

6:30 PM

5. Old Business

6. Other

Adjourn



REQUEST FOR PLANNING COMMISSION ACTION

Meeting Date:		October 12, 2023					
Item Name:		September 7th, 2023 Planning Commission Meeting Minutes					
Originating Department:		Community Development					
Presented by:		Lane Braaten					
Previous Commission Action (if any):							
Item Type (X only one):	Consent	X	Regular Session		Discussion Session		
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Motion to adopt the September 7th, Planning Commission Meeting Minutes							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
<u>Attachments:</u> 1. September 7 2023 Planning Commission Minutes							
FINANCIAL IMPLICATIONS:							
Funding Sources & Uses:							
Budget Information:							
_____ Budgeted							
_____ Non Budgeted							
_____ Amendment Required							

CITY OF WACONIA
September 7, 2023

1) [Call meeting to order and roll call](#)

Pursuant to due call and notice thereof the regular meeting of the regular meeting of the Planning Commission of the City of Waconia was called to order by Zellman.

Members present:	Zellman, Polunc, Paulsen and Genz.
Members Absent:	Sarcletti and Leshner
Alternate Present:	Paulsen
City Liaison Present:	Sorensen
Staff Present:	Braaten, Havlik and Stein

2) [Adopt Agenda](#)

Braaten had no changes to the agenda.

MOTION by Paulsen, second by Genz to adopt the agenda. MOTION CARRIED.

3) [Minutes Approval](#)

3.1 [August 3rd, 2023, Planning Commission Meeting Minutes](#)

MOTION by Paulsen, second by Zellman to adopt the minutes. MOTION CARRIED.

[Cover Page](#)

[Planning Commission Minutes August 3 2023.pdf](#)

4) [New Business](#)

4.1 [CONTINUED - Variance \(After-the-Fact\) - 150 Stacy Circle](#)

[Cover Page](#)

[Location Map_150 Stacy Circle.pdf](#)

[Campbell Narrative.pdf](#)

[Certificate of Survey_Campbell.pdf](#)

[REVISED Stormwater Plan.pdf](#)

[Stormwater Plan Review Comments_REVISED Plan.pdf](#)

Braaten presented the After-The-Fact Variance for 150 Stacy Circle. This item was tabled August 3rd, 2023, after determining the City Engineer/Public Services Director need to review the revised stormwater plan. The applicant provided a second revised storm water plan the night before the meeting. Braaten forwarded the updated information to the Commission members and to the City Engineer/Public Services Director to review. Braaten explained the difference between the revised plan and the newly revised plan.

Paulsen added the property is within the shoreland overlay in which the maximum impervious coverage is 25%. There are no other standard provisions in our ordinance that state alternatives for going over the 25%.

Gretchen and Will Campbell, 150 Stacy Circle, Waconia, MN 55387.
Comments and Concerns:

- Paulsen asked if the Campbell's were aware of maintenance of the rain gardens.
- Polunc wondered if the city was going to be responsible to monitor the hydrology/engineering techniques of these changes to replace % of impervious coverage. Braaten stated its normal to have a maintenance agreement with stormwater projects.

Motion by Paulsen, seconded by Polunc to table the After the Fact Variance for 150 Stacy Circle to give the City Engineer and Public Services Director time to review the newly revised storm water plan and advise. MOTION CARRIED.

4.2 PUBLIC HEARING - Variance - 483 Lakeview Terrace Boulevard

Cover Page

1. Location Map 483 Lakeview Terrace Blvd.pdf

2. Public Hearing Notice

3. Waconia Variance Request Narrative.pdf

4. 483 Lakeview Terrace Survey and Proposed 11x17.pdf

5. Public Hearing Comment Mortensen

Braaten identified the address and the location of the parcel, which is zoned R-1 and located in the Shoreland Overlay District. The existing site survey shows they are meeting current impervious coverage of 24.9%. The homeowners are requesting approval to construct a new home on the site, which would cause the impervious surface percentage to be 29.3%.

The trench system has been reviewed and deemed acceptable by the City Engineer. The shore impact zone is proposed to be restored to native vegetation and tree, except for an access path.

Paulsen mentioned the non-conforming lot size. The lot was created before the zoning ordinance was in place.

Zellman opened the Public Hearing.

Mike Fritz, M & M Home Contractor.

Mr. Fritz explained in detail the trench system. Instead of a rain garden they decided to go with the trench system. This system is about 4 ½ feet deep and water is directed toward the trench.

Polunc asked about the soils and the soil borings. Fritz stated the engineer they hired did hand borings to come up with the design for the trench system. The experts are the engineers who approved and signed off on the project.

Conversation regarding the extra 4.3% over the impervious and what it would take to get the impervious down to 25%. Additionally, the Commission discussed the fact that the current home does not meet all of the required setbacks and the proposed new home will meet all setback requirements except for the 25% hardcover requirement. Questions were asked about ongoing maintenance for the trench system. A maintenance agreement would be needed.

Tim and DeAnn Buss, 483 Lakeview Terrace Boulevard, Waconia, MN 55387

Zellman asked Buss what the unresolved noise issue consisted of regarding the public comment. The noise complaint was regarding their dog barking. The property owner indicated that the problem had been resolved.

Motion by Paulsen, seconded by Genz to close the Public Hearing. MOTION CARRIED.

Genz explained the difficulty in making these decisions because of not having definitive information and answers available. Questioning if these options are acceptable for going over hard surface cover. Braaten stated the because stormwater mitigation options are changing continuously it would be difficult to create an ordinance to encompass all of the options.

Paulsen indicated it was important to him to find out if the trench system design is better for the lake than existing condition before he could make a recommendation regarding the proposed variance.

Discussion followed.

Motion by Paulsen, seconded by Polunc to table the Variance until staff receives further information from the DNR, SWCD or CCWMO regarding if the proposed improvements are more effective at managing the stormwater resulting in less impact to the lake than the existing condition. Motion tabled with a 3-1 vote. MOTION CARRIED.

4.3 Sketch Plan - Falk-Saltire Properties - Pulte Group

[Cover Page](#)

[Location Map Falk Saltire.pdf](#)

[Sketch Plan Falk Property Narrative.pdf](#)

[Concept Sketch Plan Falk Saltire.pdf](#)

[Land Use Maps 2040 Comp Plan.pdf](#)

[Parks and Trails Maps 2040 Comp Plan.pdf](#)

Braaten introduced the Falk Sketch Plan submitted by the Pulte Group. Sketch Plan is an informal discussion between the Pulte Group and Commission members to discuss and advise what might be necessary to add/revise regarding a potential project. The property is located near the intersection of County Road 10 and Little Avenue. This property is currently within Laketown Township and the 2040 Comp Plan identifies the property as a future growth area. This sketch plan will also be brought to the Park Board for consideration and discussion regarding park dedication.

Pulte Group-presentation of the Falk-Saltire Sketch Plan.

Introduction to the area and the neighborhood design being proposed. The Falk property is mostly in the transition area 2020-2030 plan. Property is in the orderly annexation area and has a variety of guided uses identified. Pulte Group is an active builder that partnered with M/I Homes to work on this possible project.

The neighborhood design was displayed, and the different lot sizes and housing types were identified. The southwest corner of the property is designated for parkland and accessed via a foot bridge.

Discussion followed regarding the future County Road 10 and future Laketown Parkway/County Road 92 improvements. The topography on this site includes streams, wetlands, and tributaries which makes it challenging to work around in designing a residential neighborhood. Conversations have started with the City to discuss and identify how the property might be served by utilities.

The sketch plan shows 323 single family homes along with trails and parkland.

Commission members comments and concerns:

- Asked about impervious surface coverage, shoreland overlay and side yard setbacks.
- Discussion regarding R-5 High Density Residential District outlot.
- Questions about extending utilities for the water and sewer capacity.
- Requirements for fencing, screening and berm requirements for the homes abutting the county road.
- A traffic study is necessary and will be completed with the EAW for the site per the County's requirements.
- Next steps: Address the Park Board, and then the City Council in October and start time would possibly be the summer of 2024.
- The development should happen in two phases.
- Road widths.
- Cost price points of these homes

5) Old Business

There will not be a work session tonight.

6) Other

Update:

- Comp Plan Amendment for the Klinkner property. The applicant withdrew the application before the City Council meeting.
- City Council approved the metal shipping structure at 219 East Frontage Road.
- City Council approved the New Creations Daycare.
- Next Planning Commission meeting will be held October 12th, 2023.

Adjourn

Motion by Zellman, second by Paulsen to adjourn at 8:15 PM. MOTION CARRIED.

ATTEST: _____

Brenda Stein, Office Assistant



REQUEST FOR PLANNING COMMISSION ACTION

Meeting Date:		October 12, 2023					
Item Name:		CONTINUED - Variance (After-the-Fact) - 150 Stacy Circle					
Originating Department:		Community Development					
Presented by:		Lane Braaten					
Previous Commission Action (if any):							
Item Type (X only one):	Consent		Regular Session	X	Discussion Session		

RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED (Include motion in proper format.)

Motion recommending either approval or denial of the after-the-fact variance to exceed the hardcover maximum in the Shoreland Overlay District for the property located at 150 Stacy Circle.

EXPLANATION OF AGENDA ITEM (Include a description of background, benefits, and recommendations.)

CONTINUED APPLICATION

The Planning Commission, at the regular meeting on August 3rd, 2023, held the required public hearing and took all public comments. Upon further discussion of the application the Commission felt it was pertinent to have the City Engineer/Public Services Director review the revised stormwater plan, which was submitted the day before the meeting on August 3rd. As such, the Planning Commission tabled the application, and the revised stormwater plan was submitted to the applicable staff for review and comment.

The Planning Commission, at the regular meeting on September 7th, 2023, again tabled the application as the applicant submitted another revised stormwater plan on September 6th, 2023, which did not give City staff enough time to review prior to the meeting on the 7th. Staff has attached the review comments to this report. Additionally, included is the general information provided in the previous packet.

BACKGROUND

Applicant: Gretchen and Will Campbell

Owner: Gretchen and Will Campbell

Address: 150 Stacy Circle

PID# 752990040

Zoning: R-2, Single-Family Residential District

Special District: Shoreland Overlay District

REQUEST:

The City has received a Variance application from Gretchen and Will Campbell (the “applicants”) requesting approval of an after-the-fact variance to exceed the 25% hardcover maximum allowed in Shoreland Overlay District.

APPLICABLE ORDINANCE PROVISIONS:

1. Section 900.06, Subd. 7. Shoreland Overlay District
2. Section 900.12 - Administration, Enforcement and Procedures, Subd. 4 - Variances

VARIANCE REVIEW CRITERIA:

Waconia City Code Section 900.12, Subd. 4 and Minnesota State Statue 462.357, Subd. 6 establishes criteria to be considered when contemplating the issuance of a Variance in terms of “practical difficulty” as follows: “Variances shall only be permitted when they are in harmony with the general purposes and intent of the ordinance and when the terms of the Variance are consistent with the Comprehensive Plan.” So a City evaluating a Variance application should make findings as to:

1. Is the Variance in harmony with the purposes and intent of the ordinance?

2. Is the Variance consistent with the Comprehensive Plan?
3. Does the proposal put the property to use in a reasonable manner?
4. Are there unique circumstances to the property not created by the landowner?
5. Will the Variance, if granted, alter the essential character of the locality?

State Statute specifically notes that economic considerations alone cannot create a practical difficulty. Whereas, practical difficulties exist only when the three statutory factors are met (1. Reasonableness, 2. Uniqueness, and 3. Essential character).

PLANNING AND VARIANCE CONSIDERATIONS:

1. The subject property is zoned R-2, Single-Family Residential and located within the Shoreland Overlay District which allows for a maximum impervious surface of 25%.
2. City staff initially received a complaint regarding the installation of additional driveway and parking area in close proximity to a property line. Based on the complaint, staff called the property owner twice requesting that no work be done until they had a conversation with city staff. The two calls that staff made were not returned until after the concrete was poured and in place. The project consisted of widening of the driveway and adding improved parking area next to the garage.
3. The revised revised stormwater plan was submitted to the City Engineer for review and comment. The comments have been attached for review and consideration.
4. Based upon a conversation with the Public Services Director the typical life of a rain garden is 12-15 years if maintained properly. If not maintained, a rain garden could cease functioning properly within 2 years.

PUBLIC NOTICE/COMMENT

The notice was published in the WACONIA PATRIOT on July 20th, 2023 and posted at Waconia City Hall. Individual notices were mailed to all property owners within 350 feet of the subject parcel. The public hearing comments received have been attached to this report for review and consideration.

CONCLUSION / RECOMMENDATION

The Planning Commission should review the pertinent information and make a recommendation to the City Council regarding the proposed after-the-fact variance for 150 Stacy Circle.

Attachments:

1. [Location Map_ 150 Stacy Circle.pdf](#)
2. [Certificate of Survey_Campbell.pdf](#)
3. [20230907_Amended Letter of intent for variance with notation.pdf](#)
4. [20230907_Amended-2.pdf](#)
5. [20230913_City Engineer Comments 150 Stacy Circle.pdf](#)
6. [Public Hearing Comments.pdf](#)

FINANCIAL IMPLICATIONS:

Funding Sources & Uses:

Budget Information:

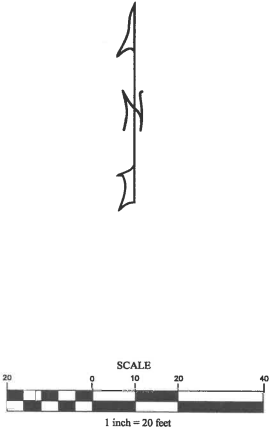
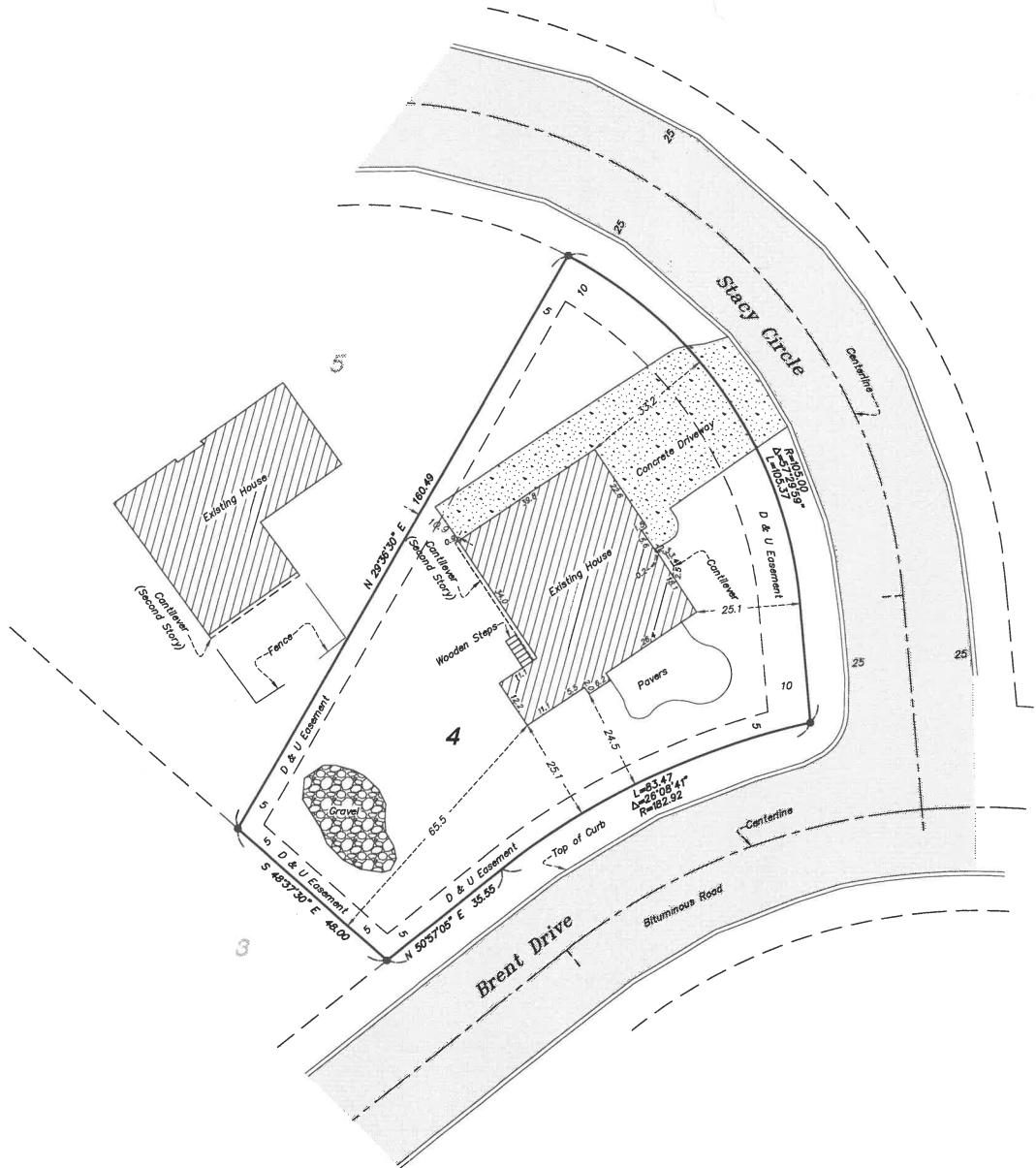
_____ Budgeted
 _____ Non Budgeted
 _____ Amendment Required

LOCATION MAP—150 STACY CIRCLE



Certificate of Survey

Prepared for:
Gretchen Campbell



Legend
● Found Iron Monument

Site Address:
150 Stacy Circle
Waconia, MN 55387

Boundary Description (Doc. No. T116851)
Lot 4, Block 1, HARMS LAKE VIEW 4TH ADDITION,
according to the plat thereof on file and of record
in the Office of the Registrar of Titles, in and for
Carver County, Minnesota.

Existing Hardcover (sq. ft.)	
House	1,953
Concrete Driveway	1,482
Pavers	406
Gravel	388
Wooden Steps	22
Cantilever (east)	8
	4,259

Parcel Area = 12,224
Total Hardcover = 34.8%

Job Number:	9823
Survey Date:	6/19/23
Drawing Name:	Campbell.dwg
Drawn by:	SKH
Revisions:	

I hereby certify that this certificate of survey was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

Kelly L. Brauer
Kelly L. Brauer

Date: June 20, 2023 Registration No. 48328

SCHOBORG
LAND SERVICES
INC.

763-972-3221 8927 Co. Rd. 13 SE
www.schoborgland.com Delano, MN 55228

Bearings based on assumed datum.

Dear City of Waconia,

The purpose of this letter is to inform you of a request for variance at our property at 150 Stacy Circle. Last fall we had new concrete added next to our driveway to provide extra parking for our young adult drivers. We felt it important to keep our vehicles off the road as much as possible. We were unaware of the Shoreland Overlay District limiting hardcover to 25%. Our contractor was also unaware of the standard. Since this issue has been brought to our attention we are applying for a variance. We are prepared to make several changes to reduce our current hardcover and in addition we will add features to mitigate water as well as improve the aesthetic of the property. In doing so we believe we will be in harmony with the surrounding properties.

The proposed changes are listed below (they are also detailed on the enclosed survey map):

Changes made on September 5, 2023 are in blue text.

1. Remove 9.92 ft x 16ft of new concrete at the northwest corner of the house. This is an area of 159 square ft. of hard surface. Remove another 30 square feet of new concrete to bring the hard surface down to 29.9%
2. In the backyard we have a playset set in pea rock (on the survey map it is labeled as gravel). We will remove the gravel and playset. This is 388 square ft of hardcover.
3. The driveway is currently 26 ft. across where it meets the street. We will remove 2 ft. in length at the end of the driveway to reduce the total length to 24 ft.
4. We will install drain tile to the outlet of three down spouts on the west side of the house. This will direct water to the rain garden.
5. The rain garden will be 11.5' x 11.5' x 1' on the southwest side of the house. We will install underground drain tile to drain into the new rain garden from the 3 downspouts.
6. Connect to the city catch basin when the curb and gutter is upgraded on Brent Drive. We understand this is scheduled to be upgraded in the near future. This improvement is already finished on the other side of Stacy Circle. This will also connect to our sump pump when the upgrade is done.

Rain Garden Details:

The rain garden will be 11.5' x 11.5' x 1' deep. We will build the rain garden according to the CCWMO standards which will include the replacement of the in place soil with filter media and tile at the base of the garden. We are working with Stone Mountain Landscaping to build the rain garden to the proper size to mitigate the water. The roof square footage that will drain to the rain garden is 1,000 square ft. A rain garden of the above mentioned volume will be adequate to drain 1,000 square feet of water.

Details about the property and surrounding area:

1. Our lot is on a corner and the edge of a circle. A big percent of our green space is taken up by the boulevard. Since we own a curved corner lot a larger percentage of the entire lot is owned by the city than a typical lot. 2,331 square feet of the entire lot is owned by the city, 2,081 square feet of that 2,331 is green space. The parcel area is 12,224 sq. ft. The total lot including that owned by the city is 14,555. 16% of the total lot is city owned. That green space is still present and should be a consideration.
2. Upon observation of surrounding homes, including aerial footage of the neighborhood, our variance appears to be in harmony with the homes around us. Many homes around us have 2 car garages, several have traditional patios, some have built in pools and many also have an extra parking area.
3. On the survey map the wooden steps to our sunroom are counted as 22 sq. ft. of hard cover. Per Lane Braaten the steps do not need to be counted as hard cover since there are slats that drain to the grass below.
4. With the changes expressed above, here are the new totals in square feet:

House	1,953
Concrete Driveway	1,323 1,297
Pavers	406
Cantilever (east)	<u>8</u>
	3,690 3660

	3,690 3,660
Roof water mitigation	<u>-1,000</u>
	2,690 2,660

Parcel area = 12,224

Total hardcover with water mitigation = ~~22%~~ 21.7%

Respectfully,
Gretchen and Will Campbell

Gretchen Campbell 612-597-0083
Will Campbell 952-442-5080

Amended

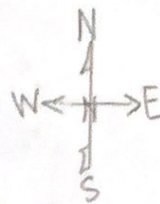
Amended 8-1-23 / 9-5-23

Proposed Changes:

-
- Proposed Changes
1. remove a 9 x 16 ft. of new concrete (159 sq ft)
 2. remove gravel playset (388 sq ft)
 3. remove 2 ft of length at the end of the driveway
 4. install drains to downspouts on the west side of the house.
 5. install a 132 ft² rain garden on the south west side of the house
 6. install drain tile to empty into the rain garden
 7. connect to city catch basin when the city upgrade is done.
 8. remove an additional 30 sq. ft. on new concrete.

Certificate of Survey

Figure 10
Stretch Campbell



● *Claytonia virginica*

100-100000
 100-100000
 100-100000

[illegible]

Landline Numbers	40
Flower	40
Flowers (Plants)	40
Flower	40
Driver	40
Mobile (Days)	40
City/State (Lat)	40

Market Size = 10,000
 Total Customers = 20,000

Page Number = 4833

Refrigerant levels in engine oil

[illegible]

Lane Braaten

From: Lane Braaten
Sent: Wednesday, September 13, 2023 10:37 AM
To: Lane Braaten
Subject: After-the-Fact Variance 150 Stacy Circle - City Engineer Comments for 2nd REVISIONS to the Storm Water Plan
Attachments: 20230907_Amended Letter of intent for variance with notation.pdf; 20230907_Amended-2.pdf

Commissioners,

At your regular meeting on September 7th, 2023, you tabled the after-the-fact variance request for 150 Stacy Circle to allow the City Engineer some time to review the additional revisions to the storm water plan that were submitted the night before the PC meeting. I summarize the City Engineer's comments below for convenience. Additionally, I have attached the most current storm water plan submitted by the applicant.

The removal of 30 additional square feet gets the proposed hardcover below 30%. The City follows the CCWMO detail for raingardens, which includes an underdrain with an outlet. If the Planning Commission chooses to recommend approval of the variance it should require that the sump pump discharge and the raingarden tile be connected to the existing catch basin located near the lot line of 180 Brent Drive and 240 Brent Drive, which is approximately 150 feet away from the proposed raingarden location and would require trenchless installation or the removal and replacement of a portion of the concrete driveway at 180 Brent Drive. A maintenance agreement for the raingarden should also be included.

Please note that I have attached an aerial image to help identify where the improvement would be connected to the existing catch basin on Brent Drive. Also, the applicant indicated that they would connect when Brent Drive is improved. Based on a review of the Capital Improvement Plan and a conversation with the City Engineer this is not in the current 10-year plan, so Brent Drive will not be worked on for quite some time.

Please let me know if you have any additional questions regarding this application.

Thanks, and I will see you on October 12th.

Lane L Braaten

Community Development Director
City of Waconia
201 South Vine Street
Waconia, MN 55387
Office: 952-442-2184
Direct: 952-442-3106
www.waconia.org



Lane Braaten

From: Nathan Albee <nathanalbee@gmail.com>
Sent: Monday, July 31, 2023 12:17 PM
To: Lane Braaten
Subject: 150 Stacy Circle Variance Request

To the Planning Commission:

We are neighbors with Gretchen and Will Campbell, who are applying for an after-the-fact variance. They have explained to us that they are spending a lot of time with a site plan to get more pervious surface on their property. We hope that they can be granted some leniency because of the way their lot is situated. Since it sits on a curved corner, a much higher percentage of the grassy area along the perimeter belongs to the city rather than the Campbells, and that is an area that can absorb water. The Campbells are people of integrity who want to do right by the city and their neighbors, and we hope the commission allows the variance process to be governed by practicality rather than percentages.

With sincere thanks for your consideration,
Nate and Jaime Albee
134 Stacy Cir, Waconia, MN 55387

Lane Braaten

From: Huinker, Taylor (DNR) <Taylor.Huinker@state.mn.us>
Sent: Wednesday, August 2, 2023 10:15 AM
To: Lane Braaten
Subject: RE: Public Hearing Notice - My Apologies

Hi Lane,

Thank you for sending this after-the-fact variance request to increase the impervious surface to 30.2% at 150 Stacy Circle, Waconia in order to park cars in an expanded driveway. This parcel is located within the shoreland overlay district, which means it is subject to the 25% maximum impervious surface standard.

The health of Lake Waconia is affected by our activities in the watershed. How we develop land and alter the landscape affects water quality and the health of fish and animal habitat associated with the lake. Specifically, as impervious surface coverage increases, the rate and amount of runoff and pollutants entering public waters increases. Therefore, the shoreland regulations limit the amount of impervious surface in order to protect the health of the lake.

Variances should be rare and for reasons of exceptional circumstance, and must demonstrate a practical difficulty exists. I do not believe this has been demonstrated. If this after-the-fact variance were to be granted, what is to prevent other property owners from seeking to do something similar?

Thank you for the opportunity to comment.

Taylor

Taylor Huinker
South Metro Area Hydrologist | Ecological and Water Resources

Minnesota Department of Natural Resources
1200 Warner Road
St. Paul, MN 55106
Phone: 651-259-5790
Email: taylor.huinker@state.mn.us
mndnr.gov



From: Lane Braaten <LBraaten@waconia.org>
Sent: Tuesday, August 1, 2023 3:22 PM
To: Huinker, Taylor (DNR) <Taylor.Huinker@state.mn.us>
Subject: Public Hearing Notice - My Apologies

This message may be from an external email source.

Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Taylor,

I hope all is well. A light bulb just went off in my brain and I realized that I did not send the attached public hearing notice to you regarding an upcoming variance request. I have also attached the staff report for review. Let me know if you have any comments or questions. Again, I apologize for not sending this sooner.

Lane

Lane L Braaten

Community Development Director

City of Waconia

201 South Vine Street

Waconia, MN 55387

Office: 952-442-2184

Direct: 952-442-3106

www.waconia.org



Lane Braaten

From: Joshua Kukowski <jclover41@hotmail.com>
Sent: Wednesday, August 2, 2023 9:13 AM
To: Lane Braaten
Subject: 150 Stacy Circle

I'm writing a message of support for Will and Gretchen Campbell (150 Stacy Circle) and their request for an after the fact variance. They are great neighbors, care for the community, have supported us as a family, and take care of their yard. Embedded in their family character is an inherent protection and love of the environment. Please allow this variance to go through. Reach out to me if you have any questions.

Sincerely,

Joshua

Joshua Kukowski
126 Stacy Circle
Waconia MN 55387
612.669.3143

Sent from my Verizon, Samsung Galaxy smartphone
Get [Outlook for Android](#)

CITY OF WACONIA, MN
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Waconia, MN, will hold a public hearing on August 3rd, 2023, at 6:30 p.m., at the Waconia City Hall, 201 South Vine Street, Waconia, MN, to consider an after-the-fact variance from the City's hardcover/impervious surface maximum for the property located at 150 Stacy Circle (PID# 752990040).

The applicants, Gretchen and Will Campbell, are requesting approval of an after-the-fact variance to allow impervious surface improvements exceeding the 25% maximum allowed within the Shoreland Overlay District.

Pertinent information pertaining to this request is available at City Hall. Interested persons may submit written or oral comments pertaining to this matter any time prior to the hearing, or at the hearing on August 3rd, 2023. Written comments will be distributed to the Planning Commission for review and consideration. Please submit written comments by mail, email or in person as follows:

Mail/in person: Attention: Lane L. Braaten, 201 South Vine Street, Waconia, MN 55387
Email: lbraaten@waconia.org

By: WACONIA PLANNING COMMISSION
ATTEST: Lane L. Braaten, Community Development Director

(Published in the Waconia Patriot on July 20th, 2023)

Neely — They have a nice patio, play area
for children, off street parking, maintained
property. Please enforce other regulations
street parking — cars, fish houses, boats



REQUEST FOR PLANNING COMMISSION ACTION

Meeting Date:		October 12, 2023					
Item Name:		CONTINUED - Variance - 483 Lakeview Terrace Boulevard					
Originating Department:		Community Development					
Presented by:		Ethan Nelson					
Previous Commission Action (if any):							
Item Type (X only one):	Consent		Regular Session	X	Discussion Session		
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Motion recommending either approval or denial of a variance to demolish and construct a new home to 29.3% impervious surface versus the 25% maximum allowed in the Shoreland Overlay District.							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
CONTINUED APPLICATION The Planning Commission, at the regular meeting on September 7th, 2023, held a public hearing, took all public comment and reviewed the variance application. Upon further discussion, the Commission tabled the application and requested staff gather additional information to determine whether the proposed stormwater plan was an improvement to the existing conditions of the property and Lake Waconia.							
BACKGROUND Applicant: M&M Home Contractors Owner: Tim & DeAnn Buss Address: 483 Lakeview Terrace Boulevard PID# 752950010 Zoning: R-2, Single Family Residential District Special District: Shoreland Overlay District							
REQUEST: The City has received a variance application from M&M Home Contractors (the "Applicant") on behalf of Tim and DeAnn Buss (the "Owners"), and is requesting approval of a variance to demolish the existing home and rebuild a new home that would result in a proposed impervious surface of 29.3% versus the maximum 25% allowed in the Shoreland Overlay District. The applicants indicated the variance is necessary due the existing lot being smaller than average and are proposing to install stormwater mitigation systems in response to the impervious surface increase.							
APPLICABLE ORDINANCE PROVISIONS: Section 900.05 – District Regulations, Subd. 2.B. - R-2, Single-Family Residential District Section 900.06.7 - Shoreland Overlay Regulations Section 900.12 – Administration, Enforcement and Procedures, Subd. 4 – Variances							
VARIANCE REVIEW CRITERIA: Waconia City Code Section 900.12, Subd. 4 and Minnesota State Statue 462.357, Subd. 6 establishes criteria to be considered when contemplating the issuance of a Variance in terms of “practical difficulty” as follows: “Variances shall only be permitted when they are in harmony with the general purposes and intent of the ordinance and when the terms of the Variance are consistent with the Comprehensive Plan.” So a City evaluating a Variance application should make findings as to: 1. Is the Variance in harmony with the purposes and intent of the ordinance? 2. Is the Variance consistent with the Comprehensive Plan?							

3. Does the proposal put the property to use in a reasonable manner?
4. Are there unique circumstances to the property not created by the landowner?
5. Will the Variance, if granted, alter the essential character of the locality?

State Statute specifically notes that economic considerations alone cannot create a practical difficulty. Whereas, practical difficulties exist only when the three statutory factors are met (1. Reasonableness, 2. Uniqueness, and 3. Essential character).

VARIANCE ANALYSIS:

The subject property currently includes an existing principal structure that was built in 1955, and a rear yard shed. The rear yard deck and west side of the house currently exist within setbacks. The applicant is proposing to remove all existing improvements and construct the property to setbacks required by code and exceed the maximum hardcover allowed by 4.3%. In addition to the aforementioned site improvements, the applicant is also proposing to install an infiltration trench and restore the shore impact zone with native grass area and trees. The existing lot circumstances and proposed changes to the lot conditions are reflected in Table 1.1 below.

Table 1.1

Lot Requirements	R-2 Single Family Residential District & Shoreland Overlay District	Existing Conditions	Proposed Conditions
Minimum Lot Size	20,000 sq. ft.	12,288 sq. ft.	12,288 sq. ft.
Maximum Impervious Surface	25%	24.9%	29.3%
Front Yard Setback	25 ft.	42.8 ft.	25.0 ft.
Left (West) Side Yard Setback	10 ft.	7.9 ft.	10.4 ft.
Right (East) Side Yard Setback	10 ft.	14.3 ft.	10.0 ft.
OHWL Setback	50 ft.	48.8 ft.	50.2 ft.

PLANNING CONSIDERATIONS:

1. The existing home and improvements are currently 3,063 sq. ft. The applicant is proposing to improve the property to 3,600 sq. ft. This would increase the hardcover on the site by 547 sq. ft.
2. The property currently exists within the west side and shoreland structure setbacks. The applicant is proposing to build the new structure within all required setbacks.
3. The applicant's storm water plan proposes to install an infiltration trench that would serve 2,360 sq. ft. of the property. Of that area, 1,300 sq. ft. is impervious.
4. The City Engineer has reviewed the proposed storm water plan and has confirmed that the system will be able to handle the area indicated above.
5. The applicant is also proposing to restore the shoreline areas with an access path to the lake. This restoration includes a native grass area and a row of four (4) pine trees. The applicant has also indicated they would work with Carver County Water Management Organization (CCWMO) to finalize suitable installation. CCWMO reviewed the proposed infiltration trench and the native shoreline buffer and indicated that the improvements are sized to provide enough treatment for the proposed increase in impervious surface to meet WMO rules.
6. Carver Soil & Water Conservation District recommends either swamp white oaks or bur oaks to be planted within the Shore Impact Zone, which the applicant has reflected in their proposed site plan.
7. The applicant submitted a report, prepared by Kent Brander, PE, detailing an analysis of the proposed stormwater design for the subject property that indicated a net water quality benefit for Lake Waconia. In addition, the applicant has also submitted DNR stormwater and shoreline best management practices (BMPs) and highlighted vegetated filter strips and the water quality benefits they provide.

PUBLIC NOTICE/COMMENT

The notice was published in the WACONIA PATRIOT on August 17, 2023 and posted at Waconia City Hall.

Individual notices were mailed out to all property owners within 350 feet of the subject parcel and to the DNR. One additional public hearing comment was received and attached to this report.

RECOMMENDATION

The Planning Commission should review the Variance application based upon the Variance Criteria stated above and the additional information provided and make a recommendation to the City Council. Upon a formal recommendation by the Planning Commission this application will be forwarded to the City Council for review at their upcoming meeting on October 16th, 2023.

If the Planning Commission chooses to recommend approval, staff recommends including the following conditions:

1. Due to the large site disturbance for construction of a new home, perimeter control shall be provided along the lake side of the project.
2. The applicant shall submit and install a landscape plan at the time of permit application that details the restoration of the shoreline with native and/or natural vegetation to provide habitat, functional soil stability and vegetative screening from view from public waters to the satisfaction of the Community Development Department and Carver County Soil & Water Conservation District.
3. The applicant shall provide the City with cash, corporate surety bond, approved letter of credit or other surety satisfactory to the City to guarantee the proper installation and growth of the approved plans.
4. Final installation of the storm water plan shall meet the satisfaction of the City Engineer.

Attachments:

1. [Location Map 483 Lakeview Terrace Blvd \(1 Page\)](#)
2. [Existing and Proposed Site Plan \(3 Pages\)](#)
3. [DNR Comments \(1 Page\)](#)
4. [CCWMO Comments \(2 Pages\)](#)
5. [Carver Soil & Water Conservation District Comments \(1 Page\)](#)
6. [Applicant Hydrologic Analysis & Stormwater and Shoreline BMPs \(30 Pages\)](#)
7. [Public Hearing Comments \(3 Pages\)](#)

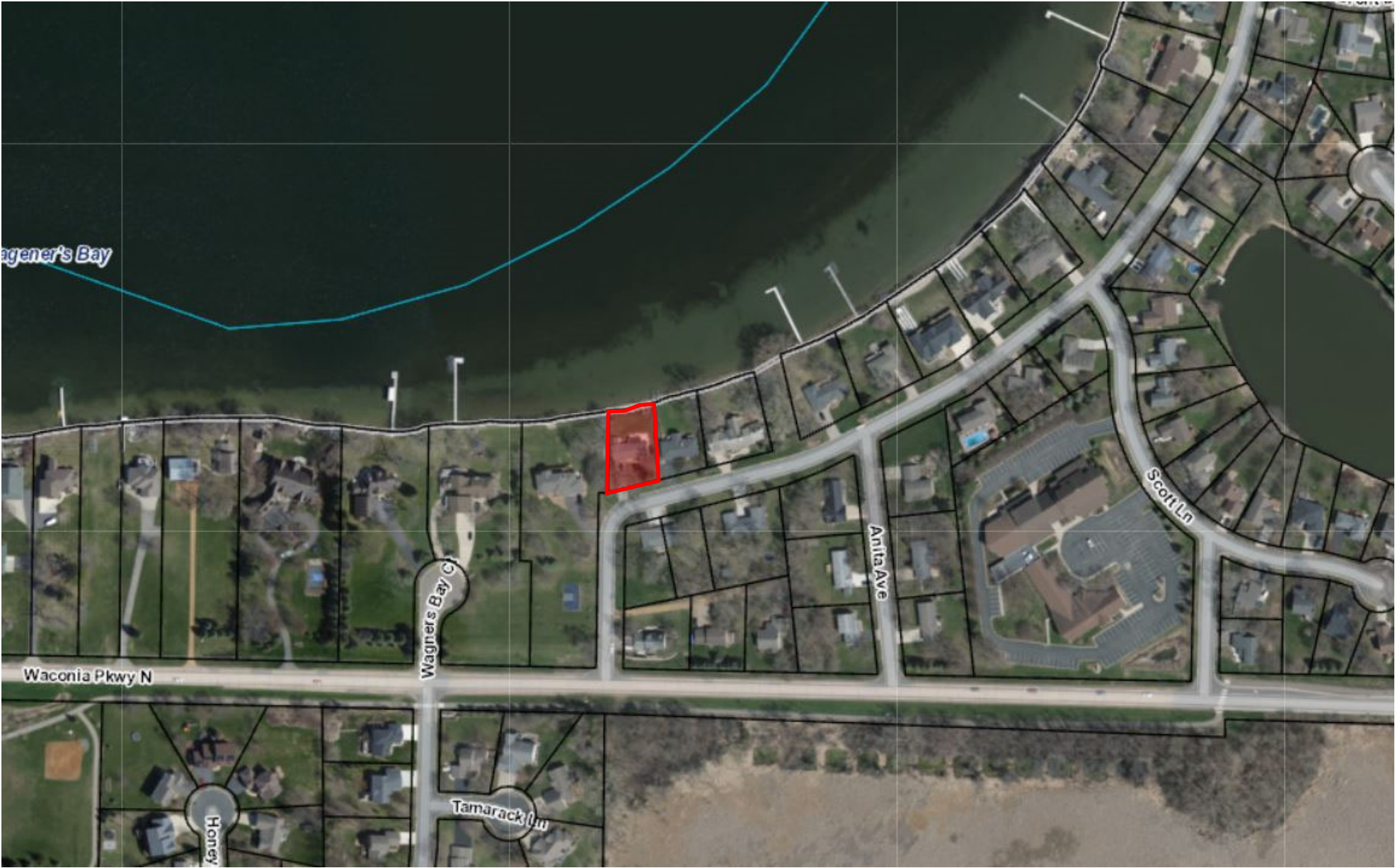
FINANCIAL IMPLICATIONS:

Funding Sources & Uses:

Budget Information:

_____ Budgeted
_____ Non Budgeted
_____ Amendment Required

LOCATION MAP—483 LAKEVIEW TERRACE BLVD.



CERTIFICATE OF SURVEY for: M&M HOME CONTRACTORS

EXISTING CONDITIONS

PROPERTY DESCRIPTION

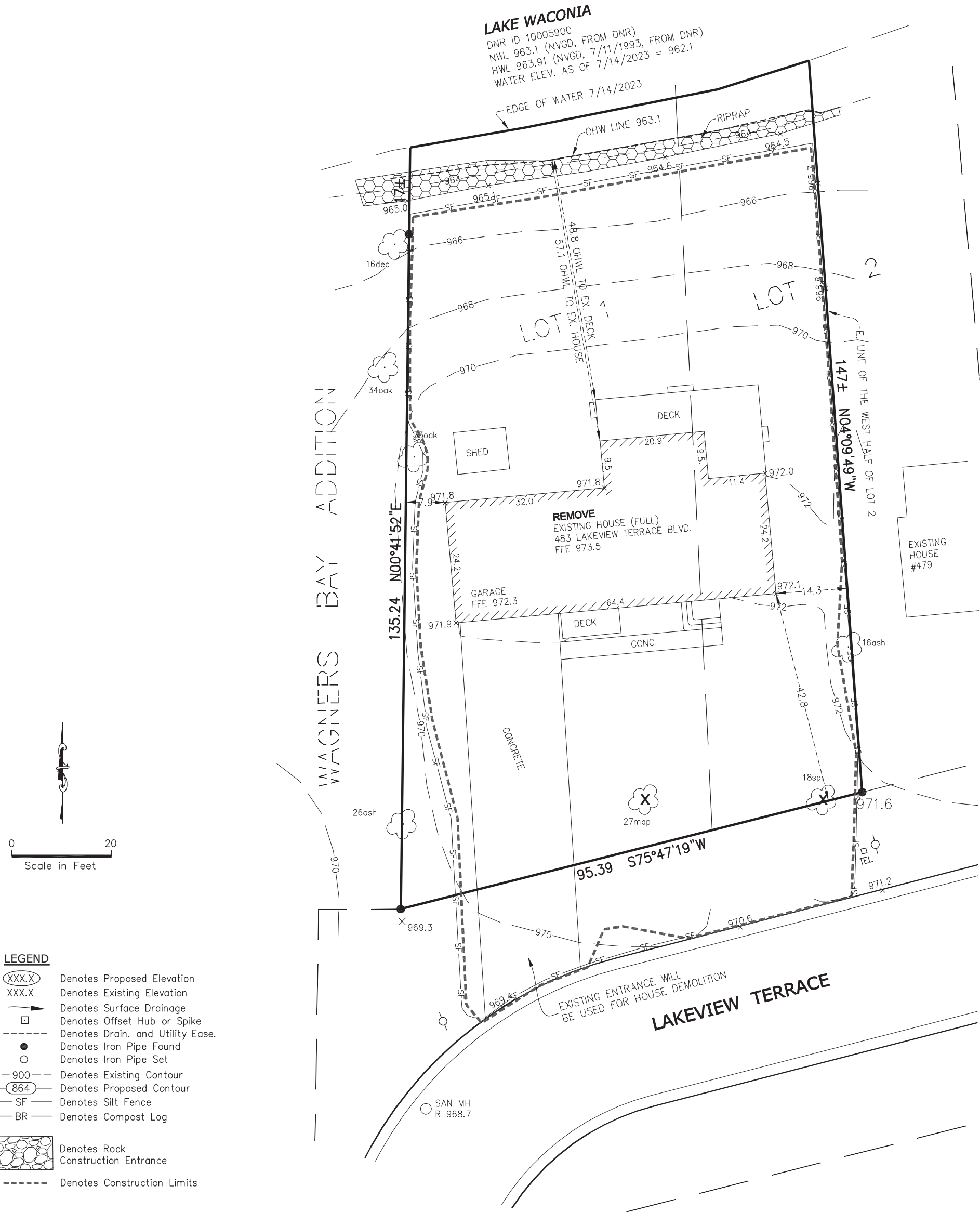
Lot 1 and the Westerly Half (front and rear) of Lot 2, Block 1, "Harms Lake View Terrace", according to the recorded plat thereof.

PROPERTY INFORMATION

Property Address:
483 Lakeview Terrace Blvd.
Waconia, MN 55387

PID 752950010

SEE SHEET 2 FOR IMPERVIOUS SUMMARY



CERTIFICATION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Curt Kallio
Curtiss J. Kallio, Lic. No. 26909

7/27/2023
Date



SISU LAND SURVEYING
2580 Christian Dr.
Chaska, MN 55318
612-418-6828

JOB NO.: 202209

CERTIFICATE OF SURVEY for: M&M HOME CONTRACTORS

PROPOSED CONDITIONS

PROPERTY DESCRIPTION

Lot 1 and the Westerly Half (front and rear) of Lot 2, Block 1, "Harms Lake View Terrace", according to the recorded plat thereof.

PROPERTY INFORMATION

Property Address:
483 Lakeview Terrace Blvd.
Waconia, MN 55387

PID 752950010

PROPOSED ELEVATIONS

Garage Floor at drive = 974.2
Top of Garage Foundation = 974.6
Top of House Foundation = 975.6
Lowest Floor = 966.9

AREAS & IMPERVIOUS

Parcel Area to OHWL = 12,288± sq. ft.

Existing Impervious Areas

House & Garage = 1756 sq. ft.
Driveway = 1061 sq. ft.
Walk = 114 sq. ft.
Shed = 88 sq. ft.
Front stoop = 44 sq. ft.
Total Impervious Surface = 3063 sq. ft. = 24.9%

Proposed Impervious Area

House & Garage = 2742 sq. ft.
Driveway = 549 sq. ft.
Walk = 61 sq. ft.
Front stoop = 44 sq. ft.
Screen porch (lakeside, patio below) = 204 sq. ft.
Total Proposed Impervious = 3600 sq. ft. = 29.3%

PROPOSED SHORELINE RESTORATION

Native Grass Area
Seed with MnDOT Seed Mixture 35-641
or other approved prairie seed mixture
Confirm seeding/planting with Carver County

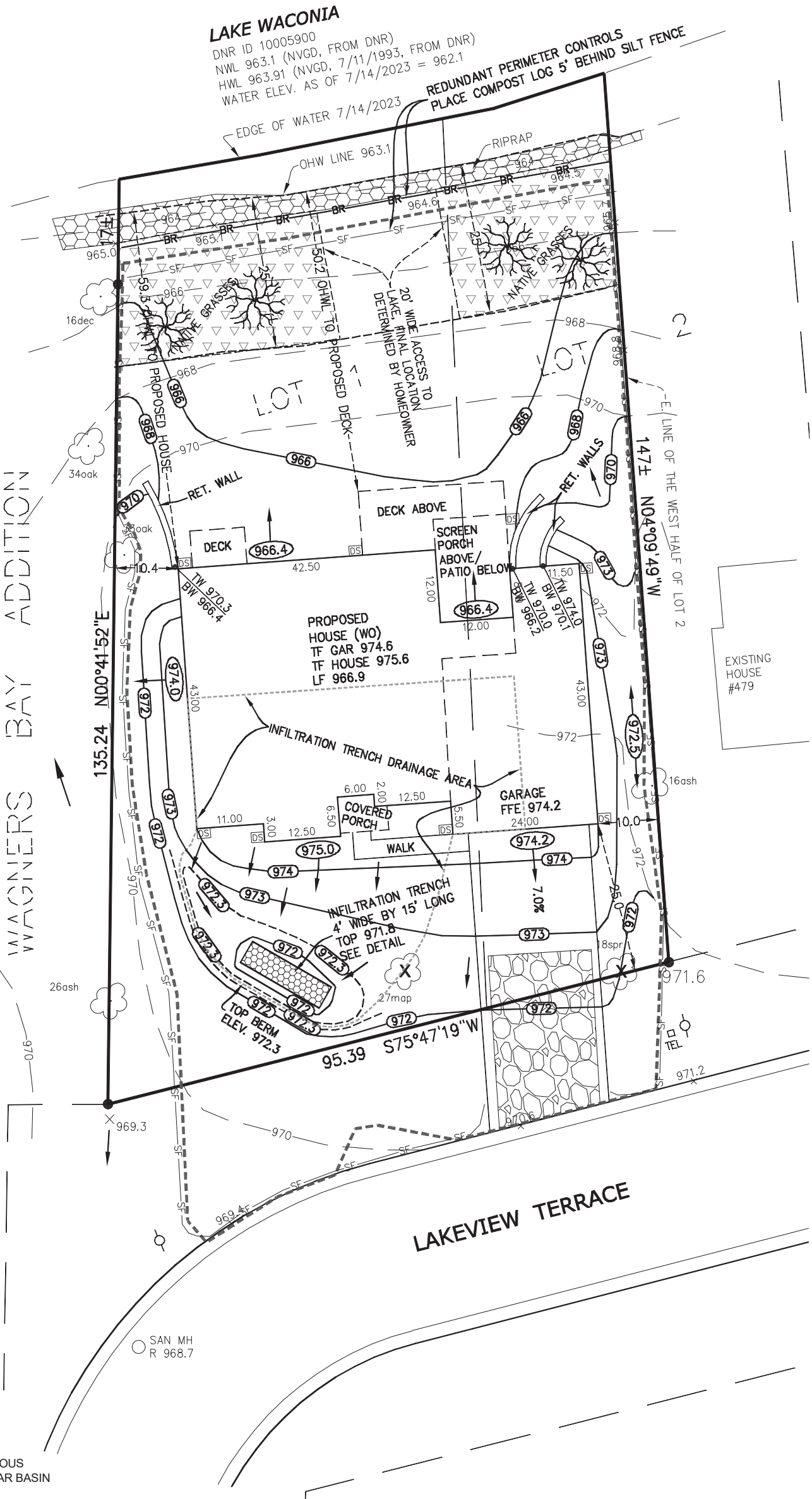
(4) Proposed Swamp White Oak
Final type and location per landscaper

Approximate drainage area to
infiltration trench = 2360 sq. ft.
(Impervious = 1300 sq. ft.)

STORMWATER MITIGATION

To mitigate the proposed increase in impervious surface, a rock infiltration trench is proposed as shown. Design details are shown on Sheet C3.

Approximate drainage area to
infiltration trench = 2360 sq. ft.
(Impervious = 1300 sq. ft.)



LEGEND

- XXX.X Denotes Proposed Elevation
- XXX.X Denotes Existing Elevation
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REVISED 08/04/2023 ADDED NATIVE GRASSES; REDUCED IMPERVIOUS
REVISED 08/22/2023 ADDED DOWNSPOUTS; ADD'L CONTOURS NEAR BASIN
REVISED 09/28/2023 PINES CHANGED TO SWAMP WHITE OAK

CERTIFICATION

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Curt J. Kallio
Curtiss J. Kallio, Lic. No. 26909

9/28/2023
Date



SISU LAND SURVEYING
2580 Christian Dr.
Chaska, MN 55318
612-418-6828

JOB NO.: 202209

INFILTRATION TRENCH DETAILS

INFILTRATION TRENCH DESIGN

Proposed increase in impervious surface = 537 sq. ft.
Volume reduction will be 1" over increase in impervious surface = 537 * 1/12 = 45 cubic feet.
Trench media is 1.5" washed rock, assume 40% void space
Minimum excavated volume = 45/0.4 = 113 cubic feet.
Proposed trench is 15' long X 4' wide X 3' deep = 180 cubic feet = 72 cubic feet void space

SITE SOILS

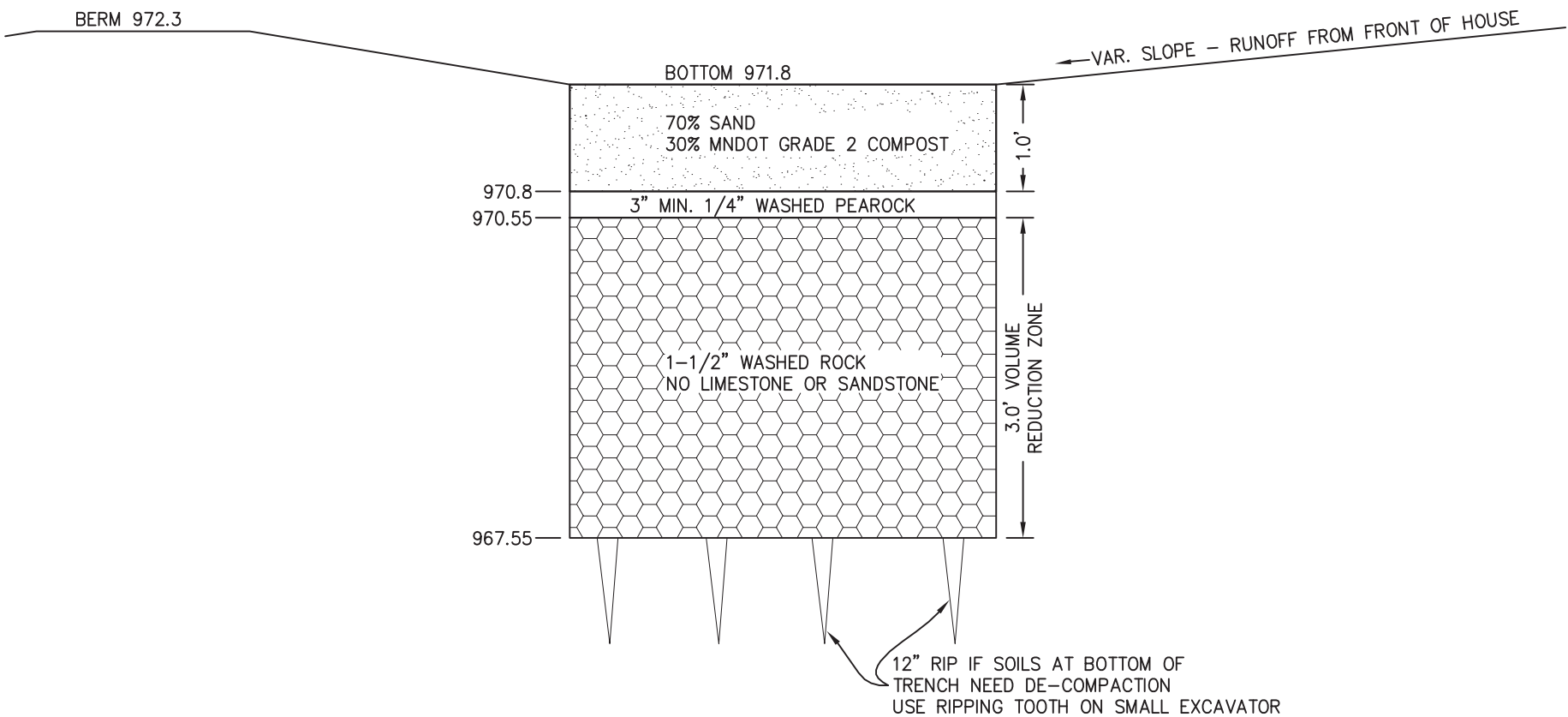
Soils are mapped as Essexville Sandy Loams. Per the Mn Stormwater Manual, the soils are suitable for infiltration and would have an design infiltration rate of 0.8 in/hr. No soil borings have been performed.

PLANTING/STABILIZATION

The top 12" of the infiltration basin will be a planting media consisting of 70% washed sand and 30% Grade 2 Compost. The infiltration basin will be seeded with MnDOT 33-261 seed mix and stabilized with Cat. 20 rolled erosion product, natural netting. Plantings and mulch may be substituted per a landscaping plan prepared by others.

CONSTRUCTION

- Construct the infiltration basin after completion of the house and final grading.
- Rip bottom of infiltration basin to a depth of 12" prior to placing the rock if necessary
- Place compost log around perimeter of infiltration trench immediately after seeding and stabilization.



INFILTRATION TRENCH SECTION

REVISED 08/04/2023 REDUCED IMPERVIOUS

CERTIFICATION

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Engineer under the laws of the State of Minnesota.

Curt Kallio
Curtiss J. Kallio, Lic. No. 26909

8/4/2023
Date



SISU LAND SURVEYING
2580 Christian Dr.
Chaska, MN 55318
612-418-6828

JOB NO.: 202209

Lane Braaten

From: Huinker, Taylor (DNR) <Taylor.Huinker@state.mn.us>
Sent: Friday, September 15, 2023 8:53 AM
To: Lane Braaten; sristow@co.carver.mn.us; Kristen Larson (Carver County)
Subject: RE: 483 Lakeview Terrace Variance Request - City of Waconia

Hi Lane,

DNR would feel comfortable with the shore impact zone restoration given:

1. The shore impact zone restoration is approved by Seth. We don't think pine trees are suitable shoreline trees and defer to Seth for selection.
2. A deed restriction is placed to record and protect the shore impact zone restoration area.

A restored shore impact zone would be beneficial to the lake compared to the turf grass that exists now. It would provide habitat and better root structure compared to turf grass, just to name a couple of benefits.

Taylor

Lane Braaten

From: Kristen Larson <klarson@co.carver.mn.us>
Sent: Monday, September 18, 2023 2:33 PM
To: Lane Braaten; Huinker, Taylor (DNR); Seth Ristow
Subject: RE: 483 Lakeview Terrace Variance Request - City of Waconia

Hi Lane-

I used the WMO's stormwater calculator that we make available to applicant's to demonstrate compliance with our rules. There are two proposed practices on the site that provide stormwater treatment: the infiltration trench and the native shoreline buffer. There are similar BMP types in the WMO's calculator: infiltration and disconnected impervious.

I entered information on existing and proposed impervious and the proposed BMPs into the WMO's calculator. **Screenshots of the calculator results are below.**

The calculator shows that the infiltration trench (entered as infiltration) and native shoreline buffer (entered as disconnected impervious surface) are sized to provide enough treatment for the **proposed increase** in impervious surface to meet WMO rules (see first image).

The treatment features don't provide full treatment for the all impervious on the site (see second image), but do provide increased treatment over the existing condition.

Treatment amounts based on amount of increased impervious

	Subwatershed Model Label	increase over existing					
	Impervious Area (Acre)	0.01					
	Impervious Area (SQ FT)	537					
	Water Quality Volume	22					
BMP ID#	Select BMP (Drop down)	BMP Details (Volume, Area)	Units	TP Treatment	TP Quality Treatment Volume	TSS Treatment	TSS Quality Treatment Volume
	Infiltration (Cubic Feet)	30	Cubic Feet	100%	22	100%	22
	Disconnecting Impervious Surface (Square Feet)	1,650	Square Feet	45%	10	75%	17
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
		Total Volume Treated			32		39
		Percent of Requirement			>100%		>100%
		Do BMPS have enough Capacity?			YES		YES

Treatment amounts based on all proposed impervious

	Subwatershed Model Label	proposed					
	Impervious Area (Acre)	0.08					
	Impervious Area (SQ FT)	3,600					
	Water Quality Volume	150					
BMP ID#	Select BMP (Drop down)	BMP Details (Volume, Area)	Units	TP Treatment	TP Quality Treatment Volume	TSS Treatment	TSS Quality Treatment Volume
	Bioretention >3' Separation (Cubic Feet)	30	Cubic Feet	75%	23	90%	27
	Disconnecting Impervious Surface (Square Feet)	1,650	Square Feet	45%	31	75%	52
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
	Select BMP	(Enter BMP Details Here)	Unit	TP Credit		TSS Credit	
		Total Volume Treated			53		79
		Percent of Requirement			40%		58%
		Do BMPS have enough Capacity?			NO		NO

If you have questions, let me know!

Kristen

Lane Braaten

From: Seth Ristow <sristow@co.carver.mn.us>
Sent: Friday, September 15, 2023 11:11 AM
To: Lane Braaten
Subject: RE: 483 Lakeview Terrace Variance Request - City of Waconia

Hi Lane,

The buffer seems like a great idea to me. The seed mix they selected would work. They could also look at shoreline specific mixes.

Instead of pines I would recommend either swamp white oaks or bur oaks.

Having a native establishment and maintenance plan would be a good idea too. I can help them with that if they need assistance.

Seth Ristow | Landscape Restoration Specialist | Carver Soil & Water Conservation District |

11360 US-212, Suite 6 | Cologne, MN 55322 | Office: 952-466-5264 | Cell: 334-707-4202 | sristow@co.carver.mn.us



CIVIL METHODS, INC.

PROFESSIONAL ENGINEERS

LAND

| WATER

| INFRASTRUCTURE

Saint Paul, Minnesota

www.civilmethods.com

TECHNICAL MEMORANDUM

Date:	September 19, 2023
Subject:	483 Lakeview Terrace Blvd, Waconia, MN: Hydrologic Modeling
Prepared For:	M&M Home Contracting
Prepared By:	Kent Brander, PE

A. INTRODUCTION

Civil Methods, Inc. (CMI) performed hydrologic modeling to evaluate the effects of planned stormwater best management practices (BMPs) at 483 Lakeview Terrace Blvd, Waconia, MN. The planned modifications include installation of an infiltration trench as well as replacement of existing turf with native grasses near the shoreline (the property is situated adjacent to Lake Waconia). The analysis was performed to quantify the level of treatment being provided by the proposed design.

B. MODEL DETAILS

The existing survey and proposed conditions as well as the infiltration trench detail were provided by Sisu Land Surveying and are included as Attachment 1. Soils in the area are mapped as HSG B in the County soil survey. In both existing and proposed conditions, all runoff from the site eventually reaches Lake Waconia. Generally, runoff from the north side of the property discharges directly to the lake, while runoff from the south side of the property first runs to the street and eventually to the lake.

Under proposed conditions, there is a net increase of 537 SF impervious area (see survey for additional detail). Assuming a water quality volume of 1 IN of runoff over the net new impervious area would indicate a volume reduction standard of 45 CF. If we assume the higher MIDS standard of 1.1 IN over the impervious area, the volume reduction standard would be 49 CF.

Part of the impervious runoff discharging to the road is first captured by the proposed infiltration trench and shallow depression area above the trench. The retention volume provided below the outlet at this location is 180 CF (72 CF for the rock storage, 30 CF for the media above the rock, and 78 CF of surface storage below the berm). This exceeds the base volume reduction requirement (and the MIDS standard), providing additional volume for water quality treatment and peak flow rate reduction.

On the north side of the property, a significant portion of the existing turf is to be replaced with deep rooting native grasses consistent with Carver County seeding/planting standards. This provides a substantially improved hydrologic condition, represented by increasing the hydrologic soil group of the amended area by one step to HSG A.

The existing and proposed drainage diagram corresponding to the hydrologic model (HydroCAD) is provided as Attachment 2. The HydroCAD report is included as Attachment 3.

C. SUMMARY OF RESULTS

The volume reduction provided by the infiltration trench exceeds typical MIDS standard and provides an associated degree of direct water quality benefits. In addition, the proposed infiltration trench and vegetation improvements together reduce the peak flow rates to the lake, indicating a reduction in erosion potential and overall hydrologic impact. A summary of the peak flow rates for existing and proposed conditions is provided in Table 1.

Table 1. Summary of Peak Flow Rates (Values in CFS)

Location	Direct To Lake		Direct To Road		Total To Lake (Summary)	
Conditions	Existing	Proposed	Existing	Proposed	Existing	Proposed
Node	A1X	A1P	A2X	R2P	R1X	R1P
2-YR STORM	0.14	0.10	0.19	0.09	0.33	0.18
10-YR STORM	0.40	0.34	0.43	0.23	0.83	0.55
100-YR STORM	1.13	1.06	1.01	0.99	2.14	2.05

D. CONCLUSION

Based on the results of this analysis, the proposed stormwater design for 483 Lakeview Terrace Blvd provides a net water quality benefit for Lake Waconia.

ATTACHMENT 1: PROVIDED SURVEY & DETAIL

EXISTING CONDITIONS

CERTIFICATE OF SURVEY for: M&M HOME CONTRACTORS

PROPOSED CONDITIONS

PROPERTY DESCRIPTION

Lot 1 and the Westerly Half (front and rear) of Lot 2, Block 1, "Harms Lake View Terrace", according to the recorded plat thereof.

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Property Address:
483 Lakeview Terrace Blvd.
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PID 752950010

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Lowest Floor = 966.9

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Native Grass Area
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or other approved prairie seed mixture
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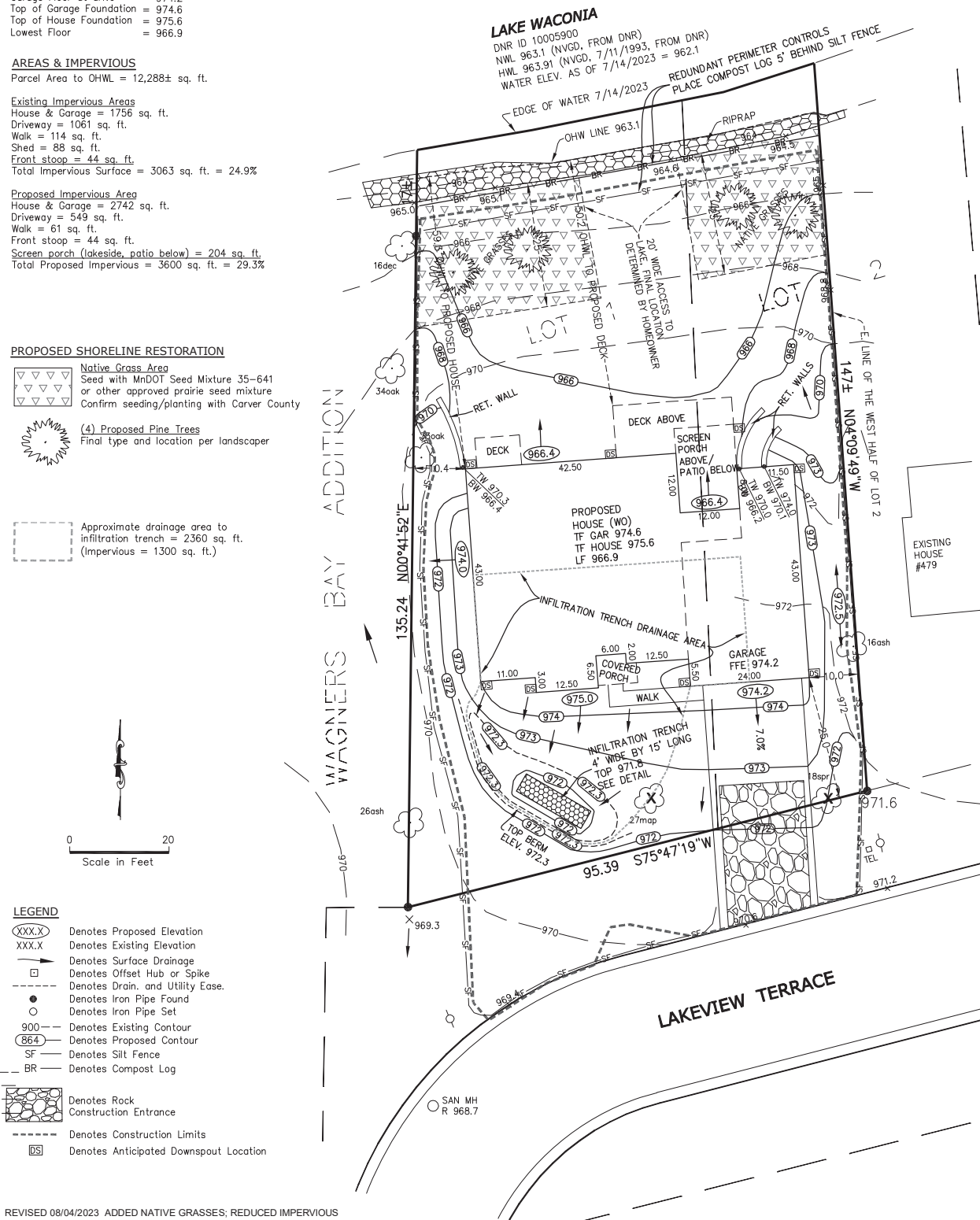
(4) Proposed Pine Trees
Final type and location per landscaper

Approximate drainage area to
infiltration trench = 2360 sq. ft.
(Impervious = 1300 sq. ft.)

STORMWATER MITIGATION

To mitigate the proposed increase in impervious surface, a rock infiltration trench is proposed as shown. Design details are shown on Sheet C3.

Approximate drainage area to
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(Impervious = 1300 sq. ft.)



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Curtiss J. Kallio, Lic. No. 26909

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INFILTRATION TRENCH DETAILS

INFILTRATION TRENCH DESIGN

Proposed increase in impervious surface = 537 sq. ft.
Volume reduction will be 1" over increase in impervious surface = $537 * 1/12 = 45$ cubic feet.
Trench media is 1.5" washed rock, assume 40% void space
Minimum excavated volume = $45/0.4 = 113$ cubic feet.
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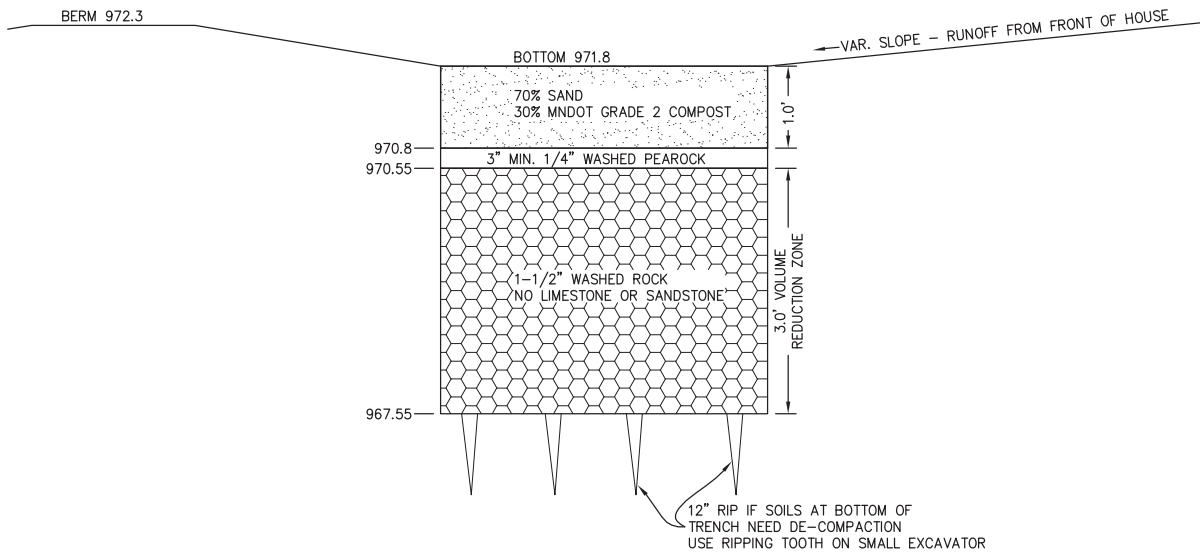
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CONSTRUCTION

1. Construct the infiltration basin after completion of the house and final grading.
2. Rip bottom of infiltration basin to a depth of 12" prior to placing the rock if necessary
3. Place compost log around perimeter of infiltration trench immediately after seeding and stabilization.



INFILTRATION TRENCH SECTION

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Curtiss J. Kallio, Lic. No. 26909

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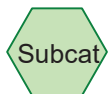
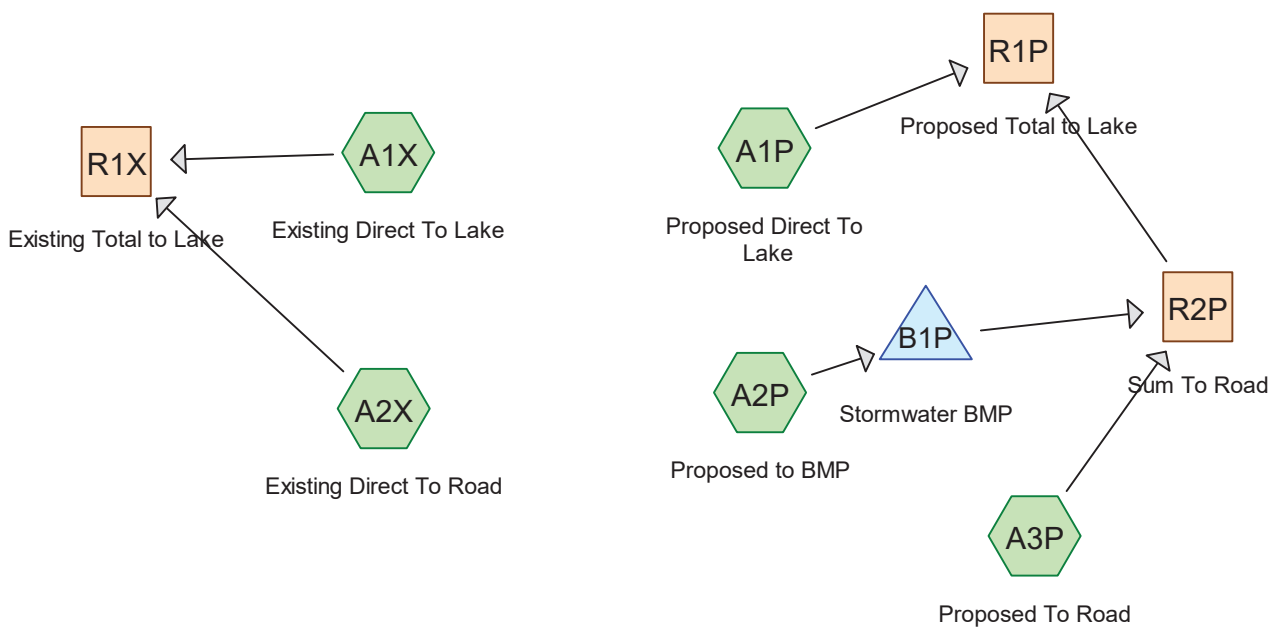


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ATTACHMENT 2: DRAINAGE DIAGRAMS

ATTACHMENT 3: HYDROCAD REPORT



Routing Diagram for 483 Lakeview Terrace Blvd
 Prepared by Civil Methods, Inc., Printed 9/19/2023
 HydroCAD® 10.10-5a s/n 07283 © 2020 HydroCAD Software Solutions LLC

483 Lakeview Terrace Blvd

Prepared by Civil Methods, Inc.

HydroCAD® 10.10-5a s/n 07283 © 2020 HydroCAD Software Solutions LLC

Printed 9/19/2023

Page 2

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	MSE 24-hr	3	Default	24.00	1	2.84	2
2	10-Year	MSE 24-hr	3	Default	24.00	1	4.20	2
3	100-Year	MSE 24-hr	3	Default	24.00	1	7.18	2

Summary for Subcatchment A1P: Proposed Direct To Lake

Runoff = 0.10 cfs @ 12.14 hrs, Volume= 0.005 af, Depth= 0.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.84"

	Area (sf)	CN	Description
*	1,448	98	Impervious
	4,708	61	>75% Grass cover, Good, HSG B
	1,593	39	>75% Grass cover, Good, HSG A
	7,749	63	Weighted Average
	6,301	55	81.31% Pervious Area
	1,448	98	18.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A1X: Existing Direct To Lake

Runoff = 0.14 cfs @ 12.14 hrs, Volume= 0.007 af, Depth= 0.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.84"

	Area (sf)	CN	Description
*	1,086	98	Impervious
	6,377	61	>75% Grass cover, Good, HSG B
	7,463	66	Weighted Average
	6,377	61	85.45% Pervious Area
	1,086	98	14.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A2P: Proposed to BMP

Runoff = 0.13 cfs @ 12.13 hrs, Volume= 0.005 af, Depth= 1.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.84"

	Area (sf)	CN	Description
*	1,300	98	Impervious
	1,066	61	>75% Grass cover, Good, HSG B
	2,366	81	Weighted Average
	1,066	61	45.05% Pervious Area
	1,300	98	54.95% Impervious Area

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MSE 24-hr 3 2-Year Rainfall=2.84"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A2X: Existing Direct To Road

Runoff = 0.19 cfs @ 12.13 hrs, Volume= 0.008 af, Depth= 0.81"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.84"

Area (sf)	CN	Description
* 1,977	98	Impervious
3,475	61	>75% Grass cover, Good, HSG B
5,452	74	Weighted Average
3,475	61	63.74% Pervious Area
1,977	98	36.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A3P: Proposed To Road

Runoff = 0.09 cfs @ 12.13 hrs, Volume= 0.004 af, Depth= 0.71"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 2-Year Rainfall=2.84"

Area (sf)	CN	Description
* 852	98	Impervious
1,948	61	>75% Grass cover, Good, HSG B
2,800	72	Weighted Average
1,948	61	69.57% Pervious Area
852	98	30.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Reach R1P: Proposed Total to Lake

Inflow Area = 0.296 ac, 27.87% Impervious, Inflow Depth = 0.38" for 2-Year event
Inflow = 0.18 cfs @ 12.14 hrs, Volume= 0.009 af
Outflow = 0.18 cfs @ 12.14 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min

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MSE 24-hr 3 2-Year Rainfall=2.84"

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Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Reach R1X: Existing Total to Lake

Inflow Area = 0.296 ac, 23.72% Impervious, Inflow Depth = 0.61" for 2-Year event
 Inflow = 0.33 cfs @ 12.13 hrs, Volume= 0.015 af
 Outflow = 0.33 cfs @ 12.13 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Reach R2P: Sum To Road

Inflow Area = 0.119 ac, 41.66% Impervious, Inflow Depth = 0.39" for 2-Year event
 Inflow = 0.09 cfs @ 12.13 hrs, Volume= 0.004 af
 Outflow = 0.09 cfs @ 12.13 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Pond B1P: Stormwater BMP

Inflow Area = 0.054 ac, 54.95% Impervious, Inflow Depth = 1.19" for 2-Year event
 Inflow = 0.13 cfs @ 12.13 hrs, Volume= 0.005 af
 Outflow = 0.00 cfs @ 15.05 hrs, Volume= 0.005 af, Atten= 97%, Lag= 175.5 min
 Discarded = 0.00 cfs @ 15.05 hrs, Volume= 0.005 af
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Peak Elev= 972.23' @ 15.05 hrs Surf.Area= 312 sf Storage= 160 cf

Plug-Flow detention time= 1,103.8 min calculated for 0.005 af (100% of inflow)

Center-of-Mass det. time= 1,104.0 min (1,919.4 - 815.5)

Volume	Invert	Avail.Storage	Storage Description
#1	971.80'	143 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 4.00'W x 15.00'L x 4.25'H Prismatoid 255 cf Overall x 40.0% Voids
#2	967.55'	102 cf	
		245 cf	
			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
971.80	60	0	0
972.00	109	17	17
972.30	300	61	78
972.40	1,000	65	143

Device	Routing	Invert	Outlet Devices
#1	Primary	972.30'	Custom Weir/Orifice, Cv= 2.62 (C= 3.28) Head (feet) 0.00 0.10 Width (feet) 10.00 30.00
#2	Discarded	967.55'	0.450 in/hr Exfiltration over Surface area

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MSE 24-hr 3 2-Year Rainfall=2.84"

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Discarded OutFlow Max=0.00 cfs @ 15.05 hrs HW=972.23' (Free Discharge)

↑**2=Exfiltration** (Exfiltration Controls 0.00 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=967.55' TW=0.00' (Dynamic Tailwater)

↑**1=Custom Weir/Orifice** (Controls 0.00 cfs)

Summary for Subcatchment A1P: Proposed Direct To Lake

Runoff = 0.34 cfs @ 12.13 hrs, Volume= 0.015 af, Depth= 1.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=4.20"

	Area (sf)	CN	Description
*	1,448	98	Impervious
	4,708	61	>75% Grass cover, Good, HSG B
	1,593	39	>75% Grass cover, Good, HSG A
	7,749	63	Weighted Average
	6,301	55	81.31% Pervious Area
	1,448	98	18.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A1X: Existing Direct To Lake

Runoff = 0.40 cfs @ 12.13 hrs, Volume= 0.017 af, Depth= 1.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=4.20"

	Area (sf)	CN	Description
*	1,086	98	Impervious
	6,377	61	>75% Grass cover, Good, HSG B
	7,463	66	Weighted Average
	6,377	61	85.45% Pervious Area
	1,086	98	14.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A2P: Proposed to BMP

Runoff = 0.24 cfs @ 12.13 hrs, Volume= 0.010 af, Depth= 2.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=4.20"

	Area (sf)	CN	Description
*	1,300	98	Impervious
	1,066	61	>75% Grass cover, Good, HSG B
	2,366	81	Weighted Average
	1,066	61	45.05% Pervious Area
	1,300	98	54.95% Impervious Area

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MSE 24-hr 3 10-Year Rainfall=4.20"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A2X: Existing Direct To Road

Runoff = 0.43 cfs @ 12.13 hrs, Volume= 0.018 af, Depth= 1.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=4.20"

Area (sf)	CN	Description
* 1,977	98	Impervious
3,475	61	>75% Grass cover, Good, HSG B
5,452	74	Weighted Average
3,475	61	63.74% Pervious Area
1,977	98	36.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A3P: Proposed To Road

Runoff = 0.20 cfs @ 12.13 hrs, Volume= 0.009 af, Depth= 1.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 10-Year Rainfall=4.20"

Area (sf)	CN	Description
* 852	98	Impervious
1,948	61	>75% Grass cover, Good, HSG B
2,800	72	Weighted Average
1,948	61	69.57% Pervious Area
852	98	30.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Reach R1P: Proposed Total to Lake

Inflow Area = 0.296 ac, 27.87% Impervious, Inflow Depth = 1.10" for 10-Year event
Inflow = 0.55 cfs @ 12.13 hrs, Volume= 0.027 af
Outflow = 0.55 cfs @ 12.13 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min

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MSE 24-hr 3 10-Year Rainfall=4.20"

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Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Reach R1X: Existing Total to Lake

Inflow Area = 0.296 ac, 23.72% Impervious, Inflow Depth = 1.43" for 10-Year event
 Inflow = 0.83 cfs @ 12.13 hrs, Volume= 0.035 af
 Outflow = 0.83 cfs @ 12.13 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Reach R2P: Sum To Road

Inflow Area = 0.119 ac, 41.66% Impervious, Inflow Depth = 1.22" for 10-Year event
 Inflow = 0.23 cfs @ 12.19 hrs, Volume= 0.012 af
 Outflow = 0.23 cfs @ 12.19 hrs, Volume= 0.012 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Pond B1P: Stormwater BMP

Inflow Area = 0.054 ac, 54.95% Impervious, Inflow Depth = 2.29" for 10-Year event
 Inflow = 0.24 cfs @ 12.13 hrs, Volume= 0.010 af
 Outflow = 0.13 cfs @ 12.20 hrs, Volume= 0.010 af, Atten= 48%, Lag= 4.2 min
 Discarded = 0.01 cfs @ 12.20 hrs, Volume= 0.007 af
 Primary = 0.12 cfs @ 12.20 hrs, Volume= 0.003 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Peak Elev= 972.32' @ 12.20 hrs Surf.Area= 510 sf Storage= 188 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 674.7 min (1,476.7 - 802.0)

Volume	Invert	Avail.Storage	Storage Description
#1	971.80'	143 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 4.00'W x 15.00'L x 4.25'H Prismatoid 255 cf Overall x 40.0% Voids
#2	967.55'	102 cf	
		245 cf	
		Total Available Storage	

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
971.80	60	0	0
972.00	109	17	17
972.30	300	61	78
972.40	1,000	65	143

Device	Routing	Invert	Outlet Devices
#1	Primary	972.30'	Custom Weir/Orifice, Cv= 2.62 (C= 3.28) Head (feet) 0.00 0.10 Width (feet) 10.00 30.00
#2	Discarded	967.55'	
			0.450 in/hr Exfiltration over Surface area

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MSE 24-hr 3 10-Year Rainfall=4.20"

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Discarded OutFlow Max=0.01 cfs @ 12.20 hrs HW=972.32' (Free Discharge)

↑**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.12 cfs @ 12.20 hrs HW=972.32' TW=0.00' (Dynamic Tailwater)

↑**1=Custom Weir/Orifice** (Weir Controls 0.12 cfs @ 0.46 fps)

Summary for Subcatchment A1P: Proposed Direct To Lake

Runoff = 1.06 cfs @ 12.13 hrs, Volume= 0.045 af, Depth= 3.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=7.18"

	Area (sf)	CN	Description
*	1,448	98	Impervious
	4,708	61	>75% Grass cover, Good, HSG B
	1,593	39	>75% Grass cover, Good, HSG A
	7,749	63	Weighted Average
	6,301	55	81.31% Pervious Area
	1,448	98	18.69% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A1X: Existing Direct To Lake

Runoff = 1.13 cfs @ 12.13 hrs, Volume= 0.048 af, Depth= 3.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=7.18"

	Area (sf)	CN	Description
*	1,086	98	Impervious
	6,377	61	>75% Grass cover, Good, HSG B
	7,463	66	Weighted Average
	6,377	61	85.45% Pervious Area
	1,086	98	14.55% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A2P: Proposed to BMP

Runoff = 0.51 cfs @ 12.12 hrs, Volume= 0.023 af, Depth= 4.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=7.18"

	Area (sf)	CN	Description
*	1,300	98	Impervious
	1,066	61	>75% Grass cover, Good, HSG B
	2,366	81	Weighted Average
	1,066	61	45.05% Pervious Area
	1,300	98	54.95% Impervious Area

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MSE 24-hr 3 100-Year Rainfall=7.18"

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Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A2X: Existing Direct To Road

Runoff = 1.01 cfs @ 12.12 hrs, Volume= 0.044 af, Depth= 4.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=7.18"

Area (sf)	CN	Description
* 1,977	98	Impervious
3,475	61	>75% Grass cover, Good, HSG B
5,452	74	Weighted Average
3,475	61	63.74% Pervious Area
1,977	98	36.26% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Subcatchment A3P: Proposed To Road

Runoff = 0.50 cfs @ 12.13 hrs, Volume= 0.021 af, Depth= 3.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs
MSE 24-hr 3 100-Year Rainfall=7.18"

Area (sf)	CN	Description
* 852	98	Impervious
1,948	61	>75% Grass cover, Good, HSG B
2,800	72	Weighted Average
1,948	61	69.57% Pervious Area
852	98	30.43% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Summary for Reach R1P: Proposed Total to Lake

Inflow Area = 0.296 ac, 27.87% Impervious, Inflow Depth = 3.27" for 100-Year event
Inflow = 2.05 cfs @ 12.13 hrs, Volume= 0.081 af
Outflow = 2.05 cfs @ 12.13 hrs, Volume= 0.081 af, Atten= 0%, Lag= 0.0 min

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MSE 24-hr 3 100-Year Rainfall=7.18"

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Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Reach R1X: Existing Total to Lake

Inflow Area = 0.296 ac, 23.72% Impervious, Inflow Depth = 3.71" for 100-Year event
 Inflow = 2.14 cfs @ 12.13 hrs, Volume= 0.092 af
 Outflow = 2.14 cfs @ 12.13 hrs, Volume= 0.092 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Reach R2P: Sum To Road

Inflow Area = 0.119 ac, 41.66% Impervious, Inflow Depth = 3.63" for 100-Year event
 Inflow = 0.99 cfs @ 12.13 hrs, Volume= 0.036 af
 Outflow = 0.99 cfs @ 12.13 hrs, Volume= 0.036 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Summary for Pond B1P: Stormwater BMP

Inflow Area = 0.054 ac, 54.95% Impervious, Inflow Depth = 4.97" for 100-Year event
 Inflow = 0.51 cfs @ 12.12 hrs, Volume= 0.023 af
 Outflow = 0.50 cfs @ 12.13 hrs, Volume= 0.023 af, Atten= 1%, Lag= 0.5 min
 Discarded = 0.01 cfs @ 12.13 hrs, Volume= 0.008 af
 Primary = 0.49 cfs @ 12.13 hrs, Volume= 0.015 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-96.00 hrs, dt= 0.01 hrs

Peak Elev= 972.35' @ 12.13 hrs Surf.Area= 703 sf Storage= 203 cf

Plug-Flow detention time= 341.8 min calculated for 0.023 af (100% of inflow)

Center-of-Mass det. time= 342.1 min (1,128.6 - 786.5)

Volume	Invert	Avail.Storage	Storage Description
#1	971.80'	143 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 4.00'W x 15.00'L x 4.25'H Prismatoid 255 cf Overall x 40.0% Voids
#2	967.55'	102 cf	
		245 cf	
		Total Available Storage	

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
971.80	60	0	0
972.00	109	17	17
972.30	300	61	78
972.40	1,000	65	143

Device	Routing	Invert	Outlet Devices
#1	Primary	972.30'	Custom Weir/Orifice, Cv= 2.62 (C= 3.28) Head (feet) 0.00 0.10 Width (feet) 10.00 30.00
#2	Discarded	967.55'	
			0.450 in/hr Exfiltration over Surface area

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MSE 24-hr 3 100-Year Rainfall=7.18"

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Discarded OutFlow Max=0.01 cfs @ 12.13 hrs HW=972.35' (Free Discharge)

↑**2=Exfiltration** (Exfiltration Controls 0.01 cfs)

Primary OutFlow Max=0.49 cfs @ 12.13 hrs HW=972.35' TW=0.00' (Dynamic Tailwater)

↑**1=Custom Weir/Orifice** (Weir Controls 0.49 cfs @ 0.68 fps)



Stormwater and shoreline best management practices for public water access sites



Well-designed and managed public water accesses (PWAs) can maintain and even improve water quality by restoring shoreline buffers and alleviating storm water runoff.

PWAs provide an opportunity for users to interact with the natural riparian environment during their recreational pursuits. Many PWAs receive high use, and care must be taken in their design, construction, and maintenance to sustain the health of the natural resources and to provide quality experiences in the future. The DNR and local units of government have the responsibility to demonstrate exemplary development and management practices that will improve or maintain natural resources health and provide access to public waters of the state for recreational pursuits.

This guide describes sound practices based on the most current information, and will be updated as new methods become available. It is meant to assist with site-level development and management that will ultimately enhance the larger landscape. This guide should not be considered a comprehensive design tool. It will be especially helpful to resource managers in becoming familiar with sound design options. Engineers and ecological restoration professionals should be consulted when substantial site modifications are warranted.

Click on topic below to reveal more information. Click again to hide.

Expand all sections

+ General guidelines for all public water access sites

The following standards and practices should be applied to all future PWA development and management:

- [Enhancing stormwater management in Minnesota](https://www.pca.state.mn.us/water/enhancing-stormwater-management-minnesota) (<https://www.pca.state.mn.us/water/enhancing-stormwater-management-minnesota>)
- Adherence to MN Rule 6120.3300 for shoreline setback [Excerpt from Shoreland and Floodplain Management \(PDF\)](https://files.dnr.state.mn.us/destinations/water_access/ais/excerpt_mn_rules_6120_subp3-5.pdf) (https://files.dnr.state.mn.us/destinations/water_access/ais/excerpt_mn_rules_6120_subp3-5.pdf)
- Preservation of 75% of shoreline
- Application of best management practices
- Application of soil guidelines [description \(/water_access/bmp/soil_retention_bmp.html\)](#). »
- Preservation of native vegetation and the use of native plants especially in the restoration and management of shorelines (See DNR Operational Order 124)

+ Environmental revitalization of existing impaired sites

Example of a revitalized site.

(https://images.dnr.state.mn.us/destinations/water_access/bmps/rendering_revitalization_existing_impaired_sites.jpg)

These sites can be improved by regional field staff taking the following actions:

- Assess infrastructure conditions and natural resources [Initial PWA Site Assessment Form \(PDF\)](https://files.dnr.state.mn.us/destinations/water_access/ais/initial_pwa_site_assessment_form.pdf) (https://files.dnr.state.mn.us/destinations/water_access/ais/initial_pwa_site_assessment_form.pdf)
- Seek assistance from a natural resource specialist and/or a shoreline restoration specialist [PWA Assessment Detailed On-Site Analysis by Specialist\(s\) \(PDF\)](https://files.dnr.state.mn.us/destinations/water_access/ais/pwa_assessment_detailed_on_site_analysis_by_specialist.pdf) (https://files.dnr.state.mn.us/destinations/water_access/ais/pwa_assessment_detailed_on_site_analysis_by_specialist.pdf)
- Seek minimal engineering guidance
- Divert runoff into vegetated areas via minor grade changes, such as surface, subsurface diversions, and curb cuts
- Stop mowing to the water's edge, and assess emerging vegetation for one growing season before attempting restoration
- Identify invasive species and apply DNR Operational Order 113 in their management
- Apply DNR Operational Order 124, Plant Community Standards for Native Plant Community Restoration, as appropriate
- Conduct a thorough soil analysis

- Design and implement minor storm water management and/or shoreline best management practices as feasible [Project example \(https://images.dnr.state.mn.us/destinations/water_access/bmps/revitalization_existing_impaired_3_sites.jpg\)](https://images.dnr.state.mn.us/destinations/water_access/bmps/revitalization_existing_impaired_3_sites.jpg).
- Identify and implement regular maintenance practices to maintain functionality of best management practices

When considering projects in this category, DNR Parks and Trails and local units of government should explore possible partnerships with [local soil and water conservation districts staff \(http://www.maswcd.org/SWCDs_On_The_Web/swcds_on_the_web.htm\)](http://www.maswcd.org/SWCDs_On_The_Web/swcds_on_the_web.htm) and with Conservation Corps Minnesota. Grants may be available through the first two organizations as they have similar goals to restore and maintain healthy water resources in their respective areas. Natural resources specialist services should be available to help assess shorelines.

+ Engineered redevelopment of existing sites with inferior performance

[Example of a redeveloped site. \(https://images.dnr.state.mn.us/destinations/water_access/bmps/rendering_redevelopment_existing_sites.jpg\)](https://images.dnr.state.mn.us/destinations/water_access/bmps/rendering_redevelopment_existing_sites.jpg)

These sites will be redesigned by an engineer. Design should be guided by the following actions:

- Assess infrastructure conditions and natural resources [PWA Assessment Detailed On-Site Analysis by Specialist\(s\) \(PDF\) \(https://files.dnr.state.mn.us/destinations/water_access/ais/pwa_assessment_detailed_on_site_analysis_by_specialist.pdf\)](https://files.dnr.state.mn.us/destinations/water_access/ais/pwa_assessment_detailed_on_site_analysis_by_specialist.pdf).
- Minimize impervious surfaces
- Disconnect impervious surfaces
- Incorporate minimal design standards [Minimal design standards for storm water management \(http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/stormwater-minimal-impact-design-standards-mids.html\)](http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/stormwater-minimal-impact-design-standards-mids.html)
- Adhere to MN Rule 6120.3300 for shoreline setback [Excerpt from Shoreland and Floodplain Management \(PDF\) \(https://files.dnr.state.mn.us/destinations/water_access/ais/excerpt_mn_rules_6120_subp3-5.pdf\)](https://files.dnr.state.mn.us/destinations/water_access/ais/excerpt_mn_rules_6120_subp3-5.pdf).
- Identify invasive species and implement DNR Operational Order 113
- Preserve and/or restore existing natural vegetation
- Apply DNR Operational Order 124, Plant Community Standards for Native Plant Community Restoration, as appropriate
- Conduct a thorough soil analysis
- Select, design, and implement storm water management and/or shoreline best management practices as feasible
- Identify and implement regular maintenance practices to maintain functionality of best management practices

+ Development of new sites

[Example of a new site. \(https://images.dnr.state.mn.us/destinations/water_access/bmps/rendering_new_sites.jpg\)](https://images.dnr.state.mn.us/destinations/water_access/bmps/rendering_new_sites.jpg)

Before acquiring a site, careful consideration should be given to the feasibility of developing an access that can fully implement best management practices and still serve the public good. New sites should be exemplary in demonstrating a state-of-the-art facility.

These sites will be designed by an engineer. The design should be guided by the following actions:

- Assess infrastructure conditions and natural resources [PWA Assessment Detailed On-Site Analysis by Specialist\(s\) \(PDF\) \(https://files.dnr.state.mn.us/destinations/water_access/ais/pwa_assessment_detailed_on_site_analysis_by_specialist.pdf\)](https://files.dnr.state.mn.us/destinations/water_access/ais/pwa_assessment_detailed_on_site_analysis_by_specialist.pdf).
- Minimize impervious surfaces
- Incorporate minimal design standards [Minimal design standards for storm water management \(http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/stormwater-minimal-impact-design-standards-mids.html\)](http://www.pca.state.mn.us/index.php/water/water-types-and-programs/stormwater/stormwater-minimal-impact-design-standards-mids.html)
- Adhere to MN Rule 6120.3300 for shoreline setback [Excerpt from Shoreland and Floodplain Management \(PDF\) \(https://files.dnr.state.mn.us/destinations/water_access/ais/excerpt_mn_rules_6120_subp3-5.pdf\)](https://files.dnr.state.mn.us/destinations/water_access/ais/excerpt_mn_rules_6120_subp3-5.pdf).
- Identify invasive species and implement DNR Operational Order 113
- Preserve and/or restore existing natural vegetation
- Apply DNR Operational Order 124, Plant Community Standards for Native Plant Community Restoration, as appropriate
- Conduct a thorough soil analysis
- Select, design, and implement storm water management and/or shoreline best management practices as feasible
- Identify and implement regular maintenance practices to maintain functionality of best management practices

+ Storm water runoff best management practices

The emphasis today is on Low Impact Development (LID): keeping the raindrop where it falls and filtering out harmful substances. These practices require replacing traditional engineering with design that disconnects impervious surfaces and disperses runoff into several small catchment areas using innovative site-specific solutions that mimic each site's natural hydrology. This is especially important for areas closely connected to fresh water.

[Minimum impact design standards for storm water management \(/water_access/bmp/stormwater_mids.html\)](/water_access/bmp/stormwater_mids.html). »

[Conveyance best management practices \(/water_access/bmp/conveyance_bmp.html\)](/water_access/bmp/conveyance_bmp.html). »

[Pretreatment best management practices \(/water_access/bmp/pretreatment_bmp.html\)](/water_access/bmp/pretreatment_bmp.html). »

[Treatment best management practices \(/water_access/bmp/treatment_bmp.html\)](/water_access/bmp/treatment_bmp.html). »

— Shoreline protection best management practices

Ecologically intact shorelines are essential for a healthy lake or river. State and local units of government have the responsibility to preserve, restore, and maintain the natural attributes of riparian areas today and for the future. PWA sites must demonstrate leadership in preserving, restoring, and maintaining a healthy buffer zone to assure that erosion and polluted runoff from the upland does not enter the water body.

Well maintained aquatic, transitional, and upland buffer zones serve to:

- Stabilize shoreland, reducing erosion potential
- Improve fish and wildlife habitat
- Filter nutrients and pollutants
- Enhance storm water infiltration and storage
- Reduce erosion from upland sources
- Lessen the impact of wave action causing shore erosion

Guiding principles

- Protect and manage intact shore remnants
- Restore degraded lakeshore systems
- Reestablish degraded lakeshore systems with native plants of local origin
- Minimize human disturbances
- Showcase best shoreline management

[Minimum impact design standards for shoreline protection \(/water_access/bmp/shoreline_mids.html\)](/water_access/bmp/shoreline_mids.html). »

[Best management practices for shores dominated by native vegetation \(/water_access/bmp/native_veg_bmp.html\)](/water_access/bmp/native_veg_bmp.html). »

[Best management practices for shores dominated by invasive plants \(/water_access/bmp/invasive_plants_bmp.html\)](/water_access/bmp/invasive_plants_bmp.html). »

[Best management practices for riprap shores \(/water_access/bmp/riprap_bmp.html\)](/water_access/bmp/riprap_bmp.html). »

[Best management practices to remediate shore erosion \(/water_access/bmp/erosion_bmp.html\)](/water_access/bmp/erosion_bmp.html). »

For more information: [Restore Your Shore \(https://www.dnr.state.mn.us/rys/index.html\)](https://www.dnr.state.mn.us/rys/index.html).

+ Legislation

The 2013 Legislature directed the Commissioner of the Department of Natural Resources to "utilize applicable design standards and best management practices when designing and constructing new public water access sites and renovating existing sites. The Commissioner shall make the design standards and best management practices available on the Department of Natural Resources website and notify Local Units of Government of the standards and practices."

+ Acknowledgements

The design standards and best management practices were created by a dedicated team of professionals. A special thanks to:

- Angela Anderson, Project Leader, DNR Parks and Trails
- Bill Bartodziej, Ramsey Washington Metro Watershed District
- Heather Baird, DNR Shoreline Habitat
- Virginia Blakesley, DNR Parks and Trails
- Doug Carter, DNR Engineering
- Lindy Ekola, DNR Shoreline Habitat
- Linda Escher, DNR Web Editor
- Trygve Hanson, DNR Parks and Trails
- Mike Isensee, Washington Conservation District
- Bob Moore, DNR Parks and Trails
- Bryan Pynn, Washington Conservation District
- Dean Sether, DNR Engineering
- Stefanie Stearns, DNR Web Coordinator
- Nancy Stewart, Project Leader, DNR Parks and Trails
- Gregg Thompson, City of Eagan



Vegetated filter strips

Vegetated filter strips are a pretreatment Best Management Practice (BMP) designed to remove solids from stormwater runoff. The vegetation can consist of natural and established vegetation communities and can range from turf grass to woody species with native grasses and shrubs. Because of the range of suitable vegetation communities, vegetated filter strips can be easily incorporated into landscaping plans; in doing so, they can accent adjacent natural areas or provide visual buffers within developed areas. They are best suited for treating runoff from roads, parking lots and roof downspouts.

Their primary function is to slow runoff velocities and allow sediment in the runoff to settle or be filtered by the vegetation. By slowing runoff velocities, they help to attenuate flow and create a longer time of concentration. Filter strips do not significantly reduce runoff volume, but there are minor losses due to infiltration and depression storage.

Filter strips are most effective if they receive sheet flow and the flow remains uniformly distributed across the filter strip. Channelized flow significantly reduces the effectiveness of a filter strip because flow velocities are minimally reduced and the effects of filtration through plant stems and accumulated thatch on the ground surface is lost.

Contents

- 1 Permit applicability
- 2 Retrofit applicability
- 3 Cold climate suitability
- 4 Special receiving waters suitability
- 5 Water quality benefits
- 6 Water quantity benefits
- 7 Design considerations
- 8 Construction
- 9 Maintenance

Permit applicability

Vegetated filter strips are included in the "Infiltration/Filtration" category (Section III.D.1) of the MPCA Construction Stormwater General Permit ([https://stormwater.pca.state.mn.us/index.php?title=Category:Level_2_-_Regulatory/Construction_\(CSW\)](https://stormwater.pca.state.mn.us/index.php?title=Category:Level_2_-_Regulatory/Construction_(CSW))) and will usually require such a permit as part of the overall construction project. Properly designed vegetated filter strips also satisfy permit requirements for pre-treatment for certain stormwater quality BMPs. Retrofits are cases in which

construction of a vegetated filter strip may not require a MPCA Permit, although the permit’s standards may still provide design guidelines. Additional permits may be necessary depending on the jurisdiction and the proposed location of the vegetated filter strip.

Retrofit applicability

The ability to retrofit a site to incorporate a vegetative filter strip is highly dependent on existing conditions and how well the filter strip conforms to design requirements. As noted in the overview and design guidelines, vegetated filter strips are much more effective if they receive sheet flow and if the filter strip has a low gradient. A retrofit may therefore require additional grading or repaving to create sheet flow and/or create a grade suitable for effective pretreatment. The availability of space for the filter strip will impact its effectiveness, particularly if the available space is smaller than design guidelines stipulate. In such cases, the pretreatment needs should be evaluated to determine if a potentially undersized filter strip is the most appropriate pretreatment option.

Cold climate suitability

During the winter season, vegetated filter strips can become covered with snow and ice, causing runoff to find an alternate flow path or possibly flow on top of ice-covered ground and away from the filtering ability of the vegetation. Furthermore, the frozen ground eliminates the minor benefit of infiltration.

Special receiving waters suitability

Design restrictions for filtration BMPs hold true for vegetated filter strips specifically. While the design of filter strips can utilize a variety of vegetation communities, native vegetation with robust root systems should be used immediately adjacent to water bodies to provide additional bank stabilization and provide natural cover for habitat.

Infiltration and filtration bmp¹ design restrictions for special waters and watersheds. See also Sensitive waters and other receiving waters.
Link to this table

BMP Group	receiving water				
	A Lakes	B Trout Waters	C Drinking Water ²	D Wetlands	E Impaired Waters
Infiltration	RECOMMENDED	RECOMMENDED	NOT RECOMMENDED if potential stormwater pollution sources evident	RECOMMENDED	RECOMMENDED unless target TMDL pollutant is a soluble nutrient or chloride
Filtration	Some variations NOT RECOMMENDED due to poor phosphorus removal, combined with other treatments	RECOMMENDED	RECOMMENDED	ACCEPTABLE	RECOMMENDED for non-nutrient impairments

¹ Filtration practices include green roofs, bmps with an underdrain, or other practices that do not infiltrate water and rely primarily on filtration for treatment.

² Applies to groundwater drinking water source areas only; use the lakes category to define BMP design restrictions for surface water drinking supplies

Water quality benefits

Properly designed vegetated filter strips slow runoff velocities and allow sediment in the runoff to settle or be filtered by the vegetation. In addition to filtering solids, vegetated filter strips can also remove portions of other pollutants in runoff, including small particulates, hydrocarbons, heavy metals and nutrients such as phosphorus and nitrogen. The removal

mechanisms include sedimentation, filtration, adsorption, infiltration, biological uptake, and microbial activity.

The water quality benefit of a vegetated filter strip is dependent on the length of flow through the BMP, the effectiveness in achieving sheet flow and avoiding channelized flow, and the characteristics of the contributing watershed. Studies have examined the effectiveness of vegetated filter strips in treating runoff from urban settings, including highways and parking lots; however, these studies have been too few in number or have too many varying characteristics (watershed variables and vegetated filter strip design) to determine strong correlations between design components and specific water quality benefits.

Water quantity benefits

Vegetated filter strips are not a primary means of water quantity control; however, there are minor volumetric losses from infiltration and evapotranspiration.

Design considerations

There are five critical components for an effective vegetative filter strip design:

- contributing drainage area;
- type of vegetation;
- filter strip length;
- filter strip slope; and
- filter strip soils.

Vegetated filter strips are most effective for storm events up to the 1- to 2-year event. The effectiveness of filter strips is reduced for flow depths that exceed 1 inch and flow velocities that exceed 0.5 feet per second.

The flow length leading to the vegetated filter strip is a primary design factor because if the flow length is too long, there is a greater chance that the sheet flow will become concentrated flow and require additional design to re-establish sheet flow entering the vegetated filter strip. The flow length into the vegetated filter strip should be limited to 75 feet from impervious surfaces and 150 feet from pervious surfaces.

Vegetated filter strips are most effective if the vegetation is healthy and dense. Grasses are most effective in shorter filter strips while woody species may be suitable for longer filter strips.

A properly designed filter strip length is dependent on the slope, the underlying soils, and the type of vegetation to be used. Filter strips that are too short will have reduced effectiveness. Filter strips with steeper slopes will require more length to be equally effective as a filter strip with a lower slope; slopes less than 5 percent are most effective. The current state of Minnesota guidelines are consistent with other published guidelines.

Guidelines for filter strip pre-treatment sizing

Link to this table

Parameter	◆ Impervious Parking Lots ◆				◆ Residential Lawns ◆			
Maximum Inflow Approach Length (ft)	35		75		75		150	
Filter Strip Slope	=<2%	>2%	=<2%	2%	=<2%	2%	=<2%	2%
Filter Strip Minimum Length	10'	15'	20'	25'	10'	12'	15'	18'

Proposed filter strip per plans is 12% slope and 25' wide, twice the recommended minimum width.

Construction

One significant benefit of vegetated filter strips is that construction is relatively inexpensive since it is limited to grading and vegetation establishment. Maintaining sheet flow in the filter strip is critical to its effectiveness; therefore, construction must result in an evenly graded site. Care should also be taken to avoid excessive compaction in the filter strip area to maintain healthy soils for a healthy vegetation community and to preserve the infiltration capacity of the soils.

Maintenance

If designed properly and if they receive sheet flow, vegetated filter strips require minimal maintenance. More maintenance is required of vegetated filter strips that receive channelized flow from the contributing watershed or concentrated flow from curb cuts. Systems that redistribute concentrated or channelized flow into sheet flow may require periodic maintenance to ensure the redistribution system maintains its design function. Depending on the contributing watershed characteristics, common maintenance needs include periodic removal of accumulated sediment and debris (particularly at the upstream end of the filter strip) and monitoring to ensure channels or preferential flow paths have not developed. Contributing watersheds with high sediment concentrations require more frequent maintenance in the vegetated filter strip to manage sediment build-up. Maintenance may also include mowing and trimming or burning the plant community depending on specific needs of the vegetation.

Retrieved from "https://stormwater.pca.state.mn.us/index.php?title=Vegetated_filter_strips&oldid=66896"

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Ethan Nelson

From: Sherry Mortensen <tallgirl1776@gmail.com>
Sent: Wednesday, August 30, 2023 11:05 PM
To: Ethan Nelson
Subject: 483 Lakeview Terr Blvd Variance

Hi Ethan.

I am responding to the variance request for 483 Lakeview Terrace Blvd. I have reviewed the drawings for the proposed home construction. While the home is architecturally attractive, I feel the home needs to be sized to meet existing codes. Additional space was added to the home on the west side several years ago, which diminished the view of the lake from my home. The proposed home would extend the existing footprint on the east side, further limiting the lake view.

There are unresolved noise issues with the homeowners since the purchase of the property. The proposed drawings relocate the garage from the west side of the property to the east side. This places the noise source closer to my home. Windows are often closed to lessen the noise and it is difficult to enjoy my outdoor space. I feel the noise issues would be compounded if the home were to be built as currently planned. I am not in favor of granting this variance request.

Best regards,

Sherry Mortensen
436 Lakeview Terr Blvd

Ethan Nelson

From: Mark Fischer <markfischer11@gmail.com>
Sent: Tuesday, September 5, 2023 10:23 PM
To: Ethan Nelson
Subject: Re: COMMENT re; Property 483 Lakeview Terrace Boulevard

Ethan, thank you for providing the information around the variance requesting an increase in the impervious surface maximum allowed. As pointed out, the garage will now be situated on the east side close to our house, rather than the west side, where it is currently. This raises an ongoing concern we and other neighbors have. When the owners leave the property they lock their dog in the garage and from that time on and until they return the dog barks incessantly, often for hours on end.

I appreciate you giving us the opportunity to comment,

Best Regards

Mark Fischer
479 Lakeview Terrace Boulevard
Waconia 55387, MN.

Ethan Nelson

To: Joe Meyer
Subject: RE: 483 Lakeview Terrace Blvd

From: Joe Meyer <joe@thetaxbook.com>
Sent: Monday, September 18, 2023 10:54 AM
To: Ethan Nelson <enelson@waconia.org>
Subject: Re: 483 Lakeview Terrace Blvd

Could I update my public comments? If so, below are my changes.

- 1) The retaining wall on the northwest side of the property is very close to the property line. Can it be that close? Also, the retaining wall is very close to the oak tree that is partially on my property. I don't believe it provides enough space for the roots of that tree. I'm not terribly concerned if the tree dies but it is highly likely.
- 2) How does the city monitor the native grass and pine trees to be planted in the backyard?

Thanks Ethan!

Joe

Joe Meyer
Senior Vice President
TheTaxBook
15105 Minnetonka Ind. Rd, Suite 221
Minnetonka, MN 55345
952-746-5276 Ext. 207
www.thetaxbook.com



REQUEST FOR PLANNING COMMISSION ACTION

Meeting Date: October 12, 2023

Item Name: PUBLIC HEARING - Conditional Use Permit Amendment - 9460 County Road 10 East

Originating Department: Community Development

Presented by: Lane Braaten

Previous Commission Action (if any):

Item Type (X only one):	Consent		Regular Session	X	Discussion Session	
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RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED (Include motion in proper format.)

Open Public Hearing
Close the Public Hearing
Provide recommendation to the City Council regarding the proposed amendment to the Conditional Use Permit (CUP) for 9460 County Road 10 East (PID# 750191130).

EXPLANATION OF AGENDA ITEM (Include a description of background, benefits, and recommendations.)

BACKGROUND

Applicant: Brianna Lovett/BCL Holdings, LLC
Owner: Brianna Lovett/BCL Holdings, LLC
Address(es): 9460 County Road 10 East
PID# 750191130
Existing Zoning Districts: R-3, Medium Density Residential District

REQUEST

The applicant, Brianna Lovett, has submitted an application to amend the Conditional Use Permit (CUP) for 9460 County Road 10 East. Specifically, the applicant is requesting an extension to connect to city utilities (sewer/water), an extension on the required paving/improvement of the gravel surfaces, and an amendment to the existing commercial use of the property.

HISTORY

Lovett Planters is the existing use on the property, which was formerly doing business as Lovett Garden Home and Floral. The applicant received approval of a Conditional Use Permit for the garden center use via Resolution 2021-50 on February 16th, 2021.

APPLICABLE ORDINANCE PROVISIONS:

1. Section 900.05 - District Regulations, Subd. 2.C - R-3, Medium Density Residential District
2. Section 900.07 - Landscaping and Fencing
3. Section 900.08 - Performance Standards
4. Section 900.09 - Off-Street Parking, Loading, and Access Regulations
5. Section 900.10 - Sign Regulations
6. Section 900.11 - Uses Permitted by Conditional Use Permit (CUP) and Interim Use Permit (IUP)

APPLICABLE ORDINANCE DEFINITIONS:

Conditional Use: Those occupations, vocations, skills, arts, businesses, professions, or uses specifically designated in each zoning use district, which for the respective conduct or performance in such designated use districts may require reasonable, but special, peculiar, unusual or extraordinary limitations, facilities, plans, structures, thoroughfares, conditions, modification or regulations in such use district for the promotion or preservation of the general public welfare, health, convenience, or safety therein and in the County, and therefore may be permitted in such use district only by a Conditional Use Permit (CUP).

CONDITIONAL USE PERMIT REVIEW

Unless carefully controlled and monitored, some uses have the potential to have a deleterious effect on adjacent properties and the community as a whole. They must therefore meet and maintain a higher standard of quality to insure land use and environmental compatibility. Uses possessing unique and potentially detrimental characteristics may be authorized in certain zoning districts by issuance of a CUP where certain conditions are met.

GENERAL REQUIREMENTS/FINDINGS

Before a CUP shall be issued, the City Council and Planning Commission shall find that all of the following requirements are met:

1. *The use does not have an undue adverse impact on the public health, welfare or safety of the neighborhood or the City.*
2. *The use is consistent with the goals, objectives and policies of the City's Comprehensive Plan.*
3. *The use is consistent with the intent of the City Ordinances.*
4. *The use is adequately served by public facilities and services and will not create excessive demands for additional public services.*
5. *The use complies with the performance standards specified in Section 900.08 of this Ordinance.*
6. *The use will not result in the loss of solar access, significant natural, scenic, or historical features.*

ZONING

The subject parcel is zoned R-3, Medium Density Residential District. Garden Centers are a conditional use in said district subject to the requirements of Section 900.11, which are identified below in italics.

Garden Center Use subject to the following:

- a. *The facility shall have direct access to a collector or arterial street as identified in the Comprehensive Plan.*
- b. *Vehicular access to any such site shall not pass through any existing or proposed residential neighborhoods.*
- c. *Minimum parcel size shall be 5 acres.*
- d. *Off-street parking facilities shall be provided consistent with Section 900.09 of the Code.*
- e. *Light sources on the site shall be screened and directed away from residential areas.*
- f. *Landscaping and screening requirements shall be consistent with the standards identified in Section 900.07 for the B-1, Highway Business District.*
- g. *Signage shall be allowed consistent with Section 900.10 and the garden center use shall be allowed signage rights consistent with the B-1, Highway Business District standards.*
- h. *Hours of operation shall be subject to the City Council's approval and memorialized in the resolution approving the conditional use permit. Any change to the approved hours shall require an amendment to the conditional use permit, which may be granted or denied in the City Council's discretion.*
- i. *The use shall be in compliance with the City's nuisance standards identified in Section 900.08 of the Code.*
- j. *The property shall be located within the City Limits and connected to City utility services.*

CONDITIONAL USE PERMIT ANALYSIS:

1. The City Council approved Ordinance No. 735 on December 21st, 2020, which approved and identified garden center uses as a conditional use in the R-3, Medium Density Residential District if the ten (10) conditions identified in said ordinance could be met by the applicant and the proposed location. The ten conditions are found in Section 900.11, Subd. 1.B of the City Code and identified above. The Conditional Use Permit section of the City Code also identifies six general requirements and findings to consider when reviewing a CUP, which are also stated above.
2. The following items are currently outstanding based on the previous CUP approval: a. Connection to city utilities (i.e. sewer and water) within 3 years of annexation. Annexation was complete on September 16th, 2021, and therefore connection to utilities is currently required by September 16, 2024, and b. Improvement of the current gravel drive and parking area to bituminous or concrete within 5 years of the CUP approval date of February 16th, 2021.
3. The applicant is requesting an extension to connection to city services as follows: a. Connection to city

sewer and water by September 16th, 2034, which is ten years from their currently required date.

4. The current conditions of approval require the applicant to improve the existing gravel drive and parking area to bituminous or concrete by February 16th, 2026. The applicant is requesting an extension to allow this work to be completed no later than February 16th, 2036.
5. Section 900.09, Off-Street Parking, Loading and Access Regulations requires all areas intended to be utilized for parking space and driveways to be surfaced with bituminous or concrete to control dust and drainage.
6. The original approval for the property assumed retail garden center use. Based on the application and some email conversations with the applicant, the garden center retail has now morphed into a planter business. The Planning Commission should review the use with the applicant to ensure that the existing use is consistent with intent of the City Code.
7. See attached CUP resolution of approval regarding the initial findings and conditions associated with the garden center use at 9460 County Road 10 East (Resolution 2021-50).

CONCLUSION / RECOMMENDATION

The Planning Commission should hold the required public hearing, take all public comment and make a recommendation to the City Council regarding the proposed amendment to the Conditional Use Permit for 9460 County Road 10 East. This item will be forwarded to the City Council for review at their upcoming meeting scheduled for November 6th, 2023.

If the Planning Commission chooses to recommend approval of the CUP amendment, staff would recommend the approval upon the following conditions:

1. The proposed improvements shall be completed as approved and as conditionally revised/amended by the Planning Commission and the City Council.
2. The applicant shall connect to City utilities (i.e. sanitary sewer and water) within _____ years of the Conditional Use Permit amendment. The property owner shall be responsible for all costs regarding the necessary infrastructure and the required Metropolitan Council SAC fee and associated City Water Trunk fee and Sewer Trunk fee.
3. To date the City of Waconia has incurred \$4,000 in utility expenses associated with the subject parcel to extend services from the neighboring cul-de-sac. The applicant shall pay the outstanding \$4,000 balance within 90 days of the Conditional Use Permit amendment approval.
4. All areas intended to be utilized for parking space and driveways shall be surfaced with bituminous or concrete to control dust and drainage. Plans for surfacing and drainage shall be submitted to the City Engineer for review and approval. The surfacing of parking areas and driveways shall be complete within _____ years of Conditional Use Permit amendment approval date.
5. Except as modified by this approval the applicant shall conform to the conditions stated in Resolution 2021-50.

Attachments:

1. [Location Map 9460 County Road 10 East.pdf](#)
2. [CUP Amendment Application Lovett.pdf](#)
3. [Applicant Narrative.pdf](#)
4. [Public Hearing Notice.pdf](#)
5. [Certificate of Survey 9460 County Road 10 E.pdf](#)
6. [ALTA Survey.pdf](#)
7. [Res No 2021-050_CUP Approval.pdf](#)

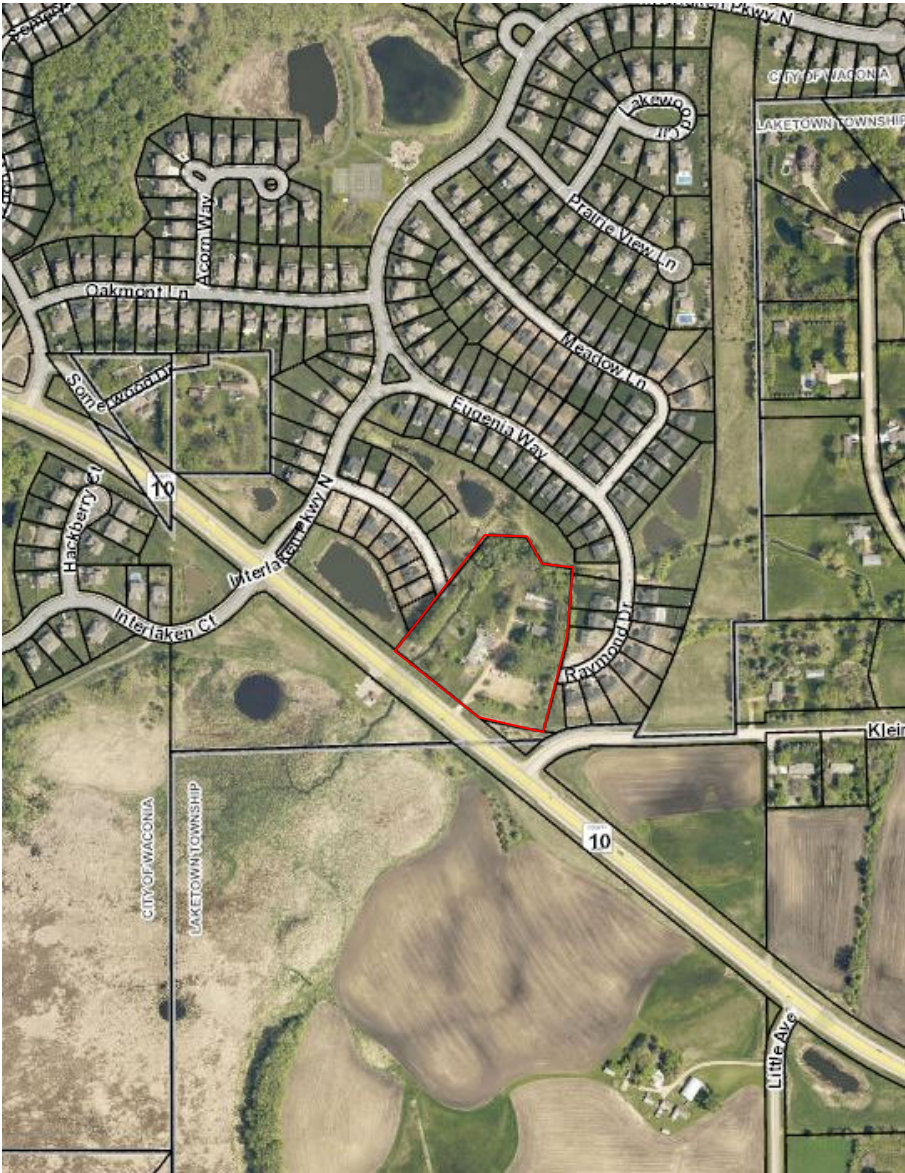
FINANCIAL IMPLICATIONS:

Funding Sources & Uses:

Budget Information:

_____ Budgeted
_____ Non Budgeted
_____ Amendment Required

LOCATION MAP—9460 COUNTY ROAD 10 EAST





CITY OF WACONIA
201 South Vine Street
Waconia, MN 55387
Phone: (952) 442-2184 Ext. 2
Fax (952) 442-2135
www.waconia.org

CONDITIONAL/INTERIM USE PERMIT

APPLICANT INFORMATION

1. Owner's Name: Brianna C. Lovett
2. Address of Property: 9460 County Rd 10 E Waconia, MN 55387
3. Legal Description: Attached Separately
4. Applicant's Name: Brianna C. Lovett
5. Mailing Address: 9460 County Rd 10 E Waconia MN 55387
6. Daytime Phone(s): 952.367.7021
7. Email Address: brianna.lovett@gmail.com

The City will distribute copies & appropriate information to applicant via email

OFFICE USE ONLY

Date Received: 9/4/23

Fee: \$ PD
Receipt #: PD



CITY OF WACONIA
201 South Vine Street
Waconia, MN 55387
Phone: (952) 442-2184 Ext. 2
Fax (952) 442-2135

CONDITIONAL/INTERIM USE PERMIT

1. Present Zoning: R-3
2. Existing use of Property: Residential as well as commercial.
3. Describe Request: I would like an extension for the following:
 - Connection to city water 5-10 years (Sept. 16th 2034).
 - Hard Surface 5-10 years (February 16th 2036).
 - I would like to keep the present zoning until decisions are made.
 - I would also like to keep the garden center building connected to well water. It is better for plants.

THE FOLLOWING INFORMATION MUST BE SUBMITTED IN ORDER TO CONSIDER THE APPLICATION COMPLETE

- ✓ 1. Payment of application fee (\$125 – residential; \$275 – non-residential) and escrow payment of \$500.00 for residential and non-residential applications. Additional consulting review fees may apply, such as civil engineering and legal counsel.
- ✓ 2. Certified survey of property
- ✓ 3. Scaled plot plan with north arrow and the proposed site showing all site dimensions.
- ✓ 4. All types of proposed uses.
5. Elevation drawings or illustrations indicating the architectural treatment of all proposed buildings and structures.
6. Location and size of all required parking spaces.
7. Landscaping plan including location, size and type of all proposed planting materials.
8. General floor plans of all proposed buildings and structures.
9. Indication of location, size and type of storage facilities for the storage of trash and waste materials.
10. Design layout and size of all proposed signs.
11. Drainage plan of the proposed site.

**Each conditional use or interim use is subject to the requirements of Section 900.11 of the City Zoning Ordinance.

FAILURE to comply with any condition set forth in a Conditional Use or Interim Use permit shall constitute a violation of this Ordinance and shall automatically terminate the permit.

Applicant's Signature: _____

Date: 9/4/2023

Printed Name: _____

Brianna C. Lovett

Further Explanations:

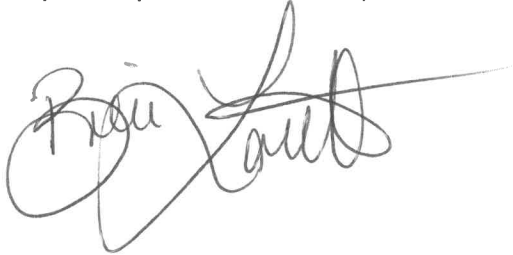
For the time being, I would like to continue to live on the property as well as use the outdoor buildings and spaces to run the container gardening business.

I would like to keep the current zoning on the property even though the retail portion of the garden center is currently closed. Other than that, there are no other changes currently taking place. I do plan on re-opening the garden center or at least selling plants and containers from the property when I have the resources and staff to do so.

Because of the less-than-ideal projected financials, I would like a 5-to-10-year extension on the city water connection as well as the hard surfacing of the parking lot. The garden center did not profit enough to support loans on such costly improvements. I will need more time.

With the water connection extension, I would also like to ask that the garden center building itself be given permission to remain connected to well water. Well water is better for the plants as city water has higher levels of unwanted elements i.e. chlorine etcetera.

Thank you for your consideration,

A handwritten signature in black ink, appearing to read "Ryan Paul". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

CITY OF WACONIA, MN
NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that the Planning Commission of the City of Waconia, MN, will hold a public hearing on October 12th, 2023 at 6:30 p.m., to consider a Conditional Use Permit (CUP) amendment application submitted by Brianna Lovett for the property located at 9460 County Road 10 East (PID# 750191130).

The applicant is requesting an amendment to the garden center Conditional Use Permit. Specifically, the applicant is requesting an extension on connection to city utilities, paving of the existing gravel surfaces on the subject parcel and revised use of the property, which would not include a retail element.

Pertinent information pertaining to this request is available at City Hall. Interested persons may submit written or oral comments pertaining to this matter any time prior to the hearing, or at the hearing on Thursday, October 12th, 2023. Written comments will be distributed to the Planning Commission for review and consideration. Please submit written comments by mail, email or in person as follows:

Mail/in person: Attention: Lane L. Braaten, 201 South Vine Street, Waconia, MN 55387
Email: lbraaten@waconia.org

By: WACONIA PLANNING COMMISSION

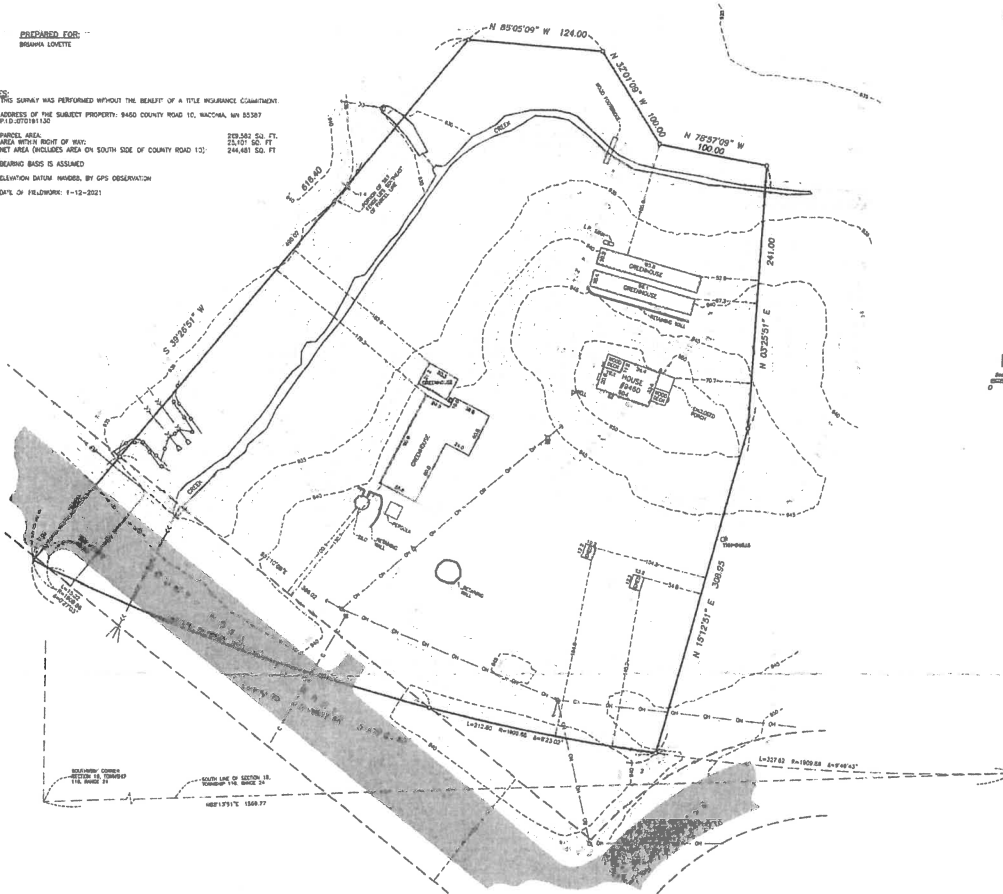
ATTEST: Lane L. Braaten, Community Development Director

(Published in the September 28th, 2023 Waconia Patriot newspaper)

CERTIFICATE OF SURVEY

PREPARED FOR:
BRIANNA LOVETTE

- NOTES:
- 1) THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE INSURANCE COMMITMENT.
 - 2) ADDRESS OF THE SUBJECT PROPERTY: 8400 COUNTY ROAD 10, WACONIA, MN 55387
P.L.D. 07/01/11/12
 - 3) PARCEL AREA:
AREA WITHIN RIGHT OF WAY: 229,340 SQ. FT.
NET AREA (EXCLUDES AREA ON SOUTH SIDE OF COUNTY ROAD 10): 23,177 SQ. FT.
244,481 SQ. FT.
 - 4) BEARING AND DISTANCE ASSUMED.
 - 5) ELEVATION DATA PROVIDED BY GPS OBSERVATION.
 - 6) DATE OF FIELDWORK: 1-13-2021



LEGAL DESCRIPTION:

That part of the Southwest Quarter of Section 10, Township 116, Range 24, Carver County, Minnesota described as follows:

Commencing at the southeast corner of said Section 10; thence on an assumed bearing of North 89 degrees 05 minutes 09 seconds East along the south line of said Southwest Quarter of the Southwest Quarter 1,869.77 feet to a point of curve, thence Northwesterly along a 3 degree 08 minutes 00 seconds curve concave to the Northwest, for each length of 327.62 feet; the chord of said curve bears North 85 degrees 19 minutes 07 seconds West from said point and is 217.22 feet in length to the point of beginning of the tract to be described, thence North 16 degrees 43 minutes 00 seconds East 308.55 feet; thence North 4 degrees 19 minutes 30 seconds East 241.00 feet; thence North 77 degrees 23 minutes 00 seconds West 180.00 feet; thence North 30 degrees 29 minutes 00 seconds West 180.00 feet; thence North 83 degrees 23 minutes 00 seconds West 134.00 feet; thence South 49 degrees 59 minutes 00 seconds West 618.40 feet more or less to the intersection with the previously described 3 degree 08 minutes 00 seconds curve; thence Southwesterly along said 3 degree 08 minutes 00 seconds curve, for each length of 600.98 feet; the chord of said curve bears North 71 degrees 23 minutes 23 seconds East from said point and chord length is 593.31 feet and said curve terminating on the originally described point of beginning.

LEGEND:

- SET BEAM
- SET BEAM
- POWER POLE (WITH DAY METER)
- FINE MASONRY
- GATE VALVE
- COMMUNICATIONS FIDUCIAL
- ELECTRIC METER
- GAS METER
- OVERHEAD UTILITY LINE
- COMMUNICATIONS LINE
- STORM SEWER LINE
- SANITARY SEWER FIDUCIAL
- RAIL FENCE
- CONCRETE SURFACE
- BITUMINOUS SURFACE
- GRAVEL SURFACE

CERTIFICATION:

I hereby certify that this survey, plan, or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the state of Minnesota.

Surveyed: 1/13/2021		Drawn: 1/13/2021	
Van NESTE SURVEYING	Professional Surveyor	Surveyor	Surveyor
VAN NESTE SURVEYING PROFESSIONAL SURVEYING SERVICES 4050 102nd Ave. SW, Unit 130, Spring Park, MN 55381 952-384-3065 - VANNESTE.SURVEYING.COM			

**CITY OF WACONIA
RESOLUTION 2021-50**

**RESOLUTION APPROVING A CONDITIONAL USE PERMIT
FOR GARDEN CENTER USE**

WHEREAS, Brianna Lovett (the “**Applicant**”) has submitted a Conditional Use Permit application to the City of Waconia (the “**City**”) pursuant to Sections 900.11 and 900.12 of the Waconia City Code; and

WHEREAS, the subject property is identified as PID# 070191130 and located at 9460 County Road 10 East (the “**Property**”); and

WHEREAS, the Applicant has requested a Conditional Use Permit (CUP) to allow a garden center use on the Property; and

WHEREAS, a public hearing regarding the Applicant’s request for a Conditional Use Permit was conducted by the City’s Planning Commission at its regular meeting on February 4th, 2021, which was held via Zoom; and

WHEREAS, at the public hearing the Planning Commission considered comments from the Applicant, City staff and members of the public; and

WHEREAS, the City’s Planning Commission, via a 4-0 vote, recommended approval of the Conditional Use Permit application based on the following findings of fact:

1. The Property is currently home to a garden center use and continuation of the use will not have an adverse impact on the public health, welfare or safety of the neighborhood, rather it may serve as an asset as the residential properties develop adjacent to said property.
2. The CUP is consistent with the goals, objectives and policies of the Comprehensive Plan as the use will allow for efficient and cost-effective perimeter growth.
3. A garden center use is allowed as a conditional use and the use is consistent with the zoning district as all required conditions identified in Section 900.11 have been met.
4. The property is currently located outside of the City Limits but shall be served by public facilities within 3 years of annexation.
5. The project is consistent with the performance standards stated in Section 900.08.
6. The project will not result in the loss of solar access, significant natural, scenic or historical features.

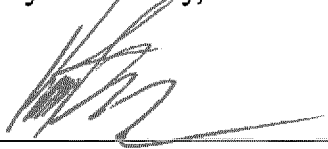
WHEREAS, the City’s Planning Commission recommends approval of the Conditional Use Permit application with the following conditions:

1. The proposed improvements shall be completed as approved and as conditionally revised by the Planning Commission and the City Council.
2. The applicant submit a petition for annexation, including all necessary submittal information and applicable fees, within sixty (60) days of Conditional Use Permit approval or within sixty (60) days of acquisition of the property, whichever is greater.
3. The applicant shall connect to City utilities (i.e. sanitary sewer and water) within 3 years of annexation of the subject parcel. The property owner shall be responsible for all costs regarding the necessary infrastructure and the required Metropolitan Council SAC fee and associated City Water Trunk fee and Sewer Trunk fee.
4. All areas intended to be utilized for parking space and driveways shall be surfaced with bituminous or concrete to control dust and drainage. Plans for surfacing and drainage shall be submitted to the City Engineer for review and approval. The surfacing of parking areas and driveways shall be complete within 5 years of Conditional Use Permit approval date.
5. The applicant shall submit a sign permit for the proposed monument signage. The proposed monument signage shall conform to Section 900.10 and be consistent with the standards and allowances associated with the B-1, Highway Business District per the conditional use permit standards.
6. Any update to the silo wall signage will require a permit and the sign dimensions shall not exceed the existing dimensions of the Willow Winds signage.
7. The applicant shall work with the City regarding the possible placement of future trail along the County Road 10 corridor, which may include necessary easements and grading for placement.
8. Any future fence installation shall require a permit from the City prior to installation and shall conform to City Code requirements for placement consistent with the B-1 standards.
9. The CUP shall become void one (1) year after being granted by the City Council if the applicant has not acted upon or made use of the approved use.
10. Any significant future expansion or modifications of the garden center use shall require review and approval by the City in the form of a Conditional Use Permit Amendment application.
11. The garden center use shall be allowed year-round and the hours of operation shall be 8 AM to 7 PM, Monday through Saturday and 8 AM to 5 PM on Sundays. The property owner shall also be allowed up to four evenings per month to host educational/craft classes with the allowance to remain open until 9 PM on said evenings.

NOW, THEREFORE, BE IT RESOLVED by the City Council of Waconia, Minnesota, as follows:

1. The findings of the City's Planning Commission are hereby incorporated as findings of the City Council.
2. A Conditional Use Permit for garden center use is hereby approved, subject to the findings and conditions set forth in this resolution.
3. The Conditional Use Permit granted by this resolution shall remain in effect only so long as the conditions set forth in this resolution are observed and the applicable provisions of the Waconia Code are met.
4. The City Administrator shall, at the Applicant's expense, record a certified copy of this Resolution with the Carver County Recorder and/or Registrar of Titles, as appropriate, against the Property.

Adopted by the City Council of the City of Waconia this 16th day of February, 2021.


Kent Bloudek, Mayor

ATTEST: jacqueline schulze
Jackie Schulze, Interim City Administrator

M/ Waldron

S/ Leo

Bloudek

Pierson

Leo

Sorensen

Waldron

Aye

Aye

Aye

Aye

Aye



REQUEST FOR PLANNING COMMISSION ACTION

Meeting Date:		October 12, 2023					
Item Name:		Sketch Plan - Kirsch Properties - Tamarack Land					
Originating Department:		Community Development					
Presented by:		Lane Braaten					
Previous Commission Action (if any):							
Item Type (X only one):	Consent		Regular Session	X	Discussion Session		
RECOMMENDATIONS/COUNCIL ACTION/MOTION REQUESTED <i>(Include motion in proper format.)</i>							
Informally discuss the Kirsch Properties Sketch Plan submitted by Tamarack Land for PID #s 070191700 & 070200030 and advise the applicant of the extent to which the plan conforms to the Comprehensive Plan and City Ordinances and discuss possible modifications that may be necessary.							
EXPLANATION OF AGENDA ITEM <i>(Include a description of background, benefits, and recommendations.)</i>							
<u>BACKGROUND:</u> Applicant: Tamarack Land Owner(s): Tony and Pat Kirsch Project: Kirsch Sketch Plan Addresses: 9350 Airport Road & unaddressed parcel PID#s: 070191700 & 070200030 2040 Comp Plan Designations: • L - Low Density Residential • M - Medium Density Residential • H - High Density Residential <u>REQUEST:</u> The City has received a Sketch Plan Application from Tamarack Land (the “applicant”) to facilitate a discussion with the Planning Commission regarding the possible future development of the properties located at 9350 Airport Road and identified as PID#s 070191700 and 070200030. Submittal of a Sketch Plan allows possible developers to provide a concept plan to the Planning Commission to receive feedback on a potential project to determine any conflicts prior to submittal of any future applications such as Preliminary Plat, Comprehensive Plan Amendments, Annexation, etc. <u>APPLICABLE ORDINANCE PROVISIONS:</u> 1. Section 1000.03 – Sketch Plan City Ordinance Section 1000.03 Sketch Plan, Subd. 1. states “<i>Subdividers shall prepare ten (10) copies of a subdivision sketch plan for review by the Planning Commission. Such sketch plan will be considered as having been submitted for informal discussion between the subdivider and the Planning Commission. No fee shall be required of the subdivider for the submission of a sketch plan.</i>” Further, Section 1000.03 Sketch Plan, Subd. 3. States “<i>Submission of a subdivision sketch plan shall not constitute formal filing of a plan with the City. On the basis of the subdivision sketch plan, the Planning Commission may informally advise the subdivider of the extent to which the plan conforms to the Comprehensive Plan, design standards of this ordinance and to other ordinances of the City and may discuss possible modification necessary to secure approval of the plan.</i>” <u>SKETCH PLAN ANALYSIS:</u> 1. The proposed sketch plan appears to be consistent with the 2040 Comprehensive Plan land use map, which							

- identifies the area as mix of low, medium, and high density residential.
2. The Sketch Plan indicates a mix of 55 and 65 ft. wide single-family lots, twin home lots and an apartment building. The plan also identifies the typical lot sizing for each along with typical setbacks.
 3. The applicant is proposing to use the Planned Unit Development (PUD) District to allow flexibility in the lot sizing and setbacks indicated as they do not conform to the typical requirements in our R-1, R-2, R-3, R-4, or R-5 Residential Zoning Districts. Section 900.05, Subd. 1.O of the City Code provides specific regulations regarding Planned Unit Developments. If the Planning Commission finds the concept plan acceptable, the applicant should more closely review the PUD standards to ensure compliance with this section.
 4. The Shoreland area includes all land within 1,000 feet of the ordinary high-water mark of a protected water of ten (10) acres or more, within 300 feet of a river or stream, or the landward extent of a flood plain on such a river or stream, whichever is greater. Reitz Lake is located to the south of the subject properties. As such, all of the high density and a very small portion of the property north of Airport Road is located within the Shoreland Overlay District. This area shall be subject to all requirements stated in Section 900.06, Subd. 7 of the City Code and Minnesota Administrative Rules 6120.3800 Planned Unit Development.
 5. Reitz Lake is classified as a Natural Environment Lake. The OWHL of this Public Water is 937.8.
 6. A small portion of the property located in close proximity to Reitz Lake is located within the designated flood zone. Any development of the property shall conform to Section 900.06, Subd. 6 Flood Plain Overlay Regulations.
 7. Figure 20 of the Comp Plan identifies the Wetland Protection Area within the City of Waconia. A significant portion of the subject properties lie within these identified areas. Any future development of the site shall conform to Section 900.06, Subd. 8, Environmental Protection Regulations.
 8. Additionally, Section 900.06, Subd. 8 Environmental Protection Regulations identifies specific regulations pertaining to tree preservation, reforestation and restitution. Portions of the subject parcel, in addition to Shoreland and wetland areas, are heavily wooded. The proposed tree removal shall be in accordance with the City's Tree Preservation standards.
 9. Section 1000 of the City Code provides regulations for the subdivision of property. Specifically, a portion of this section provides requirements relating to Public Land Dedication and Open Space. It states "It shall be presumed that at least 10% of the gross land in the subdivision shall be dedicated for parks, schools, playgrounds and open space. The City, upon consideration of the particular type of development proposed in the subdivision, may require larger or lesser amounts of land to be dedicated if it determines that the present and future residents of the subdivision would require greater or lesser amounts of land for such purposes." The sketch plan does not indicate any park areas and therefore staff presume that the developer is considering cash in lieu of land dedication, which is allowed if approved by the City Council after consideration by the Planning Commission and Park Board. If a cash payment in lieu of Park Land is required, the City Council shall take the percentage of land in the subdivision required for dedication, as determined under subsection C above (assumed to be 10% unless the City Council determines otherwise) and multiply it by the fair market value of the total land in the subdivision to determine the "Total Dedication Value". If the City Council determines that none of the Park Land is suitable or desirable, the subdivision shall make a cash payment to the City equal to the Total Dedication Value. If the City Council determines the City will accept a portion of the Park Land and that another portion is not suitable or desirable, the developer shall convey the Park Land the City is willing to accept and, in addition, make a cash payment to the City equal to the Total Dedication Value, proportionally reduced to reflect the Park Land accept by the City. The subdivider shall pay any amount due to the City via wire transfer or cashier's check prior to, and as a condition of, the City releasing the final plat for the subdivision."
 10. Subdividers are required to construct "a meaningful pedestrian circulation system subject to City approval which connects to the major trail system and to schools, parks and shopping areas and shall provide easements to accommodate movement. Said pedestrian ways shall be coordinated with those of adjacent subdivisions and the Comprehensive Plan." The 2040 Comp Plan indicates a Regional Trail Search Corridor along the future alignment of County Road 92 and future trail along Airport Road, a trail connection to the north, and trail connection to the Laketown Elementary School site to the west. The Planning Commission and Park Board should review the sketch plan to determine if the proposed trail system is consistent with the Comp Plan or if additional trail segments should be considered as part of this application.
 11. Section 1000, Subd. 7.G. Preservation of Natural Features and Amenities states "Existing features which

would add value to residential development or to the local government as a whole, such as trees, as herein defined, watercourses and falls, beaches, historic spots, and similar irreplaceable assets, shall be preserved in the design of the subdivision....” The Planning Commission and Park Board should review and determine if there are any significant areas that should be protected or preserved as part of this possible development. There are a significant number of trees on the southern parcel located along/near a steep slope which descends to Reitz Lake. This may be one of those existing features that may require some additional attention/retention.

12. Planting strips shall be required along Future Laketown Parkway/County Road 92 and Airport Road to screen the view and to reduce noise levels within the proposed residential areas.
13. The properties are bisected by the future extension of County Road 92, which is shown on the plan as “CSAH 92” and Airport Road. The applicant is proposing access to the north and to the south via Airport Road. Carver County will require a traffic study to determine what road improvements might be necessary for the proposed development. A copy of the concept plan will be submitted to the Carver County Public Works Department for review and comment.

LAND USE PLAN CATEGORIES AND PROPOSED ZONING MAP DISTRICTS:

<u>CATEGORY</u>	<u>LAND USES</u>	<u>ZONING DISTRICTS</u>
L - Low Density Residential	Single-family, detached housing on parcels with a minimum size of 10,500 square feet. The density range should be from 2 to 4 units per acre.	R-1, Single-Family Residential District R-2, Single-Family Residential District
M - Medium Density Residential	Single-family and two-family dwellings, townhouses and other forms of housing having an individual outdoor entrance for each housing unit. The density range should be from 4 to 10 units per acre.	R-2, Single-Family District R-3, Medium Density District R-4, Mixed Residential District
H - High Density Residential	All forms of attached housing ranging from 8 to 22 units per acre.	R-5, High Density Residential District

*Information above taken from Table 3-10 of the City of Waconia Comprehensive Plan

APPLICABLE ZONING DISTRICTS FOR SINGLE-FAMILY:

R-1, Single-Family Residential

- Minimum Lot Area: 10,500 sq. ft.
- Minimum Lot Width: 75 ft.
- Maximum Hardcover Surface: 35%

R-2, Single-Family Residential

- Minimum Lot Area: 7,850 sq. ft.
- Minimum Lot Width: 50 ft.
- Maximum Hardcover Surface: 35%

R-4, Mixed Residential District

- Minimum Lot Area: 7,850 sq. ft.
- Minimum Lot Width: 50 ft.
- Maximum Hardcover Surface: 35%

Note: All areas located within the Shoreland Overlay District are restricted to 25% maximum hardcover unless approved as part of the PUD, Planned Unit District, which conforms to the City and State regulations.

PUBLIC NOTICE/COMMENT:

As this application is an informal discussion with the Planning Commission, no public notice was required.

CONCLUSION / RECOMMENDATION

The Planning Commission should review the proposed submittal and how it relates to the City of Waconia's 2040 Comprehensive Plan and to the City Code and advise the applicant of the extent to which the plan conforms to said documents. It would also be appropriate to discuss possible modifications that may be necessary prior to submittal of a subdivision application for the properties.

NOTE:

The Kirsch Property Sketch Plan does not require review or consideration by the City Council. The Sketch Plan practice is a Planning Commission process to allow informal review of a potential development and to discuss possible modifications necessary to secure future approval of the plan.

Attachments:

1. [Location Map Kirsch Properties.pdf](#)
2. [KIRSCH PROPERTY - CONCEPT B 11x17.pdf](#)
3. [CHAPTER 3 Waconia Land Use Plan.pdf](#)
4. [CHAPTER 5 Waconia Parks Plan.pdf](#)

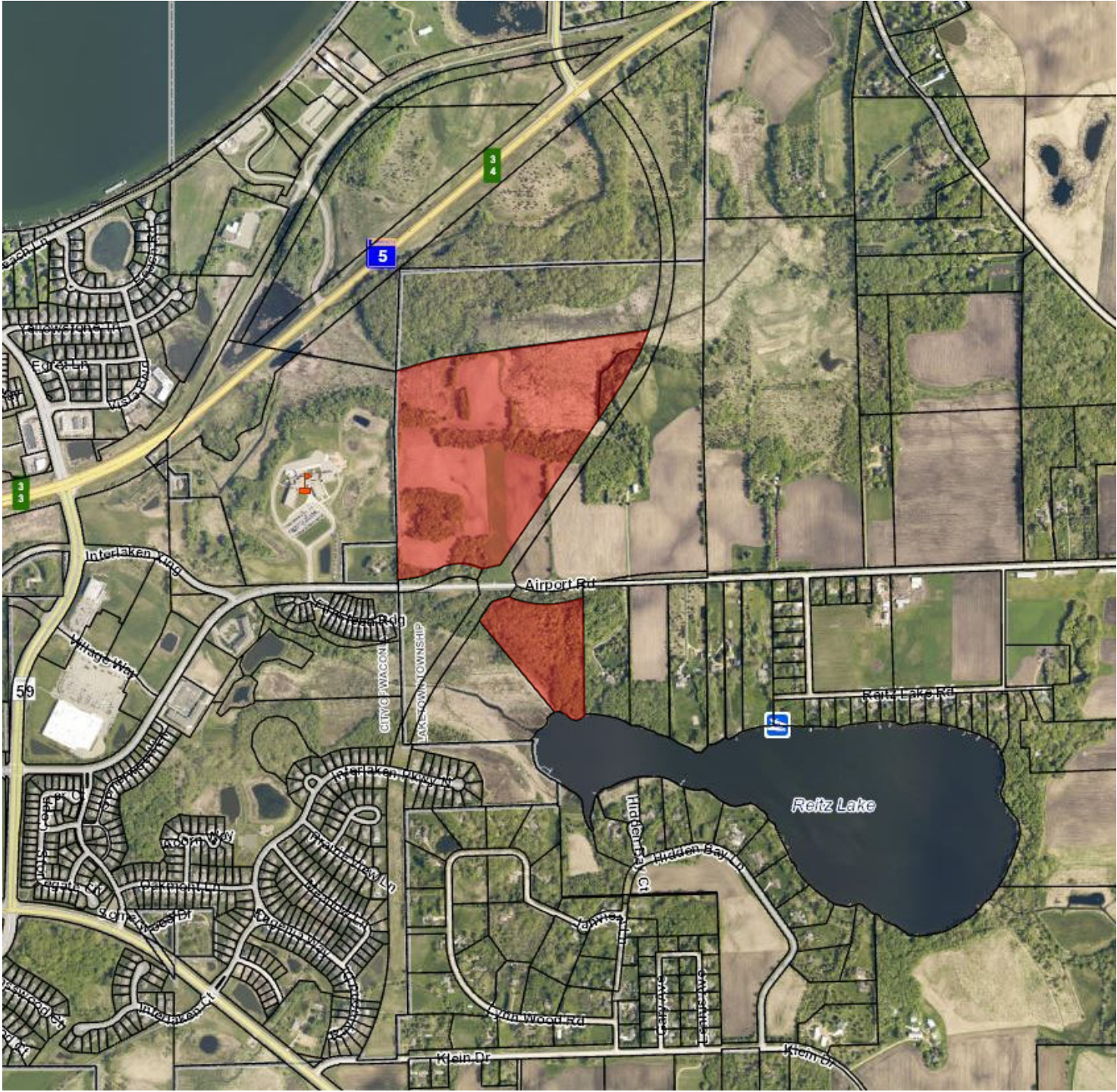
FINANCIAL IMPLICATIONS:

Funding Sources & Uses:

Budget Information:

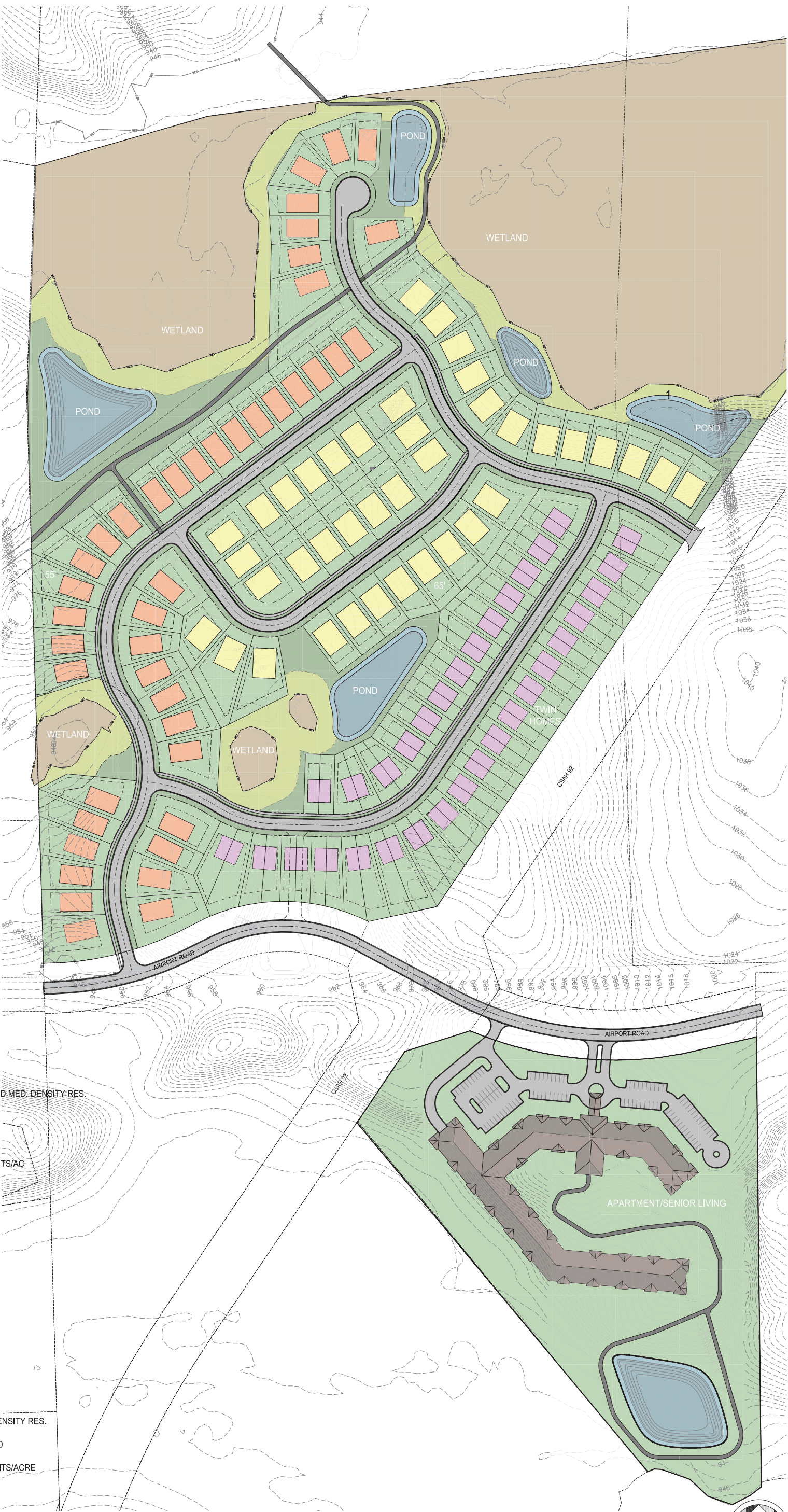
_____ Budgeted
_____ Non Budgeted
_____ Amendment Required

LOCATION MAP—KIRSCH PROPERTIES





TAMARACK LAND



SITE DATA

NORTH PARCEL	
GROSS AREA:	61.3 Ac.
WETLAND AREA:	20.4 Ac.
WETLAND BUFFER AREA:	4.8 Ac.
NET DEVELOPABLE AREA:	36.1 Ac.
ZONING:	
LAND USE:	PUD LOW AND MED. DENSITY RES.
PROP. 55' WIDE SINGLE FAMILY LOTS:	
PROP. 65' WIDE SINGLE FAMILY LOTS:	43
PROP. TWIN HOME LOTS:	39
TOTAL LOTS:	66
PROPOSED NET DENSITY:	148
	4.09 UNITS/AC
P.U.D. STANDARDS:	
SINGLE FAMILY:	
LOT WIDTH MINIMUM:	55' WIDE
LOT SIZE MIN.:	6,000 S.F.
FRONT SETBACK:	25'
SIDE SETBACKS:	7.5'/7.5' OR 5'/10'
REAR SETBACKS:	25'
TWIN HOMES:	
LOT WIDTH MINIMUM:	32' WIDE
LOT SIZE MINIMUM:	4,00 S.F.
FRONT SETBACKS:	25'
SIDE SETBACK (HOUSE):	7.5'
REAR SETBACK:	25'
SOUTH PARCEL	
GROSS AREA:	13.1 Ac.
WETLAND AREA:	0 Ac.
NET DEVELOPABLE AREA:	13.1 Ac.
ZONING:	
LAND USE:	R5 HIGH DENSITY RES.
PROPOSED UNITS:	~105-280
PROPOSED NET DENSITY:	8-22 UNITS/ACRE

CONCEPT B
KIRSCH PROPERTY

