COON CREEK WATERSHED DISTRICT

BOARD MEETING AGENDA

Coon Creek Watershed District Offices - Board Room
Monday, August 26, 2024, 5:30 p.m.

Board of Managers:
Jim Hafner, President; Erin Lind, Vice President; Jason Lund, Secretary; Mary Campbell, Treasurer; Dwight McCullough, Member at Large

Note: Individuals with items on the agenda or who wish to speak to the Board are encouraged to be in attendance when the meeting is called to order.

1. **Call to Order**
2. **Approval of the Agenda** *(Additions/Corrections/Deletions)*
3. **Announcements**
4. **Open Mic/Public Comment**

*Members of the public at this time may address the Board, for **up to three minutes,** on a matter not on the Agenda. Individuals wishing to be heard must sign in with their name and address at the door. Additional comments may be accepted in writing. Board action or discussion should **not** be expected during the presentation of public comment/open mic. Board members may direct staff to research the matter further or take the matter under advisement for consideration at a future Board meeting.*

CONSENT ITEMS

The consent agenda is considered as one item of business. It consists of routine administrative items or items not requiring discussion. Items can be removed from the consent agenda at the request of a Board member, staff member or a member of the audience.

5. **Approval of Minutes August 12th**
6. **Bills/Accounts Payable**

POLICY ITEMS

7. **2025 Draft Budget**
8. **Seek Bids Lower Coon Creek Corridor Restoration Project**

PERMIT ITEMS

9. **24-013 Enchanted Estates 4th Addition**
10. **24-042 Hogie Driveway**
11. **24-035 LaMettry's Collision**

DISCUSSION ITEMS

12. **Mercy Hospital-Unity IDDE Update**
13. **Possible Contaminants Spill in Mississippi River near Coon Rapids**

INFORMATIONAL ITEMS

14. **MPR News article on Lake shoreline – Trouble by the water**
15. **MPR News article on Lake shoreline – Paying homeowners to keep natural shorelines**
16. **Anoka Union article on Shorelines -Restoring buffer zones on lakes & rivers**
17. **MPR News article – Quit mowing: Turning Minnesota lake homeowners into shoreline stewards, one lawn at a time**

ADJOURN

COON CREEK WATERSHED DISTRICT
BOARD OF MANAGERS' MEETING

The Board of Managers of the Coon Creek Watershed District held their regular meeting on Monday, August 12, 2024, at the Coon Creek Watershed District Office.

1. Call to Order
The meeting was called to order at 5:31 PM
Board Members Present: Jim Hafner, Mary Campbell, Jason Lund, and Dwight McCullough
Board Member Absent: Erin Lind
Staff Present: Tim Kelly, Bobbie Law, Jon Janke, Jason Hilst, Erin Margl, and Emma Krause
Staff Present Virtually: Jessica Lindemyer and Erik Bye

2. Approval of the Agenda
Board Member McCullough moved to amend the agenda, moving Permit Items 24-038 Adolfson Riverbank Stabilization, 24-036 Family Promise, 23-080 Les Schwab Tire Center, 24-004 NSC Turf Field and Campus Improvements, and 23-068 Park of Four Seasons to the Consent Agenda. Seconded by Board Member Lund. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

Board Member Lund moved to approve the amended agenda. Seconded by Board Member Campbell. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

3. Announcements
Mr. Kelly explained that the CCWD intern Emma Krause was in attendance at the meeting and will be continuing her employment with the District on a limited basis during the school year once her traditional internship with the District is completed.

Board member McCullough confirmed that he is the only manager who may still be having issues receiving emails after the Microsoft migration.

4. Open Mic
No one was present.

CONSENT ITEMS
5. Approval of Minutes July 29th, 2024
6. Receive Administrator's Report
7. Advisory Committee Report
8. Bills/Accounts Payable

Claims totaling $273,937.96 on the following disbursement(s) list will be issued and released upon Board approval.

Vendor	Amount
V0008--US BANK	9,159.53
V0015--ANOKA COUNTY MN	161,117.33
V0015--ANOKA COUNTY MN	1,700.00
V0015--ANOKA COUNTY MN	1,700.00
V0026--CITY OF COON RAPIDS	3,395.00
V0027--CITY OF FRIDLEY	3,500.00
V0030--CONNEXUS ENERGY	304.48
V0033--DELL MARKETING LP	1,424.62
V0033--DELL MARKETING LP	1,424.62
V0037--ECM PUBLISHERS INC	2,884.80
V0047--AH IND SCHOOL DIST 11	3,990.00
V0052--LOFFLER COMPANIES INC	102.50
V0062--NORTH VALLEY INC	2,900.00
V0080--METROPOLITAN COUNCIL	5,900.00
V0090--CENTERPOINT ENERGY-UTILITY	30.47
V0102--US GEOLOGICAL SURVEY	8,047.25
V0103--BANKERS ADVERTISING CO	2,299.20
V0103--BANKERS ADVERTISING CO	439.51
V0111--WELL GROOMED LAWNS INC	860.00
V0128--YTS COMPANIES LLC	2,231.25
V0138--RMB ENVIRONMENTAL LABORATORIES INC	2,088.00
V0195--STANTEC CONSULTING SERVICES INC	2,871.90
V0195--STANTEC CONSULTING SERVICES INC	7,379.50
V0195--STANTEC CONSULTING SERVICES INC	27,488.28
V0195--STANTEC CONSULTING SERVICES INC	2,526.50
V0242--METRO I NET	5,398.00
V0247--POOP 911 OF MPLS STP LLC	864.25
V0313--TURFCO MANUFACTURING INC.	448.51
V0314--VEIT & COMPANY INC	1,700.00
V0315--HFN PROPERTIES LLC	7,891.65
V0316--PAUL HENNUM	1,870.81
Grand total	**273,937.96**

The following Permit Items were moved to the Consent Agenda.

12. 24-038 Adolfson Riverbank Stabilization
The purpose of this project, located at 11220 Dakota St NW in Coon Rapids, is to complete a bank stabilization with rip rap and native plants.

The staff recommendation was to approve permit application number P-24-038 with 2 conditions as presented in the staff report:

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Provide escrow in the amount of $2,150.00.

Rule 4.0 – Soils and Erosion Control

2. Provide an updated Erosion and Sediment control plan that includes:
    a. A note stating that disturbed soils will be stabilized within 7 days of inactivity.
    b. Floating silt curtain to be placed within the river during rip rap installation and to be removed upon placement of landward perimeter control.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

None

13. 24-036 Family Promise

The purpose of this project, located at 340 95th Avenue NW in Coon Rapids, is to construct a new multifamily building, parking lot, and associated stormwater treatment features.

The staff recommendation was to approve permit application number P-24-036 with 2 conditions and 3 stipulations as presented in the staff report:

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Submittal of a performance escrow in the amount of $2,485.00.

Rule 3.0 – Stormwater Management

2. Provide proof of recording of a fully executed Operations and Maintenance Agreement for the perpetual inspection and maintenance of all proposed stormwater management practices after review and approval by the District.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

1. Submittal of as-builts for the stormwater management practices and associated structures listed in Tables 2 and 3, including volume, critical elevations and proof of installation for hydrodynamic separators.
2. Completion of a post construction infiltration test on the Infiltration Basin by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
3. If dewatering is required, provide a DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location, schedule and quantities prior to construction.

14. 23-080 Les Schwab Tire Center

The purpose of this project, located at 12401 Ulysses St NE in Blaine, is to construct a new commercial building, parking areas, and associated stormwater treatment features.

The staff recommendation was to approve permit application number P-23-080 with 3 conditions and 4 stipulations as presented in the staff report:

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Submittal of a performance escrow in the amount of $2,620.00.

Rule 3.0 – Stormwater Management

2. Provide proof of recording of a fully executed Operations and Maintenance Agreement for the perpetual inspection and maintenance of all proposed stormwater management practices after review and approval by the District.

Rule 4.0 – Soils and Erosion Control

3. Updated the erosion and sediment control plan to include a note that soils and soil stockpiles will be stabilized within 7 days of inactivity.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

1. Submittal of as-builts for the stormwater management practices and associated structures listed in Tables 2 and 3, including volume, critical elevations and proof of installation for hydrodynamic separators.
2. Completion of post construction infiltration test on the East and West Filtration Basins by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
3. If dewatering is required, provide DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location, schedule and quantities prior to construction.
4. The applicant must apply for coverage under the Minnesota Pollution Control Agency's (MPCA's) Construction Stormwater Permit (Permit No: MNR100001).

15. 24-004 NSC Turf Field and Campus Improvements

The purpose of this project, located at numerous locations across the National Sports Center Campus, 1700 105th Ave NE in Blaine, is to convert natural turf fields to artificial turf and a 30-foot-wide roadway.

The staff recommendation was to approve permit application number P-24-004 with 2 conditions and 4 stipulations as presented in the staff report:

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. **Submittal of a performance escrow in the amount of $6,485.00 for increase in area of disturbance from previously approved application.**

Rule 3.0 – Stormwater Management

2. **Provide proof of recording of a fully executed Operations and Maintenance Agreement for the perpetual inspection and maintenance of all proposed stormwater management practices after review and approval by the District.**

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

1. **The applicant must apply for coverage under the Minnesota Pollution Control Agency's (MPCA's) Construction Stormwater Permit (Permit No: MNR100001)**
2. **If dewatering is required, provide DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location, schedule and quantities prior to construction.**
3. **Submittal of grading as-builts for the project to confirm adequate floodplain compensatory storage has been provided.**
4. **Submittal of as-builts for the stormwater management practices and associated structures listed in Tables 2 and 3, including volume, critical elevations and proof of installation for hydrodynamic separators.**

16. 23-068 Park of Four Seasons

The purpose of this project, located at 50 113th Avenue in Blaine, is to construct 8 new mobile home pads with paved private parking, concrete patio, and utility connections, along with associated stormwater management practices.

The staff recommendation was to approve permit application number P-23-068 with 3 conditions and 4 stipulations as presented in the staff report:

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Submittal of a performance escrow in the amount of $2,565.00.

Rule 3.0 – Stormwater Management

2. Provide proof of recording of a fully executed Operations and Maintenance Agreement for the perpetual inspection and maintenance of all proposed stormwater management practices after review and approval by the District.

Rule 4.0 – Soils and Erosion Control

3. Update the erosion and sediment control plan to include the following:

a. After initial grading, surround the proposed infiltration basin with erosion control measures to prevent the basin from clogging.
b. A note that soils and soil stockpiles will be stabilized within 7 days of inactivity.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

1. If dewatering is required, provide DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location, schedule and quantities prior to construction.
2. Completion of post construction infiltration tests on Bioretention #1 and Bioretention #2 by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
3. Submittal of as-builts for the stormwater management practices and associated structures listed in Tables 2 and 3, including volume, critical elevations and proof of installation for hydrodynamic separators.
4. The applicant must apply for coverage under the Minnesota Pollution Control Agency's (MPCA's) Construction Stormwater Permit (Permit No: MNR100001).

Board Member Campbell moved to approve the consent agenda. Seconded by Board Member Lund. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

POLICY ITEMS

9. Administrator's Employment Agreement

Mr. Kelly explained that an employment agreement was made available for the Board managers. He noted that the last step in the process would be to approve the agreement and authorize the needed signature.

Board Member McCullough moved to approve Tim Kelly's employment agreement as presented. Seconded by Board Member Lund. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

10. Submittal of Draft 2024-2033 Comprehensive Watershed Management Plan to Board of Water and Soil Resources

Mr. Kelly outlined the timeline for approval of the draft plan. He highlighted the deadline to be eligible for grant dollars. He reiterated the fact that the design of the plan was completed as such so that it could be amended.

Board Member Lund Moved to approve the submittal of the Draft 2024-2033 Comprehensive Watershed Management Plan to BWSR for 90-day review and approval. Seconded by President Hafner. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

Board Member Campbell moved to adopt resolution 2024-03 Authorizing Submittal of Draft Watershed Management Plan Update for Final State Review. Seconded by Board Member Lund. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

Roll call vote was taken:

Manager	Vote
McCullough	Aye
Lund	Aye
Campbell	Aye
Hafner	Aye
Lind	Not Present

President Hafner addressed two permittees in attendance. He notified each individual that their permits were moved to consent and approved.

11. Ditch 39 Geotechnical Services

Mr. Janke highlighted sites in Blaine and Coon Rapids that the Board visited in June during their annual tour. During the Tour, staff gave an overview of potential stormwater retrofits at these sites. Mr. Janke gave an overview of the actions taken to determine if projects in this area will be eligible for grant dollars including geotechnical services. The lowest bid for the services was Haugo Geotechnical Services for $10,020. Staff recommended the work be awarded to them.

Managers discussed access to the property to complete these potential stormwater retrofits and an outreach plan for this work. Mr. Janke confirmed that all work and projects would not be installed on private property, but would be within view of the private property of District residents.

PERMIT ITEMS

All permitting items were moved to the consent agenda.

DISCUSSION ITEMS

17. Draft 2025 Operating Budget

Mr. Kelly noted that the initial proposed levy increase is 25%. This increase was determined after receiving estimates for health coverage for CCWD staff from Preferred Benefit Concepts. This coverage is now a larger expense for CCWD beginning January 1, 2025, when District employee benefits will no longer be through Anoka County.

Managers discussed the Total Maximum Daily Loads (TMDL) and the small projects focused on achieving the TMDL. Mr. Kelly gave an overview of the goals to make a reasonable and rational attempt to address the TMDL and what happens if the goal is not achieved.

Managers discussed edits. Manager Campbell requested a minor edit of the language HRA be changed to HSA.

Board Member McCullough moved to forward the budget to draft status with the recommended amendments from the Board. Seconded by Board Member Lund. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

18. Oak Glen Creek Inspection Report

Mr. Hilst gave a presentation on his Oak Glen Creek Inspection report outlining the following:

- Purpose – identify & prioritize maintenance needs and survey methods
- Annual Inspection requirements
- Oak Glen Creek Overview
- Inspection results and recommendations

He explained that there was one down tree located during inspections with a recommendation to receive the report. Board Member Campbell asked how quickly staff is able to address issues such as down trees. Mr. Janke noted that action to remove this specific tree would occur before the spring snowmelt of 2025. The City of Fridley will pay for the maintenance needed.

Board Member Campbell moved to receive the Oak Glen Creek Inspection report as presented by Jason Hilst, CCWD Operations and Maintenance Inspector. – Seconded by Bord Member McCullough. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

19. Woodcrest Creek Inspection Report

Mr. Hilst gave a presentation on his Woodcrest Creek Inspection report outlining the following:

- Purpose – identify & prioritize maintenance needs and survey methods
- Annual Inspection requirements
- Oak Glen Creek Overview
- Inspection results and recommendations

Managers discussed one culvert outlet. Mr. Hilst explained how this type of culvert damage occurs.

Board Member Lund moved to receive the Woodcrest Creek Inspection report as presented by Jason Hilst, CCWD Operations and Maintenance Inspector. Seconded by Board Member Campbell. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

INFORMATION ITEMS

None

ADJOURN

Board Member Campbell moved to adjourn at 6:11 pm. Seconded by Board Member McCullough. The motion carried with 4 yeas (Board Members Campbell, Hafner, Lund, and McCullough) and no nays.

_____
President

COON CREEK WATERSHED DISTRICT
Request for Board Action

MEETING DATE: August 26, 2024
AGENDA NUMBER: 6
ITEM: Bills to Be Paid

FISCAL IMPACT: Budgeted
POLICY IMPACT: Policy

REQUEST
Approve bills

BACKGROUND
Claims totaling $32,971.23 on the following disbursement list will be issued and released upon Board approval.

Vendor	Amount
V0010--A1 FLOOR AND CARPET CARE INC	1,076.25
V0040--FRONTIER PRECISION INC	2,298.50
V0054--MICHELLE J ULRICH PA	4,969.25
V0096--RANDY WESP EXCAVATING LLC	1,157.50
V0096--RANDY WESP EXCAVATING LLC	12,225.00
V0110--RESPEC COMPANY LLC	1,170.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	165.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	144.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	72.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	1,125.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	216.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	144.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	216.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	237.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	144.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	168.00
V0138--RMB ENVIRONMENTAL LABORATORIES INC	207.00
V0221--ABDO LLP	3,327.50
V0221--ABDO LLP	132.50
V0236--B E LANDSCAPE DESIGN SERVICES	2,760.00
V0317--METRO STORAGE LLC	1,016.73
Grand total	**32,971.23**

Company name:	Coon Creek Watershed District									
Created on:	8/19/2024									
	Vendor name	Bill number	Date	Fund name	Department name	Account	Capital Project ID	Grant ID	Transaction amount	Memo
0824CCWD										
	A1 FLOOR AND CARPET CARE INC	0824CCWD	8/8/2024	General Fund	Administration	61105			1,076.25	AUGUST 2024 CLEANING SERVICE
Sum for 0824CCWD									1,076.25	
229										
	RANDY WESP EXCAVATING LLC	229	8/12/2024	General Fund	Operations & Maintenance	61549	PROJ-24-421		12,225.00	24 NON ROUT MAINT ISS 24-002 PEAT CREEK REPAIR
Sum for 229									12,225.00	
231										
	RANDY WESP EXCAVATING LLC	231	7/25/2024	General Fund	Operations & Maintenance	61549	PROJ-24-421		1,157.50	24 NON ROUT MAINT ISS 23-047 D58-7 BEAVER DAM REMOVAL
Sum for 231									1,157.50	
493829										
	ABDO LLP	493829	7/31/2024	General Fund	Administration	63052			3,327.50	ACCT 90223 FS MTHLY SVCS JULY 24
Sum for 493829									3,327.50	
494565										
	ABDO LLP	494565	8/19/2024	General Fund	Administration	63052			132.50	ACCT 90223 FS CK SIGN SETUP HELP
Sum for 494565									132.50	
B014056										
	RMB ENVIRONMENTAL LABORATORIES INC	B014056	8/8/2024	General Fund	Water Quality	61549	PROJ-24-515b		165.00	WOB014056 MONITORING
Sum for B014056									165.00	
B014057										
	RMB ENVIRONMENTAL LABORATORIES INC	B014057	8/8/2024	General Fund	Water Quality	61549	PROJ-24-515b		144.00	WOB014057 MONITORING
Sum for B014057									144.00	
B014058										
	RMB ENVIRONMENTAL LABORATORIES INC	B014058	8/8/2024	General Fund	Water Quality	61549	PROJ-24-515b		72.00	WOB014058 MONITORING
Sum for B014058									72.00	
B014150										
	RMB ENVIRONMENTAL LABORATORIES INC	B014150	8/9/2024	General Fund	Water Quality	61549	PROJ-24-515b		1,125.00	WOB014150 MONITORING
Sum for B014150									1,125.00	
B014153										
	RMB ENVIRONMENTAL LABORATORIES INC	B014153	8/9/2024	General Fund	Water Quality	61549	PROJ-24-515b		216.00	WOB014153 MONITORING
Sum for B014153									216.00	
B014154										
	RMB ENVIRONMENTAL LABORATORIES INC	B014154	8/9/2024	General Fund	Water Quality	61549	PROJ-24-515b		144.00	WOB014154 MONITORING
Sum for B014154									144.00	
B014155										
	RMB ENVIRONMENTAL LABORATORIES INC	B014155	8/9/2024	General Fund	Water Quality	61549	PROJ-24-515b		216.00	WOB014155 MONITORING
Sum for B014155									216.00	
B014176										
	RMB ENVIRONMENTAL LABORATORIES INC	B014176	8/9/2024	General Fund	Water Quality	61549	PROJ-24-515b		237.00	WOB014176 MONITORING
Sum for B014176									237.00	
B014177										
	RMB ENVIRONMENTAL LABORATORIES INC	B014177	8/16/2024	General Fund	Water Quality	61549	PROJ-24-515b		144.00	WOB014177 MONITORING
Sum for B014177									144.00	
B014178										
	RMB ENVIRONMENTAL LABORATORIES INC	B014178	8/16/2024	General Fund	Water Quality	61549	PROJ-24-515b		168.00	WOB014178 MONITORING
Sum for B014178									168.00	
B014205										
	RMB ENVIRONMENTAL LABORATORIES INC	B014205	8/16/2024	General Fund	Water Quality	61549	PROJ-24-515b		207.00	WOB014205 MONITORING
Sum for B014205									207.00	
INV-0724-025										
	RESPEC COMPANY LLC	INV-0724-025	7/22/2024	General Fund	Administration	63010			1,170.00	PROJ03304.0008 3RD QTR FULCRUM MAPFEEDER
Sum for INV-0724-025									1,170.00	
INV306888										
	FRONTIER PRECISION INC	INV306888	8/13/2024	General Fund	Operations & Maintenance	61575			2,298.50	M221530 ANNUAL TRIMBLE SOFTWARE
Sum for INV306888									2,298.50	
INVOICE 1										
	B E LANDSCAPE DESIGN SERVICES	INVOICE 1	8/7/2024	General Fund	Administration	65180			2,760.00	CONCEPTUAL LANDSCAPE DESIGN PROJECT
Sum for INVOICE 1									2,760.00	
Jul-24										
	MICHELLE JULRICH PA	JULY2024	8/16/2024	General Fund	Administration	63453			4,969.25	LEGAL-JULY2024
Sum for JULY2024									4,969.25	
PAN 19-050										
	METRO STORAGE LLC	PAN 19-050	8/26/2024	Escrow Fund	Administration	24210			1,016.73	P19-050 ESCROW REF-METRO SELF STORAGE
Sum for PAN 19-050									1,016.73	
Sum Total									32,971.23	

COON CREEK WATERSHED DISTRICT
Request for Board Action

MEETING DATE: August 26, 2024
AGENDA NUMBER: 7
ITEM: Order Public Hearing on Draft 2025 Operating Budget

AGENDA: Policy

ACTION REQUESTED
1. Review, comment, and correct budget
2. Approve Draft 2025 Budget for public hearing on September 9, 2024

PURPOSE AND SCOPE
This item pertains to
1. Approval of the Draft operating budget for 2025
2. The ordering of a public hearing on September 9 on the proposed 2025 budget

BACKGROUND
In March the Board adopted a calendar and process for developing the 2025 budget. The process involves three phases: analysis of the parts, fine-tuning of the whole, and review and adoption of the final.

Attached is the first draft of the entire budget and the start of phase 2 of the budget process: Fine Tuning.

Revenues	2022 Actual	2023 Actual	2024 Budget	2024 Projected	2025 Prelim	% Chg
Fund Balance January 1	**2,304,676**	**1,958,079**	**1,591,018**	**1,591,018**	**1,550,793**	
Property Tax	3,027,370	3,187,821	4,965,765	4,965,765	6,207,206	25.0%
Fees & Charges	253,820	530,203	298,423	298,423	298,423	
Grants & Intergovernmental	638,274	399,031	314,539	314,539	2,566,549	
Other Revenue	25,926	26,963	28,042	28,042	115,000	
Fund Balance Used	387,302	342,274	40,225	40,225	40,225	
	4,332,692	4,486,292	5,646,994	5,646,994	9,227,403	
Total Funds Available	**6,250,066**	**6,102,097**	**7,197,787**	**7,197,787**	**10,737,971**	
Expenditures						
Salaries & Benefits	1,499,948	1,772,946	1,981,605	1,981,605	2,414,928	
Professional Services	939,376	363,632	589,000	589,000	489,487	
Operating Expenses	188,296	204,221	239,164	239,164	317,242	
Program Costs	1,277,544	2,196,554	2,680,517	2,680,517	5,789,607	
Capital Costs	9,600	31,395	156,708	156,708	198,174	
	3,914,764	4,568,748	5,646,994	5,646,994	9,209,437	
Fund Balance December 31	**2,335,302**	**1,533,349**	**1,550,793**	**1,550,793**	**1,528,534**	
Rev - Exp	417,928	(82,456)	-	-	17,966	

ISSUES/CONCERNS/OPPORTUNITIES

1. **Initial Proposed Levy Amount**: The levy increase used to balance the preliminary draft is 25%.

2. **Impact of Proposed Property Tax Levy**: The payment of homes of various values are shown. The impact is a 16% payment increase equaling $4.40 on the low end, to a $29.31 increase on the high end. Included are the median sale values over the past 6 months.

   Please note that market value and taxable value are different. Market value, on the other hand, is based on the current real estate market and is used by consumers when buying or selling a property. The assessed value is used to calculate property taxes, and it's based on a set of guidelines that determine the value of the property.

Per Home Value	2023	2024	2025	
$ 150,000	17.64	27.48	31.88	16%
$ 200,000	23.52	36.64	42.50	16%
$ 250,000	29.40	45.80	53.13	16%
$ 283,600		**51.95**	**60.27**	Min Median value
$ 300,000	**35.28**	**54.96**	**63.75**	
$ 350,000	**41.16**	**64.12**	**74.38**	
$ 363,129	**42.70**	**66.52**	**77.16**	County Avg Home Value
$ 377,000	**44.34**	**69.06**	**80.11**	County Median Home Value
$ 400,000	**47.04**	**73.28**	**85.00**	
$ 438,000	**51.51**	**80.24**	**93.08**	Avg Median Value in District
$ 450,000	**52.92**	**82.44**	**95.63**	Median Value in District
$ 500,000	**58.80**	**91.59**	**106.25**	
$ 600,000	**70.56**	**109.91**	**127.50**	
$ 652,500	**76.73**	**119.53**	**138.66**	Max Median Value
$ 700,000	82.32	128.23	148.75	16%
$ 800,000	94.08	146.55	170.00	16%
$ 900,000	105.84	164.87	191.25	16%
$ 1,000,000	117.60	183.19	212.50	16%

3. Technical Advisory Committee Comments: The TAC met Thursday August 8. The DRAFT 2025 Budget was on the agenda. Questions of clarification. No significant comments.

4. Citizen Advisory Committee: The Citizen Advisory Committee meeting is scheduled for Wednesday, August 14. Questions of clarification. No significant comments.

5. Next Steps: This draft serves to end phase 3 (the review correct and refinement stage) of the annual Budget process. Phase 3 occurs during August with review by the District's Advisory Committees and ends with approval of the Draft

Budget and Notice of Public Hearing and adoption at the September 9 Board meeting.

IMPLICATIONS

- The budget as proposed allows
    - The District to maintain services and address the water quality issues.
    - Establish an employee benefit package that allows the District to attract and retain the required talent pool.
- Any comments or corrections acted on by the Board tonight will be included in the budget heard on September 9.

CONCLUSIONS

The proposed budget provides the District with the minimum capacity and capability to fulfill its legislative obligations and pursue achievement of the TMDLs.

RECOMMENDATION

1) Review and discuss the Draft 2025 budget

2) Direct staff to publish notice of public hearing on the proposed 2025 operating and capital budget

ACTION NEEDED

Motion and vote directing staff to publish notice of public hearing on the proposed 2025 operating and capital budget

Proposed Revenues

Code	Prepared 8/6/2024 12:22	2021 Actual	2022 Actual	2023 Actual	2024 Budget	2024 Projected	2025 Current	2025 Change	2025 Request	Change 24-25
	Property Taxes									
41101	Administrative Levy									
41102	Insurance Levy									
41103	MWMA Levy	2,577,244	2,691,777	3,027,370	4,965,765	4,965,765	4,965,765	1,241,441	**6,207,206**	25.00%
41104	Survey & Data Levy									
41105	Maintenance Levy									
	Total Property Taxes	**2,577,244**	**2,691,777**	**3,027,370**	**4,965,765**	**4,965,765**	**4,965,765**	**1,241,441**	**6,207,206**	**25.00%**
	Fees & Charges									
52226	Application Fees	1,750	1,820	1,850	850	650	850	-	**850**	
53191	Review & Inspect Fees	262,500	420,966	550,368	297,500	218,400	285,600	11,973	**297,573**	
	Total Fees	**264,250**	**422,786**	**552,218**	**298,350**	**219,050**	**286,450**	**11,973**	**298,423**	**-**
	Grants									
55190	EPA 319 Grant		21,000						-	
55190	Pet Waste 319 Grant				23,135	23,135	23,135	(12,459)	**10,676**	
55190	NKE Plan Impl 319 Grant			32,071	160,353	160,353	160,353	128,300	**288,653**	
55190	CCPSR CWF Grant		197,500	39,500					-	
55190	Aurelia Park CWF Grant		31,017	38,771					-	
55190	PCSIESF CWF Grant		132,000	33,000					-	
55190	ECIESF CWF Grant		172,500	138,000	34,500	34,500			-	
55190	WBIF 41,60,57 Sub Plan		41,580	108,189	86,551	86,551		86,551	**86,551**	
55190	WCA Admin	4,400	9,224	9,500	10,000	10,000		12,000	**12,000**	
55190	BWSR CWF WBIF Retro							178,000	**178,000**	
55190	BWSR CWF WBIF (24)							147,000	**147,000**	
	Task Force Funding									
	D17-SNBC Outlet Mod							142,400	**142,400**	
	PC-Pond Mod+ Blaine Basin							618,284	**618,284**	
	D39-Bridgewater SIESF							1,082,985	**1,082,985**	
	Total Grants	**4,400**	**604,821**	**399,031**	**314,539**	**314,539**	**183,488**	**2,383,061**	**2,566,549**	**-**
	Other Revenue									
56101	**Interest Income**	**25,926**	**26,963**	**28,042**	**28,042**	**100,000**	**28,042**	**86,958**	**115,000**	
	Fund Balances & Other									
	Building	-	-	-	-	-	-	-	-	
	AIS Rapid Response	40,000	40,000	40,000	40,000	40,000	40,000	-	**40,000**	
	Illicit Discharge Detection	225	225	225	225	225	225	-	**225**	
	Fund Equity Balance	40,225	347,077	302,049	-	-	-	-	-	
	Ditch Fund Balances									
	Ditch 54	-	-	-	-	-	-	-	-	
	Other Fund Balances	-	-	-	-	-	-	-	-	
	Total Fund Balances	**80,450**	**387,302**	**342,274**	**40,225**	**40,225**	**40,225**	**-**	**40,225**	
	TOTAL REVENUE	**2,952,270**	**4,133,649**	**4,348,935**	**5,646,921**	**5,639,579**	**5,503,970**	**3,723,433**	**9,227,403**	**0**

Salaries & Benefits

Code	Prepared 8/6/2024 12:23	2021 Actual	2022 Actual	2023 Actual	2024 Budget	2024 Projected	2025 Current	2025 Change	2025 Request	Change 24-25
	Salaries & Benefits									
60110	Salaries	$ 1,333,723	$ 1,164,379	1,330,378	1,448,994	1,448,994	1,506,954	101,437	**1,608,391**	11%
60260	Temporary Salaries-Students	$ 17,952	$ 17,129	-	39,000	39,000	40,560	1,789	**42,349**	9%
60713	HRA Payment	$ 8,215	$ 6,762	14,466	15,117	15,117	15,722	146,878	**162,600**	976%
60714	Health Insurance	$ 182,383	$ 121,640	208,094	235,020	235,020	244,421	69,579	**314,000**	34%
60715	Life Insurance	$ 559	$ 300	512	526	526	547	2,213	**2,760**	425%
60716	Social Security (FICA)	$ 101,372	$ 89,075	102,845	114,673	114,673	119,260	7,940	**127,200**	11%
60717	Retirement (PERA)	$ 100,769	$ 84,418	96,674	107,880	107,880	112,195	7,483	**119,679**	11%
60720	Dental Insurance	$ 7,805	$ 5,580	7,605	7,605	7,605	7,909	6,041	**13,950**	83%
60721	LTD Insurance	$ 2,104	$ 1,048	1,422	1,790	1,790	1,862	10,138	**12,000**	570%
60855	Board & Advisory Expenses	$ 10,050	$ 9,617	10,950	11,000	11,000	11,440	560	**12,000**	9%
	Total Salaries & Benefits	**1,764,932**	**1,499,948**	**1,772,946**	**1,981,605**	**1,981,605**	**2,060,869**	**354,059**	**2,414,928**	**22%**

Professional Services

	Services	2022 Actual	2023 Actual	2024 Budget	2024 Projected	2025 Current	2025 Change	2025 Request	
63010	GIS Services	$ 104,837	$ 111,700	$ 117,286	$ 116,900	$ 121,977	$ 17,134	**$ 139,111**	19%
63052	Accounting/HR	$ 5,050	$ 5,252	$ 5,252	$ 75,000	$ 5,462	$ 98,783	**$ 104,245**	1885%
63052	Audit	$ 11,960	$ 12,438	$ 12,438	$ 13,913	$ 12,936	$ 3,064	**$ 16,000**	29%
63066	IT Services	$ 47,250	$ 58,336	$ 58,336	$ 64,790	$ 60,669	$ 20,362	**$ 81,031**	39%
63246	Engineering Services	$ 718,279	$ 143,758	$ 143,758	$ 81,000	$ 149,508	$ (60,408)	**$ 89,100**	-38%
63453	Legal Services	$ 52,000	$ 54,080	$ 54,080	$ 58,252	$ 56,243	$ 3,756	**$ 60,000**	11%
		$ 939,376	**$ 385,564**	**$ 391,150**	**$ 409,855**	**$ 406,796**	$ 82,691	**$ 489,487**	25%

Operating Costs

Code	Prepared 8/6/2024 12:25	2021 Actual	2022 Actual	2023 Actual	2024 Budget	2024 Projected	2025 Current	2025 Change	2025 Request	Change 24-25
	Operating Expenses									
61101	Small Equipment (furn/off/comp/misc)	47,641	23,505	18,020	37,203	37,203	38,691	809	**39,500**	6%
61102	Printing	-	-	-	4,040	4,040	4,202	(202)	**4,000**	-1%
61105	Cleaning & Janitorial Supp	10,062	10,062	15,487	16,222	16,218	16,871	(4)	**16,867**	4%
61110	Gasoline/Oil/License	15,025	15,025	16,377	17,377	16,377	18,072	(2,072)	**16,000**	-8%
61149	Gen'l Supplies (office)	18,914	18,914	19,031	20,033	12,993	20,834	(10,203)	**10,632**	-47%
61249	R&M Phone Hardware	68	3,000	2,350	3,450	3,000	3,588	(538)	**3,050**	-12%
61250	R&M Buildings	15,925	12,205	15,166	22,412	23,000	23,308	1,172	**24,480**	9%
61251	R&M Office Machine & Equip	685	1,046	3,588	5,900	-	6,136	7,344	**13,480**	128%
61263	R&M Security	1,000	1,030	1,071	1,125	1,171	1,170	1,495	**2,665**	137%
61354	Training & Conferences-Board/Other	198	2,352	2,000	500	300	520	(220)	**300**	-40%
61355	Training & Conferences-Staff Dev	4,199	11,356	11,810	10,620	9,820	11,045	7,910	**18,955**	78%
61475	Mileage	691	2,718	2,827	683	600	710	(80)	**630**	-8%
61476	Other Travel Exp, Parking	6	0	40	40	40	42	(2)	**40**	0%
61477	Meals & Staff Enrichment	949	2,000	1,750	2,965	2,965	3,084	1,216	**4,300**	45%
61552	Bank Charges	556	732	761	799	1,065	831	287	**1,118**	40%
61557	Dues & Memberships	9,070	10,529	15,650	17,000	15,450	17,680	10,475	**28,155**	66%
61558	Advertising	0	1,574	1,637	1,650	500	1,716	(716)	**1,000**	-39%
61559	Subscriptions & Publications	1,985	1,485	2,744	4,243	5,645	4,413	4,922	**9,335**	120%
61575	Books & Software	7,765	7,765	18,498	33,558	33,558	34,900	6,883	**41,784**	25%
61810	Misc & Contingency	-	-	-	0	-	-	1,750	**1,750**	#DIV/0!
62119	Web Site Server	960	889	1,000	1,995	1,930	2,075	(185)	**1,890**	-5%
62124	Leases & Rentals	6,078	5,594	5,818	3,600	4,692	3,744	1,003	**4,747**	32%
62225	Utilities-Heat/Natural Gas	1,821	2,405	2,501	2,626	2,700	2,731	185	**2,916**	11%
62226	Utilities-Electric	3,772	5,287	10,258	5,696	5,356	5,924	(116)	**5,808**	2%
62228	Utilities-Waste/Recycle Disposal	1,169	1,046	1,300	1,418	1,550	1,475	199	**1,674**	18%
62229	Phones	15,500	15,200	17,884	18,778	17,000	19,529	(1,169)	**18,360**	-2%
62231	Postage	358	987	1,027	975	500	1,014	(489)	**525**	-46%
62273	Cable	5,956	7,005	7,285	7,649	6,500	7,955	(935)	**7,020**	-8%
62370	Insurance-Liability	13,591	16,624	18,500	19,425	14,545	20,202	(4,930)	**15,272**	-21%
62372	Insurance-Property	919	1,004	4,700	4,935	8,861	5,132	4,172	**9,304**	89%
62373	Insurance-Work Comp	6,364	5,228	5,437	5,709	9,913	5,937	4,471	**10,409**	82%
62374	Insurance-Vehicles	845	941	1,135	1,192	1,216	1,240	37	**1,277**	7%
	Total Operating Expenses	**192,072**	**187,508**	**225,652**	**273,818**	**258,708**	**284,771**	**31,862**	**317,242**	15%

Program Costs

Administration

	Service Providers	2020 Actual	2021 Actual	2022 Actual	2024 Budget	2024 Projected	Current	2025 Change	2025 Request
Administraion									
	Field Supplies	500	500	735	750	750	788	(38)	750
	Total								

Operations & Maintenance

	Service Providers	2020 Actual	2021 Actual	2022 Actual	2024 Budget	2024 Projected	Current	2025 Change	2025 Request
Operations & Maintenance									
	Engineering/Feasibility Studies	-	-	30,000	30,000	30,000	31,500	300	31,800
	AOP Crossing Enhancement				0	0	-	79,500	79,500
	CC Restoration 131st to Main				0	0	-	106,000	106,000
	University Ave Pond Retrofit				0	0	-	51,100	51,100
	Woodbridge Channel Improvement				0	0	-	100,000	100,000
	Bank Repair & Stabilization	856,208	593,050	58,240	125,000	125,000	131,250	21,125	152,375
	Ditch Repair & Maintenance	124,021	58,000	137,280	100,000	100,000	105,000	(52,000)	53,000
	Non-routine Maintenance	-	56,000	88,400	96,000	96,000	100,800	960	101,760
	Field Supplies	1,000	600	4,625	1,400	1,400	1,470	30	1,500

Planning

Planning & Special Studies									
	Boundary Adjustments	-	3,500	3,500	3,000	3,000	-	0	0
	Water Quality Model	-	-	70,000	0	0	-	210,000	210,000
	Model Updates				50,000	50,000	52,500	500	53,000
	Watershed Modeling Pilot Upgrade	6,240	6,490	20,800	0	0	-	101,482	101,482
	Aquatic Organism Passage Enhancement Ph 2	-	-	-	75,000	75,000	-	0	0
	Subwatershed Planning/Assessments	-	-	-	228,000	228,000	-	130,000	130,000
	Subwatershed Feasibility Designs	-	-	-	0	0	-	120,000	120,000
	Channel Geomorphic Analysis	-	-	-	0	0	-	79,500	79,500
	Drainage Atlas				0	0	-	7,950	7,950
	Water Quantity Studies	-	-	-	0	0	-	26,500	26,500
	Economic Resource Study				125,000	125,000	-	0	0
	MN Partner Funding Research Council	-	-	-	10,000	10,000	-	0	0
	Groundwater Study/Assessment	-	-	-	5,000	5,000	-	90,000	90,000

Public and Governmental Affairs

Public & Government Relations									
	Information								
	Springbrook I & E Implementation	-	-	-	69,900	69,900	-	0	0
	Targeted Pleasure Cr Subwatershed I & E Implementation	-	-	-	19,900	19,900	-	0	0
	NKE Sand Creek Trail Audience Survey	-	-	-	15,000	15,000	-	0	0
	Website Updates				0	0	-	3,600	3,600
	Digital Communications				0	0	-	7,700	7,700
	Creek/Ditch Signage	-	-	-	11,000	11,000	11,550	(8,050)	3,500
	Involvement								
	Audience Community Survey	23,750	24,050	26,000	28,393	28,393	29,813	5,187	35,000
	Interactive Educational Displays						-	35,000	35,000
	Water Education Grants	850	4,250	3,745	3,867	3,867	4,060	(60)	4,000
	Newsletter Communications				0	0	-	25,000	25,000
	Sponsorships	-	-	-	1,750	1,750	1,838	262	2,100
	Outreach								
	Adopt-A-Drain	10,000	6,500	6,864	6,000	6,000	6,300	(800)	5,500
	Pet Waste	7,435	17,500	18,000	10,288	10,288	10,802	10,198	21,000
	Field Supplies	1,103	2,444	6,614	3,815	3,815	4,006	(1,456)	2,550

Water Quality

	Service Providers	2020 Actual	2021 Actual	2022 Actual	2024 Budget	2024 Projected	2025 Current	2025 Change	2025 Request
Water Quality									
	AIS Rapid Response	3,092	-	5,000	20,000	20,000	21,000	200	21,200
	Lake Plan Implementation	1,215	2,776	2,887	5,000	5,000	5,250	50	5,300
	Monitoring	89,113	96,400	99,746	110,489	110,489	116,013	1,105	117,118
	WQ Cost Share Program	55,418	76,000	75,000	215,000	215,000	225,750	64,250	290,000
	Groundwater-Surface Water Chlorides Pilot	-	-	-	35,000	35,000	36,750	37,662	74,412
	Biomonitoring				0	0	-	32,000	32,000
	Pond Performance Evaluation				0	0	-	5,000	5,000
	Street Sweepings Testing	-	-	-	15,000	15,000	-	0	0
	Contaminents of Emerging Concern	-	-	-	50,000	50,000	-	0	0
	Winter Chloride Monitoring	-	-	-	6,000	6,000	-	0	0
	PC MNDot Pond Outlet Modification	-	-	-	21,000	21,000	-	0	0
	Springbrook Nature Center Outlet Modificaiton	-	-	-	22,500	22,500	-	0	0
	Sand Creek AOP crossing Enhancement @ Xeon	-	-	-	115,000	115,000	-	0	0
	Field Supplies	3,000	3,666	7,547	2,566	2,566	2,694	1,256	3,950
	Multi-Revenue Source Projects								
	CRD Reg Park LCC Corridor Restoration-Expansion				0	0	-	695,000	695,000
	Springbrook Cr Subwatershed plan				90,000	90,000	94,500	158,200	252,700
	Pleasure Cr Subwatershed plan				87,500	87,500	91,875	717,935	809,810
	Subwatershed Planning-D39				0	0	-	1,482,500	1,482,500

Watershed Development

	Service Providers	2020 Actual	2021 Actual	2022 Actual	2024 Budget	2024 Projected	2025 Current	2025 Change	2025 Request
Watershed Development									
	Illicit Discharge Detection	590	800	850	900	900	900	0	900
	Groundwater-Surface Water Dewatering Study	-	-	-	15,000	15,000	-	0	0
	District Rule Amendment				0	0	-	7,950	7,950
	Engineering	-	-	-	400,000	400,000	420,000	(70,000)	350,000
	Field Supplies	1,025	500	950	500	500	525	75	600

Capital Equipment

	Prepared	2021	2022	2023	2024			2025			Change
Code	6/26/2024 10:57	Actual	Actual	Actual	Budget	Projected	Var.	Current	Change	Request	24-25
	Capital Equipment										
65180	**Building Improvements**	28,000	0	8,000	97,350	97,350	0%	30,350	44,496	**74,846**	**-23%**
	Blinds	8,000	0	-	0			-	-		
	Landscaping	2,000	0	8,000	0			-	10,000		
	Keyless Entry-Rekey				20,900			-	-		
	Handicap Doors				11,100			-	-		
	Hex Pave/Auxilary parking				21,000			21,000	24,000		
	Rear Parking Paving				35,000			-	-		
	Parking Lot Netting				9,350			9,350	1,496		
	3 bathroom fixtures/counters							-	9,000		
65230	**Monitoring & Field**	0	0	13,795	14,000	14,000	0%	-	54,828	**54,828**	**292%**
	Portable Velocity/Depth Sensor			-	14,000	-		-	-		
	Backpack Electrofisher							-	14,828		
	GNSS Receiver							-	40,000		
65250	**Vehicle**	0	55,000	0	0	-	#DIV/0!	-	41,500	**41,500**	**100%**
	SUV - Truck(s)		55,000	-		-		-	41,500		
65270	**Telecommunications**	0	0	-	0	-	#DIV/0!	-	-	**-**	**#DIV/0!**
								-	-		
65340	**Office Equipment/Furniture**	0	0	-	16,000	16,000	0%	-	-	**-**	**0%**
	Training Tables & Chairs				16,000			-	-		
65380	**Computers & Equipment**	15,095	11,100	-	0	-	#DIV/0!	-	12,000	**12,000**	**100%**
	Monitors/computers	15,095	11,100	-		-		-	-		
	Sharpboard							-	12,000		
65390	**Software**	0	0	-	29,358	29,358	0%	-	15,000	**15,000**	**-49%**
	MS4 Modules				0			-	15,000		
	Sage IntAcct				14,358			-	-		
	Website Migration				15,000			-	-		
	Total Capital Equipment	**43,095**	**66,100**	**21,795**	**156,708**	**156,708**	**0%**	**30,350**	**167,824**	**198,174**	**26%**

NOTICE OF PROPOSED PROPERTY TAXES and BUDGET

The Board of Managers of the Coon Creek Watershed District will hold a public hearing on:

Monday, September 9, 2024
5:30 PM
Coon Creek Watershed District
13632 Van Buren St NE
Ham Lake, MN 55304

All residents of the Watershed District are invited to attend the public hearing on the proposed 2025 budget to express their opinions on the budget and the amount of property taxes the Board of Managers propose to collect to pay for District services to be provided in 2025. If the discussion on the budget cannot be completed, a time and place for continuing the discussion will be announced at the hearing.

The complete budget document can be reviewed at the District office at the address below or on the District website (www.cooncreekwd.org). You are invited to send written comments to:

President
Coon Creek Watershed District
13632 Van Buren St NE
Ham Lake, MN 55304

Revenues	**2025 Draft**
Property Tax	6,189,240
Fees & Charges	298,423
Grants & Intergovernmental	2,566,549
Other Revenue	115,000
Fund Balance Used	40,225
	9,209,437
Expenditures	
Salaries & Benefits	2,414,928
Professional Services	489,487
Operating Expenses	317,242
Program Costs	5,789,607
Capital Costs	198,174
	9,209,437

COON CREEK WATERSHED DISTRICT
Request for Board Action

MEETING DATE:	August 26, 2024
AGENDA NUMBER:	8
ITEM:	Request to Seek Bids - LCCCR Project
FISCAL IMPACT:	$1,205,705
POLICY IMPACT:	Policy

REQUEST
Authorize staff to seek bids for the Lower Coon Creek Corridor Restoration project.

BACKGROUND
In 2006, Coon Creek was added to Minnesota's 303(d) list of impaired waters for aquatic life impairments due to macroinvertebrate and fish bioassessments. Excess total suspended solids (TSS), total phosphorus (TP), altered hydrology, and poor habitat were identified as the primary stressors to Coon Creek's biota.

In 2016, required pollutant reductions were established for TSS and TP as part of the approved CCWD TMDL. The non-pollutant stressors of altered hydrology and poor habitat/connectivity also need to be addressed.

In 2020, a routine ditch inspection revealed that the section of Coon Creek in the Coon Rapids Dam Regional Park between the trail crossing and Vale Street was a sediment and nutrient-loading hotspot due to the extent of active streambank erosion sites within this reach.

In June 2022, CCWD was awarded a $320,705 federal 319 grant to address high-priority barriers to aquatic organism passage and related channel stabilization and habitat enhancement work in Sand and Coon Creeks. The trail crossing over Coon Creek within the Coon Rapids Dam Regional Park was identified as the highest priority site Districtwide.

In February 2023, Anoka County Parks indicated their willingness to update the existing trail crossing from its current design (four culverts) to a bridge as part of their planned 2024 trail reconstruction work if CCWD could lead the related channel stabilization and habitat enhancement components of a creek restoration.

On June 12, 2023, the annual Board tour included a site visit and discussion about the trail crossing being a barrier to aquatic organisms and need to stabilize the channel and enhance habitat in Coon Creek.

At the September 11, 2023, Board meeting the Board approved the 2024 budget including $440,000 for the Lower Coon Creek Corridor Restoration project (Project).

On November 8, 2023, District and Anoka County Parks staff hosted a public meeting at the Coon Rapids Dam Regional Park Activity Center to discuss proposed County trail

improvements, Coon Creek bridge replacement, trail crossing enhancement, and the Lower Coon Creek Corridor Restoration project. This meeting was advertised via direct mailings to nearby property owners (n=358), on-site trail signage, an article in the newspaper, and website posting. The meeting was attended by 20 individuals representing at least 13 properties. The Project was well-received. District staff has continued to provide project updates on a dedicated project webpage: www.cooncreekwd.org/LCCCR.

In December 2023, the District was awarded a Clean Water Fund Projects and Practices grant in the amount of $445,000.00 for the Project. The Project will stabilize active streambank erosion and enhance habitat along the 4,400 linear foot reach of Lower Coon Creek making progress towards meeting required pollutant reduction targets for TSS and TP and improving conditions for biota.

At the May 8, 2024, Board meeting the Board executed a JPA with Anoka County for the Project.

ISSUES/CONCERNS

Budget: The overall Project budget is $1,205,705 (including staff time, engineering, permitting, and construction). $760,705 is from grants and $440,000 is from the District.

Publication: notice for bids is required to be published in official District newspapers as the Project estimated cost exceeds statutory minimum. Notice for bids will also be published on the District website and Quest website.

Vegetation removal: The project has been designed to minimize tree removal to the maximum extent practicable. Tree removal will be limited to those trees that restrict access, pose a hazard to the creek, are needed for the Project, or are dead, dying, or diseased. Removed trees will remain onsite and incorporated into the Project design. The revegetation plan includes planting some trees.

Northern Long Eared Bat is one of the threatened or endangered species that could be affected by the Project. In March 2023, the bat was reclassified from a threatened species to an endangered species. New requirements have been established limiting tree clearing activities between April 1 and November 15. This has caused some delay in the Project timeline as work cannot begin until after November 15.

Active trail: The Coon Rapids Dam Regional Park Trail is within a portion of the project area. The trail is currently closed for construction, anticipated to open in October, and expected to remain open during the Project construction. Signage will be placed along the trail. Work is anticipated to be completed during the winter months when trail usage is relatively low.

Landowner agreements: The Project area is within the Coon Rapids Dam Regional Park (owned by Anoka County) and 11 private properties. A JPA was executed with Anoka County and cooperators agreements are being executed with private property owners. A notice to proceed will not be issued until all applicable landowner agreements are received.

Permits: The District will obtain permits from the Army Corps of Engineers and MN Department of Natural Resources. The awarded contractor will obtain necessary NPDES, transportation, and/or utility permits. A notice to proceed will not be issued until all applicable permits are received.

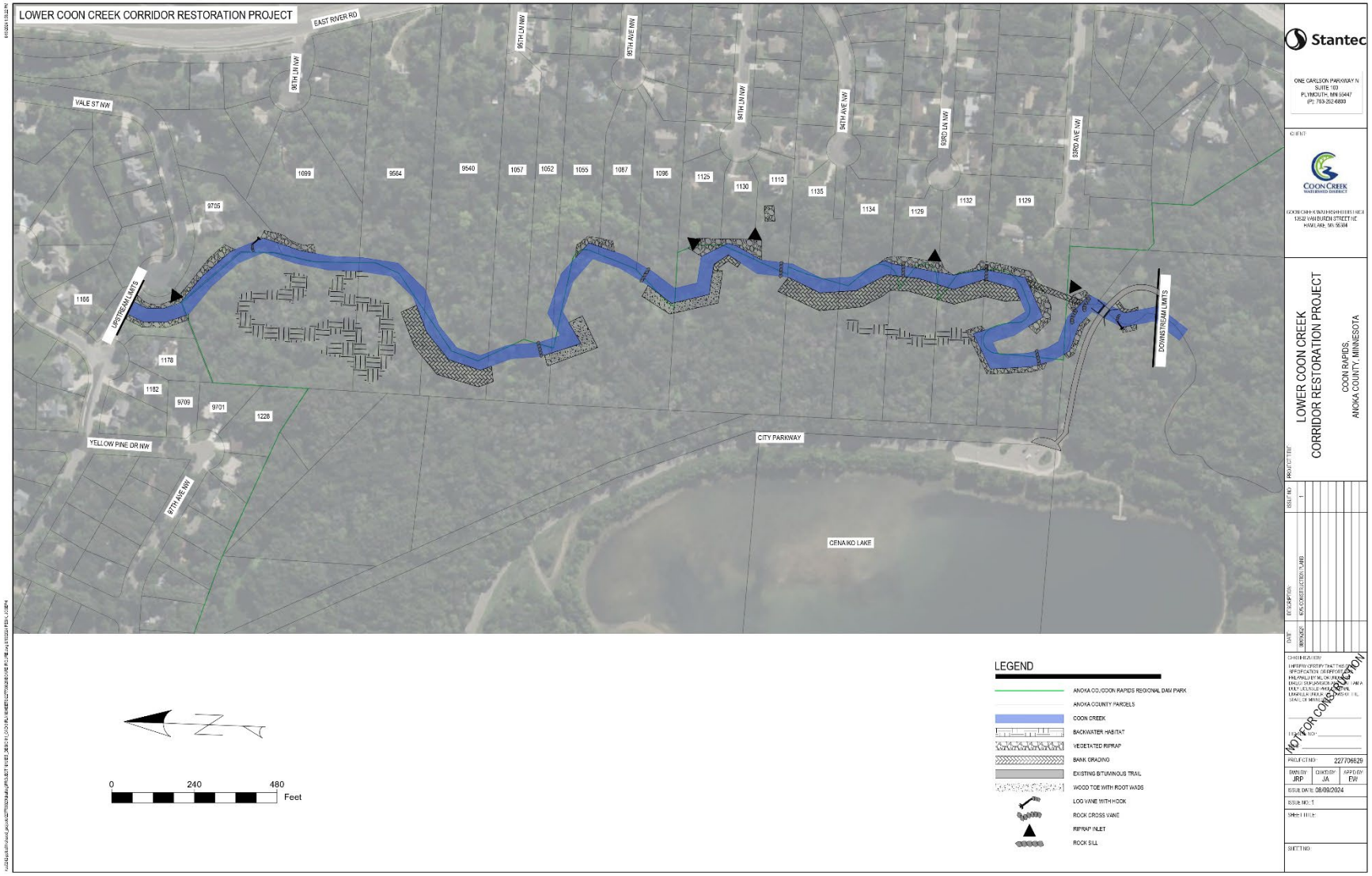
Resident communication: The Project commencement and updates will be communicated to residents by direct mailings to adjacent properties, onsite signage, and the District website.

OPTIONS

1. Authorize staff to seek bids for the Lower Coon Creek Corridor Restoration project
2. Table action until the next meeting with a statement of reason and need
3. Cancel Project; provide specific direction to staff on how to achieve equivalent project outcomes

RECOMMENDATION

Authorize staff to seek bids for the Lower Coon Creek Corridor Restoration project


LOWER COON CREEK CORRIDOR RESTORATION PROJECT
EAST RIVER RD
VALE ST NW
96TH LN NW
95TH LN NW
95TH AVE NW
94TH LN NW
94TH AVE NW
93RD LN NW
93RD AVE NW
UPSTREAM LIMITS
DOWNSTREAM LIMITS
CITY PARKWAY
YELLOW PINE DR NW
87TH AVE NW
CENAIKO LAKE
0
240
480
Feet
LEGEND
ANOKA CO./COON RAPIDS REGIONAL DAM PARK
ANOKA COUNTY PARCELS
COON CREEK
BACKWATER HABITAT
VEGETATED RIPRAP
BANK GRADING
EXISTING BITUMINOUS TRAIL
WOOD TOE WITH ROOT WADS
LOG VANE WITH HOOK
ROCK CROSS VANE
RIPRAP INLET
ROCK SILL
Stantec
ONE CARLSON PARKWAY N
SUITE 150
PLYMOUTH, MN 55447
(P): 763-252-6800
COON CREEK WATERSHED DISTRICT
12152 VAN BUREN STREET NE
HAM LAKE, MN 55304
LOWER COON CREEK
CORRIDOR RESTORATION PROJECT
COON RAPIDS,
ANOKA COUNTY, MINNESOTA
NOT FOR CONSTRUCTION
PROJECT NO: 227706629
DWN BY: JRP
CHK'D BY: JA
APP'D BY: EW
ISSUE DATE: 08/09/2024
ISSUE NO: 1
SHEET TITLE:
SHEET NO:

COON CREEK WATERSHED DISTRICT

Permit Application Review Report
Date: 8/21/2024

Board Meeting Date: 8/26/2024
Agenda Item: 9

Applicant/Landowner:
Roger Haugen
4056 Constance Blvd NE
Ham Lake, MN 55014

Project Name: Enchanted Estates Fourth Addition

Project PAN: P-24-013

Project Purpose: creation of 9 new single-family lots

Project Location: Austin St NE & 161st Ln NE, Ham Lake

Site Size: size of parcel - 15.7 acres; size of disturbed area - 3.7 acres; size of regulated impervious surface - 1.27 acres

Applicable District Rule(s): Rule 2, Rule 3, Rule 4

Recommendation: Approve with 3 Conditions and 2 Stipulations

Description: The application is proposing the fourth and final addition of the Enchanted Estates housing development project. The scope of work includes grading, restoration, and home construction. The project will disturb 3.7 acres and create 1.27 acres of regulated impervious. The site drains to County Ditch 11. The relevant water resource concerns are stormwater management, erosion and sediment control, and wetlands. These correspond to District Rules 3, 4, and 5. See attached Figure 1: Project Location and Figure 2: Site Plan.

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Submittal of a performance escrow in the amount of $3,850.00.
2. Submittal of the required $10 administrative fee that is missing from the application and review fee check.

Rule 4.0 – Soils and Erosion Control

3. Update the erosion and sediment control plan to include the following:
   a. Provide a note that soils and soils stockpiles will be stabilized within 24 hours of inactivity.
   b. A note that streets will be swept clean of sediment by the end of each workday.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

1. If dewatering is required, provide DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location, schedule and quantities prior to construction.
2. The applicant must apply for coverage under the Minnesota Pollution Control Agency's (MPCA's) Construction Stormwater Permit (Permit No: MNR100001).

Exhibits:

Exhibit Type	Exhibit Author	Signature Date	Received Date
Revised Wetland Figure	Earth Science Associates, Inc.	05/08/2024	05/08/2024
Wetland Delineation Report - Update	Earth Science Associates, Inc.	03/2024	03/20/2024
Construction Plans	Plowe Engineering	07/15/2024	07/15/2024
Stormwater Drainage Report	Plowe Engineering	07/18/2024	07/25/2024
SWPPP	Plowe Engineering	07/15/2024	07/15/2024
Soil Borings	Tradewell Soil Testing	05/11/2024	07/15/2024
Pond F as-built	EG Rud & Sons	07/25/2024	07/25/2024

Findings

Fees and Escrows (Rule 2.7):
The applicant has submitted a $7,000.00 application fee and deposit. The fee check is missing the $10 administrative fee. The fee ($7000.00) is for a Single Family/Multifamily Residential Development project of 15.7 acres. The applicant will be required to submit a performance escrow in the amount of $3,850.00. This corresponds to a base escrow of $2,000, plus an additional $500/acre of disturbance (3.7 acres of land disturbance proposed).

Stormwater Management (Rule 3.0):
Rule 3.0 applies to the proposed project because it includes land disturbing activities creating a cumulative total of 10,000 sf or more of new or fully reconstructed impervious surface.

Rate Control: Peak stormwater flow rate at each point of site discharge does not increase from the pre-development condition for the 24-hour precipitation event with a return frequency of 2-, 10-, 100- years as shown in Table 1. The project is utilizing existing ponds which were constructed during previous additions and intended to treat stormwater for this 4th addition. The project will not impact Drainage Sensitive Use areas. The rate control standard is met.

Volume Control:
The proposed project is new development; therefore, the volume reduction requirement is equal to 1.1 inches over the area of all impervious surface. The amount of proposed impervious required to be treated is 55,321 ft^2.

The applicant is proposing the Stormwater Management Practices (SMPs) described below:

Drainage Area	Impervious required to be treated (ft^2)	Proposed SMP	TP Removal Factor	Required Water Quality Volume (ft^3)	Water Quality Volume Provided (ft^3)
Wetland A/B/C	9,906	Impervious Disconnect	1	908	908
Pond F	45,415	Pond F	0.5	8,326	8,326
Totals:	**55,321**			**9,234**	**9,234**

Table 2.

The volume control standard has been met as shown in Table 2.

Water Quality: The total Water Quality Volume has been provided in aggregate.

Stormwater treatment on site must remove at least 80% of the average annual post development TSS per discharge location. The following TSS removal has been provided:

Discharge Point	TSS Removal Provided
Wetland A/B/C	80
Pond F	84

Table 4.

The TSS removal standard is met at each discharge point as shown in Table 4.

Discharges to Wetlands: Stormwater from the proposed project is being discharged into the following wetlands.

Wetland ID	Wetland C
Wetland Type	Slightly Susceptible
Change of Bounce 2-yr (ft)	0.01
Change of Bounce 10-yr (ft)	0.00
Change of Inundation on 2-yr (hrs)	0
Change of Inundation on 10-yr (hrs)	0
Change of Run out Control (ft)	0

Wetland ID	Wetland B
Wetland Type	Slightly Susceptible
Change of Bounce 2-yr (ft)	0.01
Change of Bounce 10-yr (ft)	-0.01
Change of Inundation on 2-yr (hrs)	-1
Change of Inundation on 10-yr (hrs)	0
Change of Run out Control (ft)	0

Wetland ID	Wetland A
Wetland Type	Slightly Susceptible
Change of Bounce 2-yr (ft)	0.01
Change of Bounce 10-yr (ft)	0
Change of Inundation on 2-yr (hrs)	N/A
Change of Inundation on 10-yr (hrs)	N/A
Change of Run out Control (ft)	0

Wetland ID	E Wetland
Wetland Type	Slightly Susceptible
Change of Bounce 2-yr (ft)	0.01
Change of Bounce 10-yr (ft)	0.00
Change of Inundation on 2-yr (hrs)	N/A
Change of Inundation on 10-yr (hrs)	N/A
Change of Run out Control (ft)	0

Table 5.

The proposed project meets bounce, discharge rate, inundation, and runout control requirements for all wetlands receiving discharge from the site as shown in Table 5. Inundation is not calculated for Wetland A or E Wetland because they do not discharge in the 2 or 10-year events.

Landlocked Basins: The proposed drainage system does not outlet to a landlocked basin, therefore this section does not apply.

Freeboard: Habitable structures are not within the vicinity of stormwater features, therefore; low floor freeboard does not apply.

Maintenance:

Access: Sufficient maintenance access has been provided on the plans for all stormwater management practices.

Easements: Maintenance easements for all stormwater management practices are required for the proposed project.

All required maintenance easements have been provided on the plans.

Maintenance Agreements: All proposed stormwater management practices will be maintained as part of standard municipal public work activities. Therefore, no maintenance agreement will be required.

Soils and Erosion Control (Rule 4.0)
Rule 4.0 applies to the proposed project because it is a land disturbing activity that requires a permit under another District rule.

The proposed project drains to County Ditch 11. The soils affected by the project include Zimmerman and Lino which have a soil erodibility factor of 0.15 or greater. Disturbed areas are not proposed to be stabilized within 24 hours, as required. The proposed erosion and sediment control plan includes perimeter control and inlet protection. The erosion control plan does not meet District requirements because soils and soil stockpiles are not proposed to be stabilized within 24 hours of inactivity and streets are not proposed to be swept by the end of each workday.

Wetlands (Rule 5.0)
Wetlands exist on site, but no impacts are proposed. Wetlands were delineated under PAN W24-010. The boundary and type application was reviewed and approved. The Notice of Decision was issued on 05/15/2024.

Floodplain (Rule 6.0)
The proposed project does not include land disturbing activities within the floodplain as mapped and modeled by the District. Rule 6.0 does not apply.

Drainage, Bridges, Culverts, and Utility Crossings (Rule 7.0)
The proposed project does not include land disturbing activities which construct, improve, repair, or alter the hydraulic characteristics of a bridge profile control or culvert structure on a creek, public ditch, or major watercourse. The proposed project does not include land disturbing activities which involve a pipeline or utility crossing of a creek, public ditch, or major watercourse.

The proposed project does not include land disturbing activities which construct, improve, repair or alter the hydraulic characteristics of a conveyance system that extends across two or more parcels of record not under common ownership and has a drainage area of 200 acres or greater. Rule 7.0 does not apply.

Buffers (Rule 8.0)
The proposed project does not include a land disturbing activity on land adjacent or directly contributing to a Public Water, Additional Waters, High or Outstanding Ecological Value Waters, a Public Ditch, or Impaired Waters/waters exceeding state water quality standards. Rule 8.0 does not apply.

Variances (Rule 10.2)
The proposed project is not requesting a variance from the District's rules, regulations, and policies. Rule 10.2 does not apply.

Figure 1: Project Location

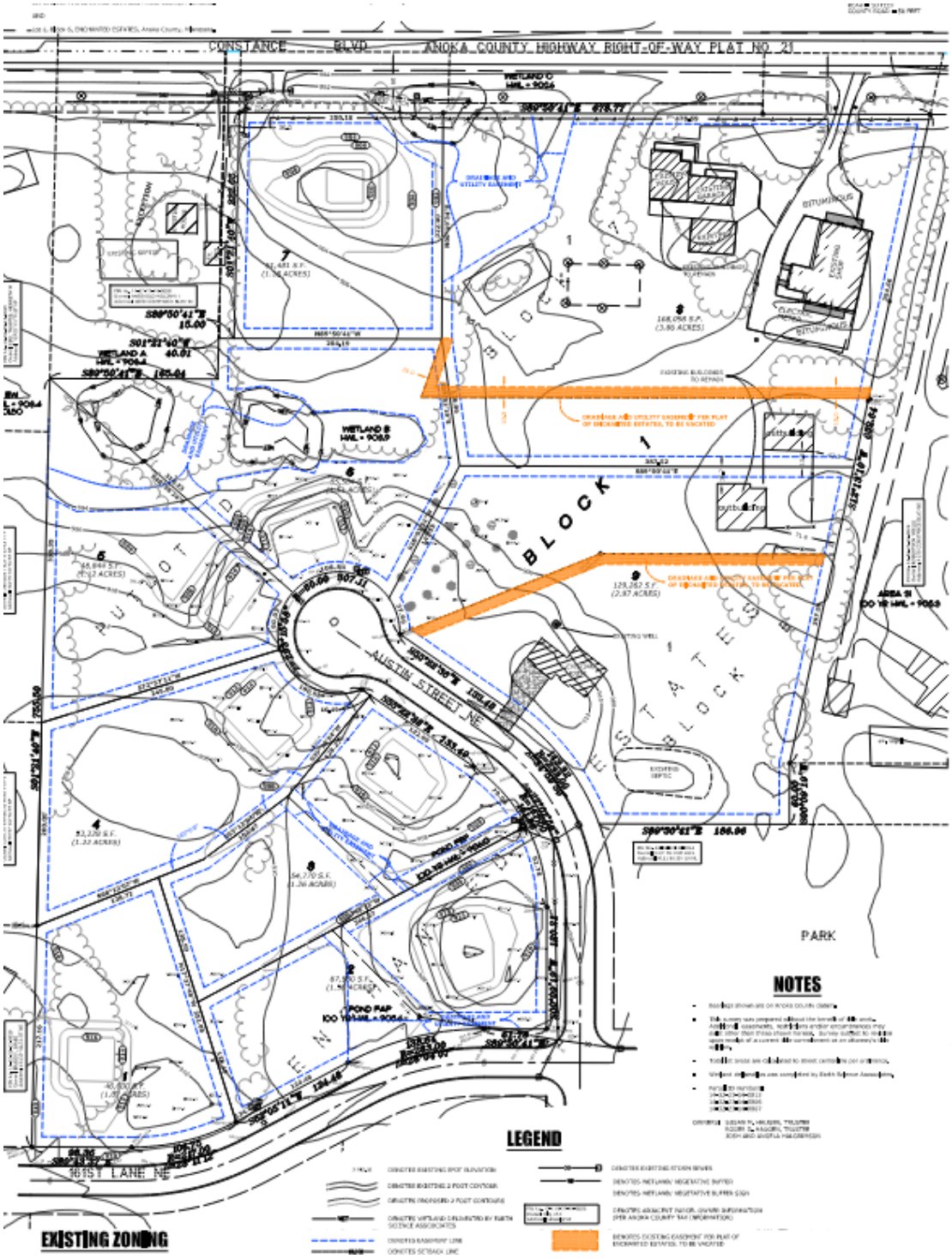


Figure 2: Site Plan

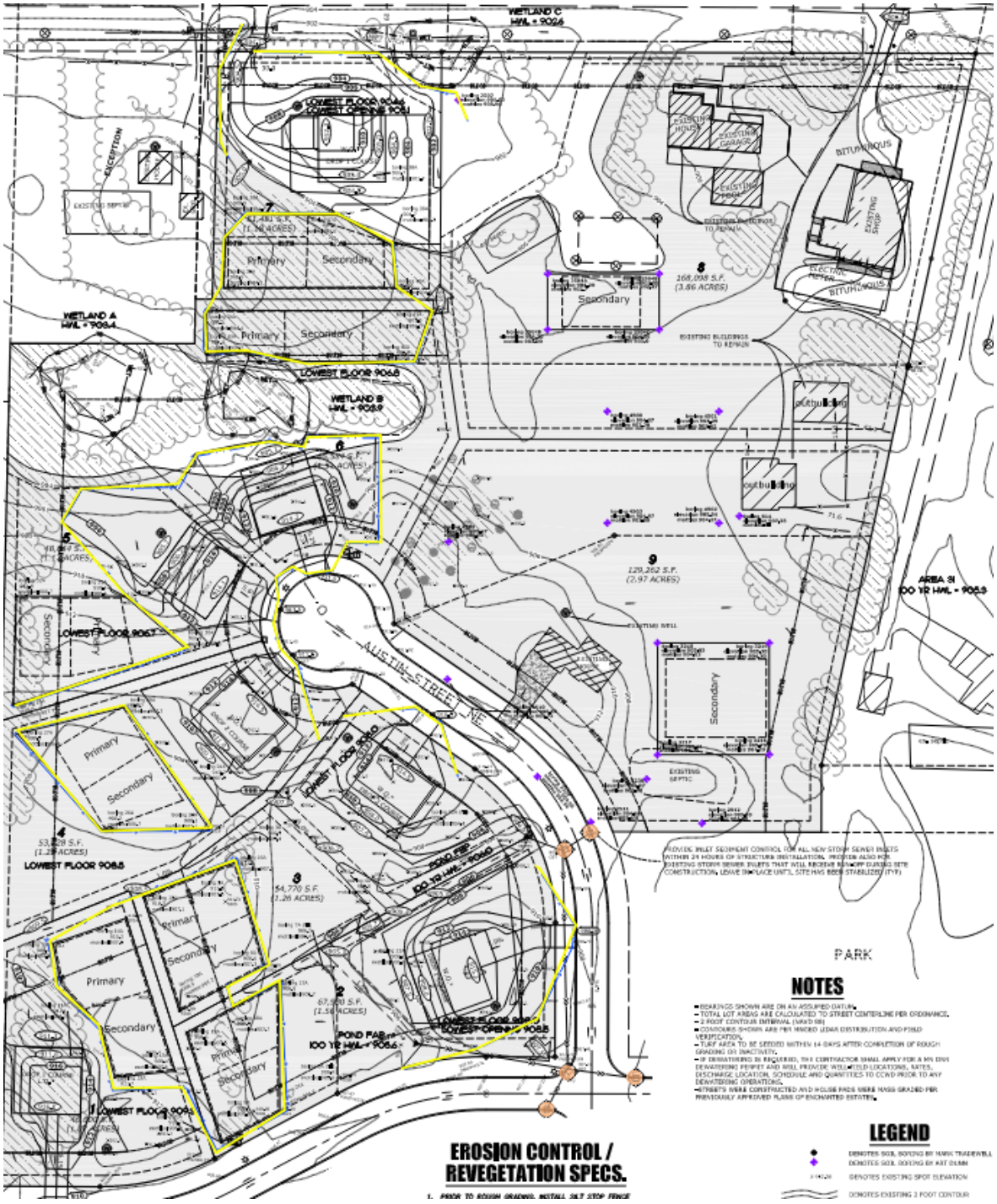


Figure 3: Erosion and Sediment Control Plan

PRELIMINARY PLAT

EXISTING PROPERTY DESCRIPTION

Outlot D, ENCHANTED ESTATES, Anoka County, Minnesota.

AND

Lot 1, Block 7, ENCHANTED ESTATES, Anoka County, Minnesota.

AND

Lot 1, Block 6, ENCHANTED ESTATES, Anoka County, Minnesota.

~of~ ENCHANTED ESTATES FOURTH ADDITION

~for~ ROGER AND SUE HAUGEN
4056 CONSTANCE BLVD.
HAM LAKE, MN 55304
TEL: (763) 434-6582

DEVELOPMENT DATA

TOTAL SITE AREA = 15.74± ACRES

9 PROPOSED SINGLE FAMILY LOTS

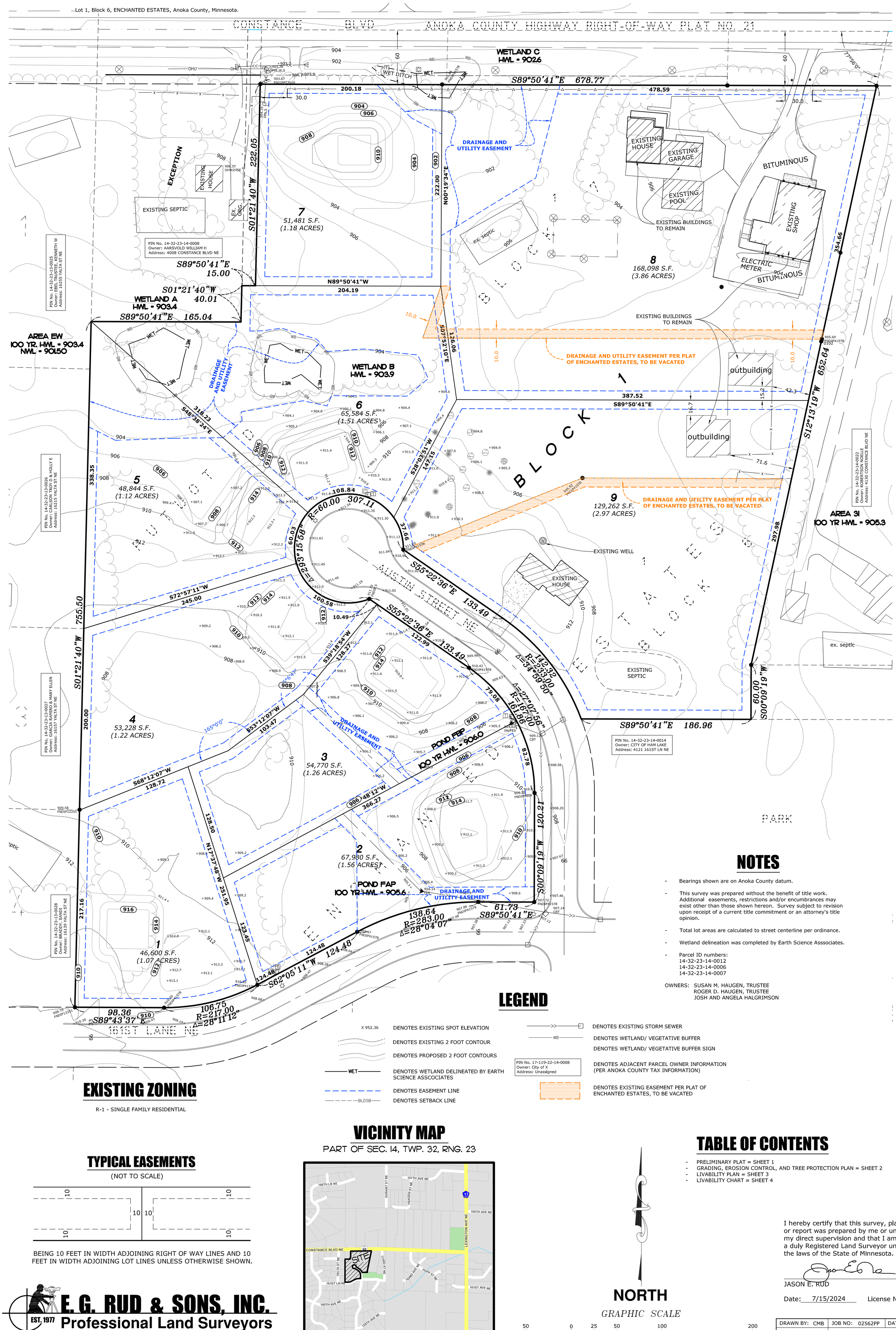
AVERAGE LOT SIZE = 1.75± ACRES

MINIMUM STREET FRONTAGE = 200 FEET (60 ON CUL-DE-SAC LOTS)

MINIMUM LOT SIZE = 1.00 ACRES (INCLUDING HALF OF STREET ROW)

PROPOSED ZONING = R-1

BUILDING SETBACKS FRONT = 30 FEET
SIDE = 10 FEET
REAR = 50 FEET
COUNTY ROAD = 50 FEET



NOTES

- Bearings shown are on Anoka County datum.
- This survey was prepared without the benefit of title work. Additional easements, restrictions and/or encumbrances may exist other than those shown hereon. Survey subject to revision upon receipt of a current title commitment or an attorney's title opinion.
- Total lot areas are calculated to street centerline per ordinance.
- Wetland delineation was completed by Earth Science Asssociates.
- Parcel ID numbers:
  14-32-23-14-0012
  14-32-23-14-0006
  14-32-23-14-0007

OWNERS: SUSAN M. HAUGEN, TRUSTEE
ROGER D. HAUGEN, TRUSTEE
JOSH AND ANGELA HALGRIMSON

LEGEND

- X 952.36 — DENOTES EXISTING SPOT ELEVATION
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- WET — DENOTES WETLAND DELINEATED BY EARTH SCIENCE ASSCOCIATES
- DENOTES EASEMENT LINE
- BLDSB — DENOTES SETBACK LINE
- DENOTES EXISTING STORM SEWER
- WB — DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- PIN No. 17-119-22-14-0008 Owner: City of X Address: Unassigned — DENOTES ADJACENT PARCEL OWNER INFORMATION (PER ANOKA COUNTY TAX INFORMATION)
- DENOTES EXISTING EASEMENT PER PLAT OF ENCHANTED ESTATES, TO BE VACATED

EXISTING ZONING

R-1 - SINGLE FAMILY RESIDENTIAL

TYPICAL EASEMENTS

(NOT TO SCALE)

BEING 10 FEET IN WIDTH ADJOINING RIGHT OF WAY LINES AND 10 FEET IN WIDTH ADJOINING LOT LINES UNLESS OTHERWISE SHOWN.

VICINITY MAP

PART OF SEC. 14, TWP. 32, RNG. 23

ANOKA COUNTY, MINNESOTA
(NO SCALE)

NORTH

GRAPHIC SCALE

50 0 25 50 100 200

1 INCH = 50 FEET

TABLE OF CONTENTS

I hereby certify that this survey, plan or report 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.

JASON E. RUD

Date: 7/15/2024 License No. 41578

DRAWN BY: CMB	JOB NO: 02562PP		DATE: 03/20/2024
CHECK BY: JER	FIELD CREW: DT/CT		
1	04/24/24	CITY COMMENTS	CMB
2	07/15/24	CITY COMMENTS / NEW BORINGS	MMD
3			
NO.	DATE	DESCRIPTION	BY

E. G. RUD & SONS, INC.
EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

GRADING, EROSION CONTROL, AND TREE PROTECTION PLAN

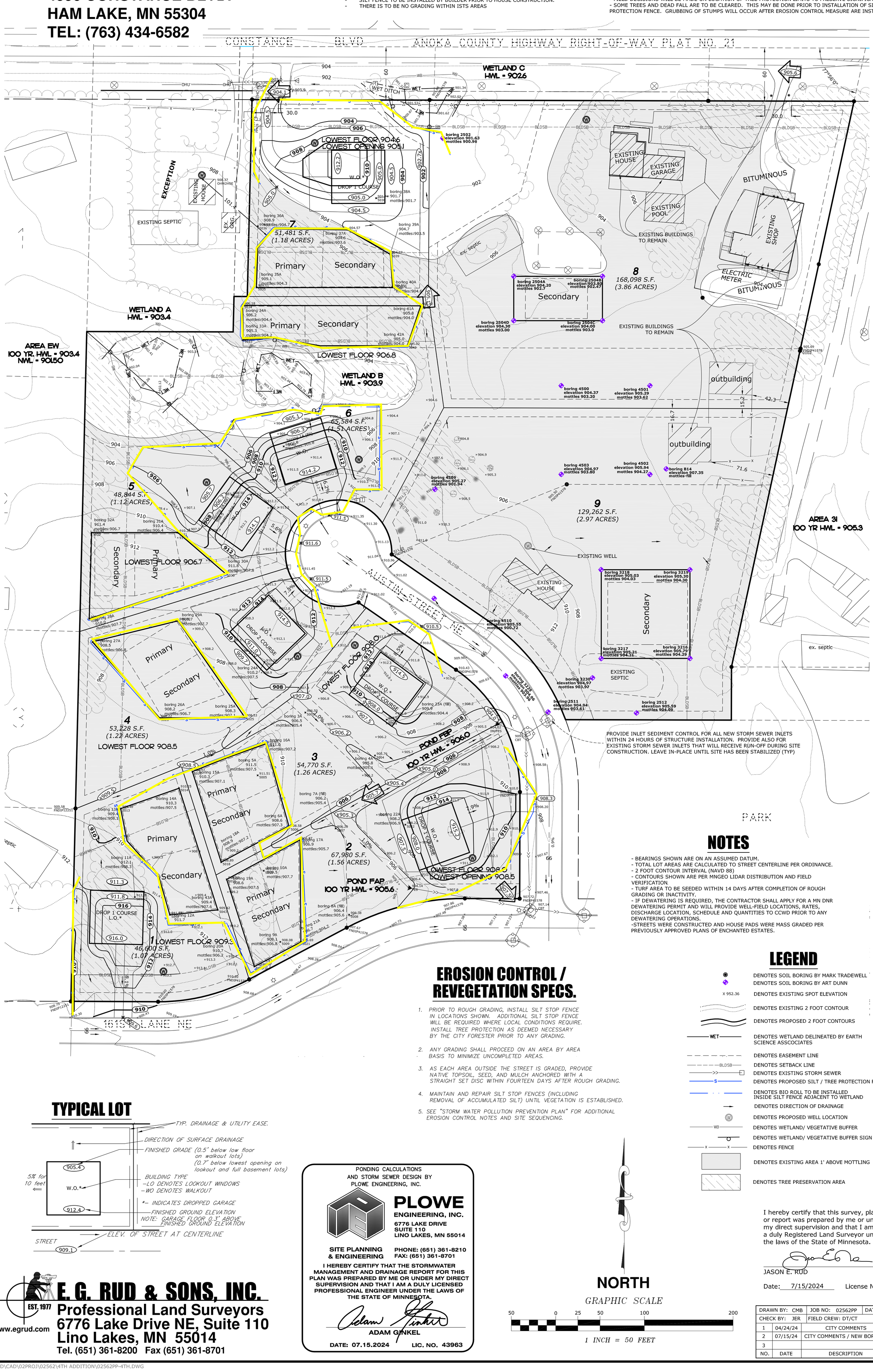
~of~ ENCHANTED ESTATES FOURTH ADDITION
~for~ ROGER AND SUE HAUGEN
4056 CONSTANCE BLVD.
HAM LAKE, MN 55304
TEL: (763) 434-6582

LOT GRADING NOTES

- PAD CONTOURS SHOWN ARE FOR DEMONSTRATION PURPOSES.
- HOUSE TYPES AND GRADING THAT VARY FROM WHAT IS PROPOSED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF HAM LAKE.
- SILT FENCE TO BE INSTALLED BY BUILDER PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN ISTS AREAS

TREE PROTECTION NOTES

- TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
- SILT / TREE PROTECTION FENCE TO BE INSTALLED AT CONSTRUCTION LIMIT LINE.
- CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY OR CONSTRUCTION VEHICLE TRAFFIC WITHIN THE DRIP LINE OF TREES IN THE TREE PROTECTION ZONE.
- FIELD DECISIONS WILL BE MADE ON LOCATION OF TREE PROTECTION LIMITS TO PRESERVE SIGNIFICANT TREES.
- SOME TREES AND DEAD FALL ARE TO BE CLEARED. THIS MAY BE DONE PRIOR TO INSTALLATION OF SILT / TREE PROTECTION FENCE. GRUBBING OF STUMPS WILL OCCUR AFTER EROSION CONTROL MEASURE ARE INSTALLED.



NOTES

- BEARINGS SHOWN ARE ON AN ASSUMED DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MNGEO LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- TURF AREA TO BE SEEDED WITHIN 14 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CCWD PRIOR TO ANY DEWATERING OPERATIONS.
- STREETS WERE CONSTRUCTED AND HOUSE PADS WERE MASS GRADED PER PREVIOUSLY APPROVED PLANS OF ENCHANTED ESTATES.

LEGEND

- DENOTES SOIL BORING BY MARK TRADEWELL
- DENOTES SOIL BORING BY ART DUNN
- X 952.36 — DENOTES EXISTING SPOT ELEVATION
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- WET — DENOTES WETLAND DELINEATED BY EARTH SCIENCE ASSCOCIATES
- DENOTES EASEMENT LINE
- BLDSB — DENOTES SETBACK LINE
- DENOTES EXISTING STORM SEWER
- S — DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIO ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED WELL LOCATION
- WB — DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- x — x — DENOTES FENCE
- DENOTES EXISTING AREA 1' ABOVE MOTTLING
- DENOTES TREE PRESERVATION AREA

EROSION CONTROL / REVEGETATION SPECS.

1. PRIOR TO ROUGH GRADING, INSTALL SILT STOP FENCE IN LOCATIONS SHOWN. ADDITIONAL SILT STOP FENCE WILL BE REQUIRED WHERE LOCAL CONDITIONS REQUIRE. INSTALL TREE PROTECTION AS DEEMED NECESSARY BY THE CITY FORESTER PRIOR TO ANY GRADING.
2. ANY GRADING SHALL PROCEED ON AN AREA BY AREA BASIS TO MINIMIZE UNCOMPLETED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH ANCHORED WITH A STRAIGHT SET DISC WITHIN FOURTEEN DAYS AFTER ROUGH GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SILT) UNTIL VEGETATION IS ESTABLISHED.
5. SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE SEQUENCING.

TYPICAL LOT

E. G. RUD & SONS, INC.
EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

PONDING CALCULATIONS AND STORM SEWER DESIGN BY PLOWE ENGINEERING, INC.

PLOWE
ENGINEERING, INC.
6776 LAKE DRIVE
SUITE 110
LINO LAKES, MN 55014
SITE PLANNING & ENGINEERING
PHONE: (651) 361-8210
FAX: (651) 361-8701

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ADAM GINKEL
DATE: 07.15.2024 LIC. NO. 43963

NORTH

GRAPHIC SCALE
50 0 25 50 100 200
1 INCH = 50 FEET

I hereby certify that this survey, plan or report 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.

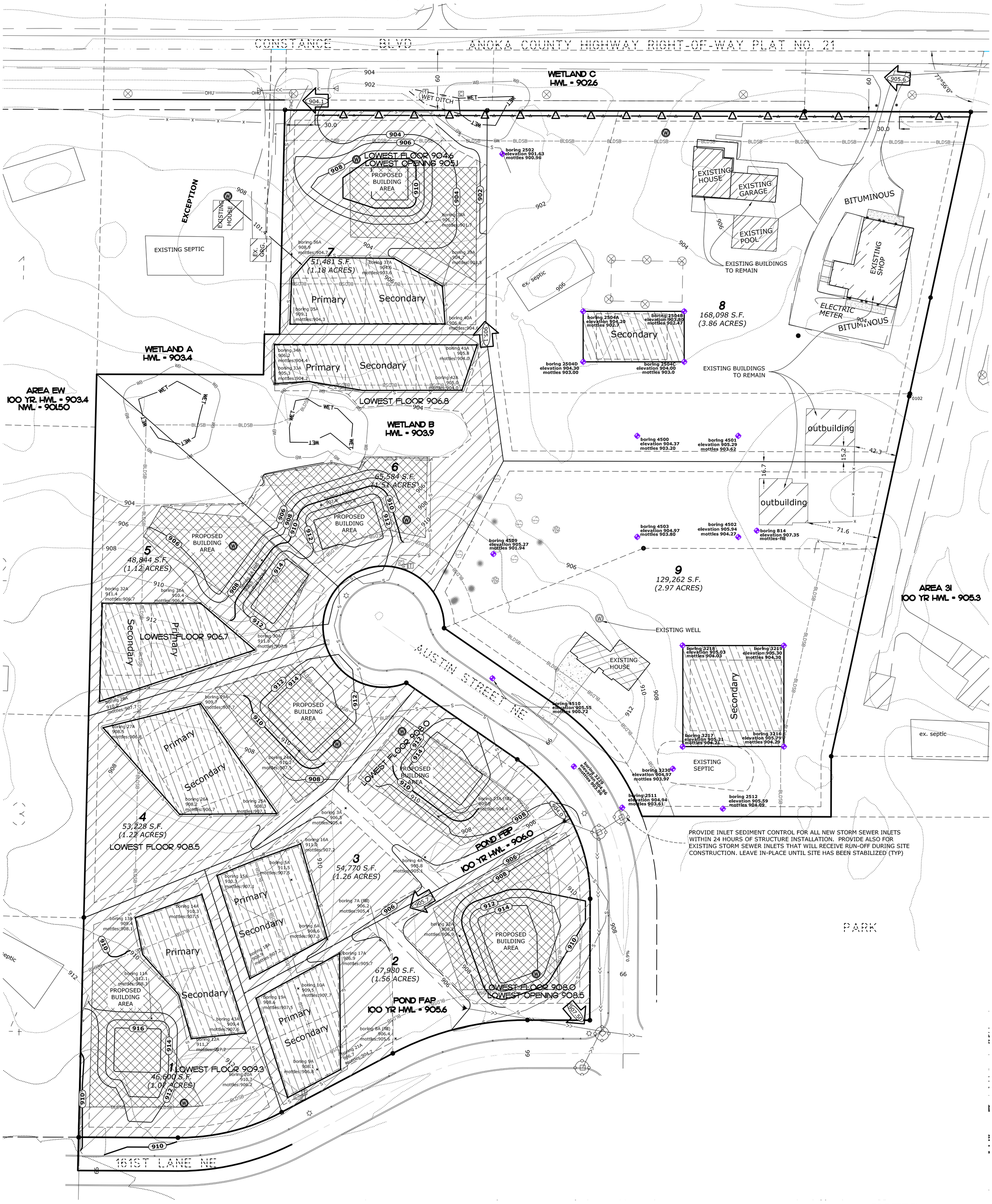
JASON E. RUD
Date: 7/15/2024 License No. 41578

DRAWN BY: CMB	JOB NO: 02562PP	DATE: 03/20/2024	
CHECK BY: JER	FIELD CREW: DT/CT		
1	04/24/24	CITY COMMENTS	CMB
2	07/15/24	CITY COMMENTS / NEW BORINGS	MMD
3			
NO.	DATE	DESCRIPTION	BY

S:\RUD\CAD\02PROJ\02562\4TH ADDITION\02562PP-4TH.DWG

LIVABILITY PLAN

~of~ ENCHANTED ESTATES FOURTH ADDITION
~for~ ROGER AND SUE HAUGEN
4056 CONSTANCE BLVD.
HAM LAKE, MN 55304
TEL: (763) 434-6582



PONDING CALCULATIONS
AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.

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6776 LAKE DRIVE
SUITE 110
LINO LAKES, MN 55014

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PHONE: (651) 361-8210
FAX: (651) 361-8701

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ADAM GINKEL

DATE: 07.15.2024 LIC. NO. 43963

LEGEND

- DENOTES SOIL BORING BY MARK TRADEWELL
- DENOTES SOIL BORING BY ART DUNN
- X 952.36 — DENOTES EXISTING SPOT ELEVATION
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- WET — DENOTES WETLAND DELINEATED BY EARTH SCIENCE ASSCOCIATES
- DENOTES EASEMENT LINE
- BLDSB — DENOTES SETBACK LINE
- DENOTES EXISTING STORM SEWER
- S — DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIO ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- Ⓦ — DENOTES PROPOSED WELL LOCATION
- WB — DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- DENOTES PROPOSED BUILDING PAD AREA
- DENOTES PROPOSED YARD AREA
- DENOTES PROPOSED SEPTIC AREA

NORTH

GRAPHIC SCALE
50 0 25 50 100 200
1 INCH = 50 FEET

NOTES

- BEARINGS SHOWN ARE ON AN ASSUMED DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MNGEO LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEEDED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- ALL PIPE APRONS PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MNDOT 33-261.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CCWD PRIOR TO ANY DEWATERING OPERATIONS.

I hereby certify that this survey, plan or report 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.

JASON E. RUD

Date: 7/15/2024 License No. 41578

DRAWN BY: CMB	JOB NO: 02562PP	DATE: 03/20/2024
CHECK BY: JER	FIELD CREW: DT/CT	

NO.	DATE	DESCRIPTION	BY
1	04/24/24	CITY COMMENTS	CMB
2	07/15/24	CITY COMMENTS / NEW BORINGS	MMD
3			

E. G. RUD & SONS, INC.
EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

S:\RUD\CAD\02PROJ\02562\4TH ADDITION\02562PP-4TH.DWG

LIVABILITY CHART

~of~ ENCHANTED ESTATES THIRD ADDITION
~for~ ROGER AND SUE HAUGEN
4056 CONSTANCE BLVD.
HAM LAKE, MN 55304
TEL: (763) 434-6582

Lot	Block	Total Lot Area (sq. ft.)	Yard Area (sq. ft.)	Septic Area (sq. ft) (sq. ft.)	Building Pad Area (sq. ft.)	Proposed Building Pad 4' Above Mottles (sq. ft.)	Garage Floor Elevation	Proposed Low Floor Elev.	Proposed Low Opening	Lowest Opening	Lowest Floor Elevation	Boring #	Boring Elevation	Mottles Elevation	Building Type	Custom Graded
1	1	46,600	20,461	8,452	10,739	7,829	916.3	909.3	912.5	909.3	909.3	11A*	912.1	908.3	L.O.*	YES
										PER	PER	12A	911.7	907.2	DROP	
										MOTTLES	MOTTLES	13A	909.4	908.1	1	
										SB 11A	SB 11A	14A	910.3	907.5	COURSE	
												43A	909.4	907.6		
2	1	67,980	21,038	7,780	12,305	7,114	915.5	908.5	908.5	908.5	908.0	7A	906.2	905.4	W.O.*	NO
										PER	PER	8A	906.4	905.6	DROP	
										OVERFLOW	POND FBP	9A	908.1	906.8	1	
												10A	909.5	907.7	COURSE	
												17A	906.9	905.7		
												19A	908.6	907.5		
												20A	910.7	906.2		
												21A	906.7	904.7		
												22A	908.2	906.9		
3	1	54,770	23,967	8,818	10,131	8,793	914.8	908.5	908.5	908.5	908.0	3A	906.5	905.4	W.O.*	NO
										PER	PER	4A	905.8	905.1	DROP	
										OVERFLOW	POND FBP	5A	911.5	907.5	2	
												6A	908.6	907.3	COURSE	
												15A	910.3	907.1		
												16A	911.0	907.2		
												18A	908.9	907.2		
												23A	909.9	904.4		
4	1	53,228	28,491	10,278	10,188	5,220	914.8	908.5	911.7	908.5	908.5	24A*	910.2	907.5	L.O.*	NO
										PER	PER	25A	908.3	907.1	DROP	
										OVERFLOW	MOTTLES	26A	908.2	906.7	2	
											SB 24A	27A	908.5	906.8	COURSE	
												29A	909.7	907.7		
5	1	48,844	17,549	9,646	10,395	3,901	914.4	906.7	906.7	906.7	906.7	2A*	908.5	905.7	W.O.	NO
										PER	PER	28A	910.0	907.7		
										MOTTLES	MOTTLES	30A	911.8	907.8		
										SB 2A	SB 2A	31A	910.4	906.4		
												32A	911.4	906.7		
6	1	65,584	19,076	8,225	10,727	4,489	914.5	906.8	906.8	906.1	906.8	1A*	907.8	905.8	W.O.	NO
										PER	PER	33A	905.3	904.2		
										MOTTLES	MOTTLES	34A	906.2	904.4		
										SB 1A	SB 1A	41A	905.8	904.0		
												42A	905.0	904.0		
7	1	51,481	23,293	8,997	10,359	3,917	912.5	905.5	905.5	905.1	904.6	35A	909.1	904.3	W.O.*	NO
										PER	PER	36A	908.9	904.7	DROP	
										OVERFLOW	WETLAND C	37A	904.6	903.6	1	
												38A	901.7	901.7	COURSE	
												39A	904.7	903.5		
												40A	906.6	904.6		
8	1	168,098	N/A	5,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2502	901.63	900.96	N/A	N/A
												2504A	904.20	902.70		
												2504B	903.80	902.47		
												2504C	904.00	903.00		
												2504D	904.30	903.00		
												4500	904.37	903.20		
												4501	905.29	903.62		
9	1	129,262	N/A	10,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	B14	907.35	FILL	N/A	N/A
												4502	905.94	904.27		
												4503	904.97	903.80		
												4509	905.27	901.94		
												3216	905.79	904.29		
												3217	905.21	904.21		
												3218	905.03	904.03		
												3219	905.30	904.30		
												3229	904.96	903.96		
												3230	904.97	903.97		
												4510	905.55	900.72		
												2511	904.94	903.61		
												2512	905.59	904.09		

Livability Standards
All residential lots shall contain at least 29,500 square feet of land which lies above the 100 year flood contour. Of this 29,500 square feet, the following additional requirements must be present.

A. ISTS Area Each lot must contain at least 7,500 square feet of contiguous area which is reserved for both the ISTS originally constructed and a future ISTS. The ISTS Area need not be contiguous to the Eligible building Area or the Yard Area, but the entire ISTS Area must exist at an elevation at least one foot above Unsuitable Soils, and must contain Undisturbed Soils or soils which meet the requirements of Rule 7080 of the Minnesota Pollution Control Agency for ISTS construction standards. The ISTS Area may be irregular in shape, provided they do not encroach into areas reserved by easement or otherwise for roadway, drainage or utility purposes, and provided that all of the area can be reasonably used for ISTS construction without the need for variances.

B. Eligible Building Area Each lot shall contain at least 10,000 square feet of contiguous land which lies at an elevation at least four feet above Unsuitable Soils. The Eligible Building Area may not be irregular in shape, and should be generally rectangular or ovoid, with no panhandles, narrow necks or peninsulas. Eligible Building Areas may not encroach into any areas reserved by easement or otherwise for roadway, drainage or utility purposes. Fill may be used to create Eligible Building Area.

C. Yard Area Each lot shall contain at least 12,000 contiguous square feet which:

i) Lies above the 100 year flood contour, and
ii) Lies at least one foot above soils unsuitable for the intended usage of the Yard area, and
iii) Is contiguous to the Eligible Building Area for a distance of at least fifty percent of the lineal perimeter of the Eligible Building Area.

Yard Areas may encroach into the dedicated easement area which lies at a distance of ten feet from the perimeter of the lot, and may encroach into areas reserved by easement or otherwise for other public utility purposes, but may not encroach into any other area reserved by dedication or otherwise for road or drainage purposes, any may not encroach into any areas within the 100 year flood contour or into designated wetlands. Yard Areas may be irregular in shape except within thirty feet of the locations where the Yard Area is contiguous to the Eligible Building Area, at which locations the Yard Areas shall be a logical extension or expansion of the generally rectangular or ovoid shape of the Eligible Building Area. Fill may be used to create Yard Area.

D. Building Pad Areas The entire Building Pad must lie within the Eligible Building Area, and shall meet the separation requirements for the Eligible Building Area.

E. Low Floor Elevations

i) For walkout designs, the low floor elevation shall be at least one foot above the 100 year flood contour, but, notwithstanding the 100 year flood contour, not less than one foot above unsuitable soils, as determined by the City's engineer.
ii) For other designs, the low floor elevation shall be at least one foot above the 100 year flood contour, but, notwithstanding the 100 year flood contour, not less than one foot above unsuitable soils, as determined by the City's engineer.

NOTES: * INDICATES DROPPED GARAGE ELEVATIONS BASED UPON 12 COURSE BASEMENT

(W) INDICATES STATIC GROUNDWATER ELEVATION

LOW OPENINGS LISTED ARE REFLECTING THE REAR YARD LOW OPENING

PONDING CALCULATIONS
AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.

PLOWE
ENGINEERING, INC.
6776 LAKE DRIVE
SUITE 110
LINO LAKES, MN 55014

SITE PLANNING & ENGINEERING
PHONE: (651) 361-8210
FAX: (651) 361-8701

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ADAM GINKEL

DATE: 07.15.2024 LIC. NO. 43963

I hereby certify that this survey, plan or report 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.

JASON E. RUD

Date: 7/15/2024 License No. 41578

DRAWN BY: CMB	JOB NO: 02562PP	DATE: 03/20/2024	
CHECK BY: JER	FIELD CREW: DT/CT		
1	04/24/24	CITY COMMENTS	CMB
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3			
NO.	DATE	DESCRIPTION	BY

E. G. RUD & SONS, INC.
EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

COON CREEK WATERSHED DISTRICT

Permit Application Review Report
Date: 8/21/2024

Board Meeting Date: 8/26/2024
Agenda Item: 9

Applicant/Landowner:
Roger Haugen
4056 Constance Blvd NE
Ham Lake, MN 55014

Project Name: Enchanted Estates Fourth Addition

Project PAN: P-24-013

Project Purpose: creation of 9 new single-family lots

Project Location: Austin St NE & 161st Ln NE, Ham Lake

Site Size: size of parcel - 15.7 acres; size of disturbed area - 3.7 acres; size of regulated impervious surface - 1.27 acres

Applicable District Rule(s): Rule 2, Rule 3, Rule 4

Recommendation: Approve with 3 Conditions and 2 Stipulations

Description: The application is proposing the fourth and final addition of the Enchanted Estates housing development project. The scope of work includes grading, restoration, and home construction. The project will disturb 3.7 acres and create 1.27 acres of regulated impervious. The site drains to County Ditch 11. The relevant water resource concerns are stormwater management, erosion and sediment control, and wetlands. These correspond to District Rules 3, 4, and 5. See attached Figure 1: Project Location and Figure 2: Site Plan.

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Submittal of a performance escrow in the amount of $3,850.00.
2. Submittal of the required $10 administrative fee that is missing from the application and review fee check.

Rule 4.0 – Soils and Erosion Control

3. Update the erosion and sediment control plan to include the following:
   a. Provide a note that soils and soils stockpiles will be stabilized within 24 hours of inactivity.
   b. A note that streets will be swept clean of sediment by the end of each workday.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

1. If dewatering is required, provide DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location, schedule and quantities prior to construction.
2. The applicant must apply for coverage under the Minnesota Pollution Control Agency's (MPCA's) Construction Stormwater Permit (Permit No: MNR100001).

Exhibits:

Exhibit Type	Exhibit Author	Signature Date	Received Date
Revised Wetland Figure	Earth Science Associates, Inc.	05/08/2024	05/08/2024
Wetland Delineation Report - Update	Earth Science Associates, Inc.	03/2024	03/20/2024
Construction Plans	Plowe Engineering	07/15/2024	07/15/2024
Stormwater Drainage Report	Plowe Engineering	07/18/2024	07/25/2024
SWPPP	Plowe Engineering	07/15/2024	07/15/2024
Soil Borings	Tradewell Soil Testing	05/11/2024	07/15/2024
Pond F as-built	EG Rud & Sons	07/25/2024	07/25/2024

Findings

Fees and Escrows (Rule 2.7):
The applicant has submitted a $7,000.00 application fee and deposit. The fee check is missing the $10 administrative fee. The fee ($7000.00) is for a Single Family/Multifamily Residential Development project of 15.7 acres. The applicant will be required to submit a performance escrow in the amount of $3,850.00. This corresponds to a base escrow of $2,000, plus an additional $500/acre of disturbance (3.7 acres of land disturbance proposed).

Stormwater Management (Rule 3.0):
Rule 3.0 applies to the proposed project because it includes land disturbing activities creating a cumulative total of 10,000 sf or more of new or fully reconstructed impervious surface.

Rate Control: Peak stormwater flow rate at each point of site discharge does not increase from the pre-development condition for the 24-hour precipitation event with a return frequency of 2-, 10-, 100- years as shown in Table 1. The project is utilizing existing ponds which were constructed during previous additions and intended to treat stormwater for this 4th addition. The project will not impact Drainage Sensitive Use areas. The rate control standard is met.

Volume Control:
The proposed project is new development; therefore, the volume reduction requirement is equal to 1.1 inches over the area of all impervious surface. The amount of proposed impervious required to be treated is 55,321 ft^2.

The applicant is proposing the Stormwater Management Practices (SMPs) described below:

Drainage Area	Impervious required to be treated (ft^2)	Proposed SMP	TP Removal Factor	Required Water Quality Volume (ft^3)	Water Quality Volume Provided (ft^3)
Wetland A/B/C	9,906	Impervious Disconnect	1	908	908
Pond F	45,415	Pond F	0.5	8,326	8,326
Totals:	**55,321**			**9,234**	**9,234**

Table 2.

The volume control standard has been met as shown in Table 2.

Water Quality: The total Water Quality Volume has been provided in aggregate.

Stormwater treatment on site must remove at least 80% of the average annual post development TSS per discharge location. The following TSS removal has been provided:

Discharge Point	TSS Removal Provided
Wetland A/B/C	80
Pond F	84

Table 4.

The TSS removal standard is met at each discharge point as shown in Table 4.

Discharges to Wetlands: Stormwater from the proposed project is being discharged into the following wetlands.

Wetland ID	Wetland C
Wetland Type	Slightly Susceptible
Change of Bounce 2-yr (ft)	0.01
Change of Bounce 10-yr (ft)	0.00
Change of Inundation on 2-yr (hrs)	0
Change of Inundation on 10-yr (hrs)	0
Change of Run out Control (ft)	0

Wetland ID	Wetland B
Wetland Type	Slightly Susceptible
Change of Bounce 2-yr (ft)	0.01
Change of Bounce 10-yr (ft)	-0.01
Change of Inundation on 2-yr (hrs)	-1
Change of Inundation on 10-yr (hrs)	0
Change of Run out Control (ft)	0

Wetland ID	Wetland A
Wetland Type	Slightly Susceptible
Change of Bounce 2-yr (ft)	0.01
Change of Bounce 10-yr (ft)	0
Change of Inundation on 2-yr (hrs)	N/A
Change of Inundation on 10-yr (hrs)	N/A
Change of Run out Control (ft)	0

Wetland ID	E Wetland
Wetland Type	Slightly Susceptible
Change of Bounce 2-yr (ft)	0.01
Change of Bounce 10-yr (ft)	0.00
Change of Inundation on 2-yr (hrs)	N/A
Change of Inundation on 10-yr (hrs)	N/A
Change of Run out Control (ft)	0

Table 5.

The proposed project meets bounce, discharge rate, inundation, and runout control requirements for all wetlands receiving discharge from the site as shown in Table 5. Inundation is not calculated for Wetland A or E Wetland because they do not discharge in the 2 or 10-year events.

Landlocked Basins: The proposed drainage system does not outlet to a landlocked basin, therefore this section does not apply.

Freeboard: Habitable structures are not within the vicinity of stormwater features, therefore; low floor freeboard does not apply.

Maintenance:

Access: Sufficient maintenance access has been provided on the plans for all stormwater management practices.

Easements: Maintenance easements for all stormwater management practices are required for the proposed project.

All required maintenance easements have been provided on the plans.

Maintenance Agreements: All proposed stormwater management practices will be maintained as part of standard municipal public work activities. Therefore, no maintenance agreement will be required.

Soils and Erosion Control (Rule 4.0)
Rule 4.0 applies to the proposed project because it is a land disturbing activity that requires a permit under another District rule.

The proposed project drains to County Ditch 11. The soils affected by the project include Zimmerman and Lino which have a soil erodibility factor of 0.15 or greater. Disturbed areas are not proposed to be stabilized within 24 hours, as required. The proposed erosion and sediment control plan includes perimeter control and inlet protection. The erosion control plan does not meet District requirements because soils and soil stockpiles are not proposed to be stabilized within 24 hours of inactivity and streets are not proposed to be swept by the end of each workday.

Wetlands (Rule 5.0)
Wetlands exist on site, but no impacts are proposed. Wetlands were delineated under PAN W24-010. The boundary and type application was reviewed and approved. The Notice of Decision was issued on 05/15/2024.

Floodplain (Rule 6.0)
The proposed project does not include land disturbing activities within the floodplain as mapped and modeled by the District. Rule 6.0 does not apply.

Drainage, Bridges, Culverts, and Utility Crossings (Rule 7.0)
The proposed project does not include land disturbing activities which construct, improve, repair, or alter the hydraulic characteristics of a bridge profile control or culvert structure on a creek, public ditch, or major watercourse. The proposed project does not include land disturbing activities which involve a pipeline or utility crossing of a creek, public ditch, or major watercourse.

The proposed project does not include land disturbing activities which construct, improve, repair or alter the hydraulic characteristics of a conveyance system that extends across two or more parcels of record not under common ownership and has a drainage area of 200 acres or greater. Rule 7.0 does not apply.

Buffers (Rule 8.0)
The proposed project does not include a land disturbing activity on land adjacent or directly contributing to a Public Water, Additional Waters, High or Outstanding Ecological Value Waters, a Public Ditch, or Impaired Waters/waters exceeding state water quality standards. Rule 8.0 does not apply.

Variances (Rule 10.2)
The proposed project is not requesting a variance from the District's rules, regulations, and policies. Rule 10.2 does not apply.

Figure 1: Project Location

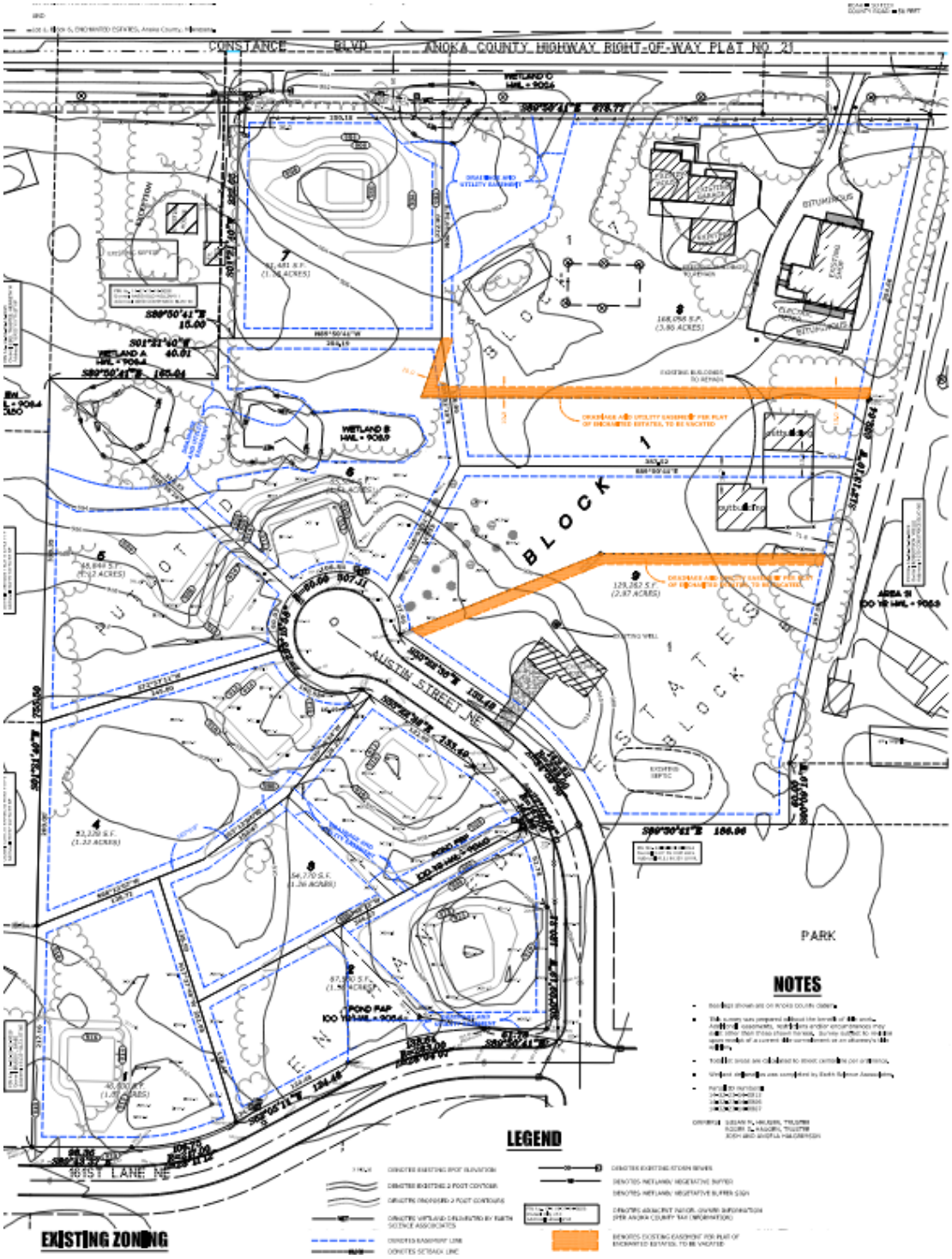


Figure 2: Site Plan

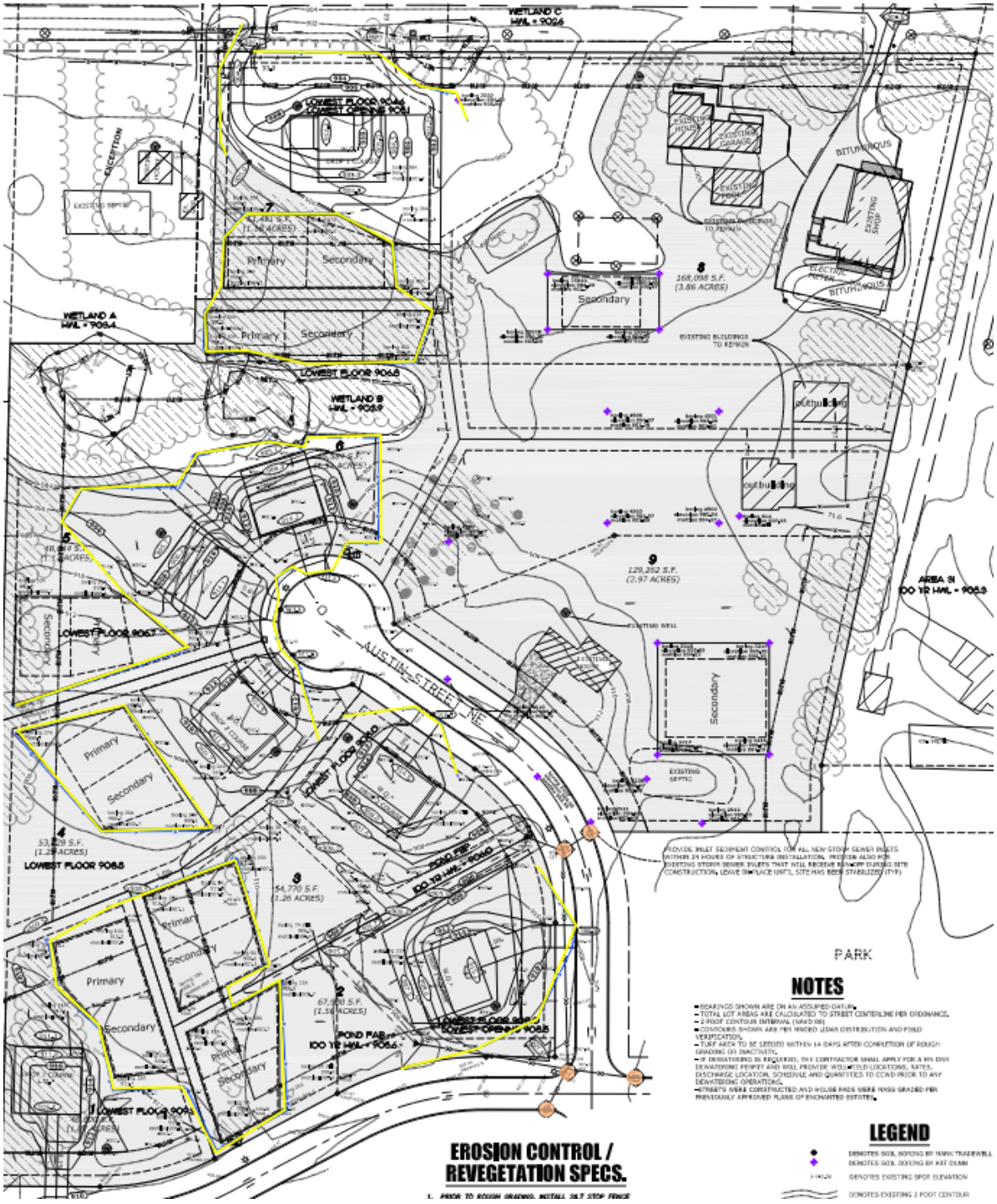


Figure 3: Erosion and Sediment Control Plan

PRELIMINARY PLAT

EXISTING PROPERTY DESCRIPTION

Outlot D, ENCHANTED ESTATES, Anoka County, Minnesota.

AND

Lot 1, Block 7, ENCHANTED ESTATES, Anoka County, Minnesota.

AND

Lot 1, Block 6, ENCHANTED ESTATES, Anoka County, Minnesota.

~of~ ENCHANTED ESTATES FOURTH ADDITION

~for~ ROGER AND SUE HAUGEN
4056 CONSTANCE BLVD.
HAM LAKE, MN 55304
TEL: (763) 434-6582

DEVELOPMENT DATA

TOTAL SITE AREA = 15.74± ACRES

9 PROPOSED SINGLE FAMILY LOTS

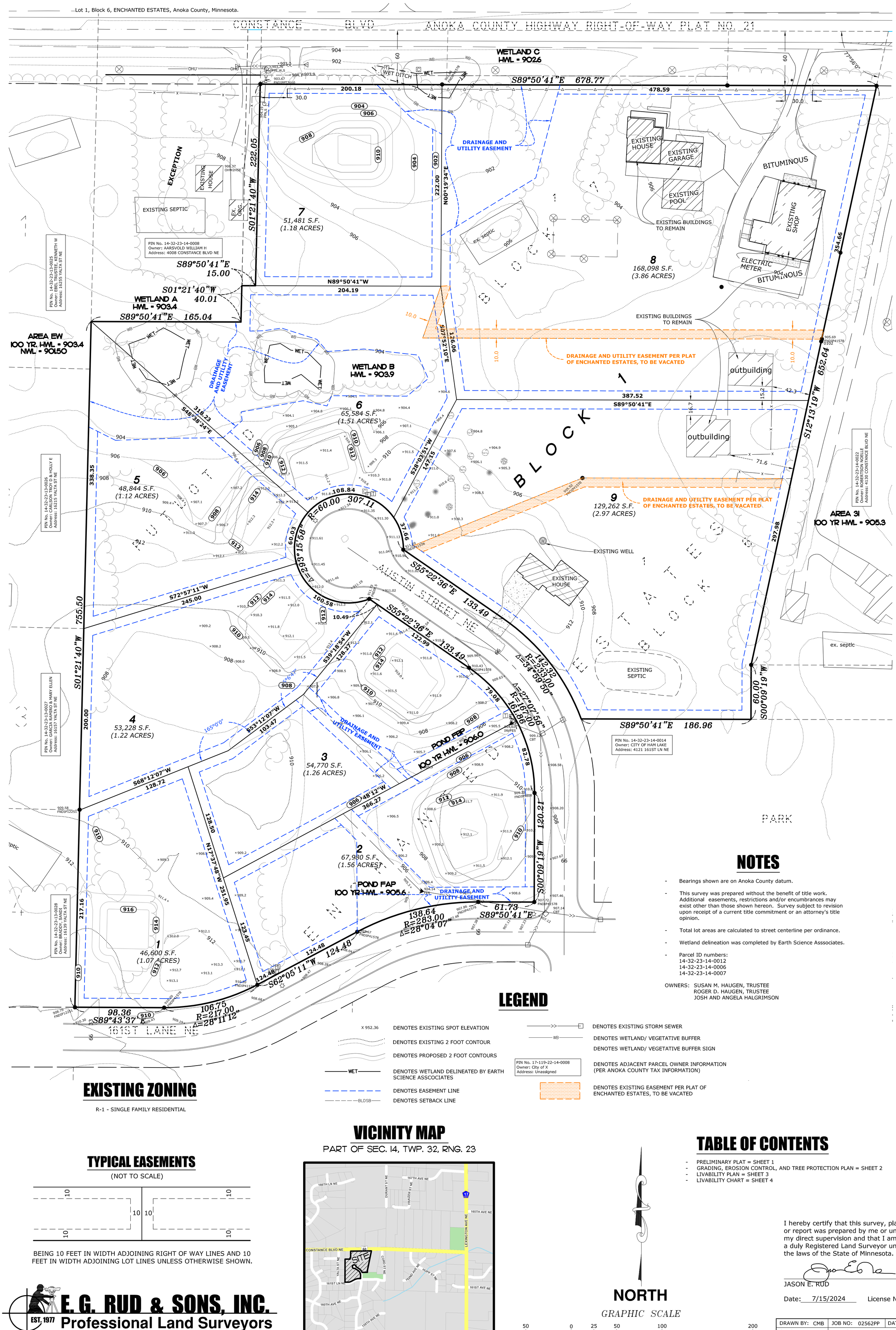
AVERAGE LOT SIZE = 1.75± ACRES

MINIMUM STREET FRONTAGE = 200 FEET (60 ON CUL-DE-SAC LOTS)

MINIMUM LOT SIZE = 1.00 ACRES (INCLUDING HALF OF STREET ROW)

PROPOSED ZONING = R-1

BUILDING SETBACKS FRONT = 30 FEET
SIDE = 10 FEET
REAR = 50 FEET
COUNTY ROAD = 50 FEET



NOTES

- Bearings shown are on Anoka County datum.
- This survey was prepared without the benefit of title work. Additional easements, restrictions and/or encumbrances may exist other than those shown hereon. Survey subject to revision upon receipt of a current title commitment or an attorney's title opinion.
- Total lot areas are calculated to street centerline per ordinance.
- Wetland delineation was completed by Earth Science Asssociates.
- Parcel ID numbers:
  14-32-23-14-0012
  14-32-23-14-0006
  14-32-23-14-0007

OWNERS: SUSAN M. HAUGEN, TRUSTEE
ROGER D. HAUGEN, TRUSTEE
JOSH AND ANGELA HALGRIMSON

LEGEND

- X 952.36 — DENOTES EXISTING SPOT ELEVATION
- DENOTES EXISTING 2 FOOT CONTOUR
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- BLDSB — DENOTES SETBACK LINE
- DENOTES EXISTING STORM SEWER
- WB — DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- PIN No. 17-119-22-14-0008 Owner: City of X Address: Unassigned — DENOTES ADJACENT PARCEL OWNER INFORMATION (PER ANOKA COUNTY TAX INFORMATION)
- DENOTES EXISTING EASEMENT PER PLAT OF ENCHANTED ESTATES, TO BE VACATED

EXISTING ZONING

R-1 - SINGLE FAMILY RESIDENTIAL

TYPICAL EASEMENTS

(NOT TO SCALE)

BEING 10 FEET IN WIDTH ADJOINING RIGHT OF WAY LINES AND 10 FEET IN WIDTH ADJOINING LOT LINES UNLESS OTHERWISE SHOWN.

VICINITY MAP

PART OF SEC. 14, TWP. 32, RNG. 23

ANOKA COUNTY, MINNESOTA
(NO SCALE)

NORTH

GRAPHIC SCALE

50 0 25 50 100 200

1 INCH = 50 FEET

TABLE OF CONTENTS

I hereby certify that this survey, plan or report 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.

JASON E. RUD

Date: 7/15/2024 License No. 41578

DRAWN BY: CMB	JOB NO: 02562PP		DATE: 03/20/2024
CHECK BY: JER	FIELD CREW: DT/CT		
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EST. 1977
Professional Land Surveyors
6776 Lake Drive NE, Suite 110
Lino Lakes, MN 55014
Tel. (651) 361-8200 Fax (651) 361-8701
www.egrud.com

GRADING, EROSION CONTROL, AND TREE PROTECTION PLAN

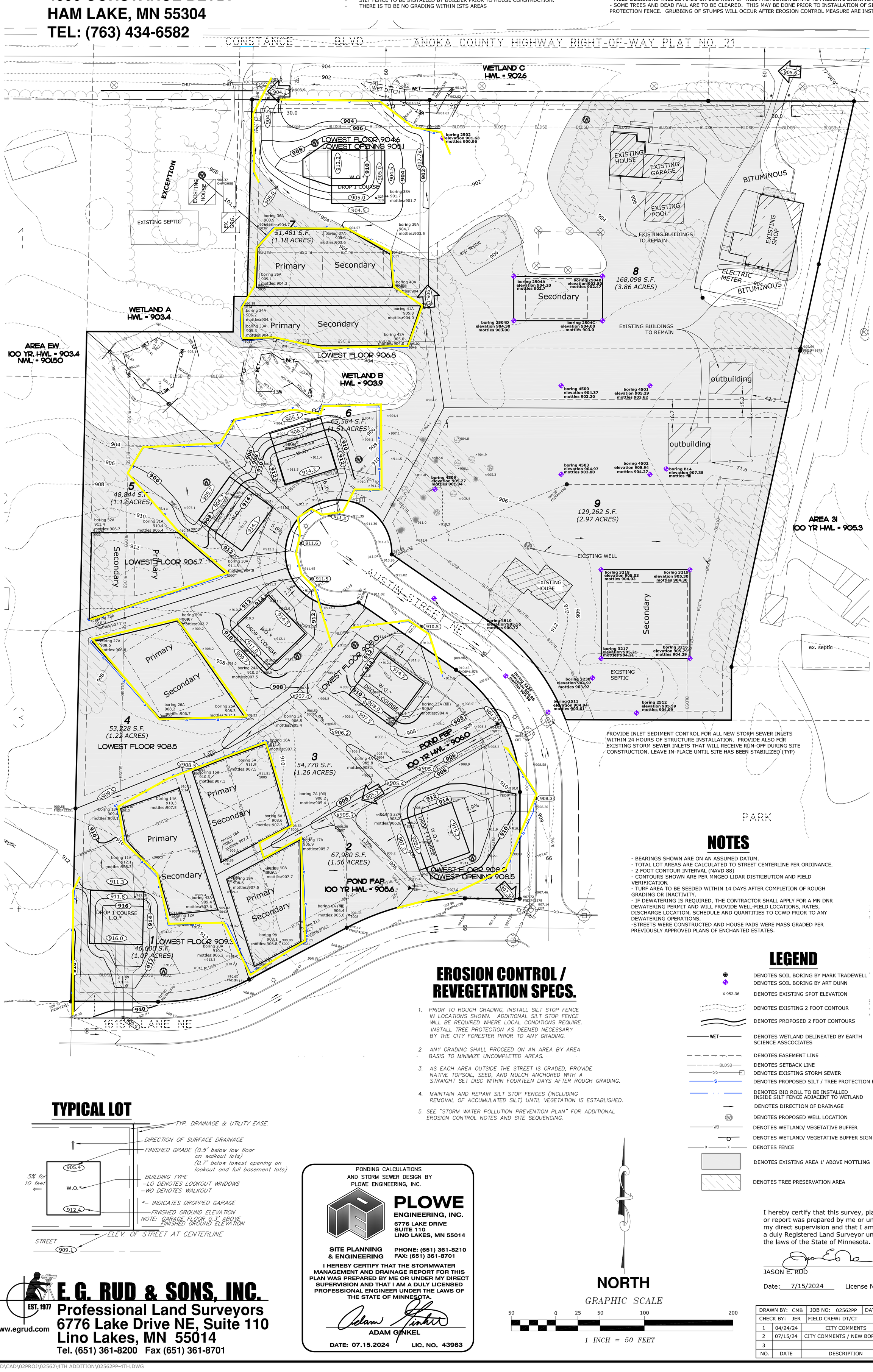
~of~ ENCHANTED ESTATES FOURTH ADDITION
~for~ ROGER AND SUE HAUGEN
4056 CONSTANCE BLVD.
HAM LAKE, MN 55304
TEL: (763) 434-6582

LOT GRADING NOTES

- PAD CONTOURS SHOWN ARE FOR DEMONSTRATION PURPOSES.
- HOUSE TYPES AND GRADING THAT VARY FROM WHAT IS PROPOSED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF HAM LAKE.
- SILT FENCE TO BE INSTALLED BY BUILDER PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN ISTS AREAS

TREE PROTECTION NOTES

- TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
- SILT / TREE PROTECTION FENCE TO BE INSTALLED AT CONSTRUCTION LIMIT LINE.
- CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY OR CONSTRUCTION VEHICLE TRAFFIC WITHIN THE DRIP LINE OF TREES IN THE TREE PROTECTION ZONE.
- FIELD DECISIONS WILL BE MADE ON LOCATION OF TREE PROTECTION LIMITS TO PRESERVE SIGNIFICANT TREES.
- SOME TREES AND DEAD FALL ARE TO BE CLEARED. THIS MAY BE DONE PRIOR TO INSTALLATION OF SILT / TREE PROTECTION FENCE. GRUBBING OF STUMPS WILL OCCUR AFTER EROSION CONTROL MEASURE ARE INSTALLED.



NOTES

- BEARINGS SHOWN ARE ON AN ASSUMED DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MNGEO LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- TURF AREA TO BE SEEDED WITHIN 14 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CCWD PRIOR TO ANY DEWATERING OPERATIONS.
- STREETS WERE CONSTRUCTED AND HOUSE PADS WERE MASS GRADED PER PREVIOUSLY APPROVED PLANS OF ENCHANTED ESTATES.

LEGEND

- DENOTES SOIL BORING BY MARK TRADEWELL
- DENOTES SOIL BORING BY ART DUNN
- X 952.36 — DENOTES EXISTING SPOT ELEVATION
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- WET — DENOTES WETLAND DELINEATED BY EARTH SCIENCE ASSCOCIATES
- DENOTES EASEMENT LINE
- BLDSB — DENOTES SETBACK LINE
- DENOTES EXISTING STORM SEWER
- S — DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIO ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED WELL LOCATION
- WB — DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- x — x — DENOTES FENCE
- DENOTES EXISTING AREA 1' ABOVE MOTTLING
- DENOTES TREE PRESERVATION AREA

EROSION CONTROL / REVEGETATION SPECS.

1. PRIOR TO ROUGH GRADING, INSTALL SILT STOP FENCE IN LOCATIONS SHOWN. ADDITIONAL SILT STOP FENCE WILL BE REQUIRED WHERE LOCAL CONDITIONS REQUIRE. INSTALL TREE PROTECTION AS DEEMED NECESSARY BY THE CITY FORESTER PRIOR TO ANY GRADING.
2. ANY GRADING SHALL PROCEED ON AN AREA BY AREA BASIS TO MINIMIZE UNCOMPLETED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH ANCHORED WITH A STRAIGHT SET DISC WITHIN FOURTEEN DAYS AFTER ROUGH GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SILT) UNTIL VEGETATION IS ESTABLISHED.
5. SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE SEQUENCING.

TYPICAL LOT

E. G. RUD & SONS, INC.
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PONDING CALCULATIONS AND STORM SEWER DESIGN BY PLOWE ENGINEERING, INC.

PLOWE
ENGINEERING, INC.
6776 LAKE DRIVE
SUITE 110
LINO LAKES, MN 55014
SITE PLANNING & ENGINEERING
PHONE: (651) 361-8210
FAX: (651) 361-8701

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

ADAM GINKEL
DATE: 07.15.2024 LIC. NO. 43963

NORTH

GRAPHIC SCALE
50 0 25 50 100 200
1 INCH = 50 FEET

I hereby certify that this survey, plan or report 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.

JASON E. RUD
Date: 7/15/2024 License No. 41578

DRAWN BY: CMB	JOB NO: 02562PP	DATE: 03/20/2024	
CHECK BY: JER	FIELD CREW: DT/CT		
1	04/24/24	CITY COMMENTS	CMB
2	07/15/24	CITY COMMENTS / NEW BORINGS	MMD
3			
NO.	DATE	DESCRIPTION	BY

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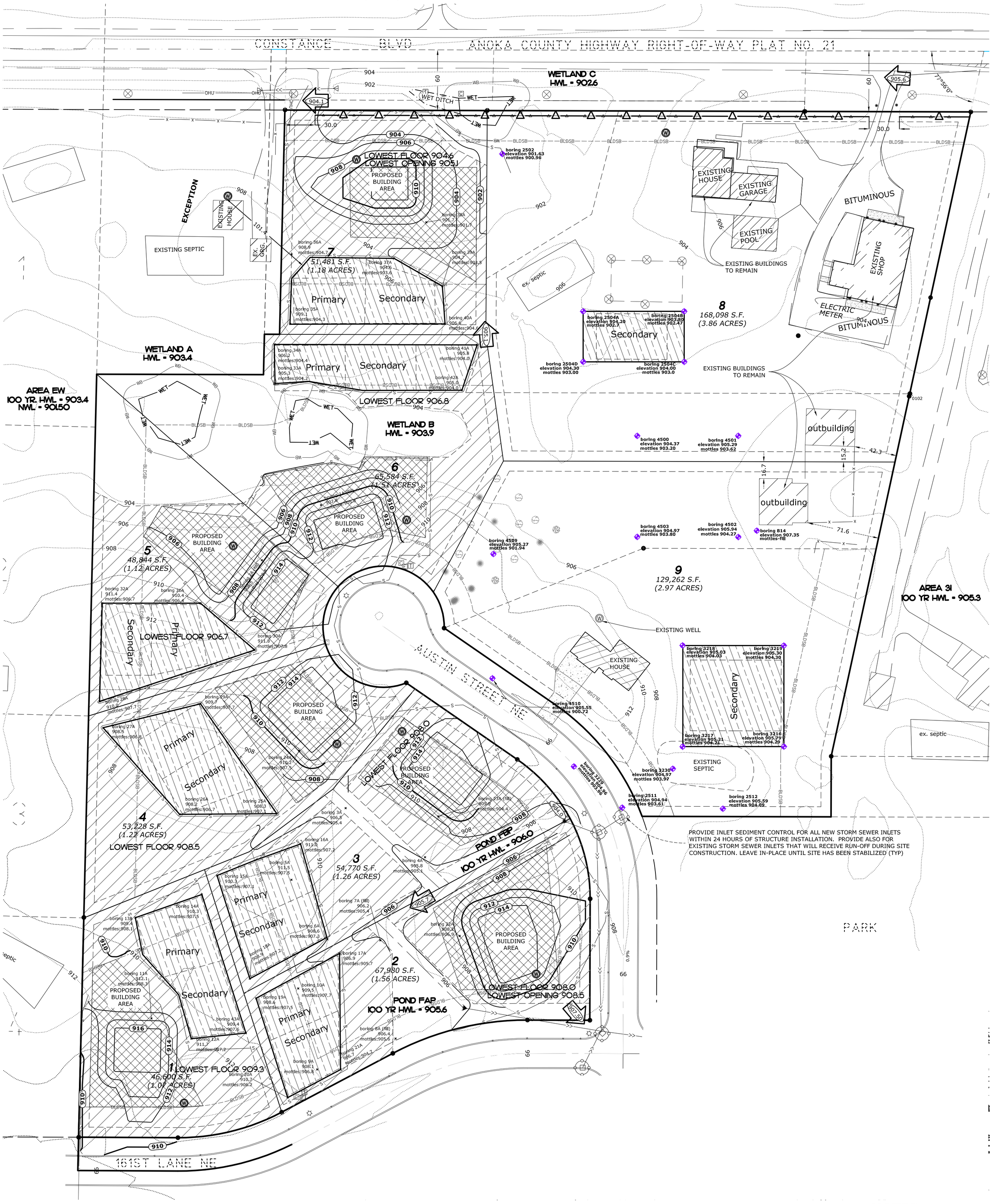
LIVABILITY PLAN

~of~ ENCHANTED ESTATES FOURTH ADDITION
~for~ ROGER AND SUE HAUGEN
4056 CONSTANCE BLVD.
HAM LAKE, MN 55304
TEL: (763) 434-6582



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AND STORM SEWER DESIGN BY
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- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- DENOTES PROPOSED BUILDING PAD AREA
- DENOTES PROPOSED YARD AREA
- DENOTES PROPOSED SEPTIC AREA

NORTH

GRAPHIC SCALE
50 0 25 50 100 200
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NOTES

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- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MNGEO LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEEDED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- ALL PIPE APRONS PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MNDOT 33-261.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CCWD PRIOR TO ANY DEWATERING OPERATIONS.

I hereby certify that this survey, plan or report 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.

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LIVABILITY CHART

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Lot	Block	Total Lot Area (sq. ft.)	Yard Area (sq. ft.)	Septic Area (sq. ft) (sq. ft.)	Building Pad Area (sq. ft.)	Proposed Building Pad 4' Above Mottles (sq. ft.)	Garage Floor Elevation	Proposed Low Floor Elev.	Proposed Low Opening	Lowest Opening	Lowest Floor Elevation	Boring #	Boring Elevation	Mottles Elevation	Building Type	Custom Graded
1	1	46,600	20,461	8,452	10,739	7,829	916.3	909.3	912.5	909.3	909.3	11A*	912.1	908.3	L.O.*	YES
										PER	PER	12A	911.7	907.2	DROP	
										MOTTLES	MOTTLES	13A	909.4	908.1	1	
										SB 11A	SB 11A	14A	910.3	907.5	COURSE	
												43A	909.4	907.6		
2	1	67,980	21,038	7,780	12,305	7,114	915.5	908.5	908.5	908.5	908.0	7A	906.2	905.4	W.O.*	NO
										PER	PER	8A	906.4	905.6	DROP	
										OVERFLOW	POND FBP	9A	908.1	906.8	1	
												10A	909.5	907.7	COURSE	
												17A	906.9	905.7		
												19A	908.6	907.5		
												20A	910.7	906.2		
												21A	906.7	904.7		
												22A	908.2	906.9		
3	1	54,770	23,967	8,818	10,131	8,793	914.8	908.5	908.5	908.5	908.0	3A	906.5	905.4	W.O.*	NO
										PER	PER	4A	905.8	905.1	DROP	
										OVERFLOW	POND FBP	5A	911.5	907.5	2	
												6A	908.6	907.3	COURSE	
												15A	910.3	907.1		
												16A	911.0	907.2		
												18A	908.9	907.2		
												23A	909.9	904.4		
4	1	53,228	28,491	10,278	10,188	5,220	914.8	908.5	911.7	908.5	908.5	24A*	910.2	907.5	L.O.*	NO
										PER	PER	25A	908.3	907.1	DROP	
										OVERFLOW	MOTTLES	26A	908.2	906.7	2	
											SB 24A	27A	908.5	906.8	COURSE	
												29A	909.7	907.7		
5	1	48,844	17,549	9,646	10,395	3,901	914.4	906.7	906.7	906.7	906.7	2A*	908.5	905.7	W.O.	NO
										PER	PER	28A	910.0	907.7		
										MOTTLES	MOTTLES	30A	911.8	907.8		
										SB 2A	SB 2A	31A	910.4	906.4		
												32A	911.4	906.7		
6	1	65,584	19,076	8,225	10,727	4,489	914.5	906.8	906.8	906.1	906.8	1A*	907.8	905.8	W.O.	NO
										PER	PER	33A	905.3	904.2		
										MOTTLES	MOTTLES	34A	906.2	904.4		
										SB 1A	SB 1A	41A	905.8	904.0		
												42A	905.0	904.0		
7	1	51,481	23,293	8,997	10,359	3,917	912.5	905.5	905.5	905.1	904.6	35A	909.1	904.3	W.O.*	NO
										PER	PER	36A	908.9	904.7	DROP	
										OVERFLOW	WETLAND C	37A	904.6	903.6	1	
												38A	901.7	901.7	COURSE	
												39A	904.7	903.5		
												40A	906.6	904.6		
8	1	168,098	N/A	5,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2502	901.63	900.96	N/A	N/A
												2504A	904.20	902.70		
												2504B	903.80	902.47		
												2504C	904.00	903.00		
												2504D	904.30	903.00		
												4500	904.37	903.20		
												4501	905.29	903.62		
9	1	129,262	N/A	10,000	N/A	N/A	N/A	N/A	N/A	N/A	N/A	B14	907.35	FILL	N/A	N/A
												4502	905.94	904.27		
												4503	904.97	903.80		
												4509	905.27	901.94		
												3216	905.79	904.29		
												3217	905.21	904.21		
												3218	905.03	904.03		
												3219	905.30	904.30		
												3229	904.96	903.96		
												3230	904.97	903.97		
												4510	905.55	900.72		
												2511	904.94	903.61		
												2512	905.59	904.09		

Livability Standards
All residential lots shall contain at least 29,500 square feet of land which lies above the 100 year flood contour. Of this 29,500 square feet, the following additional requirements must be present.

A. ISTS Area Each lot must contain at least 7,500 square feet of contiguous area which is reserved for both the ISTS originally constructed and a future ISTS. The ISTS Area need not be contiguous to the Eligible building Area or the Yard Area, but the entire ISTS Area must exist at an elevation at least one foot above Unsuitable Soils, and must contain Undisturbed Soils or soils which meet the requirements of Rule 7080 of the Minnesota Pollution Control Agency for ISTS construction standards. The ISTS Area may be irregular in shape, provided they do not encroach into areas reserved by easement or otherwise for roadway, drainage or utility purposes, and provided that all of the area can be reasonably used for ISTS construction without the need for variances.

B. Eligible Building Area Each lot shall contain at least 10,000 square feet of contiguous land which lies at an elevation at least four feet above Unsuitable Soils. The Eligible Building Area may not be irregular in shape, and should be generally rectangular or ovoid, with no panhandles, narrow necks or peninsulas. Eligible Building Areas may not encroach into any areas reserved by easement or otherwise for roadway, drainage or utility purposes. Fill may be used to create Eligible Building Area.

C. Yard Area Each lot shall contain at least 12,000 contiguous square feet which:

i) Lies above the 100 year flood contour, and
ii) Lies at least one foot above soils unsuitable for the intended usage of the Yard area, and
iii) Is contiguous to the Eligible Building Area for a distance of at least fifty percent of the lineal perimeter of the Eligible Building Area.

Yard Areas may encroach into the dedicated easement area which lies at a distance of ten feet from the perimeter of the lot, and may encroach into areas reserved by easement or otherwise for other public utility purposes, but may not encroach into any other area reserved by dedication or otherwise for road or drainage purposes, any may not encroach into any areas within the 100 year flood contour or into designated wetlands. Yard Areas may be irregular in shape except within thirty feet of the locations where the Yard Area is contiguous to the Eligible Building Area, at which locations the Yard Areas shall be a logical extension or expansion of the generally rectangular or ovoid shape of the Eligible Building Area. Fill may be used to create Yard Area.

D. Building Pad Areas The entire Building Pad must lie within the Eligible Building Area, and shall meet the separation requirements for the Eligible Building Area.

E. Low Floor Elevations

i) For walkout designs, the low floor elevation shall be at least one foot above the 100 year flood contour, but, notwithstanding the 100 year flood contour, not less than one foot above unsuitable soils, as determined by the City's engineer.
ii) For other designs, the low floor elevation shall be at least one foot above the 100 year flood contour, but, notwithstanding the 100 year flood contour, not less than one foot above unsuitable soils, as determined by the City's engineer.

NOTES: * INDICATES DROPPED GARAGE ELEVATIONS BASED UPON 12 COURSE BASEMENT

(W) INDICATES STATIC GROUNDWATER ELEVATION

LOW OPENINGS LISTED ARE REFLECTING THE REAR YARD LOW OPENING

PONDING CALCULATIONS
AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.

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6776 LAKE DRIVE
SUITE 110
LINO LAKES, MN 55014

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ADAM GINKEL

DATE: 07.15.2024 LIC. NO. 43963

I hereby certify that this survey, plan or report 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.

JASON E. RUD

Date: 7/15/2024 License No. 41578

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COON CREEK WATERSHED DISTRICT

Permit Application Review Report
Date: 8/21/2024

Board Meeting Date: 8/26/2024
Agenda Item: 11

Applicant/Landowner:
LaMettry's Collision
Attn: Ken Scherping
4700 South Robert Trail
Inver Grove Heights, MN 55077

Project Name: LaMettry's Collision Site Improvements

Project PAN: P-24-035

Project Purpose: Redevelopment of an existing commercial area including parking and associated stormwater treatment features

Project Location: 2101 108th Lane NE, Blaine

Site Size: size of parcel - 1.8 acres; size of disturbed area - 0.87 acres; size of regulated impervious surface - 0.55 acres

Applicable District Rule(s): Rule 2, Rule 3, Rule 4

Recommendation: Approve with 3 Conditions and 3 Stipulations

Description: The project proposes the redevelopment of an existing commercial lot to include new and reconstructed parking areas and a stormwater treatment feature. The project will disturb 0.87 acres and create 0.55 acres of new and fully reconstructed impervious. The area drains to County Ditch 41. The relevant water resource concerns are stormwater treatment and erosion and sediment control, which correspond to District Rules 3 and 4. See attached Figure 1: Project Location and Figure 2: Site Plan.

Conditions to be Met Before Permit Issuance:

Rule 2.7 – Procedural Requirements

1. Submittal of a performance escrow in the amount of $2,435.00.

Rule 3.0 – Stormwater Management

2. Provide proof of recording of a fully executed Operations and Maintenance Agreement for the perpetual inspection and maintenance of all proposed stormwater management practices after review and approval by the District.

Rule 4.0 – Soils and Erosion Control

3. Update the erosion and sediment control plan to include the following:
   a. A note to stabilize soils and soil stockpiles within 24 hours of inactivity.

b. Completely surround the infiltration basin with perimeter control to prevent compaction during construction.

Stipulations: The permit will be issued with the following stipulations as conditions of the permit. By accepting the permit, the applicant agrees to these stipulations:

1. If dewatering is required, provide DNR dewatering permit prior to construction. If a DNR permit is not required, provide well-field location, rates, discharge location, schedule and quantities prior to construction.
2. Completion of a post construction infiltration test on Infiltration Basin 100 by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
3. Submittal of as-builts for the stormwater management practices and associated structures listed in Tables 2 and 3, including volume, critical elevations and proof of installation for hydrodynamic separators.

Exhibits:

Exhibit Type	Exhibit Author	Signature Date	Received Date
Geotechnical Report	Haugo Geotechnical Services	07/19/2024	08/06/2024
Construction Plans	Carlson McCain	08/06/2024	08/06/2024
Stormwater Management Plan	Carlson McCain	08/06/2024	08/06/2024

Findings

Fees and Escrows (Rule 2.7):
The applicant has submitted a $3,310.00 application fee and deposit which corresponds with the nonrefundable application fee ($10), and the base fee for a Commercial/Industrial Development project of 1.8 acres ($3,300.00). The applicant will be required to submit a performance escrow in the amount of $2,435.00. This corresponds to a base escrow of $2,000, plus an additional $500/acre of disturbance (0.87 acres of land disturbance proposed).

Stormwater Management (Rule 3.0):
Rule 3.0 applies to the proposed project because it includes land disturbing activities creating a cumulative total of 10,000 sf or more of new or fully reconstructed impervious surface.

The Hydrologic Soil Group (HSG) of soils on site are HSG B. Curve Numbers have been shifted down one classification to account for the impacts of grading on soil structure.

Rate Control: Peak stormwater flow rate increases from the pre-development condition for the 24-hour precipitation event with a return frequency of 10- and 100- years for the southern discharge point as shown in Table 1. The City of Blaine has approved this increase, as this point discharges to City storm drain. The project will not impact Drainage Sensitive Use areas. The rate control standard is met to the maximum extent practicable.

Point of Discharge	2-year (cfs)		10-year (cfs)		100-year (cfs)	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
South	3.08	3.05	4.89	4.98	8.78	9.41
NW - infiltration basin	1.29	0.07	2.73	0.38	6.35	5.58

Table 1.

Volume Control: The application proposes redevelopment which does not disturb more than 50% of

the site or reconstruct more than 50% of the existing impervious surface, therefore the volume reduction requirement is equal to 1.1 inches over the area of new and fully reconstructed impervious surface. The amount of proposed impervious required to be treated is 23,958 ft^2.

The applicant is proposing the Stormwater Management Practices (SMPs) described below:

Drainage Area	Impervious required to be treated (ft^2)	Proposed SMP	TP Removal Factor	Required Water Quality Volume (ft^3)	Water Quality Volume Provided (ft^3)
South (2S)	7,057	0	0	646	0
NW (100S)	16,901	infiltration basin	1	1,549	6011
Totals:	**23,958**			**2,195**	**6,011**

Table 2.

The following pretreatment has been provided:

SMP ID	Pretreatment Device/Method	Percent TSS Removal
RG 2	Rain Guardian	80
RG 1	Rain Guardian	80

Table 3.

Pretreatment is required to be designed such that the device/method provides removal of 80% TSS entering an infiltration or filtration Stormwater Management Practice. The proposed project meets pretreatment requirements as shown in Table 3.

An explanation of drainage area treatment swapping can be found in the Water Quality section below. Due to existing parking lot grades, limited parcel space and utility conflicts, the volume control standard has been met to the maximum extent practicable as shown in Table 2.

Water Quality: The project is using in-kind treatment to make up for the 7,057 ft^2 of untreated new and reconstructed impervious that drains to the south. The applicant is proposing to treat 9,278 ft^2 of existing untreated impervious. This is 39% of the total proposed new and reconstructed impervious. This exceeds the 15% threshold for in-kind treatment; however, they have illustrated that it is not feasible to treat any more new and reconstructed impervious due to existing parking lot grades, limited space, and utility conflicts. TSS has been reduced to the maximum extent practicable for the untreated impervious surface – the runoff from the south discharge point enters into City storm drain and then returns to the property to go through an existing swale, which provides some TSS removal. The total Water Quality Volume has been provided in aggregate.

Stormwater treatment on site must remove at least 80% of the average annual post development TSS per discharge location. The following TSS removal has been provided:

Discharge Point	TSS Removal Provided
South	0
NW- infiltration basin	100

Table 4.

The TSS removal standard is not met at each discharge point as shown in Table 4 as the south discharge point is untreated. The water quality standard is met to the maximum extent practicable.

Discharges to Wetlands: Stormwater from the proposed project is not being discharged into any wetlands, therefore this section does not apply.

Landlocked Basins: The proposed drainage system does not outlet to a landlocked basin, therefore this section does not apply.

Low Floor Freeboard: The proposed project is new development which includes buildings and

habitable structures. Therefore, SMPs must be designed such that the lowest basement floor elevations are at least 2 feet above the 100-yr high water level and 1 foot above the emergency overflow. The lowest basement floor elevation proposed is 904.4 ft MSL. The applicable 100-year high water level is at 900.4 ft MSL and the applicable emergency overflow is at 899.9 ft MSL. The freeboard requirement is met.

Maintenance:
Access: Sufficient maintenance access has been provided on the plans for all stormwater management practices.

Easements: All required maintenance easements have been provided on the plans.

Maintenance Agreements: The proposed stormwater management practices will not be maintained as part of standard municipal public work activities. Therefore, a maintenance agreement that meets District standards will be required.

Soils and Erosion Control (Rule 4.0)
Rule 4.0 applies to the proposed project because it is a land disturbing activity that requires a permit under another District rule.

The proposed project drains to Ditch 41. The soils affected by the project include Markey, Lino and Isanti which have a soil erodibility factor of 0.15 or greater. Disturbed areas are not proposed to be stabilized within 24 hours, as required. The proposed erosion and sediment control plan includes perimeter control, inlet protection and street sweeping. The erosion control plan does not meet District requirements because soils and soil stockpiles are not proposed to be stabilized within 24 hours of inactivity and the infiltration basin is not surrounded by perimeter control to prevent compaction during construction. See attached Figure 3: Erosion and Sediment Control Plan.

Wetlands (Rule 5.0)
The proposed project does not include activities which result in the filling, draining, excavating, or otherwise altering the hydrology of a wetland. Rule 5.0 does not apply.

Floodplain (Rule 6.0)
The proposed project does not include land disturbing activities within the floodplain as mapped and modeled by the District. Rule 6.0 does not apply.

Drainage, Bridges, Culverts, and Utility Crossings (Rule 7.0)
The proposed project does not include land disturbing activities which construct, improve, repair, or alter the hydraulic characteristics of a bridge profile control or culvert structure on a creek, public ditch, or major watercourse. The proposed project does not include land disturbing activities which involve a pipeline or utility crossing of a creek, public ditch, or major watercourse.
The proposed project does not include land disturbing activities which construct, improve, repair or alter the hydraulic characteristics of a conveyance system that extends across two or more parcels of record not under common ownership and has a drainage area of 200 acres or greater. Rule 7.0 does not apply.

Buffers (Rule 8.0)
The proposed project does not include a land disturbing activity on land adjacent or directly contributing to a Public Water, Additional Waters, High or Outstanding Ecological Value Waters, a Public Ditch, or Impaired Waters/waters exceeding state water quality standards. Rule 8.0 does not apply.

Variances (Rule 10.2)
The proposed project is not requesting a variance from the District's rules, regulations, and policies. Rule 10.2 does not apply.

Figure 1: Project Location

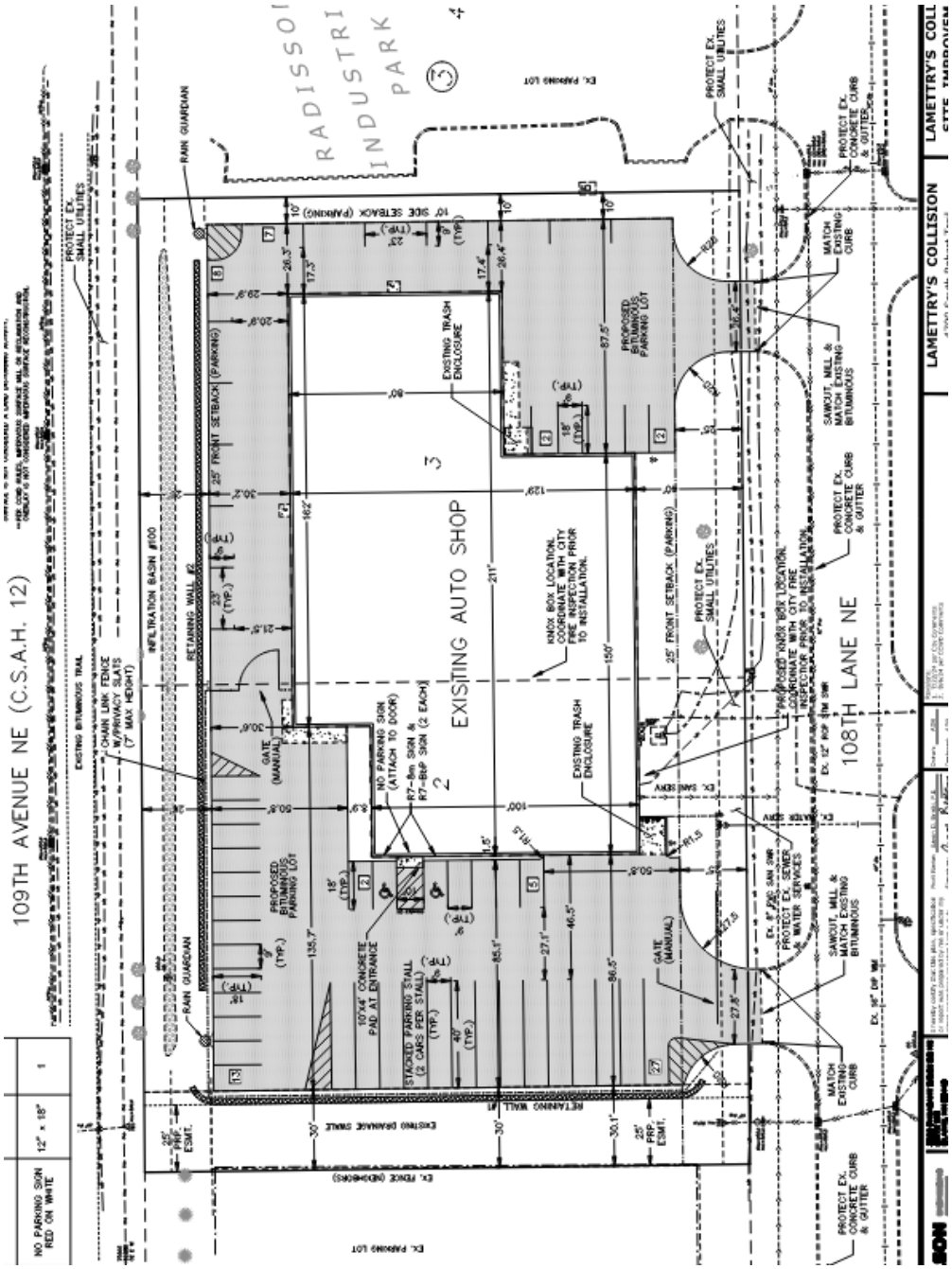


Figure 2: Site Plan

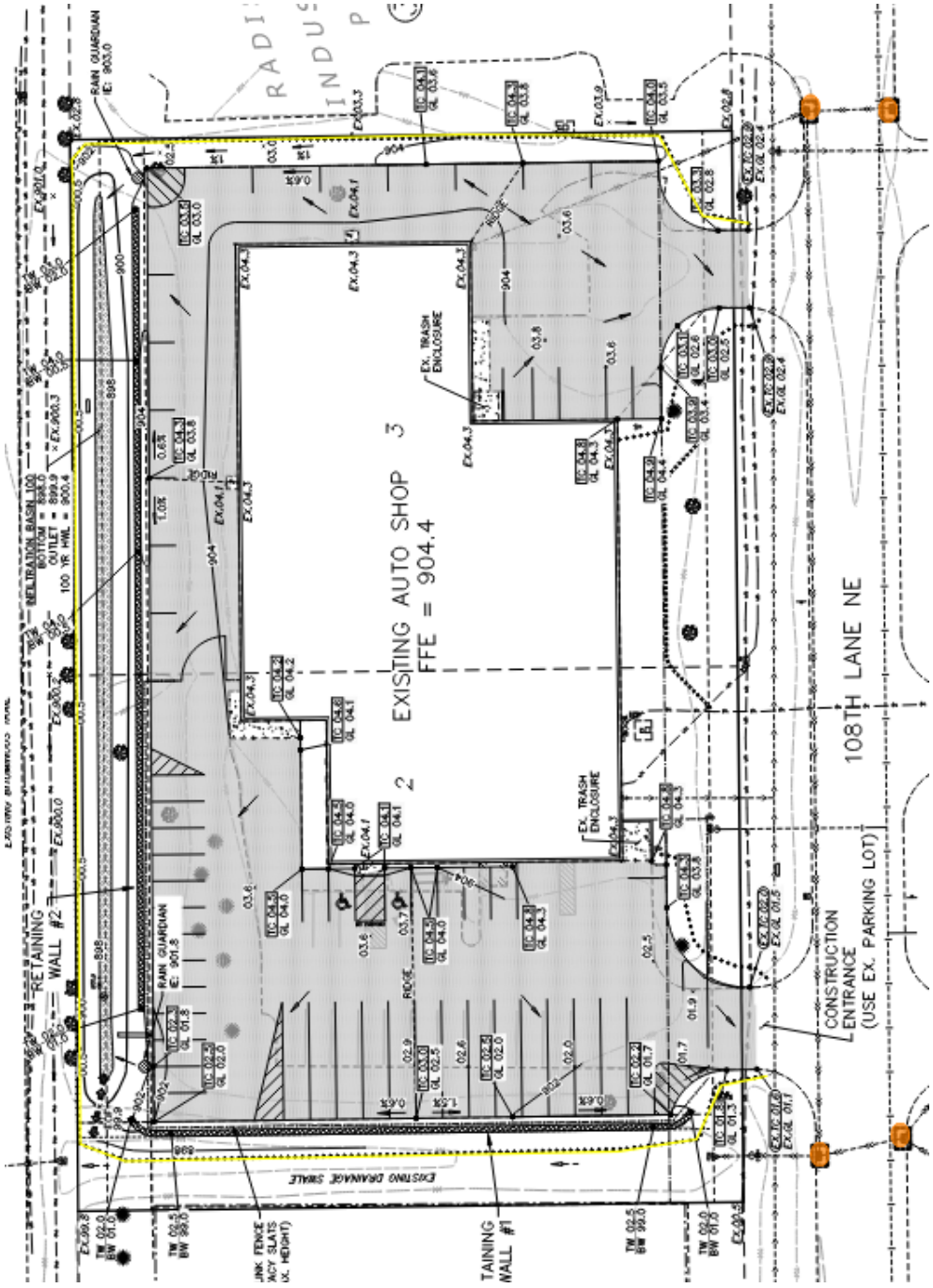
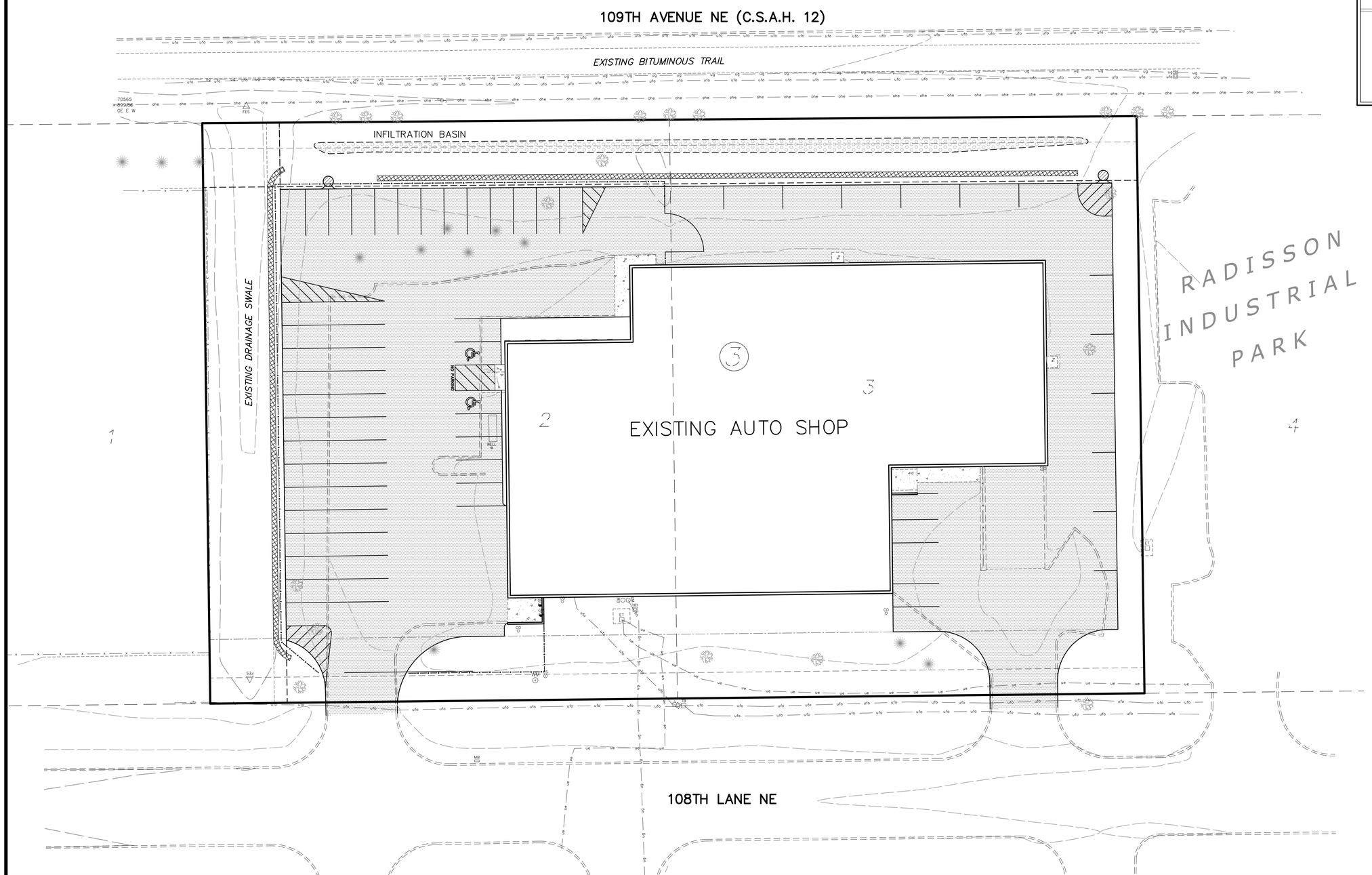
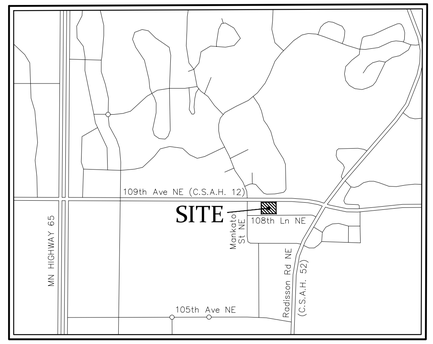


Figure 3: Erosion and Sediment Control Plan

LaMettry's Collision Site Improvements

Blaine, Minnesota





VICINITY MAP

NOT TO SCALE

SHEET INDEX

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(IN FEET)

BENCHMARK

1. Anoka county benchmark No. 2095 – Elevation 902.43 ft. (NAVD88)
2. Minnesota Department of Transportation Geodetic GSID Station No. 553 (MnDot Name 0208 D) – Elevation 903.99 ft. (NAVD88)

CALL BEFORE YOU DIG

811 Know what's **below.** **Call** before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38–02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL

3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

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 Professional Engineer under the laws of the State of Minnesota

Print Name: Aaron D. Briski, P.E.
Signature: Aaron Briski
Date: 6/28/24 License #: 57811

Drawn: ADB
Designed: ADB
Date: 6/28/24

Revisions:
1. 7/22/24 per City Comments
2. 8/6/24 per CCWD Comments

LAMETTRY'S COLLISION
4700 South Robert Trail
Inver Grove Heights, MN 55077

LAMETTRY'S COLLISION SITE IMPROVEMENTS
Blaine, MN

COVER

1 of 7

Save Date: 08/06/24 f:\jobs\10801 - 10820\10817-00 - radisson industrial park\cad c3d\engineering\site plan\10817_cvr-sht.dwg

#10817

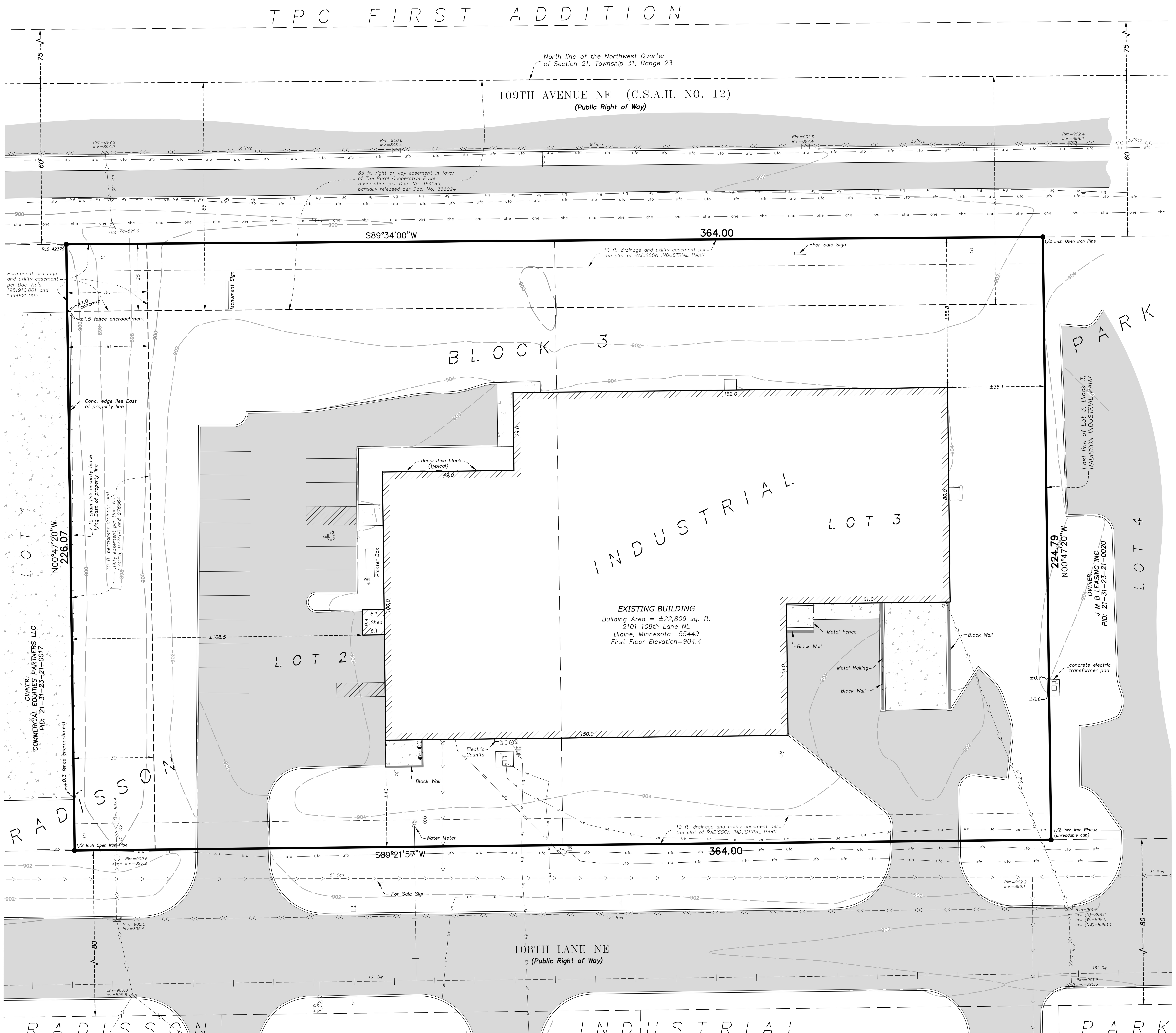
PROPERTY DESCRIPTION: *(Per Schedule A of Title Commitment File No. 67706, with a commitment date of September 19, 2023 at 8:00 A.M., prepared by Guaranty Commercial Title, Inc., as issuing agent for Old Republic National Title Insurance Company)*

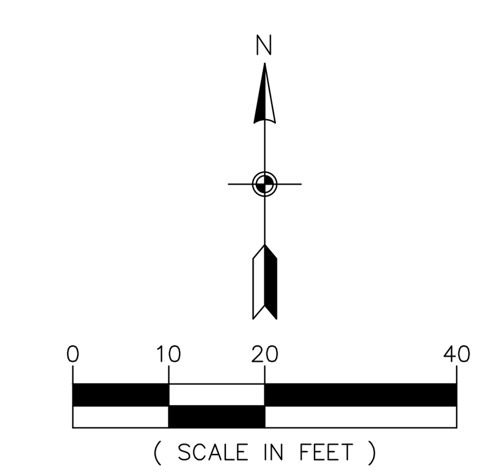
Lots 2 and 3, Block 3, Radisson Industrial Park, according to the recorded plat thereof, Anoka County, Minnesota.

(abstract property)

GENERAL NOTES:

1) *The field work was completed on November 28, 2023.*
2) *Bearings shown hereon are based on the East line of Lot 3, Block 3, RADISSON INDUSTRIAL PARK, which is assumed to bear N00°47'20"W.*
3) *Surveyed property address, per title commitment: 2101 108th Lane NE, Blaine, MN 55449.*
4) *Surveyed property contains ±82,056 sq. ft. (±1.88 acres).*
5) *Above ground utilities have been field located as shown. All underground locations shown hereon are APPROXIMATE. Prior to any excavations or digging, contact Gopher State One Call for an on-site location (651-454-0002).*





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2. Minnesota Department of Transportation Geodetic GSID Station No. 553 (MnDot Name 0208 D) – Elevation 903.99 ft. (NAVD88)

LEGEND

- Denotes Found Iron Monument, as noted
- Denotes Miscellaneous Sign
- Denotes Guard Post
- Denotes Storm Manhole
- Denotes Catch Basin
- Denotes Flared End Section
- Denotes Curb Stop
- Denotes Fire Hydrant
- Denotes Gate Valve
- Denotes Cleanout
- Denotes Existing Well
- Denotes Utility Pole
- Denotes Water Meter
- Denotes Mail Box
- Denotes Telephone Box
- Denotes Electric Transformer
- Denotes Television Box
- Denotes Hand Hole
- Denotes Gas Meter
- Denotes Electric Meter
- Denotes Underground Electric
- Denotes Underground Gas
- Denotes Underground Fiber Optic
- Denotes Overhead Utility Line(s)
- Denotes Watermain
- Denotes Sanitary Sewer
- Denotes Storm Sewer
- Denotes Existing Fence as noted
- Denotes Concrete Surface
- Denotes Bituminous Surface
- Denotes Existing 2 Ft. Contour
- Denotes Existing 10 Ft. Contour

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL	3890 PHEASANT RIDGE DR NE SUITE 100 BLAINE, MN 55449 TEL 763.489.7900 FAX 763.489.7959 CARLSONMCCAIN.COM	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	Print Name: Thomas R. Balluff, L.S. Signature: [signature] Date: 6/17/24 License #: 40361	DRAWN BY: bjs ISSUE DATE: 6/17/24 FILE NO: 2694	Revisions:	**LAMETTRY'S COLLISION** 4700 South Robert Trail Inver Grove Heights, MN 55077	**LAMETTRY'S COLLISION SITE IMPROVEMENTS** Blaine, MN	**EXISTING CONDITIONS**

Save Date: 06/28/24 f:\jobs\10801 - 10820\10817-00 - radisson industrial park\cad c3d\survey\pre plat\10817-02_xcon.dwg

109TH AVENUE NE (C.S.A.H. 12)

EXISTING BITUMINOUS TRAIL

PROTECT EX. SMALL UTILITIES

REMOVE & DISPOSE OF EX. SIGN

REMOVE & DISPOSE OF EX. TREE (TYP.)

REMOVE & DISPOSE OF EX. SIGN

PROTECT EX. CONCRETE

REMOVE & DISPOSE OF EX. BITUMINOUS PARKING LOT AND SUBGRADE

REMOVE & DISPOSE OF EX. BITUMINOUS PARKING LOT, SUBGRADE TO REMIAN UNDISTURBED (FIELD VERITY)

REMOVE EXISTING LANDSCAPING

EXISTING AUTO SHOP

REMOVE/ABANDON WELL PER MDH STANDARDS

SHED PREVIOUSLY REMOVED

REMOVE & DISPOSE OF EX. BITUMINOUS PARKING LOT, SUBGRADE TO REMIAN UNDISTURBED (FIELD VERIFY)

PROTECT EX. TRASH ENCLOSURE

PROTECT EX. CONCRETE

REMOVE & DISPOSE OF EX. CONCRETE

PROTECT EX. TRASH ENCLOSURE

REMOVE RETAINING WALLS AND TRUCK LOADING DOCK. FILL DEPRESSION WITH SITE GRADING.

REMOVE & DISPOSE OF EX. BITUMINOUS PARKING LOT, SUBGRADE TO REMIAN UNDISTURBED (FIELD VERIFY)

PROTECT EX. SMALL UTILITIES

REMOVE/ABANDON EX. 6" PVC STORM DRAIN

PROTECT EX. SMALL UTILITIES

REMOVE & DISPOSE OF EX. BITUMINOUS PARKING LOT AND SUBGRADE

PROTECT EX. SEWER & WATER SERVICES

PROTECT EX. CONCRETE CURB & GUTTER

PROTECT EX. CONCRETE CURB & GUTTER

PROTECT EX. CONCRETE CURB & GUTTER

EX. PARKING LOT

EX. FENCE (NEIGHBORS)

EXISTING DRAINAGE SWALE

EX. SAN SERV

EX. WATER SERV

EX. 8" PVC SAN SWR

EX. 12" RCP STM SWR

EX. 16" DIP WM

108TH LANE NE

EX. PARKING LOT

RADISSON INDUSTRIAL PARK

LEGEND

	EXISTING	REMOVAL
PROPERTY LINE		
EASEMENT LINE		
BITUMINOUS PAVEMENT		BIT. & SUBGRADE
CONCRETE WALK		BIT. REMOVAL ONLY
CURB LINE		AS NOTED
SANITARY SEWER		
WATER MAIN		
STORM SEWER		
UNDERGROUND TELEPHONE		
UNDERGROUND GAS		
UNDERGROUND ELECTRIC		
FENCE		
GAS VALVE		
HYDRANT		
SANITARY MANHOLE		
STORM MANHOLE		
GUARD POST		
LIGHT POLE		
GATE VALVE		
SIGN		
TELEPHONE BOX		
ELECTRIC TRANSFORMER		
TELEVISION BOX		
HAND HOLE		
ELECTRIC METER		
GAS METER		
10' CONTOUR	850	
2' CONTOUR	848	

REMOVALS PLAN NOTES

1. EXISTING CONDITIONS BASED ON FIELD WORK BY CARLSON MCCAIN, INC. IN NOVEMBER OF 2023.
2. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, DEPTH AND TYPES OF EXISTING UTILITIES AND TO NOTIFY THE OWNER AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR VARIATIONS FROM THE PLANS.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, APPURTENANCES AND STRUCTURES NOT INDICATED FOR REMOVAL. DAMAGE CAUSED BY DEMOLITION OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
4. CONTRACTOR TO REMOVE/RELOCATE EXISTING PRIVATE UTILITIES AS NECESSARY. THE CONTRACTOR SHALL COORDINATE THESE ACTIVITIES WITH THE UTILITY COMPANIES.
5. THE CONTRACTOR IS RESPONSIBLE FOR ALL THE REMOVALS SHOWN ON THE PLANS AND SHALL CONFORM/ADHERE TO ALL GOVERNING STATE AND LOCAL REGULATIONS. ALL PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
6. ALL SAWCUTS SHALL BE FULL-DEPTH CUTS.
7. THE SUBGRADE OF THE EXISTING PARKING LOT SHALL REMAIN UNDISTURBED AS NOTED IN THE REMOVALS PLAN.

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(IN FEET)

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LAMETTRY'S COLLISION SITE IMPROVEMENTS
Blaine, MN

REMOVALS PLAN

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SIGN SCHEDULE (PER MMUTCD)			
SIGN	SIGN NO.	SIZE	QUANTITY
(A) PARKING VEHICLE ID REQUIRED UP TO $200 FINE FOR VIOLATION	R7-8m WHITE ON BLUE	12" x 18"	2
(B) VAN ACCESSIBLE	R7-8bP WHITE ON BLUE	12" x 6"	2
(C) NO PARKING IN FRONT OF DOOR	NO PARKING SIGN RED ON WHITE	12" x 18"	1

SIGNING AND STRIPING NOTES

1. ALL SIGNS SHALL BE PLACED 18" MINIMUM BEHIND CURB UNLESS OTHERWISE NOTED.
2. SIGNAGE SHALL INCLUDE SIGN, POST, HARDWARE, CONCRETE FOOTING AND STEEL CASING (IF REQUIRED).
3. PARKING LOT STRIPING SHALL BE 4" SOLID WHITE OR YELLOW PAINT.
4. ALL SIGNS SHALL MEET THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) FOR RETRO REFLECTIVITY AND INSTALLATION.

SITE DATA

EXISTING ZONING:	I-2
TOTAL AREA:	82,056 SF
*DISTURBED AREA:	38,022 SF 46%
HARD SURFACE AREA:	
PROPOSED OR FULLY RECONSTRUCTED PAVEMENT:	23,965 SF 29%
**EX. RESURFACED PAVEMENT:	8,220 SF 10%
EXISTING BUILDING:	23,470 SF 28%
TOTAL:	55,655 SF 68%
PERVIOUS SURFACE AREA:	26,401 SF 32%

* PER CCWD RULES, IN KIND REPLACEMENT OF AN IMPERVIOUS SURFACE IS NOT CONSIDERED A LAND DISTURBING ACTIVITY.

** PER CCWD RULES, IMPERVIOUS SURFACE MILL OR RECLAMATION AND OVERLAY IS NOT CONSIDERED IMPERVIOUS SURFACE RECONSTRUCTION.

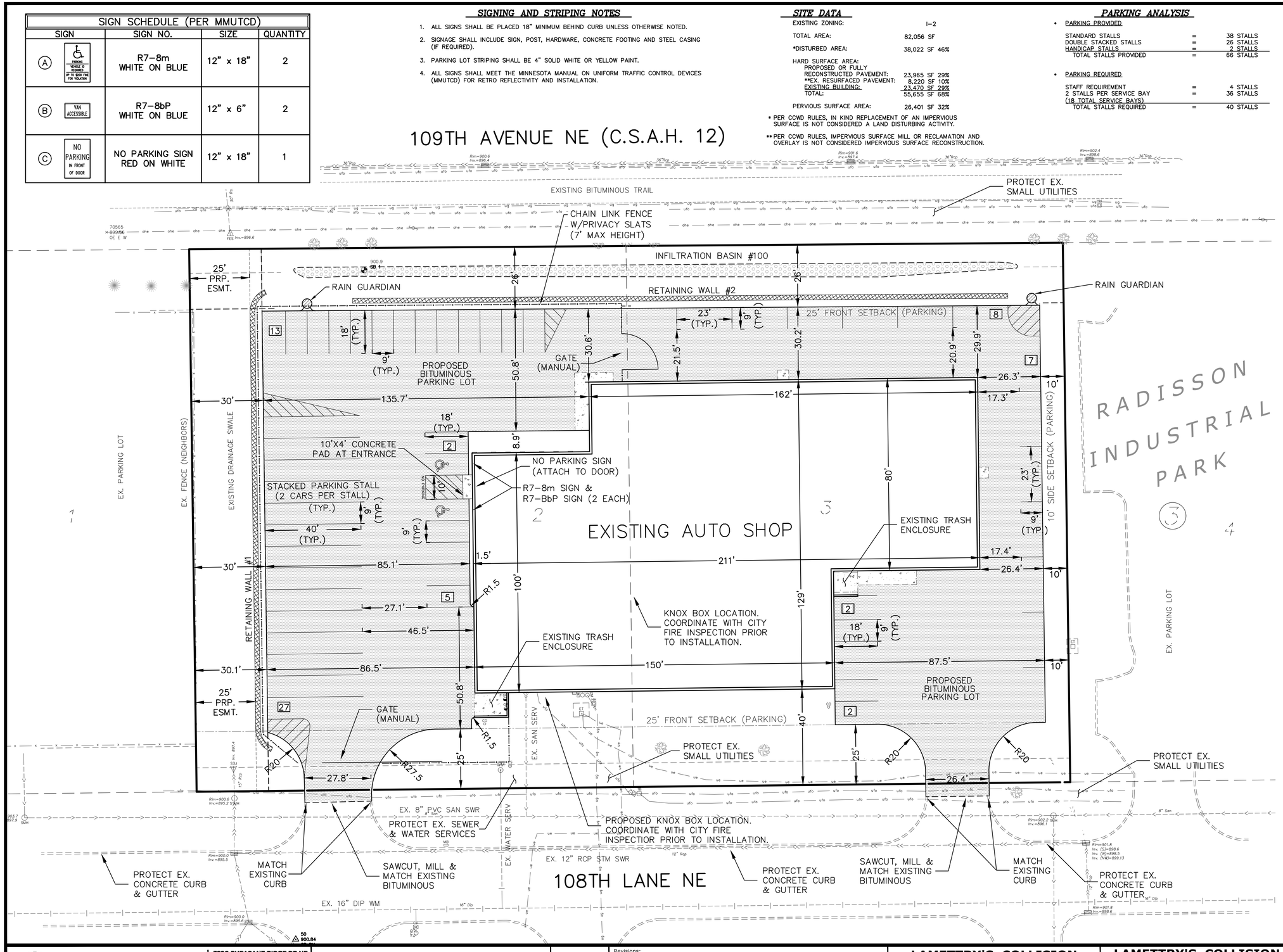
PARKING ANALYSIS

- PARKING PROVIDED

STANDARD STALLS	=	38 STALLS
DOUBLE STACKED STALLS	=	26 STALLS
HANDICAP STALLS	=	2 STALLS
TOTAL STALLS PROVIDED	=	66 STALLS

- PARKING REQUIRED

STAFF REQUIREMENT	=	4 STALLS
2 STALLS PER SERVICE BAY (18 TOTAL SERVICE BAYS)	=	36 STALLS
TOTAL STALLS REQUIRED	=	40 STALLS



SITE PLAN LEGEND

	EXISTING	PROPOSED
LIGHT POLE	☼	○
SANITARY MANHOLE	SMH	●
CLEANOUT	CO	◉
MISCELLANEOUS SIGN		
EXISTING SPOT ELEVATION	x0000.0	
EXISTING TREE		
TELEVISION BOX	TV	
FIRE HYDRANT	HYD	✳
GATE VALVE	GV	⋈
CURBSTOP	CS	●
ELECTRIC BOX	EB	
GAS METER	GM	
CATCH BASIN	▭ or ◎	▭ or ◎
RAIN GUARDIAN		RG
ELECTRIC METER	EM	
MAIL BOX	MB	
TELEPHONE BOX	TB	
UTILITY POLE	PP	
FLARED END SECTION	FES	▲
STORM MANHOLE	STMH	●
SERVICE	SRV	
SOIL BORING/TEST HOLE	B#	
RETAINING WALL		
PROPERTY LINE		
SETBACK LINE		
CURB (B612)		
CURB (B612 TIP OUT)		
CURB (B618)		
WETLAND		
DITCH		
UNDERGROUND TELEPHONE	ut	
UNDERGROUND ELECTRIC	ue	
UNDERGROUND FIBER OPTIC	ufo	
UNDERGROUND GAS	ug	
OVERHEAD ELECTRIC	ohe	
SANITARY SEWER		
WATERMAIN		
STORM SEWER		
FENCE	x	o
CONCRETE SURFACE		
BITUMINOUS SURFACE		

SITE PLAN NOTES

1. ALL DIMENSIONS ARE TO BACK OF CURB UNLESS OTHERWISE NOTED.
2. ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF THE BUILDING UNLESS OTHERWISE NOTED.
3. ALL CURB AND GUTTER SHALL BE B612 UNLESS NOTED AS B618.
4. TYPICAL PARKING STALLS ARE 9'x18' UNLESS OTHERWISE NOTED.
5. PARKING LOT STRIPING SHALL SHALL BE 4" SOLID WHITE
6. DRIVE LANES ARE AS NOTED.
7. ALL PEDESTRIAN RAMPS SHALL MEET CURRENT ADA STANDARDS AND BE INSTALLED WITH CAST IRON TRUNCATED DOMES.
8. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF SITE WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF DISCREPANCIES AND/OR VARIATIONS FROM THE PLAN.
9. UNLESS OTHERWISE SHOWN ON THIS DRAWING, CONTRACTOR SHALL PROVIDE CONTROL JOINTS, CONSTRUCTION JOINTS AND EXPANSION JOINTS IN SLAB ON GRADE, SIDEWALKS AND DRIVES PER THE FOLLOWING REQUIREMENTS:

   CONTROL JOINT MAX. SPACING: WALKS–8' O.C. ALL OTHERS–10' O.C.

   SAW CUT CONTROL JOINTS MINIMUM ¼ CONCRETE THICKNESS.

   EXPANSION JOINTS MAX. SPACING: WALKS–24. O.C. *ALL OTHERS–40' O.C.

   *AT ALL POINTS WHERE A CHANGE IN PAVEMENT THICKNESS OCCURS AND/OR WHERE NEW PAVEMENT WILL MATCH EXISTING PAVEMENT, AN EXPANSION JOINT SHALL BE PROVIDED.

   DOWEL ALL EXPANSION JOINTS: 24" O.C. MAX.

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Blaine, MN

SITE & UTILITY PLAN

4 of 7

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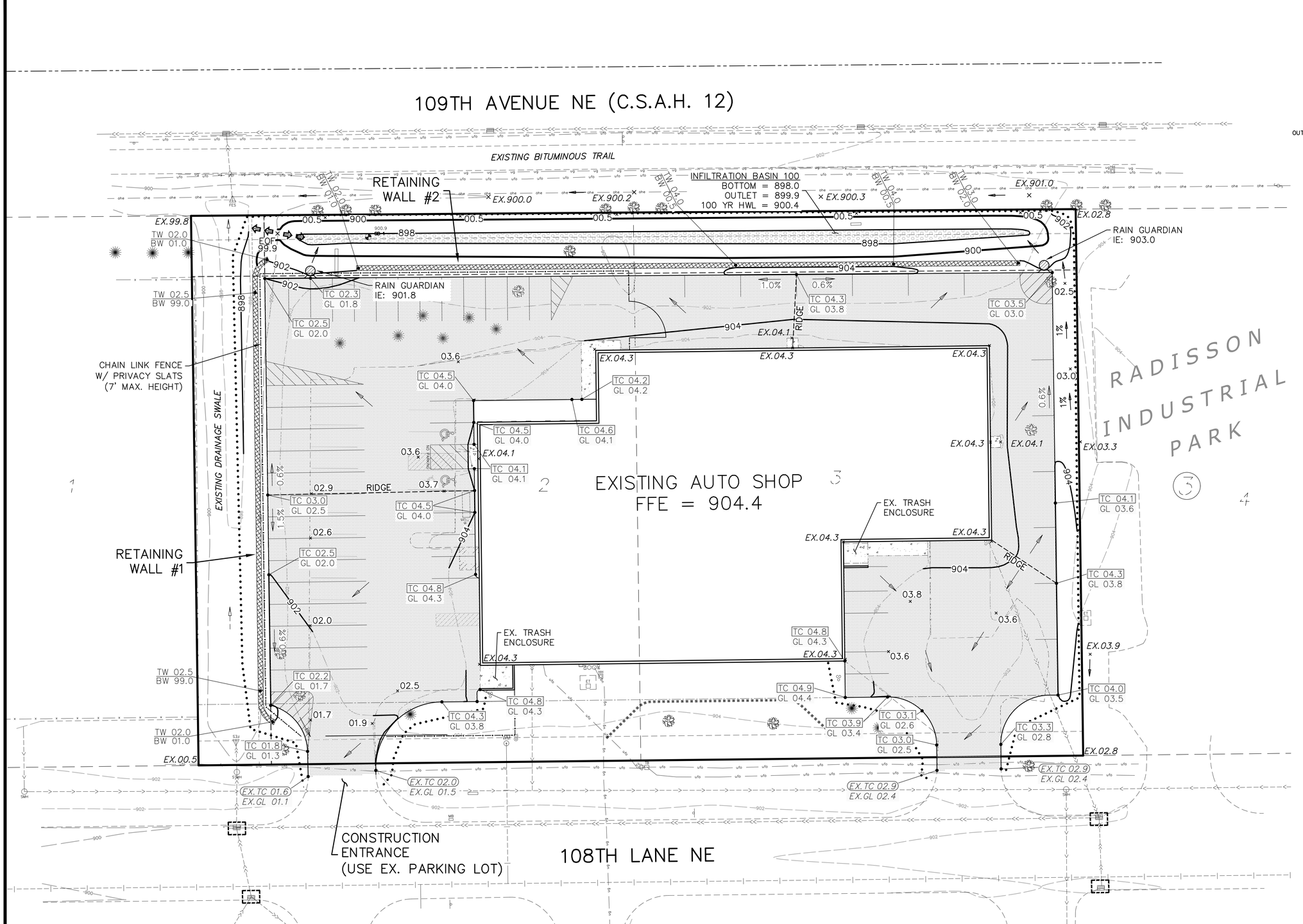

LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
CONCRETE		
SANITARY SEWER		
STORM SEWER		
DRAINTILE		DT
WATER MAIN		
OVERHEAD UTILITY		
STORM CATCH BASIN		DENOTES INLET PROTECTION
STORM MANHOLE		
OUTLET CONTROL STRUCTURE		
FLARED END SECTION		
RIP RAP		
MANHOLE		
HYDRANT		
GATE VALVE		
TELEVISION BOX		
TELEPHONE BOX		
UTILITY POLE		
RETAINING WALL		
FENCE		
10' CONTOUR	890	890
2' CONTOUR	892	892
FEMA FLOODPLAIN	FP	
CCWD FLOODPLAIN		
WETLAND LINE		
SPOT ELEVATION		00.0
EMERGENCY OVERFLOW		E.O.F.
SILT FENCE		000.0
TREE FENCE		
GRADING LIMITS		
TREELINE		
MAINTENANCE ACCESS		
WETLAND SIGN		
WELL		
LIGHT POLE		
FLAG POLE		
ELECTRIC BOX		
TELEPHONE BOX		
TELEVISION BOX		
SIGN		
GEOTECH SOIL BORING	886.1 SB-6	

NOTES

1. SITE IS LOCATED WITHIN THE BOUNDARIES OF THE COON CREEK WATERSHED DISTRICT.
2. SOIL STOCKPILES SHALL BE FITTED BY SEDIMENT-TRAPPING MEASURES AND STABILIZED WITHIN 7 DAYS OF INACTIVITY.
3. STREET SWEEPING SHALL TAKE PLACE BY THE END OF DAY (IF REQUIRED).
4. EROSION CONTROL AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
5. INSTALL EROSION CONTROL BLANKET AND SEED THE EXISTING DRAINAGE SWALE IMMEDIATELY AFTER GRADING IS COMPLETED ON SWALE. DITCH CHECKS MAY BE REQUIRED (FIELD VERIFY).
6. DEWATERING IS NOT ANTICIPATED FOR THIS PROJECT. IF REQUIRED, THE DNR DEWATERING PERMIT MUST BE OBTAINED PRIOR TO ANY DEWATERING ACTIVITY. THE DEWATERING PLAN MUST BE SUBMITTED TO THE COON CREEK WATERSHED DISTRICT AT LEAST 7 DAYS PRIOR TO DEWATERING ACTIVITY FOR REVIEW AND APPROVAL PRIOR TO START.

WETLAND SUMMARY

THERE ARE NO WETLANDS ON SITE

N

0 10 20 40
(IN FEET)

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Blaine, MN

GRADING, DEVELOPMENT & EROSION CONTROL PLAN

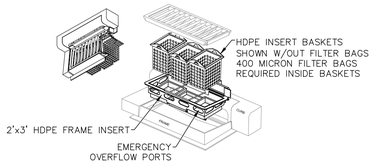
5 of 7

Save Date: 08/05/24 F:\Jobs\10801 - 10820\10817-00 - radisson industrial park\cad c3d\engineering\site plan\10817_grade.dwg

#10817

INFRASAFE – 2'x3' DEBRIS COLLECTION DEVICE

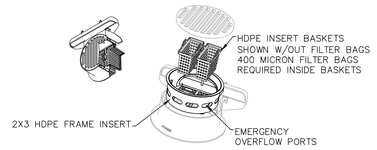
AS MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS



- MEETS MN/DOT SPECIFICATION 3891.F "STORM DRAIN INLET PROTECTION – FILTER BAG INSERT"
- DESIGNED FOR NEENAH R-3067 OR R-3290 SERIES

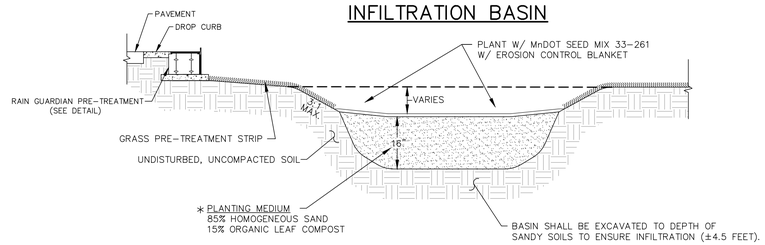
INFRASAFE – 27" DEBRIS COLLECTION DEVICE

AS MANUFACTURED BY ROYAL ENVIRONMENTAL SERVICES



- MEETS MN/DOT SPECIFICATION 3891.F "STORM DRAIN INLET PROTECTION – FILTER BAG INSERT"
- DESIGNED FOR NEENAH R-3250-A OR R-3250-1 (MNDOT 801) FRAME CASTING

INFILTRATION BASIN



* ONSITE SOILS TO BE UTILIZED TO THE EXTENT POSSIBLE. VERIFY W/ GEOTECHNICAL ENGINEER.

TURF ESTABLISHMENT

TURF ESTABLISHMENT SHALL APPLY TO ALL DISTURBED AREAS AND SHALL BE ACCORDING TO MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION (LATEST EDITION) EXCEPT AS MODIFIED BELOW.

TURF ESTABLISHMENT SHALL OCCUR AS SOON AS POSSIBLE BUT IN NO CASE MORE THAN 7 DAYS.

TOPSOIL: MINIMUM OF 6" OF TOPSOIL.

SEED: MnDOT MIXTURE 25-141 AT 60 POUNDS PER ACRE.

DORMANT SEED: SHALL BE APPLIED AT TWICE THE NORMAL RATE AFTER NOVEMBER 1ST.

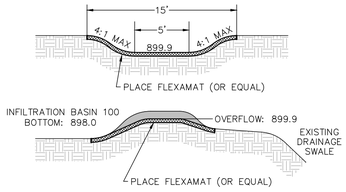
MULCH: TYPE 1 AT 2 TONS PER ACRE (DISK ANCHORED).

FERTILIZER: TYPE 1 10-10-10 AT 200 POUNDS PER ACRE.

EMERGENCY OVERFLOW

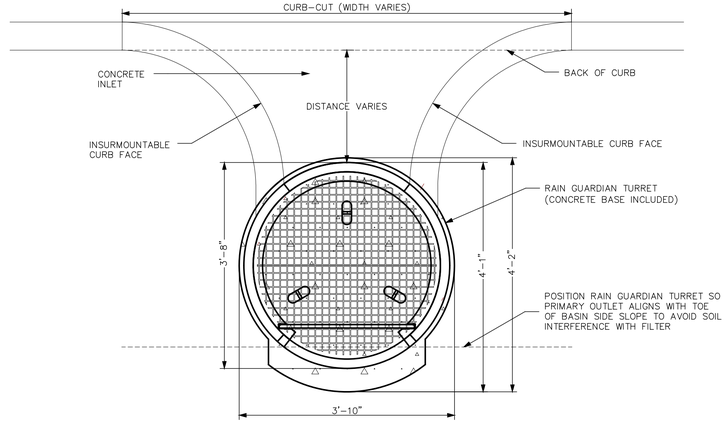
(INFILTRATION BASIN 100)

(NOT TO SCALE)

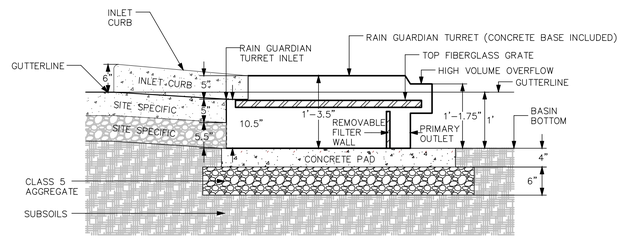


RAIN GUARDIAN DETAIL

RAIN GUARDIAN TURRET
U.S. PATENT 8,501,016

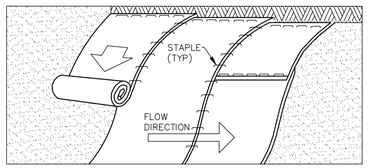


RAIN GUARDIAN TURRET PLAN VIEW



RAIN GUARDIAN TURRET CROSS-SECTION VIEW

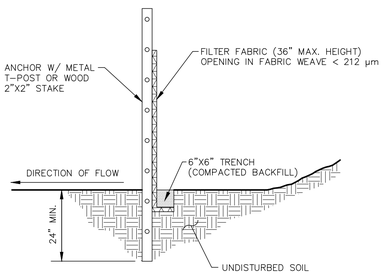
EROSION CONTROL BLANKET



NOTES:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER AND/OR SEED.
2. BEGIN AT THE TOP OF THE SLOPE (OR CHANNEL) BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. ROLL THE BLANKETS DOWN (STARTING DOWNSTREAM PROCEEDING UPSTREAM) HORIZONTALLY ACROSS THE SLOPE.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH A MINIMUM 4" OVERLAP.
5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH MINIMUM 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
6. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
7. THE TERMINAL ENDS OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.

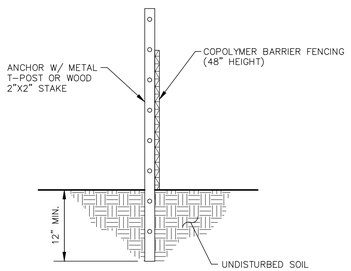
SILT FENCE



NOTES:

1. DIG A 6"X6" TRENCH ALONG THE INTENDED SILT FENCE LINE.
2. DRIVE ALL ANCHOR POSTS INTO THE GROUND AT THE DOWNHILL SIDE OF THE TRENCH.
3. POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART.
4. LAY OUT SILT FENCE ALONG THE UPHILL SIDE OF THE ANCHOR POSTS AND BACK FILL 6"X6" TRENCH.
5. SECURELY ATTACH SILT FENCE TO ANCHOR POSTS W/ MINIMUM OF THREE ATTACHMENTS PER POST.
6. SEE MNDOT SPECIFICATIONS 2573 & 3886.

TREE FENCE



NOTES:

1. TREE FENCING SHALL BE PLACED A MINIMUM OF 1 FOOT PER CALIPER INCH OF TREE DIAMETER FROM TREE(S) THAT IS/ARE TO BE SAVED.
2. ANCHOR POST MAY BE SPACED UP TO 10 FEET APART.
3. SECURELY ATTACH TREE FENCE TO ANCHOR POSTS W/ MINIMUM OF TWO ATTACHMENTS PER POST.
4. SEE MNDOT SPECIFICATION 2572.

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL

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CARLSONMCCAIN.COM

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 Professional Engineer under the laws of the State of Minnesota

Print Name: Aaron D. Briski, P.E.
Signature: Aaron Briski
Date: 6/28/24 License #: 57811

Drawn: ADB
Designed: ADB
Date: 6/28/24

Revisions:
1. 7/22/24 per City Comments
2. 8/6/24 per CCWD Comments

LAMETTRY'S COLLISION
4700 South Robert Trail
Inver Grove Heights, MN 55077

LAMETTRY'S COLLISION SITE IMPROVEMENTS
Blaine, MN

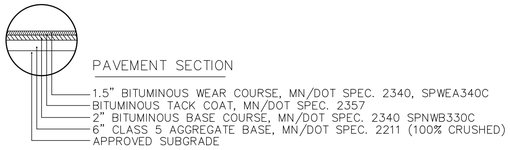
DETAILS

Save Date: 08/06/24 | F:\jobs\10801 - 10820\10817-00 - radisson industrial park\cad c3d\engineering\site plan\10817_dtl.dwg

#10817

PAVEMENT SECTION (BITUMINOUS)

* EXISTING PAVEMENT SECTION TO BE FIELD VERIFIED AND MATCHED FOR OVERLAY ONLY SECTIONS OF THE BITUMINOUS PARKING LOT *

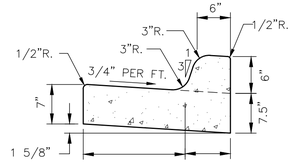


NOTE: PAVEMENT SECTION TO BE VERIFIED BY GEOTECHNICAL ENGINEER

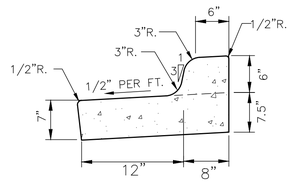
PAVEMENT SECTION (CONCRETE SIDEWALK)

NOTE: PAVEMENT SECTION TO BE VERIFIED BY GEOTECHNICAL ENGINEER

B612 CURB & GUTTER

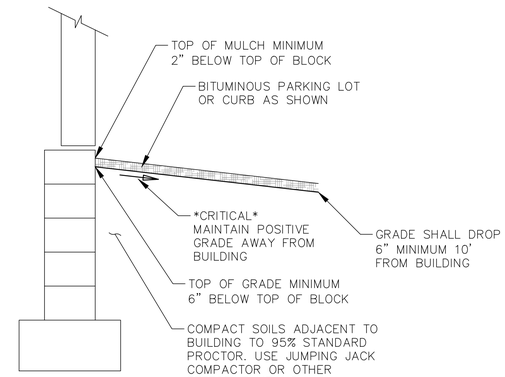


TIP OUT B612 CURB & GUTTER

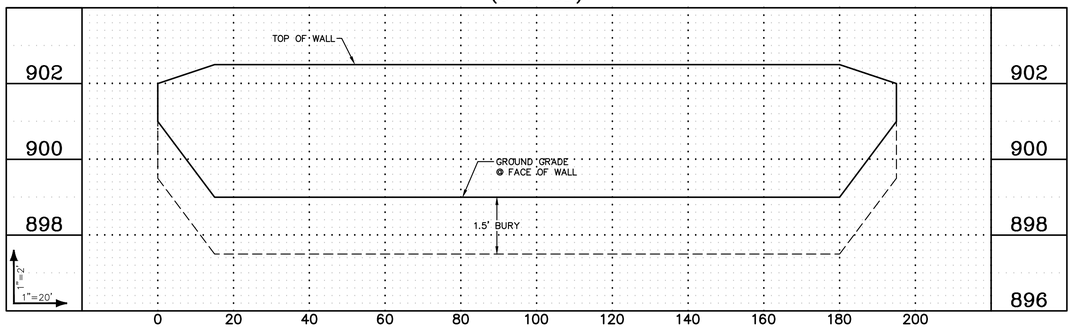


NOTE: FOR MECHANICALLY LAID CURB, SHOE MAY BE TILTED.

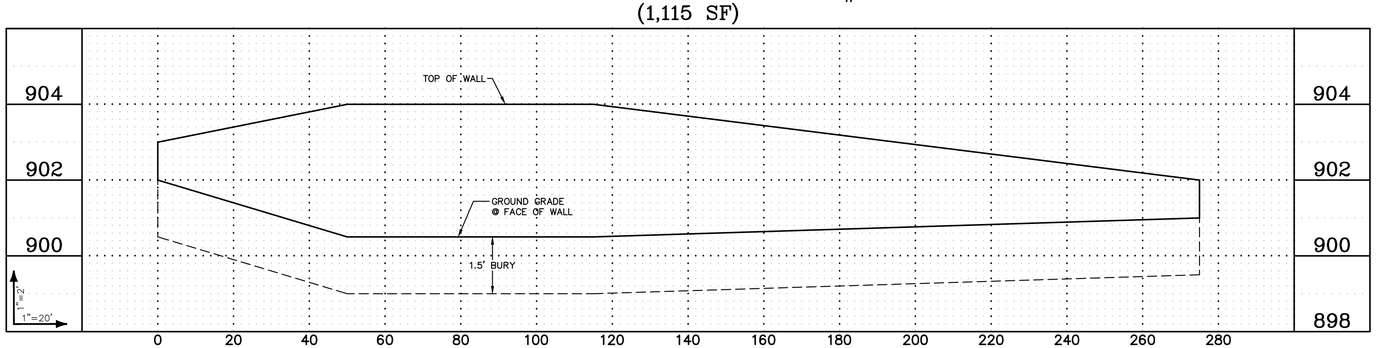
TYPICAL GRADING AT BUILDING



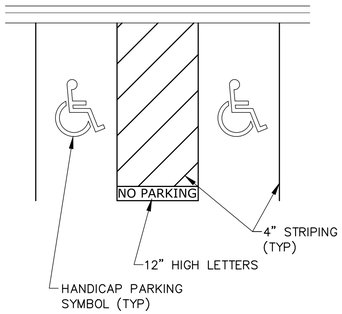
MODULAR RETAINING WALL #1
(940 SF)



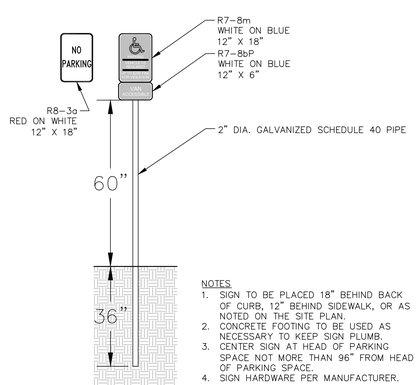
MODULAR RETAINING WALL #2
(1,115 SF)



HANDICAP PARKING STALL STRIPING



HANDICAP PARKING SIGN



NOTES
1. SIGN TO BE PLACED 18" BEHIND BACK OF CURB, 12" BEHIND SIDEWALK, OR AS NOTED ON THE SITE PLAN.
2. CONCRETE FOOTING TO BE USED AS NECESSARY TO KEEP SIGN PLUMB.
3. CENTER SIGN AT HEAD OF PARKING SPACE NOT MORE THAN 96" FROM HEAD OF PARKING SPACE.
4. SIGN HARDWARE PER MANUFACTURER.

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FAX 763.489.7959
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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 Professional Engineer under the laws of the State of Minnesota

Print Name: Aaron D. Briski, P.E.
Signature: Aaron Briski
Date: 6/28/24 License #: 57811

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#10817

GENERAL INFORMATION
MINNESOTA'S CONSTRUCTION STORMWATER PERMIT IS AN EXTENSION OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM STORMWATER PROGRAM, WHICH IS PART OF THE FEDERAL CLEAN WATER ACT. REGULATED PARTIES MUST DEVELOP A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP PROVIDES INFORMATION ON THE EXISTING AND PROPOSED SITE CONDITIONS, CONTROL MEASURES FOR STORMWATER POLLUTION PREVENTION BEFORE, DURING AND AFTER CONSTRUCTION, INSPECTION, MAINTENANCE AND INFORMATION RELATED TO THE PERMANENT STORMWATER MANAGEMENT SYSTEM. THE SWPPP SHALL BE KEPT ON SITE AT ALL TIMES DURING ACTIVE CONSTRUCTION.

PROJECT INFORMATION
PROJECT NAME: LAMETTRY'S COLLISION SITE IMPROVEMENTS
PROJECT LOCATION: BLAINE, ANOKA COUNTY, MINNESOTA
PROJECT OWNER: LAMETTRY'S COLLISION

RESPONSIBLE PARTIES
THE OWNER MUST IDENTIFY A PERSON KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMP'S WHO WILL OVERSEE THE IMPLEMENTATION OF THE SWPPP, AND THE INSTALLATION, INSPECTION AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMP'S.

SITE MANAGER: _____

TRAINING DOCUMENTATION: _____

_____

EXISTING SITE CONDITIONS
THE SUBJECT PROPERTY IS LOCATED ON THE NORTH SIDE OF 108TH LANE NE BETWEEN MANKATO STREET NE AND RADISSON ROAD NE (C.S.A.H. 52). 109TH AVENUE NE (C.S.A.H. 12) IS LOCATED DIRECTLY NORTH OF THE PROPERTY. THE PROPERTY IS CURRENTLY AN EXISTING AUTO SHOP WITH AN EXISTING BITUMINOUS PARKING LOT ON EITHER SIDE OF THE BUILDING. THE SITE IS BOUNDED BY 108TH LANE NE TO THE SOUTH, 109TH AVENUE NE (C.S.A.H. 12) TO THE NORTH, AND EXISTING INDUSTRIAL BUSINESSES TO THE EAST AND WEST. THE TOTAL AREA OF THE SITE IS 1.884 ACRES. AN EXISTING DRAINAGE SWALE RUNS SOUTH TO NORTH ALONG THE WESTERN PROPERTY LINE TO A STORM SEWER INLET IN THE NORTHWEST CORNER OF THE SITE. ALL OF THE SITES RUNOFF ULTIMATELY FLOWS TO THIS STORM SEWER SYSTEM THAT FLOWS WEST TO A STORMWATER POND ON THE SOUTH SIDE OF 109TH/ AVENUE NE (C.S.A.H. 12). ULTIMATELY THIS POND DISCHARGES TO THE LARGE PONDS IN THE TPC HOUSING DEVELOPMENT ON THE NORTH SIDE OF 109TH AVENUE NE (C.S.A.H. 12) AND THOSE PONDS THEN TIE INTO ANOKA COUNTY DITCH #41.

PROPOSED SITE CONDITIONS
LAMETTRY'S COLLISION PLANS ON RECONSTRUCTING THE EXISTING PARKING LOT AS WELL AS CREATING ADDITIONAL PARKING LOT AROUND THE NORTH SIDE OF THE BUILDING. A PORTION OF THE PARKING LOT WILL BE RESURFACED ONLY AND THE UNDERLYING SOILS WILL REMAIN INTACT. AN INFILTRATION BASIN WILL BE BUILT ALONG THE NORTHERN PROPERTY LINE TO PROVIDE RATE AND VOLUME CONTROL AS WELL AS STORMWATER TREATMENT FOR THE SITE. THE SITE WILL BE GRADED TO PROMOTE SURFACE WATER DRAINAGE AND TO MAXIMIZE THE AMOUNT OF RUNOFF THAT IS TREATED BEFORE LEAVING THE SITE. DISTURBED AREAS WILL BE TILLED, SEEDED AND MULCHED OR SODDED AFTER CONSTRUCTION IS COMPLETE.

IMPERVIOUS SURFACE CONSIDERATIONS
AS PREVIOUSLY MENTIONED, A PORTION OF THE EXISTING PARKING LOT WILL BE RESURFACED AND THE UNDERLYING SOILS WILL REMAIN INTACT. AS DETAILED IN THE COON CREEK WATERSHED DISTRICT 2023 RULES: IMPERVIOUS SURFACE MILL OR RECLAMATION & OVERLAY DOES NOT CONSTITUTE IMPERVIOUS SURFACE RECONSTRUCTION. A BREAKDOWN OF THE IMPERVIOUS SURFACES ONSITE, UNDER PROPOSED CONDITIONS, IS PROVIDED BELOW:

NEW OR FULLY RECONSTRUCTED IMPERVIOUS	= 0.550 ACRES
EXISTING RESURFACED IMPERVIOUS	= 0.189 ACRES
EXISTING BUILDING	= 0.539 ACRES

DISTURBED AREA CONSIDERATIONS
AS NOTED IN SECTION 25.6 OF THE 2023 VERSION OF THE MPCA NPDES CONSTRUCTION PERMIT: PAVEMENT REHABILITATION THAT DOES NOT DISTURB THE UNDERLYING SOILS (E.G. MILL AND OVERLAY PROJECTS) IS NOT A CONSTRUCTION ACTIVITY. ALSO NOTED IN THE 2023 CCWD RULES: IN-KIND REPLACEMENT OR REPAIR OF SURFACES THAT DO NOT EXPOSE THE UNDERLYING SOILS IS NOT CONSIDERED LAND DISTURBANCE. THE TOTAL SITE AREA AND DISTURBED AREA FOR THE SITE ARE AS FOLLOWS:

SITE AREA	= 1.884 ACRES
DISTURBED AREA	= 0.873 ACRES

THE DISTURBED AREA IS LESS THAN 50% OF THE SITE AREA SO ONLY TREATMENT OF THE NEW OR FULLY RECONSTRUCTED IMPERVIOUS SURFACE IS REQUIRED (PER SECTION 3.3.3-1 OF THE 2023 CCWD RULES). BECAUSE THE DISTURBED AREA IS UNDER 1 ACRE THE NPDES PERMIT DOES NOT APPLY FOR THIS PROJECT (PER SECTION 1.2 OF THE 2023 NPDES PERMIT).

SOIL INFORMATION
HAUGO GEOTECHNICAL SERVICES CONDUCTED A SOIL BORING WITHIN THE LIMITS OF THE PROPOSED INFILTRATION BASIN TO VERIFY THE SOILS PRESENT AND APPROXIMATE GROUNDWATER LEVEL. THE SOIL BORING INDICATES A 1.5' LAYER OF TOPSOIL OVERLAYING A 3' LAYER OF SILTY SAND. POORLY GRADED SANDS WITH SILT AND POORLY GRADED SAND WERE ENCOUNTERED BELOW. THE GRADE OF THE PROPOSED INFILTRATION BASIN IS BELOW THE SILTY SAND LAYER SO INFILTRATION ASSOCIATED WITH THE HSG A SOIL TYPES IS ANTICIPATED.

GROUNDWATER WAS ENCOUNTERED AT A DEPTH OF APPROXIMATELY 7.5 FEET, AT AN ELEVATION OF 893.7. THE BOTTOM OF THE PROPOSED INFILTRATION BASIN MEDIUM IS AT AN ELEVATION OF 896.7 THE 3 FOOT SEPARATION REQUIREMENT IS BEING SATISFIED.

WETLAND CONSIDERATIONS
THERE ARE NO EXISTING WETLANDS ON SITE.

STORMWATER RECEIVING WATERS
STORMWATER FROM THE SITE WILL ULTIMATELY DISCHARGES NORTH TO ANOKA COUNTY DITCH #41.

SPECIAL/IMPAIRED WATER CONSIDERATIONS
THERE ARE NO SPECIAL OR IMPAIRED WATERS LOCATED WITHIN 1 MILE OF THE SITE.

STORMWATER MANAGEMENT PLAN
RATE CONTROL AND VOLUME CONTROL ARE PROVIDED FOR THE SITE. THE RUNOFF RATE AND TOTAL RUNOFF VOLUME DECREASES FOR ALL MODELED EVENTS. THE TABLES BELOW DETAIL THE MODELED PEAK RUNOFF RATES (CFS) AND RUNOFF VOLUME (ACRE-FT):

PEAK RATE (CFS):	2 YR	10YR	100YR
EXISTING	4.37	7.61	15.12
PROPOSED	3.12	5.15	14.60

VOLUME (ACRE-FT):	2YR	10YR	100YR
EXISTING	0.266	0.458	0.922
PROPOSED	0.179	0.333	0.796

THE PROPOSED INFILTRATION VOLUME PROVIDED IS 0.138 ACRE-FT. THIS IS MORE THAN THE REQUIRED VOLUME FOR ALL OF THE NEW AND FULLY RECONSTRUCTED IMPERVIOUS SURFACE. EXISTING IMPERVIOUS SURFACE ALSO FLOWS TO THE PROPOSED BASIN SO THE PROJECT WILL RESULT IN A NET DECREASE OF UNTREATED IMPERVIOUS SURFACE THAT LEAVES THE SITE WHEN COMPARED TO THE CURRENT EXISTING CONDITIONS.

PRIOR TO START OF CONSTRUCTION
THE FOLLOWING STORMWATER POLLUTION PREVENTION MEASURES SHALL BE IMPLEMENTED PRIOR TO CONSTRUCTION. REFER TO GRADING AND EROSION CONTROL PLANS FOR LOCATIONS.

1. SILT FENCE
   SILT FENCE SHALL BE INSTALLED AT THE LIMIT OF GRADING ON ANY FILL SLOPE. ADDITIONAL SILT FENCE MAY BE REQUIRED IN CUT SLOPE AREAS. SILT FENCE SHALL ALSO BE INSTALLED AROUND ANY INFILTRATION/FILTRATION PRACTICE.

2. ROCK CONSTRUCTION ENTRANCE
   ROCK CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT THE FIELD ENTRANCES TO THE SITE.

3. CATCH BASINS
   ALL CATCH BASINS SHALL BE PROTECTED WITH INLET PROTECTION DEVICES APPROVED BY THE LOCAL GOVERNING UNIT. THESE SHALL INCLUDE, BUT ARE NOT LIMITED TO, WIMCO PROTECTION DEVICES, INFRASAFE PROTECTION DEVICES, FILTER FABRIC, BIO ROLLS AND STRAW BALES.

DURING CONSTRUCTION
THE FOLLOWOMNG STORMWATER POLLUTION PREVENTION MEASURES SHALL BE IMPLEMENTED DURING CONSTRUCTION. REFER TO GRADING AND EROSION CONTROL PLANS FOR LOCATIONS.

1. PHASED GRADING
   TO THE EXTENT POSSIBLE, GRADING SHALL BE PHASED TO MINIMIZE THE AMOUNT OF DISTURBED AREAS DURING SITE CONSTRUCTION.

2. TRACKED SEDIMENT
   ANY SEDIMENT TRACKED FROM THE SITE ONTO THE STREET SHALL BE REMOVED IMMEDIATELY UPON DETECTION. THE ROCK CONSTRUCTION ENTRANCE SHALL BE INSPECTED AND REPAIRED IF INUNDATED WITH SEDIMENT.

3. STOCKPILES
   STOCKPILES SHALL BE PLACED IN AN AREA THAT WILL MINIMIZE THE NEED FOR RELOCATION. IF A STOCKPILE WILL REMAIN IN PLACE FOR AN EXTENDED PERIOD OF TIME, STABILIZATION MEASURES SHALL BE IMPLEMENTED, INCLUDING BUT NOT LIMITED TO, SEEDING AND SILT FENCING. TEMPORARY STOCKPILES MUST HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AND CANNOT BE PLACED IN SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, CONDUITS OR DITCHES.

4. TOPSOIL
   UPON GRADING COMPLETION, A MINIMUM OF 4 INCHES OF TOPSOIL SHALL BE PLACED OVER ALL DISTURBED AREAS, EXCLUDING PROPOSED STREETS AND PARKING AREAS.

5. RESTORATION
   ALL DISTURBED AREAS NOT ACTIVELY WORKED SHALL BE RESTORED WITH SEED AND MULCH, EROSION CONTROL BLANKET AND/OR SOD WITHIN 7 DAYS.

6. SLOPES
   IN ORDER TO MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES, THERE SHALL BE NO UNBROKEN SLOPE LENGTH OF GREATER THAN 75 FEET FOR SLOPES WITH A GRADE OF 3:1 OR STEEPER.

7. DRAINAGE DITCHES
   THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH THAT DRAINS WATER FROM THE SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE TO ANY SURFACE WATER. STABILIZATION MUST BE COMPLETED WITHIN 24 HOURS OF CONNECTING TO A SURFACE WATER.

8. PIPE OUTLETS
   PIPE OUTLETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER.

9. CATCH BASINS
   ALL CATCH BASINS SHALL BE PROTECTED WITH INLET PROTECTION DEVICES APPROVED BY THE LOCAL GOVERNING UNIT. THESE SHALL INCLUDE, BUT ARE NOT LIMITED TO, WIMCO PROTECTION DEVICES, INFRASAFE PROTECTION DEVICES, FILTER FABRIC, BIO ROLLS AND STRAW BALES.

10. DUST
    CONSTRUCTION DUST SHALL BE CONTAINED TO THE EXTENT POSSIBLE. IF THE SITE BECOMES EXCESSIVELY DUSTY, APPROPRIATE MEASURES SHALL BE TAKEN TO REDUCE DUST BEING TRANSPORTED FROM THE SITE. DUST CONTROL MEASURES INCLUDE, BUT ARE NOT LIMITED TO, WATERING AND CALCIUM CHLORIDE APPLICATION.

11. DEWATERING
    IT IS NOT ANTICIPATED THAT DEWATERING WILL BE REQUIRED FOR THE PROJECT. IF NECESSARY, DEWATERING ACTIVITIES SHALL BE CONDUCTED WITH AND APPROVED BY THE LOCAL GOVERNING UNIT. IF THERE WILL BE ANY DEWATERING OR BASIN DRAINING THAT MAY HAVE TURBID OR SEDIMENT LADEN DISCHARGE, THE WATER MUST BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE WHENEVER POSSIBLE. APPROPRIATE BMPS SHALL BE USED FOR EROSION AND SEDIMENT CONTROL AND ENERGY DISSIPATION.

12. CONSTRUCTION MATERIALS AND DEBRIS
    CONSTRUCTION MATERIALS SHALL BE STORED IN AN ORDERLY MANNER AND IN AN AREA THAT WILL MINIMIZE CONFLICTS WITH OTHER CONSTRUCTION ACTIVITIES. CONSTRUCTION DEBRIS SHALL BE CONTAINED IN DUMPSTERS AND REMOVED FROM THE SITE AS NECESSARY.

13. CHEMICALS
    CHEMICALS SHALL BE STORED IN A SAFE AREA IN SEALED CONTAINERS WITH THE ORIGINAL LABELING AND MATERIAL SAFETY DATA SHEETS AVAILABLE.

14. SPILLS AND CONTAMINATION
    IF FUEL, OIL OR A HAZARDOUS CHEMICAL IS SPILLED OR DETECTED DURING CONSTRUCTION ACTIVITIES, ALL APPROPRIATE AGENCIES SHALL BE IMMEDIATELY NOTIFIED, INCLUDING, BUT NOT LIMITED TO, THE MINNESOTA DUTY OFFICER AT 800-422-0798.

15. CONCRETE WASHOUT AREA
    ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. AN IMPERMEABLE COMPACTED CLAY LAYER IS SUFFICIENT. CONCRETE WASHOUT IN THE AGGREGATE ROAD BASE IS ALLOWED. A SIGN MUST BE INSTALLED AT EACH WASHOUT FACILITY TO DIRECT EQUIPMENT OPERATORS TO THE APPROPRIATE LOCATION.

POST CONSTRUCTION
WHEN THE SITE HAS BEEN COMPLETELY CONSTRUCTED, THE SITE MUST UNDERGO FINAL STABILIZATION. FINAL STABILIZATION OCCURS WHEN ALL OF THE GRADING, INFRASTRUCTURE AND BUILDING ACTIVITIES HAVE BEEN COMPLETED. TO ACHIEVE FINAL STABILIZATION, THE FOLLOWING MEASURES SHALL BE COMPLETED.

1. ALL DISTURBED AREAS WITHOUT PERMANENT IMPERVIOUS SURFACES SHALL BE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER. AREAS NOT REQUIRING SOD OR EROSION CONTROL BLANKET SHALL BE SEEDED AND MULCHED.

2. SEDIMENT FROM CONVEYANCES AND TEMPORARY SEDIMENTATION BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS SHALL BE CLEANED OUT. SEDIMENTATION BASINS SHALL BE SUFFICIENTLY CLEANED OUT TO RETURN THE BASIN TO DESIGN CAPACITY. SEDIMENT MUST BE STABILIZED TO PREVENT IT FROM BEING WASHED BACK INTO THE BASIN OR CONVEYANCES DISCHARGING OFF-SITE OR TO SURFACE WATERS.

3. WHEN STABILIZED VEGETATION HAS BEEN ESTABLISHED OVER 70 PERCENT OF THE PERVIOUS SURFACE AREA, ALL SYNTHETIC TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED. THIS INCLUDES, BUT IS NOT LIMITED TO, SILT FENCE, TREE FENCE AND CATCH BASIN INLET PROTECTION DEVICES.

INSPECTIONS & RECORD KEEPING
STORMWATER POLLUTION PREVENTION INSPECTIONS SHALL OCCUR ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. INSPECTIONS MAY BE CEASED DURING FROZEN GROUND CONDITIONS. WHERE WORK HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, THE REQUIRED INSPECTIONS AND MAINTENANCE MUST TAKE PLACE WITHIN 24 HOURS AFTER RUNOFF OCCURS AT THE SITE OR PRIOR TO RESUMING CONSTRUCTION, WHICHEVER COMES FIRST. DURING THE COURSE OF CONSTRUCTION, IT MAY BE DETERMINED THAT ADDITIONAL STORMWATER POLLUTION PREVENTION MEASURES MAY BE NEEDED, OR CERTAIN MEASURES ARE NOT PRACTICAL TO INSTALL. IN THESE CASES, AN AMENDMENT TO THE SWPPP SHALL BE MADE, AND SUPPORTING REASONS SHALL BE DOCUMENTED IN THE SWPPP.

1. THE OWNER/CONTRACTOR IS RESPONSIBLE FOR ALL EROSION CONTROL INSPECTIONS.

2. RECORD NAME OF INSPECTOR AND DATE AND TIME OF INSPECTION.

3. RECORD RAINFALL AMOUNT SINCE MOST RECENT INSPECTION.

4. INSPECT ROCK CONSTRUCTION ENTRANCES FOR SEDIMENTATION. INSPECT ADJACENT STREETS FOR SEDIMENT TRACKING.

5. INSPECT SITE FOR EXCESSIVE EROSION AND SEDIMENT ACCUMULATION.

   A. INSPECT SILT FENCE AND OTHER TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES FOR EROSION, SEDIMENTATION AND MALFUNCTIONING.
   B. INSPECT FLARED END SECTIONS FOR EROSION AND SEDIMENTATION.
   C. INSPECT PONDS, INFILTRATION BASINS, TEMPORARY SEDIMENTATION BASINS AND ALL OTHER BMP'S FOR EROSION AND SEDIMENTATION.
   D. INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS FOR EVIDENCE OF SEDIMENT BEING DEPOSITED BY EROSION.

6. INSPECT SITE AND ADJACENT PROPERTIES FOR CONSTRUCTION DEBRIS, TRASH AND SPILLS.

7. INSPECT STABILIZED AREAS FOR EROSION.

8. RECORD RECOMMENDED REPAIRS, MAINTENANCE AND/OR REPLACEMENTS REQUIRED TO ENSURE EROSION AND SEDIMENTATION CONTROL MEASURES ARE SUFFICIENT.

9. RECORD RECOMMENDED AMENDMENTS TO THE SWPPP.

10. RECORD REPAIRS, MAINTENANCE AND/OR REPLACEMENTS THAT WERE COMPLETED SINCE THE LAST INSPECTION.

11. FOR AREAS THAT HAVE UNDERGONE FINAL STABILIZATION, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH.

MAINTENANCE
THE OWNER/CONTRACTOR IS RESPONSIBLE FOR THE OPERATION, INSPECTION AND MAINTENANCE OF ALL STORMWATER POLLUTION PREVENTION MEASURES FOR THE DURATION OF THE PROJECT. THE FOLLOWING GUIDELINES SHALL BE USED TO DETERMINE NECESSARY REPAIRS, MAINTENANCE AND/OR REPLACEMENT OF THE EROSION AND SEDIMENTATION CONTROL MEASURES.

1. ROCK CONSTRUCTION ENTRANCES SHALL BE REPAIRED OR REPLACED IF THE ROCK BECOMES INUNDATED WITH SEDIMENT AND/OR EXCESSIVE SEDIMENT IS BEING TRACKED FROM THE SITE. SEDIMENT TRACKED ONTO ADJACENT STREETS SHALL BE REMOVED. MEASURES SHALL BE TAKEN IMMEDIATELY UPON DISCOVERY.

2. SILT FENCE SHALL BE REPAIRED OR REPLACED WHEN SEDIMENT REACHES 1/3 THE HEIGHT OF THE SILT FENCE, THE SILT FENCE IS DAMAGED AND/OR THE SILT FENCE BECOMES NONFUNCTIONAL. MEASURES SHALL BE TAKEN WITHIN 24 HOURS OF DISCOVERY.

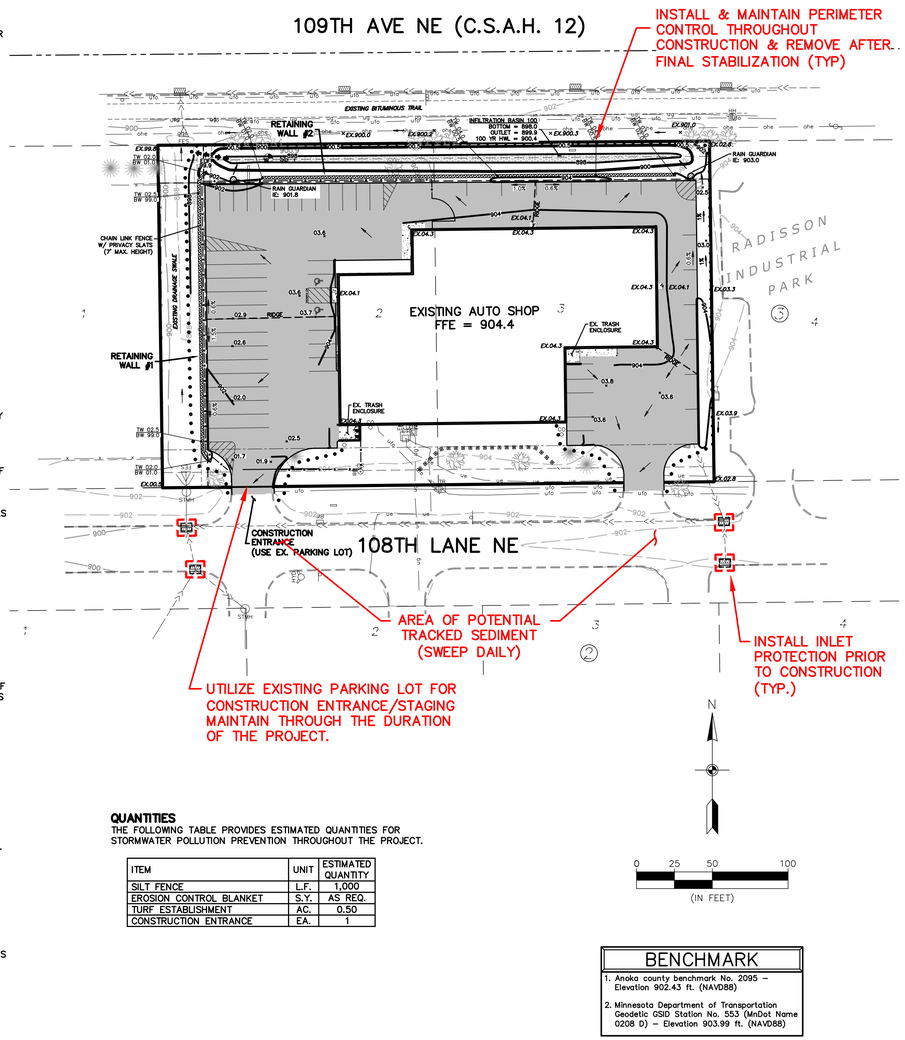
3. CATCH BASIN INLET PROTECTION DEVICES SHALL BE CLEANED WHEN SEDIMENT REACHES ½ THE HEIGHT OF THE SEDIMENT TRAP AND/OR REPAIRED OR REPLACED IF THE DEVICE BECOMES NONFUNCTIONAL. MEASURES SHALL BE TAKEN WITHIN 72 HOURS OF DISCOVERY.

4. FLARED END SECTIONS SHALL BE CLEANED IF DEBRIS IS RESTRICTING FLOW OR IF SEDIMENT HAS ACCUMULATED AT THE OUTLET. IF A FLARED END SECTION BECOMES NONFUNCTIONAL OR DAMAGED, IT SHALL BE REPAIRED OR REPLACED. MEASURES SHALL BE TAKEN WITHIN 72 HOURS OF DISCOVERY.

5. IF SEDIMENT IS OBSERVED OFF-SITE OR NEAR SURFACE WATERS, THE SOURCE OF SEDIMENT SHALL BE DETECTED AND ADDITIONAL MEASURES SHALL BE IMPLEMENTED. THE PERMITEE(S) SHALL COORDINATE SEDIMENT RETRIEVAL FROM SURFACE WATERS WITH ALL APPROPRIATE AGENCIES. MEASURES SHALL BE TAKEN WITHIN 7 DAYS OF DISCOVERY.

6. PONDS, INFILTRATION BASINS, TEMPORARY SEDIMENTATION BASINS AND ALL OTHER BMP'S SHALL BE CLEANED IF DEBRIS IS PRESENT AND/OR EXCESSIVE SEDIMENTATION HAS OCCURRED. TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED AND THE SEDIMENT REMOVED WHEN SEDIMENT HAS FILLED THE BASIN TO 1/2 THE STORAGE VOLUME. NO SEDIMENT SHALL BE ALLOWED TO ACCUMULATE IN INFILTRATION BASINS. MEASURES SHALL BE TAKEN WITHIN 72 HOURS OF DISCOVERY.

NOTICE OF TERMINATION
PROJECT CLOSEOUT SHALL BE COORDINATE WITH THE CITY OF BLAINE AND COON CREEK WATERSHED DISTRICT. AS PREVIOUSLY STATED THE NPDES PERMIT DOES NOT APPLY FOR THIS PROJECT AS THE DISTURBED AREA IS UNDER 1 ACRE.

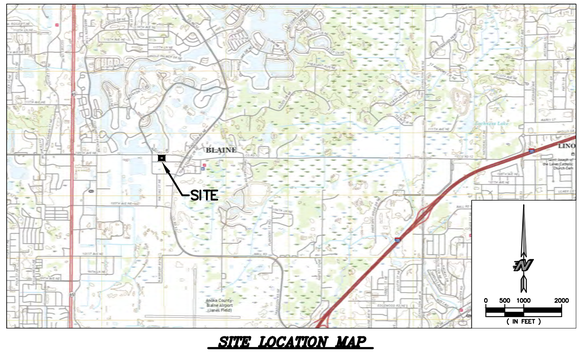


QUANTITIES
THE FOLLOWING TABLE PROVIDES ESTIMATED QUANTITIES FOR STORMWATER POLLUTION PREVENTION THROUGHOUT THE PROJECT.

ITEM	UNIT	ESTIMATED QUANTITY
SILT FENCE	L.F.	1,000
EROSION CONTROL BLANKET	S.Y.	AS REQ.
TURF ESTABLISHMENT	AC.	0.50
CONSTRUCTION ENTRANCE	EA.	1

BENCHMARK
1. Anoka county benchmark No. 2095 – Elevation 902.43 ft. (NAVD88)
2. Minnesota Department of Transportation Geodetic GSID Station No. 553 (MnDot Name 0208 D) – Elevation 903.99 ft. (NAVD88)

SWPPP DESIGN CERTIFICATION
UNIVERSITY OF MINNESOTA
Aaron D. Briski
Construction Site Management (May 31 2025)
Design of Construction SWPPP (May 31 2025)
Erosion and Stormwater Management
The bearer of this card has been tested and is certified in the area(s) shown on the reverse of this card. Certification expiration dates appear after each certification area.
Gary Sands, Head
Department of Bioproducts and Biosystems Engineering
University of Minnesota
http://www.erosion.umn.edu
Card Issued: 6/1/2022



SITE LOCATION MAP

CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

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 Professional Engineer under the laws of the State of Minnesota

Print Name: Aaron D. Briski, P.E.
Signature: Aaron Briski
Date: 6/28/24 License #: 57811

Drawn: ADB
Designed: ADB
Date: 6/28/24

Revisions:
1. 7/22/24 per City Comments
2. 8/6/24 per CCWD Comments

LAMETTRY'S COLLISION
4700 South Robert Trail
Inver Grove Heights, MN 55077

LAMETTRY'S COLLISION SITE IMPROVEMENTS
Blaine, MN

STORMWATER POLLUTION PREVENTION PLAN

S1 of 1

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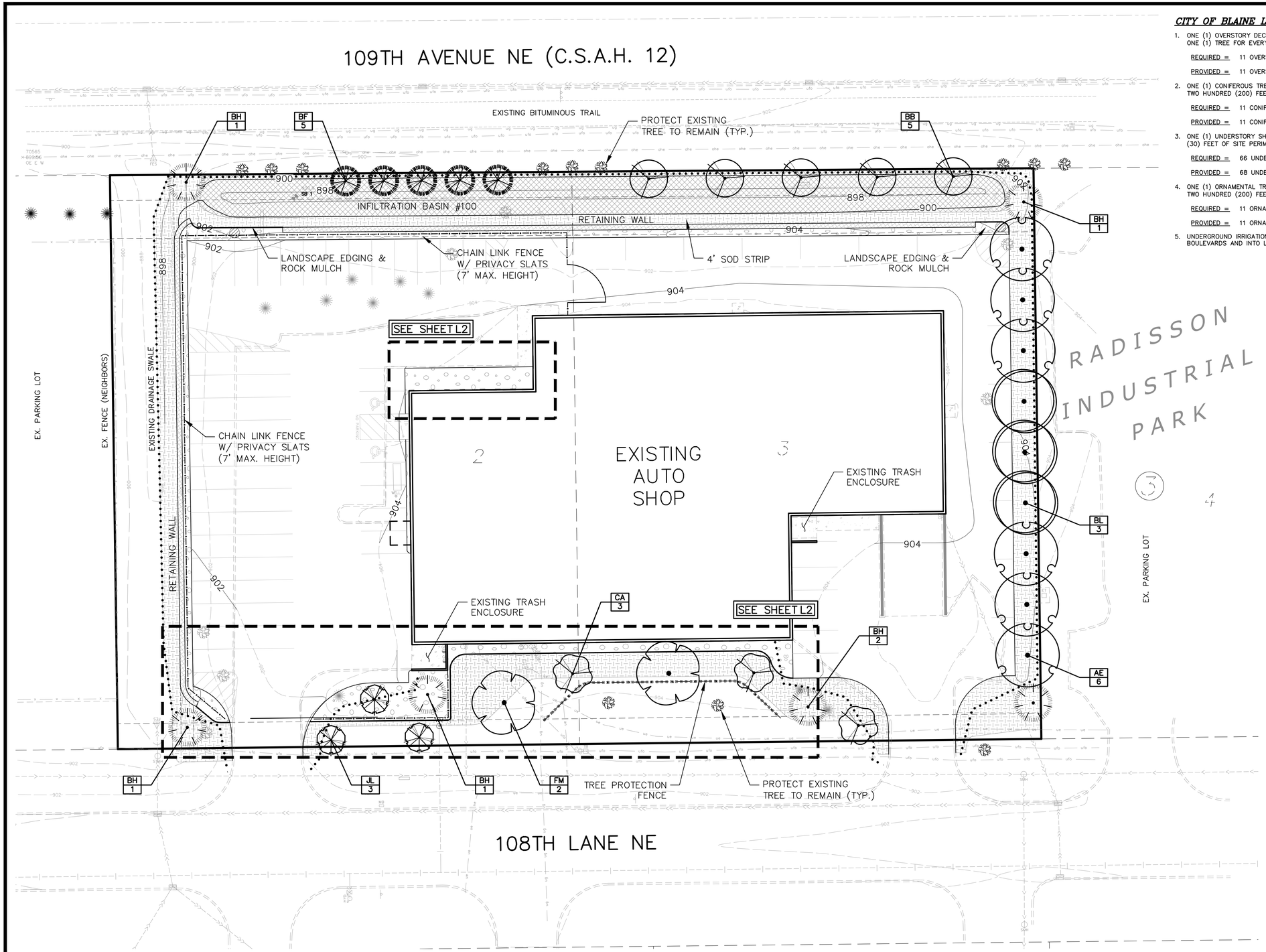

1 L1 OVERALL LANDSCAPE PLAN

CITY OF BLAINE LANDSCAPE REQUIREMENTS

1. ONE (1) OVERSTORY DECIDUOUS SHADE TREE FOR EVERY TWO THOUSAND (2,000) SQUARE FEET OF TOTAL BUILDING FLOOR AREA OR ONE (1) TREE FOR EVERY ONE HUNDRED (100) FEET OF SITE PERIMETER, WHICHEVER IS GREATER.
   - REQUIRED = 11 OVERSTORY TREES (22,809 SF BUILDING / 2000 = 12, OR 1,179 LF SITE PERIMETER / 100 = 12, PLUS 15% REDUCTION FOR I-2 ZONING PER 33.07.C.5)
   - PROVIDED = 11 OVERSTORY TREES
2. ONE (1) CONIFEROUS TREE FOR EVERY TWO THOUSAND (2,000) SQUARE FEET OF BUILDING OR ONE (1) CONIFEROUS TREE FOR EVERY TWO HUNDRED (200) FEET OF SITE PERIMETER, WHICHEVER IS GREATER.
   - REQUIRED = 11 CONIFEROUS TREES (22,809 SF BUILDING / 2000 = 12, OR 1,179 LF SITE PERIMETER / 200 = 6, PLUS 15% REDUCTION FOR I-2 ZONING PER 33.07.C.5)
   - PROVIDED = 11 CONIFEROUS TREES
3. ONE (1) UNDERSTORY SHRUB FOR EVERY THREE HUNDRED (300) SQUARE FEET OF BUILDING OR ONE (1) SHRUB FOR EVERY THIRTY (30) FEET OF SITE PERIMETER, WHICHEVER IS GREATER.
   - REQUIRED = 66 UNDERSTORY SHRUBS (22,809 SF BUILDING / 300 = 77, OR 1,179 LF SITE PERIMETER / 30 = 40, PLUS 15% REDUCTION FOR I-2 ZONING PER 33.07.C.5)
   - PROVIDED = 68 UNDERSTORY SHRUBS
4. ONE (1) ORNAMENTAL TREE FOR EVERY TWO THOUSAND (2,000) SQUARE FEET OF BUILDING OR ONE (1) ORNAMENTAL TREE FOR EVERY TWO HUNDRED (200) FEET OF SITE PERIMETER, WHICHEVER IS GREATER.
   - REQUIRED = 11 ORNAMENTAL TREES (22,809 SF BUILDING / 2000 = 12, OR 1,179 LF SITE PERIMETER / 200 = 6, PLUS 15% REDUCTION FOR I-2 ZONING PER 33.07.C.5)
   - PROVIDED = 11 ORNAMENTAL TREES
5. UNDERGROUND IRRIGATION SHALL BE REQUIRED FOR ALL LANDSCAPE AREAS. SUCH IRRIGATION SHALL EXTEND TO INCLUDE PUBLIC BOULEVARDS AND INTO LANDSCAPED PARKING ISLANDS, EXCEPT NATURAL AREAS TO BE PRESERVED.

TREE PRESERVATION

1. TREE REMOVAL / REPLACEMENT. SEE REMOVALS SHEET FOR SIGNIFICANT TREES TO BE REMOVED.

NUMBER OF TREES REMOVED =	16
NUMBER OF TREES SAVED =	3
TOTAL SIGNIFICANT TREES (ON-SITE) =	19
REPLACEMENT REQUIRED (1:1) =	16
REPLACEMENT PROVIDED =	22 (INCLUDES PROPOSED OVERSTORY AND CONIFEROUS TREES PER LANDSCAPE REQUIREMENTS)

2. TREE PROTECTION. ALL TREES NOT SPECIFICALLY NOTED OR MARKED ON SITE FOR REMOVAL SHALL REMAIN PROTECTED AND UNDISTURBED DURING CONSTRUCTION. TREE PROTECTION SHALL EXTEND TO THE DRIP LINE, WITHIN WHICH NO CONSTRUCTION ACTIVITY, MATERIAL STORAGE, OR VEHICLE PARKING SHALL BE PERMITTED. TREE PROTECTION FENCING SHALL BE ERECTED PRIOR TO CONSTRUCTION START PER PLANS OR AS DIRECTED BY OWNER/LANDSCAPE ARCHITECT AND SHALL CONSIST OF 4' TALL HEAVY DUTY ORANGE CONSTRUCTION FENCING WITH 6' STEEL FENCE POSTS SPACED 6' O.C. MAX.

LANDSCAPE PLAN NOTES

1. EXISTING CONDITIONS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION START. ANY DISCREPANCIES FOUND THAT AFFECT THE WORK SHALL BE REPORTED TO THE OWNER/LANDSCAPE ARCHITECT FOR CLARIFICATION PRIOR TO BIDDING OR APPROVING ANY ADDITIONAL WORK REQUIRED.
2. UTILITY LOCATES. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL PUBLIC AND PRIVATE UTILITIES, INCLUDING IRRIGATION LINES, AT LEAST 48 HOURS BEFORE EXCAVATING OR IN ACCORDANCE WITH STATE LAW. IN MINNESOTA, CALL GOPHER STATE ONE-CALL AT 651-454-0002 FOR FIELD LOCATION OF PUBLIC UNDERGROUND UTILITY LINES. ALL LOCATES AND ITEMS NOTED AS 'FIELD VERIFY' ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR AT THEIR EXPENSE.
3. PERMITS. CONTRACTOR SHALL VERIFY WITH THE OWNER/LANDSCAPE ARCHITECT THAT THE REQUIRED PERMITS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION START. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CODES, REGULATIONS, AND PERMITS GOVERNING THE WORK.
4. EXISTING ITEMS TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING PAVEMENT, STRUCTURES, UTILITIES, TREES, SITE AMENITIES, ETC. THAT ARE TO REMAIN FROM DAMAGE DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DAMAGE (AT CONTRACTOR'S EXPENSE) TO EXISTING ITEMS TO REMAIN.
5. CONSTRUCTION STAGING AND ACCESS. CONTRACTOR SHALL VERIFY THE LOCATION FOR CONSTRUCTION STAGING AND SITE ACCESS WITH THE OWNER/LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION START. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PEDESTRIAN AND VEHICLE ACCESS WITHIN AND ADJACENT TO THE SITE THROUGHOUT THE CONSTRUCTION PERIOD UNLESS OTHERWISE NOTED. LONG-TERM STORAGE OF MATERIALS OR SUPPLIES ON-SITE WILL NOT BE PERMITTED. ALL WASTE AND/OR UNUSED MATERIAL SHALL BE PROMPTLY REMOVED FROM THE SITE.
6. SITE REMOVALS. REFER TO CIVIL PLANS FOR GENERAL SITE REMOVALS. ALL ITEMS NOTED TO BE REMOVED SHALL BE COMPLETED BY THE CONTRACTOR AND IMMEDIATELY DISPOSED OF OFF-SITE, IN ACCORDANCE WITH LOCAL REGULATIONS, UNLESS OTHERWISE NOTED. COORDINATE WITH OWNER/LANDSCAPE ARCHITECT FOR ANY ITEMS NOTED AS 'REMOVED BY OTHERS' OR 'REMOVE AND SALVAGE.'
7. UTILITY COORDINATION. REFER TO CIVIL PLAN SHEETS FOR INFORMATION RELATED TO PROPOSED UTILITIES. COORDINATE WITH ELECTRICAL CONTRACTORS FOR SITE ELECTRICAL WORK AND SITE LIGHTING.
8. CONSTRUCTION STAKING. UNLESS OTHERWISE NOTED, CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING CONTROL POINTS AND ALL CONSTRUCTION FIELD STAKING DURING THE COURSE OF THE PROJECT.
9. DIMENSIONS. DIMENSIONS TAKE PRECEDENCE OVER SCALE. DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT/WALKWAY, OR OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
10. PLAN QUANTITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL MATERIAL QUANTITIES PER PLAN. MATERIAL SCHEDULES ARE PROVIDED SOLELY FOR CONTRACTOR'S CONVENIENCE.
11. REFERENCE SPECIFICATIONS. THE FOLLOWING SPECIFICATIONS SHALL GOVERN THIS PROJECT ACCORDING TO THE FOLLOWING ORDER:
    1. ADDENDA, WITH THOSE LATER HAVING PRECEDENCE OVER THOSE OF AN EARLIER DATE.
    2. LANDSCAPE SPECIFICATIONS.
    3. PLAN DRAWINGS.
    4. PLANT / MATERIAL SCHEDULES.
    5. CITY STANDARD SPECIFICATIONS AND DETAILS.
    6. MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, LATEST EDITION.

N

0 10 20 40
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CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
3890 PHEASANT RIDGE DR NE
SUITE 100
BLAINE, MN 55449
TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

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 Landscape Architect under the laws of the State of Minnesota

Print Name: Ryan J. Ruttger, RLA
Signature:
Date: 06/28/24 License #: 56346

Drawn: RJR
Designed: RJR
Date: 06/28/24

Revisions:
1. 7/22/24 per City Comments

LAMETTRY'S COLLISION
4700 South Robert Trail
Inver Grove Heights, MN 55077

LAMETTRY'S COLLISION SITE IMPROVEMENTS
Blaine, MN

LANDSCAPE PLAN

L1 of 2

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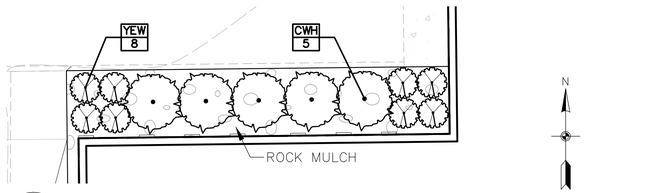
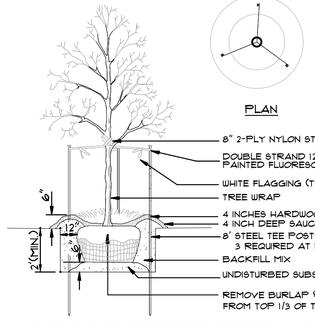
PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER
TREES						
	FM	2	Acer x freemanii 'Sienna'	Sienna Glen Maple	2.5" Cal.	B&B
	BL	3	Tilia americana 'Boulevard'	Boulevard Linden	2.5" Cal.	B&B
	AE	6	Ulmus americana 'Princeton'	American Elm	2.5" Cal.	B&B
CONIFEROUS TREES						
	BF	5	Abies balsamea	Balsam Fir	6' Ht.	B&B
	BH	6	Picea glauca densata	Black Hills Spruce	6' Ht.	B&B
ORNAMENTAL TREES						
	BB	5	Carpinus caroliniana	Blue Beech	2" Cal.	B&B
	CA	3	Malus x 'Prairifire' Red Flowers	Prairifire Crabapple	2" Cal.	B&B
	JL	3	Syringa reticulata 'Ivory Silk' White Flowers	Ivory Silk Japanese Tree Lilac	2" Cal.	B&B

SHRUBS						
	BCB	12	Aronia melanocarpa 'Autumn Magic'	Autumn Magic Black Chokeberry	#5 Cont.	
	RTD	14	Cornus sericea 'Alleman's Compact'	Dwarf Red Twig Dogwood	#5 Cont.	
	DBH	6	Diervilla lonicera	Dwarf Bush Honeysuckle	#5 Cont.	
	CWH	5	Hamamelis virginiana	Common Witch Hazel	#5 Cont.	
	MKL	4	Syringa patula 'Miss Kim'	Miss Kim Lilac	#5 Cont.	
	VBC	4	Viburnum trilobum 'Bailey Compact' Red Fall Color	Bailey's Compact American Cranberry Bush	#5 Cont.	
EVERGREEN SHRUBS						
	JSG	15	Juniperus chinensis 'Sea Green'	Sea Green Juniper	#5 Cont.	
	YEW	8	Taxus x media 'Tauntonii'	Tauton Yew	#5 Cont.	
GRASSES						
	KFG	5	Calamagrostis x acutiflora 'Karl Foerster'	Feather Reed Grass	#2 Cont.	
GROUND COVERS						
	ROCK	3,676 sf	Rock Mulch Non-Woven Geotextile Incidental	1.5" Trap Rock Mulch	4" Depth	
	SOD	8,764 sf	Turf Sod Bluegrass	Kentucky Bluegrass	sod	
	TII	5,368 sf	Type II – Stormwater Seed Mix Refer to notes for acceptable seeding methods Seeding Rate 52.0 lb/ac	MnDOT Seed Mix 33-261	seed	



1 L2 LANDSCAPE PLAN ENLARGEMENT



PLAN

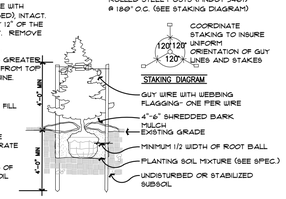
NOTE: SEE PLANTING NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

A DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

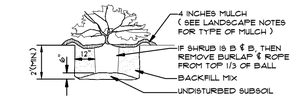
1. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING
2. TRIM OUT DEAD WOOD AND WEAK AND/OR DEFORMED TWIGS. DO NOT CUT A LEADER. DO NOT PAINT CUTS.
3. SET PLANT ON UNDISTURBED NATIVE SOIL OR THOROUGHLY COMPACTED BACKFILL SOIL INSTALL PLANT SO THE ROOT FLARE IS AT OR UP TO 2" ABOVE THE FINISHED GRADE
4. PLACE PLANT IN PLANTING HOLE WITH BURLAP AND WIRE BASKET, (IF USED), INTACT. BACKFILL WITHIN APPROXIMATELY 12" OF THE TOP OF ROOTBALL, WATER PLANT. REMOVE TOP 1/3 OF THE BASKET OR THE TOP TWO HORIZONTAL RINGS, WHICHEVER IS GREATER. REMOVE ALL BURLAP AND NAILS FROM TOP 1/3 OF THE BALL. REMOVE ALL TUNE.
5. PLUMB AND BACKFILL WITH BACKFILL SOIL.
6. WATER TO SETTLE PLANTS AND FILL VOIDS.
7. WATER WITHIN TWO HOURS OF INSTALLATION. WATERING MUST BE SUFFICIENT TO THOROUGHLY SATURATE ROOT BALL AND PLANTING HOLE.
8. PLACE MULCH WITHIN 48 HOURS OF THE SECOND WATERING UNLESS SOIL MOISTURE IS EXCESSIVE.

NOTE: GUY ASSEMBLY OPTIONAL BUT CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR MAINTAINING TREE IN A PLUMB POSITION FOR THE DURATION OF THE GUARANTEE PERIOD

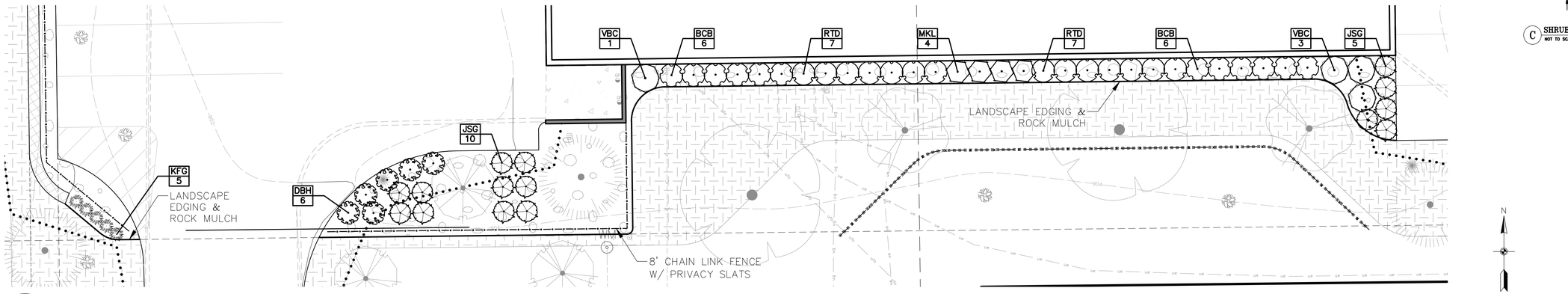
GUY ASSEMBLY- 16" POLYPROPYLENE OR POLYETHYLENE (40 MIL) 1-1/2" WIDE STRAP (TYP) DOUBLE STRAND 10 GA WIRE, 2-1" ROLLED STEEL POSTS (MNDOT 3401) @ 180° O.C. (SEE STAKING DIAGRAM)



B CONIFEROUS TREE PLANTING DETAIL
NOT TO SCALE



C SHRUB & CONTAINER PLANTING DETAIL
NOT TO SCALE



2 L2 LANDSCAPE PLAN ENLARGEMENT

LANDSCAPE SPECIFICATIONS

1. EROSION CONTROL. REFER TO CIVIL PLAN SHEETS FOR STORMWATER POLLUTION PREVENTION PLAN (SWPPP), AND TEMPORARY AND PERMANENT STORMWATER BMPS, INCLUDING SILT FENCE, BIO-ROLLS, INLET PROTECTION, EROSION CONTROL BLANKETING, DUST CONTROL, SWEEPING AND ROCK CONSTRUCTION ENTRANCE. ALL DISTURBED AREAS SHALL RECEIVE PERMANENT STABILIZATION IN ACCORDANCE WITH THE LANDSCAPE PLAN WITHIN 7 DAYS AFTER CONSTRUCTION ACTIVITY IN THE DISTURBED AREA HAS CEASED. IN THE EVENT PERMANENT STABILIZATION CANNOT BE IMPLEMENTED WITHIN 7 DAYS, TEMPORARY STABILIZATION BMPS MUST BE IMPLEMENTED WITHIN 7 DAYS USING.
2. CLEARING AND GRUBBING. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEARING AND GRUBBING ALL AREAS INDICATED AS BEING DISTURBED OR OTHERWISE SHOWN ON PLANS. CLEARING AND GRUBBING SHALL INCLUDE REMOVAL AND DISPOSAL OF ALL TREES, STUMPS, BRUSH, GRASS, ROOTS AND OTHER ORGANIC MATERIAL AT AN APPROVED OFF-SITE DISPOSAL LOCATION.
3. SOIL PREPARATION. REFER TO GEOTECHNICAL REPORT FOR ANY REQUIRED SOIL CORRECTIONS, AMENDMENTS OR ADDITIONAL INFORMATION (IF APPLICABLE). EXISTING TOPSOIL SHALL BE STRIPPED FROM ALL DISTURBED AREAS AND STOCKPILED IN AN APPROVED LOCATION FOR RE-SPREAD. ALL AREAS WHERE SOIL HAS BEEN COMPACTED BY CONSTRUCTION ACTIVITY AND THAT ARE INDICATED TO BE SODDED, SEEDED OR PLANTING BED SHALL BE DE-COMPACTED TO A MINIMUM DEPTH OF 12 INCHES BY SOIL RIPPING, TILLING OR OTHER APPROVED SOIL LOOSENING METHOD.
4. TOPSOIL MATERIAL. ALL EXISTING, AMENDED OR IMPORTED TOPSOIL SHALL MEET THE REQUIREMENTS OF MNDOT TOPSOIL TYPE A. A MINIMUM 4 INCH DEPTH OF TOPSOIL SHALL BE PLACED ON ALL AREAS TO BE SODDED OR SEEDED. A MINIMUM 12 INCH DEPTH OF TOPSOIL SHALL BE PLACED WITHIN ALL PLANTING BED AREAS. ALL TOPSOIL SHALL BE FINE GRADED, RAKED AND DRAGGED TO PROVIDE A SMOOTH, UNIFORM SURFACE. TOPSOIL GRADES SHALL BE WITHIN .1 FEET OF INDICATED FINISHED GRADE AND SHALL BE TRUE TO GRADIENTS SHOWN ON PLANS. REFER TO CIVIL PLAN SHEETS FOR FILTRATION BASIN SOIL REQUIREMENTS.
5. SODDING. CONTRACTOR SHALL OBTAIN OWNER/LANDSCAPE ARCHITECT'S APPROVAL OF FINAL GRADES AND TOPSOIL PREP PRIOR TO SODDING. APPLY 12-12-12 GRANULAR STARTER FERTILIZER AT A RATE OF 250 LBS PER ACRE PRIOR TO SODDING AND ROLL TOPSOIL TO CREATE A UNIFORM SURFACE FOR LAYING SOD. SOD SHALL NOT BE CUT MORE THAN 24-HOURS IN ADVANCE OF INSTALLATION. CONTRACTOR SHALL KEEP SOD MOIST FOR A MINIMUM OF 30 DAYS AND SHALL BE RESPONSIBLE FOR MAINTAINING THE SOD UNTIL FINAL ACCEPTANCE.
6. PLANT MATERIAL. ALL PLANTING STOCK SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK," ANSI-Z60, LATEST EDITION, OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIALS. OWNER/LANDSCAPE ARCHITECT RESERVE THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION. NO SUBSTITUTION OF PLANT MATERIAL SHALL BE ACCEPTED UNLESS APPROVED IN WRITING BY THE OWNER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
7. PLANT MATERIAL SUBSTITUTIONS. ALL REQUESTS FOR PLANT SUBSTITUTIONS SHALL BE MADE IN WRITING TO THE OWNER/LANDSCAPE ARCHITECT AND MUST BE APPROVED BY THE CITY.
8. PLANT INSTALLATION AND ESTABLISHMENT. REFER TO STANDARD PLANTING DETAILS. CONTRACTOR SHALL STAKE TREE LOCATIONS FOR APPROVAL BY OWNER/LANDSCAPE ARCHITECT PRIOR TO PLANTING. ANY PLANT MATERIAL WHICH DIES, TURNS BROWN, OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE.
9. MULCH MATERIAL. DOUBLE SHREDDED HARDWOOD MULCH OR ROCK MULCH AS INDICATED ON PLANS. ALL MULCH SHALL BE CLEAN AND FREE OF NOXIOUS WEEDS, SOIL, OR OTHER DELETERIOUS MATERIAL, AND SHALL BE INSTALLED OVER A NON-WOVEN GEOTEXTILE FABRIC (INCIDENTAL) OR OTHER APPROVED WEED BARRIER TO A MINIMUM SETTLED DEPTH OF 4". MULCH SHALL BE HELD BACK FROM PLANT STEMS/TRUNKS A MINIMUM OF 3". WOOD MULCH SHALL BE PLACED AROUND INDIVIDUAL TREES TO A 4' MINIMUM DIAMETER. MULCH SHALL BE INSTALLED WITHIN 48-HOURS OF PLANT INSTALLATION.
10. LANDSCAPE EDGING. INSTALL LANDSCAPE EDGING BETWEEN ALL MULCH AREAS AND TURF. EDGING SHALL BE COMMERCIAL GRADE BLACK POLYETHYLENE OR VINYL EDGING, 0.1 INCH THICK BY 5 INCHES DEEP, V-LIPPED BOTTOM, HORIZONTALLY GROOVED, 1-INCH ROUND TOP, EXTRUDED IN STANDARD LENGTHS, WITH 9-INCH STEEL ANGLE STAKES.
11. IRRIGATION. DESIGN, FURNISH AND INSTALL A COMPLETE UNDERGROUND IRRIGATION SYSTEM FROM APPROVED POINT(S)-OF-CONNECTION WITHIN THE SITE COVERING ALL TURF AND PLANTING AREAS AS SHOWN ON THE LANDSCAPE PLAN. INCLUDES FLOW/PRESSURE TESTING, PLANS WITH DESIGN CALCULATIONS, AS-BUILT DRAWINGS, LABOR, MATERIALS, EQUIPMENT, AND SERVICES FOR THE TESTING, ADJUSTING, RETESTING AND READJUSTING AS REQUIRED TO PLACE THE SYSTEM IN AN APPROVED OPERATING CONDITION. THE IRRIGATION SYSTEM SHALL INCLUDE THE DESIGN AND INSTALLATION OF THE FOLLOWING: PIPING, METER AND BACKFLOW ASSEMBLIES, SPRINKLER HEADS, CABINETS, VALVES AND VALVE BOXES, CONTROLLERS, CONTROL WIRING, FITTINGS, ELECTRICAL CONNECTIONS, QUICK-COUPLERS, ALL OTHER NECESSARY ACCESSORIES, SYSTEM MANUALS, 1-YEAR MAINTENANCE PERIOD INCLUDING 1 FALL WINTERIZATION AND 1 SPRING START-UP. IRRIGATION PLANS TO BE PREPARED BY A QUALIFIED IRRIGATION DESIGNER AND SUBMITTED TO OWNER/LANDSCAPE ARCHITECT FOR APPROVAL.
12. MAINTENANCE. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PORTION OF THE WORK IS IN PLACE. PLANT MATERIAL SHALL BE PROTECTED AND MAINTAINED UNTIL THE INSTALLATION OF THE PLANTS IS COMPLETE, INSPECTION HAS BEEN MADE, AND PLANTINGS ARE ACCEPTED EXCLUSIVE OF THE GUARANTEE. MAINTENANCE SHALL INCLUDE MOWING, TRIMMING, WATERING, FERTILIZING, WEED AND PESTICIDE CONTROL, MULCHING, REMOVAL OF DEAD MATERIALS, RE-SETTING PLANTS TO PROPER GRADE AND KEEPING PLANTS IN A PLUMB POSITION. AFTER ACCEPTANCE, THE OWNER SHALL ASSUME MAINTENANCE RESPONSIBILITIES, HOWEVER, THE CONTRACTOR SHALL RETAIN RESPONSIBILITY FOR ALL PLANT MATERIAL THROUGH THE COMPLETION OF THE WARRANTY PERIOD.
13. WATERING. UPON ESTABLISHMENT OF SEED AND INSTALLATION OF PLANTS, CONTRACTOR SHALL MAINTAIN A WATERING SCHEDULE WHICH WILL THOROUGHLY WATER ALL PLANTS AND TURF AREAS A MINIMUM OF ONCE A WEEK. MORE FREQUENT WATERING MAY BE REQUIRED DURING PERIODS OF HOT, DRY WEATHER. CONTRACTOR SHALL MAKE THE NECESSARY ARRANGEMENTS FOR WATER. IN THE ABSENCE OF PERMANENT IRRIGATION, TEMPORARY IRRIGATION, TREE WATERING BAGS, OR HAND-WATERING ARE ACCEPTABLE.
14. NATIVE PLANT ESTABLISHMENT. THIS PROJECT INCLUDES ONE OR MORE NATIVE PLANT SEED MIXES CONSISTING OF A VARIETY OF GRASSES, SEDGES AND FLOWERING FORBS. BECAUSE THESE PLANTS TYPICALLY HAVE A LONGER GERMINATION PERIOD, A COVER CROP SPECIES IS REQUIRED TO PROVIDE TEMPORARY COVER AND STABILIZATION. MAINTENANCE OF THESE SEEDED AREAS IS CRITICAL DURING THE FIRST SEVERAL YEARS TO ESTABLISH A SUCCESSFUL NATIVE PLANT COMMUNITY. SEEDED AREAS SHALL BE MOWED / WEED-WHIPPED TO A HEIGHT OF 6-10 INCHES IN MID-JULY AND EARLY SEPTEMBER DURING THE FIRST 2-3 YEARS OF ESTABLISHMENT. IN ADDITION, ALL NON-NATIVE SPECIES / WEEDS SHALL BE SPOT SPRAYED NO LESS THAN 3 TIMES A YEAR WITH HERBICIDE BY A LICENSED APPLICATOR. RE-SEEDING AS NECESSARY SHALL OCCUR IN MAY. A NATIVE PLANT COMMUNITY SHALL BE CONSIDERED SUCCESSFULLY ESTABLISHED NO SOONER THAT 3 YEARS AFTER INITIAL SEEDING – ONCE THE COVER CROP HAS BEEN SUFFICIENTLY REPLACED BY NATIVE PLANTS AND THE AREA IS FREE OF ALL NON-NATIVE AND INVASIVE SPECIES. AT THIS TIME, MAINTENANCE CAN BE REDUCED TO MOWING / WEED-WHIPPING TO A HEIGHT OF 6-10 INCHES ONCE A YEAR IN EARLY SEPTEMBER AND SPOT SPRAYING OF HERBACIDE ONLY AS NEEDED.
15. FINAL ACCEPTANCE. UPON SUBSTANTIAL COMPLETION OF THE WORK, CONTRACTOR SHALL REQUEST FINAL ACCEPTANCE OF THE WORK IN WRITING BY THE OWNER/LANDSCAPE ARCHITECT. IF ANY WORK IS FOUND TO BE INCOMPLETE OR UNSATISFACTORY IN THE OPINION OF THE OWNER/LANDSCAPE ARCHITECT, A WRITTEN PUNCH LIST WILL BE PREPARED LISTING ALL ITEMS THAT REQUIRE COMPLETING OR CORRECTING BEFORE FINAL ACCEPTANCE.
16. WARRANTY. ALL PLANTS, MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE, UNLESS OTHERWISE SPECIFIED. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND MATERIAL.

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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 Landscape Architect under the laws of the State of Minnesota

Print Name: Ryan J. Ruttger, RLA
Signature:
Date: 06/28/24 License #: 56346

Drawn: RJR
Designed: RJR
Date: 06/28/24

Revisions:
1. 7/22/24 per City Comments

LAMETTRY'S COLLISION
4700 South Robert Trail
Inver Grove Heights, MN 55077

LAMETTRY'S COLLISION SITE IMPROVEMENTS
Blaine, MN

LANDSCAPE PLAN

L2 of 2

Save Date: 06/27/24 | F:\jobs\10801 - 10820\10817-00 - radisson industrial park\cad c3d\landscape\10817_landscape.dwg

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COON CREEK WATERSHED DISTRICT
Request for Board Action

MEETING DATE:	August 26, 2024
AGENDA NUMBER:	12
ITEM:	Mercy Hospital-Unity Illicit Stormwater Discharge Update
AGENDA:	Information

ACTION REQUESTED
No action is requested.

PURPOSE
To provide an update on the illicit stormwater discharge discovered at Mercy Hospital-Unity Campus in Fridley, MN

BACKGROUND/CONTEXT

On 6/6/24 staff were reviewing and summarizing past water quality monitoring data from Oak Glen Creek (OGC) in preparation for an OGC Subwatershed task force meeting. Staff noticed some anomalies in specific conductivity measurements at the iron-sand filter site and stream outlet monitoring site. A handful of random spikes in specific conductivity up to 11,000 uS/cm were observed dating back to at least July 2017, the first year CCWD started monitoring Oak Glen Creek. The specific conductivity of shallow groundwater and surface water within the District typically ranges from 150-1,400 uS/cm.

Staff immediately initiated a field investigation on the afternoon of 6/6 to confirm the presence of an active illicit discharge and attempt to identify its source. Staff observed dry weather flows in many storm pipes, but did not observe any elevated measurements of specific conductivity or other evidence of past or present illicit discharges. The pervasive dry weather flows were presumed to be caused by groundwater infiltration into the trunk stormsewer line. Given the infrequent and sporadic nature of the monitoring data anomalies, a decision was made to instead deploy monitoring equipment to collect continuous data in OGC before continuing further spot investigations throughout the storm sewer network.

Temperature loggers and a conductivity sensor were deployed and monitored for two weeks, revealing unnatural spikes in conductivity occurring for approximately 90 minutes every 3 to 4 days, originating from upstream of Commerce Ln and 73rd Ln. CCWD staff alerted City of Fridley staff of preliminary findings and the City offered assistance with the ongoing investigation. Given the branched nature of the storm sewer network and presence of many industrial facilities and commercials sites, staff tracked the discharge upstream by systematically moving the monitoring equipment every 4-5 days to monitor major storm sewer laterals. By 7/8, the location of the discharge was tracked upstream to

the south side of the Mercy Hospital-Unity Campus; it was presumed to be some sort of industrial process wastewater discharge given its periodic nature.

Upon locating the suspected illicit discharge, staff filed a report through the MPCA industrial storm water compliance eService and alerted MPCA, MCES, and MDH regional contacts via email. City of Fridley staff got in contact with hospital facilities staff to continue the investigation within the facility. By 7/15, the discharge was determined to be linked to regeneration cycles of the hospital's water softening system for the main building. The hospital hired a consultant to scope the plumbing on 7/19 and reported that the softening system had been plumbed to the storm sewer versus the sanitary sewer. It is unknown how long this cross connection has been in place, but possible that it was intentionally plumbed this way in the 1970s. Hospital staff are currently working with a consultant to re-design their plumbing network and have applied to the City and State for appropriate permits to initiate the repair.

CCWD staff appreciated the responsiveness of both City of Fridley and Mercy Hospital Facilities Staff to voluntarily work together to rapidly resolve this issue. The MPCA has not yet formally responded to the reported illicit discharge.

IMPLICATIONS FOR RESOURCE

Despite receiving large volumes of softener system discharge (chlorides and other concentrated ions) for years or potentially decades, the long-term impacts to Oak Glen Creek are expected to be minimal given the high flushing rate/short travel time from the point of discharge to the Mississippi River (about 2 hours), lack of in-stream reservoirs, and connectivity to Mississippi River for aquatic organisms to repopulate the open channel portion of the creek. Impacts to the Mississippi River are also anticipated to be minimal given dilution factors; water softening system discharges across the twin cities are eventually routed to the Mississippi River via sanitary sewer and wastewater treatment plants which are not designed to effectively remove chlorides.

Given its high salt content, softener system wastewater can however be corrosive to concrete and steel stormwater infrastructure. The City of Fridley will be reviewing their inspection records to evaluate pipe integrity in this subcatchment and initiative any needed repairs.

NEXT STEPS

Verify the plumbing repair is completed and confirm any high conductivity discharges are eliminated via follow-up monitoring at the OGC outlet.

Follow up with state agencies as needed.

COON CREEK WATERSHED DISTRICT
Request for Board Action

MEETING DATE: August 26, 2024
AGENDA NUMBER: 13
ITEM: Possible contaminants spill in Mississippi River

AGENDA: Discussion

ACTION REQUESTED
No action is requested.

PURPOSE
To provide an update on a possible contaminants spill in the Mississippi River.

BACKGROUND/CONTEXT
At 8:30 pm on 8/20/24 staff were notified that an oil-like sheen had been observed on the Mississippi River earlier in the day at the HWY 610 bridge over the Mississippi River. The Minneapolis, St. Paul, and Xcel Energy Mississippi water intakes were closed as the MN Pollution Control Agency, City of Fridley, WCEC Emergency Spill Response, and St Paul and Minneapolis water works investigated the issue. Samples of the oil-like sheen were collected to determine what the substance is. Crews were unable to determine the source or substance that was causing the sheen prior to nightfall.

At 11:00 pm on 8/20/24 the Star Tribune released the attached article detailing information that was known at the time and reassuring residents that there was no immediate drinking water threat or public health threat.

On 8/21/24 staff, in coordination with the City of Fridley, investigated potential sources of oil like sheen. Inspected the Mississippi River at the confluences of Rice Creek, Springbrook Creek, Pleasure Creek, and Coon Creek. Additionally, inspected the Coon Rapids Dam, Coon Rapids Dam Regional Park, HWY 610 bridge, and known construction sites in the area. Staff did not locate any evidence of an oil-like sheen, residue, or evidence of illicit discharge during the inspection. It was noted that a contractor working on a bank stabilization project in the Coon Rapids Dam Regional Park on Coon Creek indicated around the time the oil-like sheen was reported they had encountered some organic matter in the creek that released a strong odor and could have produced a natural organic sheen into the Mississippi River. This information was communicated to the City of Fridley as they continued their investigation.

IMPLICATIONS FOR RESOURCE
The results of the substance sample analysis should determine any environmental impacts. No fish kills or evidence of environmental harm were detected or reported.

NEXT STEPS
Follow up with investigating agencies as needed.

https://www.startribune.com/possible-contaminates-spill-in-mississippi-river-near-coon-rapids-fridley/601126283

Twin Cities Suburbs

Possible contaminants spill in Mississippi River near Coon Rapids, Fridley

It is not yet confirmed what substance was making a sheen on the water or how much spilled, officials said. The substance was prevented from entering Twin Cities drinking water sources, they said.

By Elliot Hughes

The Minnesota Star Tribune

August 20, 2024 at 11:03PM

The sheen of possible contaminants seen on the Mississippi River — pictured here in 2021 — posed no immediate drinking water threat or public health threat, officials said. (Antranik Tavitian/The Minnesota Star Tribune)

The Minnesota Pollution Control Agency (MPCA) was responding Tuesday to a possible contaminant spill in the Mississippi River in the Twin Cities area.

https://www.startribune.com/possible-contaminates-spill-in-mississippi-river-near-coon-rapids-fridley/601126283

The agency said a sheen on the water's surface was spotted on the river at 1 p.m. Tuesday. It has been blocked from entering drinking water sources for Minneapolis and St. Paul and Xcel Energy's Riverside plant.

"There is no immediate drinking water threat or public health threat," Fridley Fire Chief Maddison Zikmund said.

Andrea Cournoyer, a spokesperson for the MPCA, said it is not yet confirmed what substance was making the sheen or its total volume. An analysis of water samples is pending.

Zikmund said preliminary test results suggest the substance is not gasoline or a similar product.

"We're at a loss here," he said.

Racquel Vaske, the general manager for St. Paul Regional Water Services, the water utility serving the city and suburbs, said the origin of the sheen is also unclear. But she emphasized that residents do not have to fear contamination in drinking water.

"It is not a concern for our customers," she said. "There is no impact to them at this point, nor will there be."

The sheen, first reported by the Fridley Fire Department, was seen from the Hwy. 610 bridge in Coon Rapids to a location in Fridley about 2 miles downstream, Cournoyer said. It has since begun dissipating.

No other information was immediately available late Tuesday.

Second sheen is under investigation as MPCA probes possible contamination in Mississippi River

Minneapolis and St. Paul both turned off their downstream drinking water intakes, though Minneapolis has since returned to using river water.

By Chloe Johnson

The Minnesota Star Tribune
August 21, 2024 at 5:02PM

Water flows through the Coon Rapids Dam on the Mississippi River. On Wednesday, state pollution officials said they are investigating a new area of potential pollution near Coon Rapids Dam Regional park -- the second sheen spotted on the Mississippi in less than 24 hours. (Aaron Lavinsky/The Minnesota Star Tribune)

The state continues to investigate a mysterious sheen that stretched along the Mississippi River upstream of the drinking water intakes for both Minneapolis and St. Paul — and now say another area of suspiciously shiny water was spotted by Coon Rapids Dam Regional Park.

Evidence of contamination in the river was first reported shortly after noon Tuesday, stretching from the Hwy. 610 bridge in Coon Rapids about two miles downstream. Maddison Zikmund, the Fridley fire chief, said initial testing was inconclusive and did not suggest the sheen was caused by a fuel spill, though “it absolutely looked like that.”

The sheen dissipated and was largely gone by nightfall, Zikmund said. But the Minnesota Pollution Control Agency said it received a report of a second sheen on Wednesday

morning, by the park in Coon Rapids, and is investigating whether it's connected to the earlier event.
"The type of substance is still unknown," MPCA spokesman Michael Rafferty wrote in an email.
Amy Barrett, a spokeswoman for the Minnesota Department of Health, said test results on samples of the water would be ready on Thursday morning.
The water treatment plants for Minneapolis and St. Paul both draw river water downstream of where the sheen was reported. MPCA said that booms had been put in the river around each intake to block any possible pollution.
St. Paul Regional Water Services immediately shut down its intake for river water after the sheen was reported, a spokesperson wrote in an email. It remained shut off on Wednesday, and the system was using other water sources. System general Manager Racquel Vaske said Tuesday that the city's drinking water customers would not be affected.
In addition to the river, the regional system has wells and a chain of lakes it can use for supply.

A spokesperson for the city of Minneapolis wrote in an email that the city's water was "safe and unaffected." The city relies entirely on the Mississippi, and the statement said it had briefly turned off its intake but resumed treating river water on Wednesday morning. Minneapolis was had added some precautions to its treatment process, including extra filtering and using water deeper below the surface of the river, according to the city's statement.

about the writer
Chloe Johnson
Environmental Reporter
Chloe Johnson covers climate change and environmental health issues for the Star Tribune.

https://www.mprnews.org/story/2024/08/14/unchecked-development-lax-regulation-push-minnesota-lakeshores-to-the-edge

Trouble by the water: Minnesota's vanishing natural lakeshores

Kirsti Marohn

Brainerd, Minn. August 14, 2024 4:00 AM

Unchecked development, lax regulation push Minnesota lakeshores to the edge

Docks and large houses line a developed section of lakeshore on Gull Lake in the town of East Gull Lake, Minn., pictured on Monday, June 3, 2024.

Ben Hovland | MPR News

Share

Quick Read

Nearly half of Minnesota's wild lakeshores are gone, the result of decades of decision-making that let a suburban-style vision of lake life take root and left lakes polluted. The damage can be repaired, but is the will there to do it?

Minnesotans are loving their lakes to death.

A statewide culture that long embraced rustic cabins by rugged lakeshores now values large homes with manicured lawns, patios, rock riprap and trees cleared to provide a better view of the water.

That generational change is easy to spot these days standing on the shoreline of popular destinations such as Gull Lake near Brainerd. Once-lush and woodsy shorelines have disappeared over decades. Lake cabins have been torn down and replaced with expansive homes. It’s a similar view across much of Minnesota.

It’s a slow-motion environmental crisis.

Nearly half the state’s natural shorelines are gone, according to the Minnesota Department of Natural Resources. They continue to vanish by 1 to 2 percent per decade. It's a loss rate the DNR along with local governments and nonprofits called “alarming” last year in a report that concluded “many of Minnesota’s lakes are in trouble.”

https://www.mprnews.org/story/2024/08/14/unchecked-development-lax-regulation-push-minnesota-lakeshores-to-the-edge

Water running off mowed lawns and hard surfaces contributes to pollution in lakes. One-quarter of the state's lakes have high levels of phosphorus, which feeds algae growth that turns the water a green and slimy mess. A single pound of phosphorus in a lake can produce 500 pounds of algae.

How did a state so grounded in lake culture and rule-making get to this point? Observers cite a decadeslong drip of inadequate regulation and lax enforcement by local boards and state authorities that allowed a suburban-style vision of lake life to take root, and it's damaging lakes.

Rocky Point on Gull Lake

Online Aerial footage shows how development changed the shoreline along a popular point on Gull Lake in Crow Wing County.

"The challenge is real," said Randall Doneen, a water resources section manager with the Minnesota Department of Natural Resources.

"People have a certain aesthetic preference. And what we're seeing, really, is that it is common for people to want more of a suburban landscaping," Doneen said. "It's no longer just the cabin up at the lake, with your path down to your dock."

It is possible to check and repair the damage. On some Minnesota lakes, property owners and local officials have worked together to restore and protect shorelines without crippling growth.

Getting there statewide, though, means shifting the culture and convincing people their vision of beauty is killing the thing they love.

There's a lot at stake beyond the health of the lakes. Pollution affects anyone who owns or visits a lake home or cabin, spends time fishing, swimming or boating, enjoys seeing loons and other wildlife, or dreams of spending their retirement years on a lake.

"We are a land of 10,000 lakes," said Paul Radomski, a longtime lake ecologist with the DNR. "We don't want to be a land of 10,000 impaired lakes."

'People wanting to build bigger'

Minnesota's treasured lakes have been drawing visitors and residents since the 1800s. A 1926 travel brochure advertised the state as "the nation's summer playground," according to the Minnesota Historical Society.

In recent decades, though, the nature of lake living changed. As demand for waterfront property surged and real estate prices soared, many resorts were subdivided into lots and sold. People bought modest cabins, demolished them and built showcase homes.

Tony and Bonnie Coffey bought their first lake cabin in Crow Wing County in 1994, and later settled on the Whitefish Chain of Lakes, where Tony is president of the property owners association. During that time, they've witnessed a boom in growth in the Brainerd Lakes Area.

https://www.mprnews.org/story/2024/08/14/unchecked-development-lax-regulation-push-minnesota-lakeshores-to-the-edge

“It makes it very livable, all the things we have in terms of doctors and retail and restaurants,” said Tony Coffey, who serves as president of the Whitefish Area Property Owners Association. “But what that’s done is it’s created an influx of people.”

The COVID-19 pandemic accelerated that growth. With more people able to work remotely, many lake property owners decided to turn seasonal cabins into year-round homes.

“What we're seeing is people who might have thought that to maybe build their dream home would be 10 years from now, now I think it’s today,” said Chris Pence, environmental services manager for Crow Wing County. “Because now, I don't have to be down in Minneapolis to work all the time. I can work from my cabin.”

Many improved their lake property to make it less like a seasonal cabin and more like their year-round home by adding an extra bedroom, a patio or a bigger garage.

“We're seeing people wanting to build bigger,” said Nick Neuman, senior environmental specialist for Stearns County, which has nearly 300 lakes. That could mean expanding a cabin, he said, “or it might just be wanting to build a larger home on lots that maybe aren't designed for it.”

Those larger homes often have more roofs, driveways, patios and other hard surfaces that increase polluted runoff into the lake. Neuman said the increase of impervious surfaces is “probably the biggest issue” facing Minnesota’s lake country.

“That really stems from just more development, larger structures and more intensive use of the properties that already exist,” he said.

Josh Knopik pilots a boat with Paul Radomski of the Minnesota DNR on Perch Lake in Baxter, Minn., on Monday, June 3. Ben Hovland | MPR News

A tale of two lake properties

The whir of the outboard motor barely drowned out the sound of traffic on Highway 371 during a recent summer day in Baxter as DNR ecologists Paul Radomski and Josh Knopik stood in an aluminum boat, scanning the shoreline of Perch Lake.

https://www.mprnews.org/story/2024/08/14/unchecked-development-lax-regulation-push-minnesota-lakeshores-to-the-edge

Knopik paused the boat in front of a modest home. Once likely a seasonal cabin, it's now a full-time residence.

The sandy shoreline stretches unbroken the length of a basketball court and is lined with large stones. No shrubs or native plants are in sight, just neatly mowed, bright green grass.

"There are two tall trees," Knopik said. "Otherwise, it's like a suburban house, just plopped next to a lake."

Water runs off the house's roof and driveway and across the lawn without trees or plants to slow and absorb it, Radomski said. It carries soil, organic matter and nutrients like phosphorus straight into the lake.

Shoreline stabilized with riprap, stacked rocks meant to reduce erosion, line the edge of Perch Lake in Baxter, Minn., on June 3. Ben Hovland | MPR News

After a heavy rain, seven to nine times more phosphorus will run off this mowed lawn into the lake than off undeveloped lakeshore, he said.

"That has consequences on water quality," Radomski said.

The DNR began measuring the condition of the state's shorelines with a scientific survey in 2015. So far, it's completed 900 surveys on more than 836 lakes across Minnesota.

A pristine lakeshore with no development would score a 100. The lowest-scoring lake so far is heavily developed Forest Lake in the northeast Twin Cities metro, which earned a 37.

The survey data has allowed the DNR to accurately assess what's happening with Minnesota lakes and calculate the loss of natural shorelines, Radomski said.

"Quantifying it opens eyes," he said. "People say, 'Oh, what are we doing? What are we doing about that?'"

Mapping the data shows regional differences. Lakes in central Minnesota tend to be more populated and developed. In contrast, many northern lakes still have wooded, natural shorelines that help protect water quality and provide wildlife habitat.

https://www.mprnews.org/story/2024/08/14/unchecked-development-lax-regulation-push-minnesota-lakeshores-to-the-edge

Farther down the shore of Perch Lake, Knopik paused the boat in front of a much different property. The house is almost hidden, set back about 100 feet from shore. The owners have kept most of the trees and a thick buffer of cattails along the shore.

The residents still have a mowed lawn, but the vegetation along the water's edge should absorb any runoff, Knopik said. It's "a compromise of sorts," he said.

Finding a way to both enjoy the lake and preserve it is the message the DNR is advocating to lake property owners, Radomski said.

"How do you find that balance between having that shoreline vegetation so that it protects water quality and provides the habitat, but you still get to have a great experience on the water?" he said.

Yellow and white water lilies and other shoreline vegetation line the edge of Perch Lake in Baxter on June 3. Ben Hovland | MPR News

'A problem that didn't have to exist'

The disappearance of natural shorelines has other profound effects.

A sandy beach or rock riprap supplies little food or shelter for wildlife. But vegetation along the shoreline is critical for nesting loons. Aquatic plants provide cover for fish, and fallen trees offer a resting spot for turtles and frogs.

Natural shorelines also help prevent erosion, a common problem on many Minnesota lakes — especially as climate change causes heavier rainfalls and more frequent flooding.

Native plants' roots can grow as long as 15 feet, much longer than the Kentucky bluegrass found in most Minnesota lawns. Those deeper roots help hold the soil in place.

Ironically, changes residents make to "improve" their lake property often cause more problems.

Riprap is often a solution property owners and landscape contractors use to fix erosion problems along lakeshore. But the rocks actually can increase the speed and temperature of water running into the lake, and provide no habitat for pollinators or other wildlife.

A mowed lawn edged with rock might look tidy, but it can attract unwelcome guests. Knopik points to a Perch Lake shoreline strung with an unsightly plastic fence.

https://www.mprnews.org/story/2024/08/14/unchecked-development-lax-regulation-push-minnesota-lakeshores-to-the-edge

“They’ve probably struggled with geese going on their lawn and defecating and eating and doing what they do,” he said. “That’s annoying.”

In contrast, deep-rooted native plants and trees help stabilize the shoreline, prevent erosion and discourage geese, Knopik said.

“The riprap is like a Band-Aid or a solution to a problem that didn’t have to exist,” he said.

There’s an economic impact, too. Studies have linked lakes with good water quality to higher property values.

A plastic fence is erected to prevent geese from entering a property on the edge of Perch Lake.

Ben Hovland | MPR News

Regulation ‘not working’

Minnesota has regulated development around lakes for more than 50 years, but the current shoreline rules were last updated in 1989 and many scientists consider them outdated and inadequate.

“Clearly, they're not working,” Radomski said. “We're still losing habitat.”

The Legislature directed the DNR to update the state’s shoreland rules in 2007, and Minnesota regulators spent years devising more protective standards. But then-Gov. Tim Pawlenty rejected them, saying they undermined local control and property rights.

This year, state lawmakers reaffirmed that the DNR still has the authority to update the shoreland rules. But it’s unclear whether there’s political will for tighter statewide regulations.

In Minnesota, it’s up to local governments — cities and counties — to enforce shoreland regulations, and their record is mixed. Historically, counties approve many requests for variances to the rules.

“Regulations have not stopped shoreline alterations, lot by lot, year by year, and lake by lake,” stated a report released last year by the Minnesota Natural Shoreline Partnership, a coalition that includes conservation professionals from the DNR, local government agencies and nonprofits.

https://www.mprnews.org/story/2024/08/14/unchecked-development-lax-regulation-push-minnesota-lakeshores-to-the-edge

The report says a "reasonable goal" would be a natural, unmowed buffer of trees and vegetation that stretches for 75 percent of the shoreline and is at least 25 feet deep, far from the norm on many Minnesota lakes.

While state rules prohibit "intensive" clearing of vegetation near the shore, they're open to interpretation and sometimes difficult to enforce.

"People want to be able to enjoy seeing the lake, and they see the trees and the shrubs as an impediment to their view," Doneen said. "That's a real challenge, because you want people to be able to enjoy the lake without degrading it so much."

The DNR occasionally intervenes and challenges a county's decision to issue a shoreland variance if it violates state or local rules, but those cases are not the norm.

The agency prefers to provide education for local government officials and, if needed, share its concerns about a development proposal, Doneen said.

"If it comes down to it and it's egregious, and we think that the resources being sacrificed are significant and that there really has been a legal error, we'll step in if we have to," he said. "But it is the absolute last thing that we would want to do."

Bullrushes grow near the shore of Perch Lake in Baxter. Ben Hovland | MPR News

'People like to push the envelope'

While there's been little political will to tighten the state's shoreland rules, some counties have adopted their own regulations that go beyond the state's minimum requirements.

Crow Wing County, with close to 500 lakes, allows up to 25 percent of a lake property to be covered with hard surfaces such as roofs, driveways and patios. But anything over 15 percent requires a plan to use rain gardens or other techniques to manage stormwater.

That's the threshold studies have shown could start to affect water quality, Pence said.

https://www.mprnews.org/story/2024/08/14/unchecked-development-lax-regulation-push-minnesota-lakeshores-to-the-edge

About three years ago, Stearns County began requiring property owners to have a minimum amount of natural shoreline before they can get a permit to make any changes near the lake. It's had a significant impact, Neuman said.

"People like to push the envelope," he said. "So that's where the regulatory measures really are a safeguard to protect whatever you know is worth protecting."

- Survey:Are you a lake steward?

State and local governments, watershed districts, nonprofits and lake associations have worked to educate property owners about the importance of keeping shoreline natural. Results are mixed.

Most people make decisions about their lake property based on economics and what others around them are doing, Neuman said.

"We can promote and we can suggest and we can recommend," he said. "But the vast majority of people — and therefore contractors, because they are trying to meet the wants of their clients — are going to be interested in making it look the way they want it to look."

Some lake advocates are thinking beyond regulations about how to change societal norms beyond perfectly manicured lawns and boat lifts and docks that resemble a marina, said Joe Shneider, president of the Minnesota Coalition of Lake Associations.

"It doesn't help our water quality," Shneider said. "And at the end of the day, it's really all about protecting the quality of the water."

https://www.mprnews.org/story/2024/08/16/paying-homeowners-to-keep-shorelines-natural-pays-off-wisconsin-minnesota

In NW Wisconsin, a county finds paying homeowners to keep shorelines natural pays off

Purple pickerel rush lines the shoreline along Warmer Lake in Burnett County, Wis., on July 3.

Ben Hovland | MPR News

Quick Read

Losing natural shorelines to development is a major environmental problem. In Burnett County, Wis., officials found success paying cash to property owners to keep shorelines pristine. One Twin Cities watershed has taken notice.

Mike and Sally Kindell bought a home six years ago on Warner Lake in Burnett County, lured largely by the lake's clean, clear water.

It doesn't suffer the late-summer algae blooms that turn the water green and slimy on lakes across Wisconsin and Minnesota. One big reason why: It still boasts plenty of undeveloped, wooded lakeshore that helps filter runoff and nutrient pollution.

"The lake is really what was appealing to us," Sally Kindell said. "We certainly did research the quality of the water, and that was really important to us."

While protecting the lake aligns with their values, the Kindells have another reason for keeping their property deliberately natural. They're part of a program in Burnett County that pays homeowners to protect their lakeshore, the only one of its kind in Wisconsin.

https://www.mprnews.org/story/2024/08/16/paying-homeowners-to-keep-shorelines-natural-pays-off-wisconsin-minnesota

Landowners who enroll in the shoreline incentive program agree to follow the county's lakeshore zoning rules. If their property doesn't meet the rules, they're required to restore it.

In exchange for enrolling, landowners get an initial payment of $250, plus a $50 check every year. The county also will pay up to 70 percent of the cost of restoring a shoreline with native plants.

Sally and Mike Kindell are enrolled in Burnett County's Shoreline Incentive Program, pictured on their Warner Lake property in Burnett County, Wis., on July 3.

Ben Hovland | MPR News

While the payments are relatively modest — Burnett County puts the total annual cost at $35,000 to $40,000 a year — officials say the incentive has preserved more than 50 miles of shoreline and helped cultivate a culture of stewardship, by engaging property owners to care about their lake's health.

"I would just say it's just as much an educational tool as it is a reward tool," said Burnett County conservationist Dave Ferris, who helped create the program in 2000. "Luckily, the county board has been very supportive of that. It helps a lot, and solves a lot of problems down the road."

Lake advocates cite the 24-year-old Burnett County program as a model that could be replicated in Minnesota, where nearly half of the state's natural shorelines have been lost to suburban-style development. Over the past few decades, property owners have cleared trees, built larger homes and converted natural shorelines to manicured lawns or rock riprap.

Burnett County's success has caught the attention of some in the Twin Cities region. The Comfort Lake-Forest Lake Watershed District northeast of St. Paul launched a pilot program last year that pays property owners up to $300 a year to keep their lakeshore natural.

"Basically, it's our effort to incentivize good property management that's beneficial for the watershed, while also rewarding those who are already doing that work for us," said Aidan Read, land management specialist with the watershed district.

The program is now in its first full year. Lake associations have been helping spread the word and there's been a lot of interest, Read said. "We've been very, very busy this year, which has been great."

https://www.mprnews.org/story/2024/08/16/paying-homeowners-to-keep-shorelines-natural-pays-off-wisconsin-minnesota

‘Reward people for doing the right thing’

Burnett County doesn’t have any large cities, and much of its land is still forested. But development is increasing, and it’s putting pressure on the lakes.

Its location about a two-hour drive from the Twin Cities makes it popular for seasonal residents. Its population jumps from about 15,000 in the winter to 75,000 in the summer, said Emily Moore, county water resources specialist. Along with climate change, it’s affecting lake health, she said.

“We do have some lakes in the county, even with good water clarity, that we are seeing algae blooms just because of the environment — how it's changing, the water is warming up,” Moore said. “Constant pressure of people on the lake causes that, too.”

About 800 of Burnett County’s lake properties — roughly 10 percent — are enrolled in the shoreline incentive program. County officials say it’s helped educate homeowners and provided another motivation to restore their lakeshore to a more natural condition that protects the lake.

Burnett County Water Resources specialist Emily Moore is in charge of site visit inspections for Burnett County’s Shoreline Incentive Program.

Ben Hovland | MPR News

“Over the years, people have picked away at the shoreline, and it gets less and less natural,” Ferris said. “Pretty soon, it's nothing but green grass right down to the water, without anything stopping runoff.”

Burnett County started the voluntary program in 2000 when it was revising its mandatory lakeshore zoning rules, which had been confusing and difficult to enforce, Ferris said.

In their place, the county adopted a clear directive that lake property owners should keep a buffer of natural vegetation at least 35 feet deep along the water, he said.

“To go along with that, we felt it was important that there was a program that would reward people for doing the right thing,” Ferris said.

When a homeowner enrolls in the program, a covenant is placed on the property that remains permanently, even if it’s sold. The county does spot checks on about 10 percent of the properties every year to make sure they’re still complying.

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“Then we'll send a letter just letting them know, ‘Hey, your shoreline looks good,’” Moore said. “Or, ‘Hey, you need to work on this area.’”

Real estate agents don’t always disclose the restrictions when they sell a home, so sometimes new buyers aren’t aware of them, she said.

Rather than using heavy-handed enforcement, the program also gives the county staff a chance to build a positive relationship with the homeowner and offer advice on improving their property. Moore has given the Kindells ideas of what native plants to plant, and will help them design a rain garden they want to install.

Enrollment in the shoreline incentive program boomed when it first started. It’s slowed, but keeps adding new members, Moore said.

“We hope to continue building it, just because we know how much pressure our shoreline properties are getting right now with people migrating away from the cities up to a North Woods feel here,” she said.

Of the county’s 500-plus lakes, 350 have at least one property in the program. Once a few homeowners join, others on the lake tend to follow, Moore said.

“It seems like neighbors talk to neighbors,” she said. “We are seeing a lot of properties being clustered on a lake, which has been really cool to see.”

By the same token, if people see their neighbor clear-cutting their shoreline, they assume they can do it too, Moore said.

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Burnett County Water Resources specialist Emily Moore (center) chats with lakeshore property owners Mike and Sally Kindell at their home on Warner Lake in Wisconsin on July 3.

Ben Hovland | MPR News

‘Not just your shoreline’

Many property owners today understand the pressures of development and the impacts on water quality but there’s always at least one person who doesn’t want a “weedy” natural shoreline and would rather have a manicured lawn, Moore said.

She pitches homeowners on the importance of not only keeping a buffer along the shore but also about letting vegetation grow in the lake itself.

Property owners are allowed to clear a 30-foot-wide path to navigate a boat, but lily pads, pickerel, watershield and other aquatic plants are good at buffering waves from boats that can damage the sandy shore, she added.

“So it’s not just your shoreline,” Moore said. “It’s what’s in the lake, too.”

The previous owners had already enrolled in the program when the Kindells bought their Warner Lake property in 2018.

“We thought that was a really good idea, so we just kind of stayed with it,” Mike Kindell said.

The couple has used the payments to buy more native plants and seeds, including milkweed, bee balm and black-eyed Susans that attract pollinators and birds.

Unlike conventional grass lawns, the native plants have deep roots that absorb runoff and keep nutrients from flowing into the lake.

The Kindells plan to keep adding to their native plantings. They say the money is a nice bonus, but they would still keep their shoreline natural even without the payments.

“I think regardless,” Sally Kindell added, “we would be doing it, because it’s important to us.”

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Downed trees and vegetation line the shore of Warner Lake in Burnett County, Wis., on July 3.

Ben Hovland | MPR News

https://www.hometownsource.com/abc_newspapers/news/local/garden-views-restoring-buffer-zones-for-lakes-and-rivers/article_548bf2a0-5a5a-11ef-85b7-8b4684a57641.html

FEATURED POPULAR

GARDEN VIEWS: Restoring buffer zones for lakes and rivers

Jone Tiffany\Anoka County Extension Master Gardener
Aug 20, 2024

Tiffany lake

Many Minnesotans are lucky enough to have a cabin or home near water, but we don't always think about the effect these properties have on our ecological system. In our quest for picture-perfect green lawns and exotic gardens, sometimes we inadvertently damage our delicate aquatic ecosystems.

During the last few years, I have been part of a project to restore the buffer zone in the area where I live. The shoreline had been taken over by invasive species such as purple loosestrife and buckthorn, which in turn had choked out native plants and grasses.

Restoring buffer zones around lakes and rivers is crucial for maintaining healthy ecosystems and ensuring the sustainability of water resources. Often comprised of grasses, plants, and shrubs, these buffer zones act as natural barriers that filter pollutants, reduce erosion, and provide habitat for wildlife. Buffer zones are essential for preserving water quality and biodiversity, mitigating the impacts of climate change, and ensuring the sustainability of freshwater resources.

Here's a closer look at how buffer zones help our aquatic ecosystems:

• Filtering: Buffer zones filter out sediments, nutrients, and pollutants from surface runoff before they enter water bodies. This natural filtration process reduces the levels of harmful substances such as nitrogen, phosphorus, pesticides, and heavy metals, which can cause water quality issues.

• Stabilizing: Vegetation stabilizes the soil with its root systems, significantly reducing the amount of erosion. This prevents sedimentation in water bodies, which can degrade habitats for aquatic organisms.

• Supporting: Buffer zones serve as crucial habitats for a variety of species. They provide food, shelter and breeding grounds, supporting biodiversity and enhancing ecosystem resilience.

• Mitigating: Vegetated buffer zones act as carbon sinks, taking carbon dioxide from the atmosphere and helping mitigate climate change. Additionally, they help moderate local temperatures and maintain humidity levels, benefiting both wildlife and human communities.

Steps to restoring buffer zones:

• Create a plan: Assess the current condition and identify the primary sources of degradation. Map the area, evaluate the soil and water quality, and understand the local plants. A well-thought-out plan considers ecological, social, and economic factors. Check for any regulations regarding buffer zones in your local area.

• Select plants: Plants should be well adapted to the local climate and soil conditions. Native plants are more resilient, require less maintenance, produce better root systems, and provide better habitat for local wildlife.

• Monitor: Invasive species can outcompete native plants and disrupt the ecosystem. Regular monitoring is vital to track progress, make necessary adjustments, and ensure the success of the restoration.

• Maintain: Activities such as replanting and weed and erosion control measures should be part of the long-term management plan.

Restoring buffer zones offers numerous benefits beyond environmental protection. Buffer zones enhance the aesthetic value of the landscape and promote recreational activities like fishing and birdwatching. While rejuvenating them can be challenging, the environmental and economic benefits outweigh the costs.

For more information about buffer zone requirements and resources, visit: https://bwsr.state.mn.us/minnesota-buffer-law

Interested in becoming an Extension Master Gardener volunteer? Applications accepted now through Oct. 1. T o apply, visit https://extension.umn.edu/master-gardener/become-master-gardener.

https://www.mprnews.org/story/2024/08/15/turning-minnesota-lake-homeowners-into-shoreline-stewards-quit-mowing-lawns

Kirsti Marohn Brainerd, Minn.

August 15, 2024 4:00 AM

‘Quit mowing’: Turning Minnesota lake homeowners into shoreline stewards, one lawn at a time

A sign for the Lake Steward program is posted on Dorothy Whitmer’s dock in East Gull Lake, Minn., on June 3. Ben Hovland | MPR News

Quick Read

Are Minnesotans willing to rethink their vision of beauty to save wild shorelines? On Gull Lake the answer is yes. Getting there, though, means convincing property owners their "neat and tidy" view of the lake is killing it.

When a quiz popped up in Dorothy Whitmer’s email inbox in 2016 asking her to score the quality of her lakeshore property, she jumped at the chance.

“I was so excited, because I said, ‘Oh, I have this great property, and it's going to get a high rating,’” said Whitmer, 71, a retired physician who’s owned a scenic spot on Gull Lake in the Brainerd Lakes region for 34 years.

She answered a series of questions: How much of her property is covered with native vegetation, and how much is mowed lawn? How much is covered by hard surfaces, like buildings, patios and driveways? Does she use fertilizer or pesticides?

To her surprise, Whitmer failed the test.

“It was a disaster,” she recalled. “So over the next three years, I kind of fell back on that ancient wisdom: When all else fails, read the directions.”

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Whitmer's awakening spurred her into action, the kind advocates say is crucial to saving Minnesota's lakes. Nearly half the state's natural shorelines have been lost to suburban-style development, according to a report last year that described the ongoing loss as "alarming" and concluded "many of Minnesota's lakes are in trouble."

Dorothy Whitmer looks out over Gull Lake from the shore on her property in East Gull Lake, Minn., on Monday, June 3. Ben Hovland | MPR News

Whitmer helped launch a program on the Gull Chain of Lakes that encourages and rewards property owners who preserve or restore their natural shorelines to help keep lake pollution in check.

More broadly, it's an effort to change Minnesotans' attitudes toward lakeshores by engaging and educating the property owners who helped create the problem. Supporters say many homeowners simply aren't aware of the devastating effects a heavily altered shoreline can have on the lake's health and water quality.

"What is good for the lakes actually saves money and effort, and it's highly rewarding," Whitmer said. "It could be summarized in two words: Quit mowing."

Pushing back on a 'neat and tidy' culture

After failing the lakeshore environment quiz in 2016, Whitmer started digging into the research. She learned about the importance of keeping the shoreline natural to keep the lake healthy, and that perfectly manicured and fertilized lawns contribute to phosphorus pollution, which spurs algae growth.

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Whitmer pitched an idea to the Gull Chain of Lakes Association to send a short survey to its members, then have volunteers visit their properties. If they pass — or after the owners restore the shoreline to a natural state — they receive a sign to post on the end of their dock indicating they're a lake steward.

"When they get the lake steward award, they know they're doing the right thing, and they're incredibly proud and grateful," Whitmer said. "Then their sign goes up, and they influence others, especially in their neighborhood."

Now in its sixth year, the Minnesota Lake Steward Program has 102 members on the Gull chain, and recently reached a milestone: 15 percent of the 650 property owners they contacted via email have joined.

"We thought that 15 percent is a number where, if you just get to that level, it'll jump off and kind of go viral," Whitmer said. "And you'll get many more lake stewards after that."

The program has spread to dozens more lakes across Minnesota. Supporters view it as part of a strategy to help change societal norms and expectations around lakeshore development, and help slow the loss of natural shoreline that protects lakes from pollution.

Plants grow on the Gull Lake shoreline on Dorothy Whitmer's property in East Gull Lake, Minn., on June 3.

Ben Hovland | MPR News

"What that does is it signals to other people that there's a thought behind the way the property is being managed on the lake, that there's consideration being taken for the water

quality," said Jeff Forester, executive director of Minnesota Lakes and Rivers Advocates, a nonprofit that represents lake associations and property owners. It's helped expand the program to 39 lake associations across the state.

After one sign goes up on a lake, it's often followed by more as other residents take notice, Forester said. "Then there'll be a cluster of five or six or seven, as one neighbor starts asking, 'What's that?'"

The signs also are a way to indicate that the property owner isn't just being lazy and avoiding mowing — that there's a purpose for leaving the shoreline natural.

Native plants have much deeper roots than most typical lawn grass, so they help stabilize the lakeshore and prevent erosion. After a rainfall, they also absorb water running off the lawn, helping keep nutrients like phosphorus out of the lake where they can cause algae blooms.

While many lake residents believe their property should look "neat and tidy," giving up the stress of having to meticulously mow and maintain perfect lawns lets people enjoy their property even more, Whitmer said.

"When you let things grow, you don't really miss it anymore," she added. "That neat and tidy — that was just a lot of work. When you're neat and tidy, any little elevation of the grass, you want to run out and fix it. So this relieves you of all that worry, and you can just enjoy what you have."

How restoring natural shorelines improves lake health

Keeping or replacing native vegetation slows runoff, filters nutrients and benefits wildlife.

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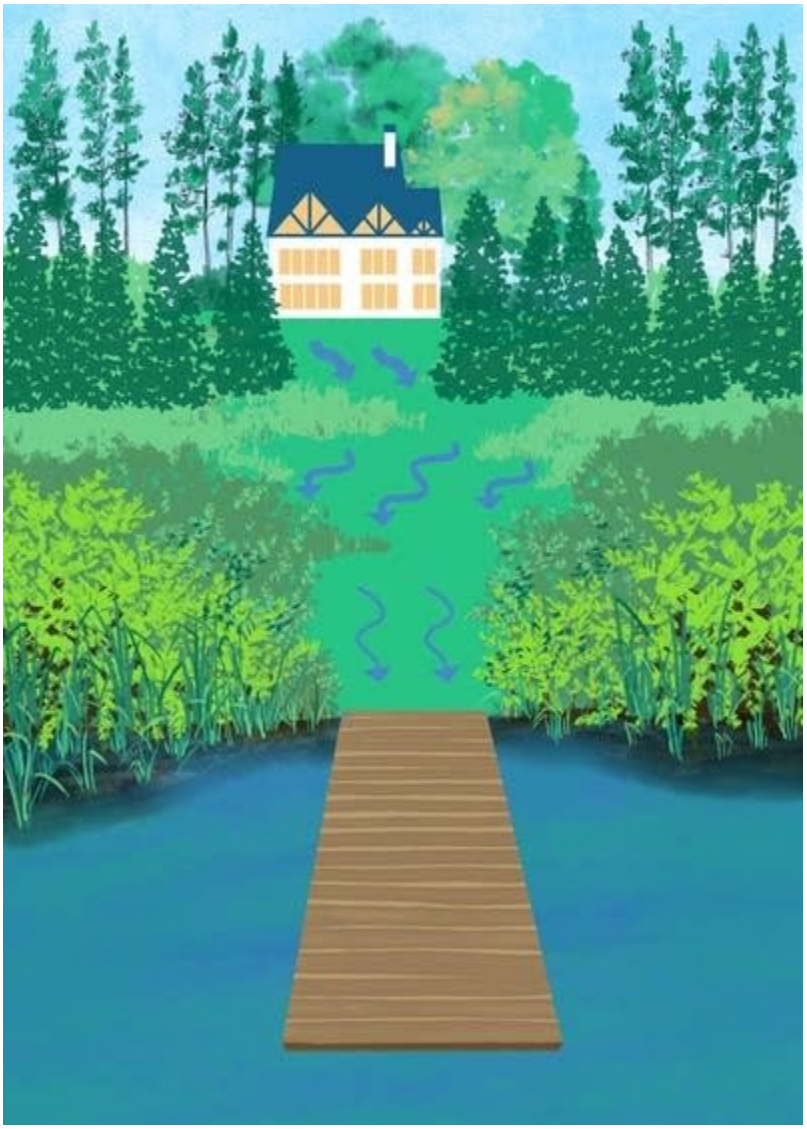
BEST: Most of this property has been left natural. The trees and native plants absorb runoff before it reaches the lake. The buffer of native plants and fallen trees along the shoreline helps reduce erosion and provides habitat for birds, fish and other wildlife. Illustration by Jennifer Lu | APM Reports

https://www.mprnews.org/story/2024/08/15/turning-minnesota-lake-homeowners-into-shoreline-stewards-quit-mowing-lawns

BAD: This lakeshore property has no trees or native vegetation to absorb runoff from the house and lawn. Rain water runs directly into the lake, carrying sediment and nutrients like phosphorus. The mowed lawn and rocks provide no wildlife habitat. Illustration by Jennifer Lu | APM Reports

https://www.mprnews.org/story/2024/08/15/turning-minnesota-lake-homeowners-into-shoreline-stewards-quit-mowing-lawns



BETTER: Trees and native vegetation slow runoff and allow it to filter into the soil. A buffer of tall plants along the shoreline help keep pollution out of the lake. There's still a cleared path to allow access to the lake. Illustration by Jennifer Lu | APM Reports

Going 'wild and free' to curb pollution

Across Minnesota, the trend of lakeshore development in the past few decades has been larger homes with more driveways, patios and manicured lawns. More hard surfaces and the loss of natural shoreline contribute to erosion and nutrient pollution in lakes.

Gull Lake still has relatively good water quality. The Minnesota Department of Natural Resources grades it a B for lake health. But the phosphorus level is higher than it was pre-development, Whitmer said.

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“So we’re moving in the wrong direction,” she said. “That’s why I think if we could get people to plant and become lake stewards, we can make the water quality sustainable.”

Lake Steward program co-chair and naturalist Kris Driessen, 69, has been a Gull Lake resident since the 1960s, when small cabins and pine trees ringed the lake.

Docks line a developed section of Gull Lake in the town of East Gull Lake on June 3. Ben Hovland | MPR News

More recently, many homeowners have installed rock boulders along the shore, which look neat but don’t filter nutrients and actually can make things worse, she said.

“It acts like a bulldozer with ice heaves,” Driessen said. “It pushes it up further, and there’s more runoff.”

Riprap also tends to be more expensive to install than natural vegetation and still requires maintenance, according to the DNR.

Driessen helps educate people about using deep-rooted native plants to help hold the soil in place, slow runoff and keep phosphorus and other nutrients from polluting the lake.

She speculates that new residents might not know about natural alternatives to riprap, which is often promoted by landscape contractors.

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“It's often private companies, and that's been their way of fixing things for a long time,” Driessen said.

Lake Steward program co-founder Kris Driessen stands in a section of natural shoreline in East Gull Lake. Ben Hovland | MPR News

Landscape contractors who specialize in restoring natural lakeshores sometimes need to overcome clients’ skepticism or fears about losing their lake access or view.

“Sometimes it's all about education, letting them know that there are other options, other tools in the toolbox” besides riprap, the solution that often comes to mind, said Brad Vierkant, director of ecological projects for Sauk Rapids-based Natural Resource Services.

While in some cases rocks might be the best method to repair an eroding shore, Vierkant prefers more natural solutions, such as using logs made of coconut fiber or other biodegradable material and planting native plants to hold the soil in place.

With Driessen’s guidance, Whitmer has transformed her Gull Lake property. Mowed lawn has been replaced by thick native plants and colorful wildflowers that attract bees and butterflies.

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“It's much more beautiful than it ever was, and there's more wildlife,” Whitmer said. “This morning, I took a video of a fawn nursing on my property at seven in the morning. It was just unbelievable. It’s brought me so much happiness.”

And she’s shifted her thinking about what a lake property should look like. Neat and tidy is OK — inside the house, Whitmer said. “Then, when you go outside, be wild and free.”

Funding for this series is provided in part by the Four Cedars Environmental Fund of the Duluth Superior Area Community Foundation.

- 10 key data points and graphs about loss of shoreline on Minnesota’s lakes