CITY OF HAM LAKE



15544 Central Avenue NE Ham Lake, Minnesota 55304 (763) 434-9555 Fax (763) 434-9599

CITY OF HAM LAKE PLANNING COMMISSION AGENDA MONDAY, OCTOBER 10, 2022

CALL TO ORDER: 6:00 p.m.

PLEDGE OF ALLEGIANCE

APPROVAL OF MINUTES: September 12, 2022

PUBLIC HEARING:

6:01 p.m.

Larry Schwartz requesting Preliminary Plat and Final Plat Approval and Rezoning from R-A, Rural Single Family Residential to R-1, Single Family Residential, for Schwartz Estates (3 single family residential lots) located in Section 23.

NEW BUSINESS:

1. Larson Systems, Inc. requesting Commercial Site Plan approval to construct a 9,900 square foot building and a 17,776 square foot addition (east addition) to the existing 24,000 square foot building at 13847 Aberdeen Street NE (PID# 32-32-23-13-0026)

COMMISSION BUSINESS:

1. City Council Update

CITY OF HAM LAKE PLANNING COMMISSION MINUTES MONDAY, SEPTEMBER 12, 2022

The Ham Lake Planning Commission met for its regular meeting on Monday, September 12, 2022 in the Council Chambers at Ham Lake City Hall located at 15544 Central Avenue NE in Ham Lake, Minnesota.

MEMBERS PRESENT:

Commissioners Brian Pogalz, Kyle Lejonvarn, Scott Heaton,

Jonathan Fisher, Dave Ringler and Erin Dixson

MEMBERS ABSENT:

Commissioner Jeff Entsminger

OTHERS PRESENT:

City Engineer Dave Krugler and Building and Zoning Clerk

Jennifer Bohr

CALL TO ORDER:

Chair Pogalz called the meeting to order at 6:00 p.m.

PLEDGE OF ALLEGIANCE:

The pledge of allegiance was recited by all in attendance.

APPROVAL OF MINUTES:

Motion by Lejonvarn, seconded by Fisher, to approve the minutes of the August 22, 2022 Planning Commission meeting as written. All present in favor, motion carried.

NEW BUSINESS:

Jeff Stalberger, HFN Properties, LLC., requesting Sketch Plan approval for Hidden Forest East 4th Addition (22 Single Family Residential lots and 3 outlots) in Sections 24 and 25 Mr. Jeff Stalberger, Mr. Jeff Stalberger, Jr. and Mr. Ryan Stalberger were present. Mr. Jeff Stalberger stated Hidden Forest East 4th Addition will have 22 lots, three which were originally part of Hidden Forest East 3rd Addition. Mr. Jeff Stalberger stated the three northernmost lots were converted to an outlot after the Hidden Forest East 3rd Addition preliminary plat review because additional evaluation of the land needed to be done to determine if it would be feasible to develop that area. Mr. Jeff Stalberger stated he has been working with the City Engineer to ascertain where access to Lexington Avenue NE could be in the future; conceptually 150th Avenue NE will extend to the west through a "future phase" as shown on the Hidden Forest East 4th Addition concept plan. Mr. Jeff Stalberger stated there are three outlots (A, B, C) shown on the concept plan. Mr. Jeff Stalberger stated his intention is to deed outlot A back to the Bexell family and outlots B and C back to the Knoll family. Chair Pogalz asked Mr. Jeff Stalberger if another ingress/egress connection is one, future phase away as there have been several serious

accidents at the intersection of 143rd Avenue NE and Lexington Avenue NE, the only ingress/egress to the three current Hidden Forest East developments. Mr. Jeff Stalberger stated it will depend on land acquisition negotiations with the land owners. Mr. Jeff Stalberger stated Engineer Collins informed him that Anoka County Highway Department has applied for a grant to upgrade Lexington Avenue NE in 2026. Chair Pogalz asked Engineer Krugler to comment on the development. Engineer Krugler stated FEMA Letters of Map Amendment will be needed for Lots 1, 2, 3, 5, 6 and 7, Block 1, Lot 2, Block 2 and Lot 3, Block 3 and that money in lieu of parkland should be recommended for this development; the Coon Creek Watershed District will require that post development 100year discharge rates do not exceed pre-development 25-year rates and a National Heritage Information System data review by the DNR will be required to determine if any state-protected species may be located within the plat boundary. Mr. Jeff Stalberger stated he knows there are some huckleberry plants within the development that are considered state-protected species. Motion by Pogalz, seconded by Fisher, to recommend approval of the Sketch Plan presented by Jeff Stalberger, HFN Properties, LLC, for Hidden Forest East 4th Addition, a 22-lot single family residential development, 3 outlots located in Sections 24 and 25 subject to obtaining FEMA Letters of Map Amendment for Lots 1, 2, 3, 5, 6 and 7, Block 1, Lot 2, Block 2 and Lot 3, Block 3, accepting money in lieu of parkland, meeting the recommendations of the City Engineer and meeting all City, State and County requirements. All present in favor, motion carried. This application will be placed on the City Council's Monday, September 19, 2022 agenda.

Chair Pogalz asked Mr. Jeff Stalberger if he plans to finish the platting process this year. Mr. Jeff Stalberger stated he intends to complete the plat process next year.

COMMISSION BUSINESS:

City Council Update

Chair Pogalz stated the City Council approved the Special Home Occupation Permit for Bakkene Machining and Service less the suggested recommendation allowing customer traffic; Article 9 of the City Code must be amended to allow customer traffic. The Planning Commission will review some provisions in Article 9 in the future. Chair Pogalz informed the Commissioners the City has contracted with a new law firm, Berglund, Baumgartner, Kimball and Glaser, LLC. There will not be a Planning Commissioner present at the September 19, 2022 City Council meeting.

ADJOURNMENT:

Motion by Heaton, seconded by Fisher, to adjourn the Planning Commission meeting at 6:17 p.m. All present in favor, motion carried.

Jennifer Bohr Zoning and Building Clerk

CITY OF HAM LAKE PLANNING COMMISSION REQUEST APPLICATION INSPECTION REPORT

MEETING DATE:
INSPECTION ISSUED TO:Erin Dixson
APPLICANT/CONTACT:Larry Schwartz
TELEPHONE NUMBER: 612-386-6180 or leschwartz@victorinc.com
BUSINESS/PLAT NAME: Schwartz Estates
ADDRESS/LOCATION OF INSPECTION: 4021 155th Ave NE
APPLICATION FOR: Preliminary Plat
RECOMMENDATION:
DATE:
PLANNING COMMISSIONER SIGNATURE:



PLANNING REQUEST

CITY OF HAM LAKE

15544 Central Avenue NE Ham Lake, MN 55304

Phone (703) 434-9555 Fax (703) 235-1097
Date of Application 8-25-202- Date of Receipt
Receipt #
Meeting Appearance Dates:
Planning Commission 10-10-22 City Council
,
Please check request(s):
Metes & Bounds Conveyance Commercial Building Site
Sketch Plan Certificate of Occupancy Preliminary Plat Approval* Home Occupation Permit
Final Plat Approval Conditional Use Permit (New)*
Rezoning*
Multiple Dog License*
*NOTE: Advisory Signage is required for land use alterations and future road connections.
This application also requires a Public Hearing. Such fees shall be deducted from deposit.
Development/Business Name: SCHWARTE ESTATES
Address/Location of property: 4021 1555 AVE NE
Legal Description of property: EAST GOO FEET OF NORTH 726 FEET OF WEST 2052-14 FEET OF SY2 OF NEY4, Sec-32, T.32, 1223 PIN # 23-32-23-14-0003 Current Zoning 12-4 Proposed Zoning 12-1
Notes: 3 LOT MINOR PLAT
Applicant's Name: LARIZY SCHWANTZ
Business Name: NA
Address 1543 105TY LANE NW
City COON RAPIDS State MN Zip Code 55433
Phone Cell Phone 6/2-386-6/80 Fax
Email address leschwartz @ victorine com
You are advised that the 60-day review period required by Minnesota Statutes Chapter 15.99 does
not begin to run until all of the required items have been received by the City of Ham Lake.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SIGNATURE JANSIMED SHEWAFT DATE 25-AUG-ZOZZ

- FOR STAFF USE ONLY -
ACTION BY: Planning Commission



Office (763) 862-8000 Fax (763) 862-8042

Memorandum

Date:

September 28, 2022

To:

Planning Commissioners

From:

Tom Collins, City Engineer

Subject:

Schwartz Estates

Introduction:

The Preliminary and Final Plat for Schwartz Estates subdivides the 10-acre 4012 155th Avenue / 23-32-23-14-0003 parcel (https://gis.anokacountymn.gov/propertysearch/?find=23-32-23-14-0003) into three lots. The existing house and accessory buildings are located on proposed Lot 1, Block 1. Rural Single Family Residential (R-A) and the proposed zoning is Single Family Residential (R-1). A 600-scale zoning map, 100-scale aerial photo and 400-scale half-section map are attached.

Discussion:

The Preliminary Plat, Grading Plan, Livability Plan, Details, Storm Water Pollution Prevention Plan and Stormwater Drainage Report received September 26th and the Final Plat received September 14th, address the prior review comments. The proposed subdivision falls under the Minor Plat portion of City Code Section 10-101. The gravel portion of the existing driveway will be removed.

Because the minor plat is utilizing the existing infrastructure, and no construction is required other than individual lot development, a Development Agreement will not be required. The developer will need to pay a \$200 drainage fund contribution along with a \$2,500 parkland dedication fee for each of the three lots.

The Soil Boring Test Report confirms that there is adequate area for a primary and secondary septic system for all three lots. The attached September 20th Tradewell septic certification certifies that the lots will support two standard septic systems in accordance with Minnesota Rules 7080.

The Coon Creek Watershed District (CCWD) conditionally approved the minor plat at their September 12th Board of Directors meeting. The Notice of Permit Application Status is attached. The CCWD permit will be issued once the \$3,300 escrow is paid. The CCWD did not require a Natural Heritage Information System data review by the DNR to determine whether any state-protected species may be located within the property.

Recommendations:

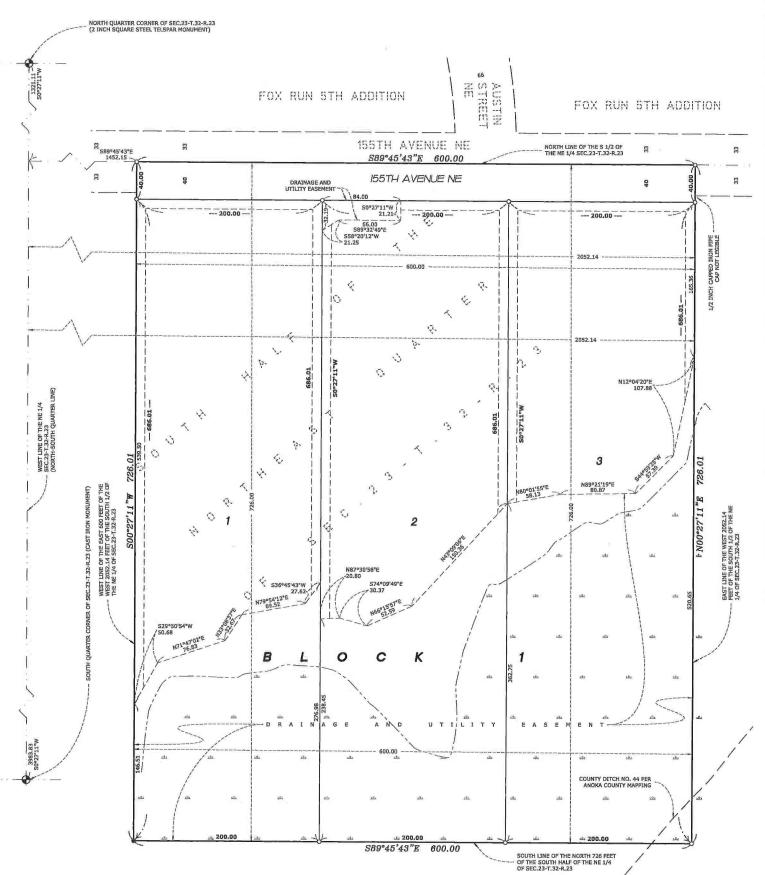
It is recommended that the Preliminary Plat and Final Plat for Schwartz Estates be recommended for approval.

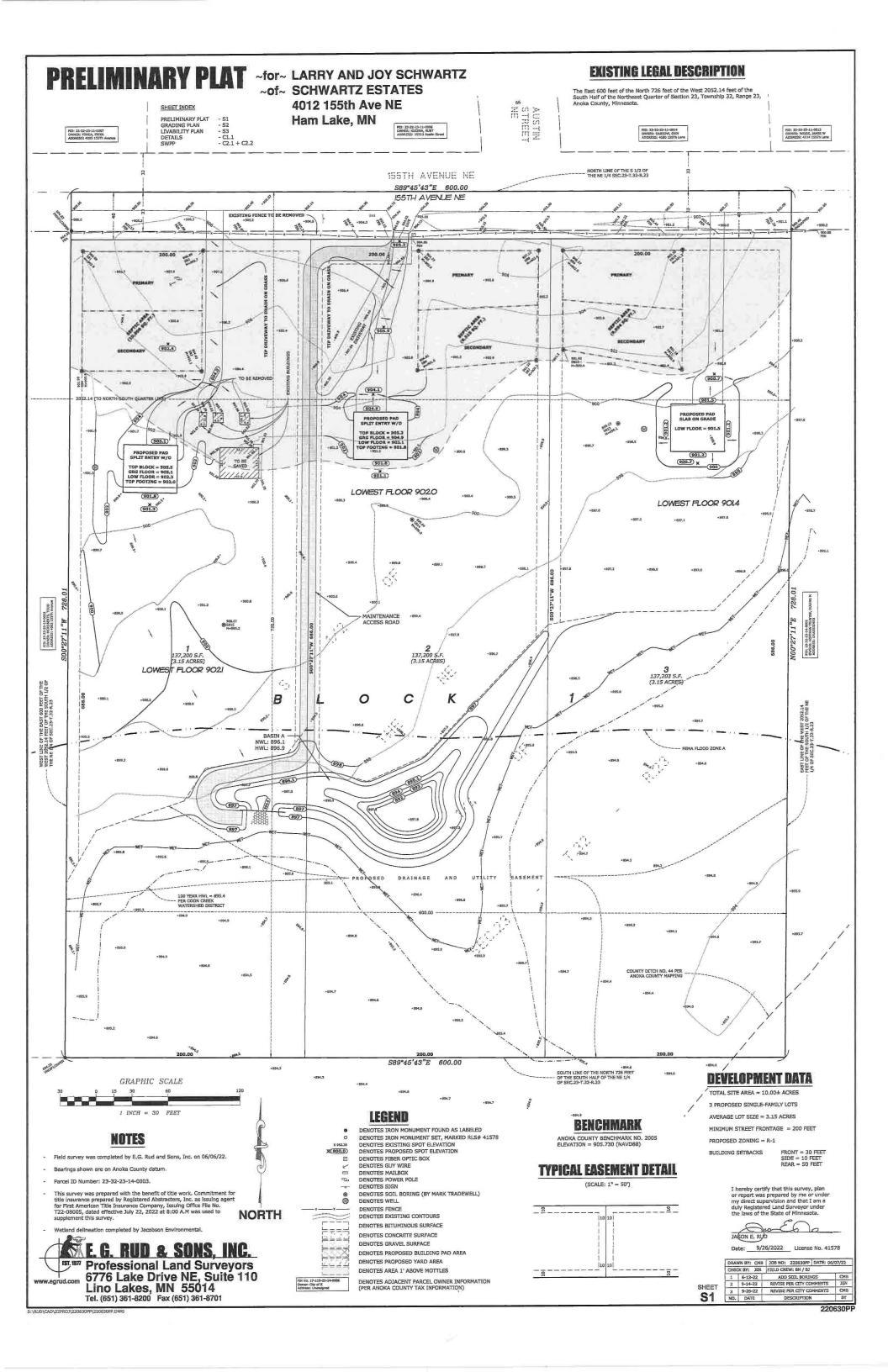
PLAT.DWG	
FINAL	
220630PP FIN	
FILENAME: 220630PP FINAL PLAT.DWG	

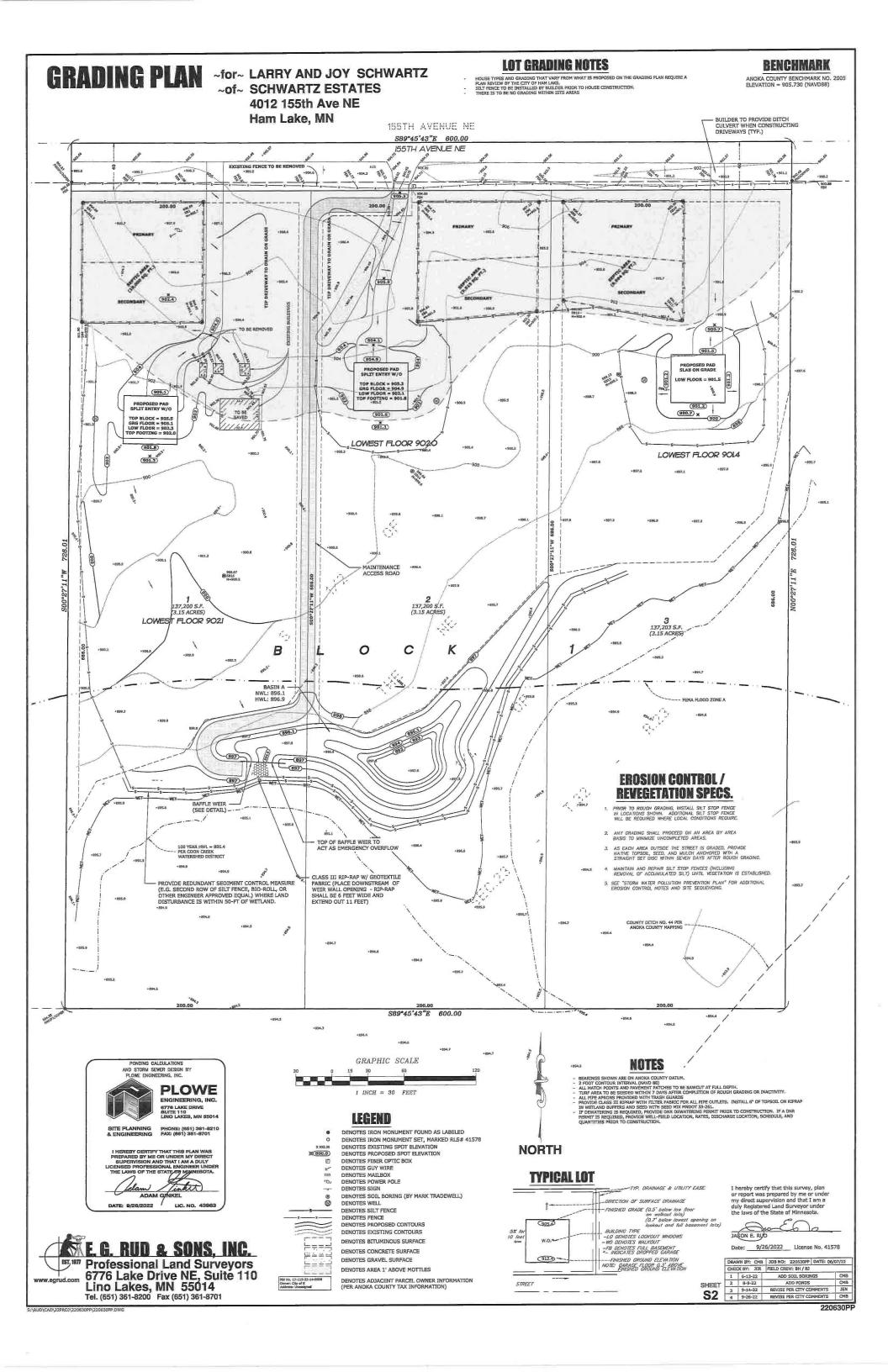
KNOW ALL PERSONS BY THESE PRESENTS: That Lawrence E. Schwartz and Joy A. Schwartz, husba	nd and wife, owners of the following described property:	001
The East 600 feet of the North 726 feet of the West 2052.14 feet of the South Half of the North	heast Quarter of Section 23, Township 32, Range 23, Anoka County, Minnesota.	5 U
Have caused the same to be surveyed and platted as SCHWARTZ ESTATES and do hereby dedicate this plat.	to the public for public use the public way and the drainage and utility easements as shown on	
In witness whereof said Lawrence E. Schwartz and Joy A. Schwartz, husband and wife, have hereunt this day of	to set their hands	
		NORTH QUARTER CORNER OF (2 INCH SQUARE STEEL TELSI
Lawrence E. Schwartz Joy A. Schwartz		
STATE OF MINNESOTA COUNTY OF		Z71111 Z71111 Z71111 Z
This instrument was acknowledged before me thisday of, 20	by Lawrence E. Schwartz and Joy A. Schwartz, husband and wife.	300
(Signature)		·
Notary Public, (Print name)		589°45'43"E
My Commision Expires		E PROPERTY OF THE PROPERTY OF
I Jason E. Rud do hereby certify that this plat was prepared by me or under my direct supervision; i representation of the boundary survey; that all mathematical data and labels are correctly designate within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section public ways are shown and labeled on this plat.	ed on this plat; that all monuments depicted on this plat have been, or will be correctly set	
Dated this day of, 20		
Jason E. Rud, Licensed Land Surveyor Minnesota License No. 41578	LEGEND	
Millinesota License No. 41576	O DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578	
STATE OF MINNESOTA COUNTY OF	DENOTES FOUND 1/2 INCH OPEN IRON PIPE DENOTES ANOKA COUNTY SECTION MONUMENT, AS NOTED	
This instrument was acknowledged before me this day of, 20 by	T	
(Signature)		
Notary Public, County, Minnesota My Commision Expires	FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 23, TOWNSHIP 32, RANGE 23, ANOKA COUNTY, MINNESOTA IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 45 MINUTES 43 SECONDS EAST.	Gas
CITY COUNCIL, CITY OF HAM LAKE, MINNESOTA		171E NE 1/4 1.23 H QUAKTER U
This plat of SCHWARTZ ESTATES was approved and accepted by the City Council of the City of Ham and sald plat is in compilance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.	n Lake, Minnesota at a regular meeting thereof held this day of, 20,	WEST LINE OF THE NE 1/4 SEC.23-1.23-2.23 (NORTH-SOUTH QLAKTER 6. 0.1 V. 339.50
CITY COUNCIL, CITY OF HAM LAKE, MINNESOTA		001
Ву Мауог Ву Clerk	DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:	728
	(NOT TO SCALE)	AUMENT)
COUNTY SURVEYOR		RON MOI F 600 FE THE 50U 32-R-23
I hereby certify that in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat hat this day of	as been reviewed and approved	CL23 (CASTI I THE EAST) THE FEET OF: THE FEE
David M. Ziegimeier Anoka County Surveyor	BEING 10 FEET IN WIDTH ADJOINING RIGHT OF	REC.23-T.32-P. WEST LINE (WEST 2052, THE NE 1/4
COUNTY AUDITOR/TREASURER	WAY LINES AND 10 FEFT IN WIGHT ADDIDINING SIDE LOT LINES UNLESS OTHERWISE SHOWN.	6
Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, taxes payable in the year 20 on the 272.12, there are no delinquent taxes and transfer entered this day of, 2	land hereinbefore described have been paid. Also, pursuant to Minnesota Statutes, Section 20	2525 200 NR PE
		н одментвя
Property Tax Administrator By		HIJOS -
COUNTY RECORDER/REGISTRAR OF TITLES COUNTY OF ANOKA, STATE OF MINNESOTA		
I hereby certify that this plat of SCHWARTZ ESTATES was filed in the office of the County Recorder	Registrar of Titles for public record on this nent Number	3963.83 86.53 th
County Recorder/Registrar of Titles	-	
By, Deputy	GRAPHIC SCALE	sile
	50 0 25 50 100 200	$\sqrt{\nu}$
E G RIID & SONS INC	(SCALE IN FERT)	***
E.G. RUD & SONS, INC. 1857,1877 Professional Land Surveyors	1 INCH = 50 FEET NORTH	
Trolessional Land Surveyors		

HWARTZ ESTATES

City of Ham Lake **County of Anoka** Sec. 23, T32, R23





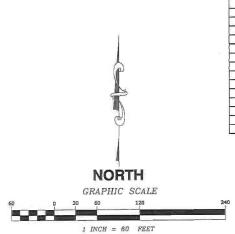


LIVABILITY PLAN

~for~ LARRY AND JOY SCHWARTZ ~of~ SCHWARTZ ESTATES 4012 155th Ave NE Ham Lake, MN

EXISTING LEGAL DESCRIPTION

The East 600 feet of the North 726 feet of the West 2052.14 feet of the South Half of the Northeast Quarter of Section 23, Township 32, Range 23, Anoka County, Minnesota.



											Low Floor					
Lot	Block	Total Lot Area	Yard Area	Septic Area (sq. ft)	Building Pad Area	Proposed Building Pad	Garage Floor	Proposed Low	Proposed Low	Lowest Floor	Determining	Boring#	Boring	Mottles	Building	
201	DIO GIL	(sq. ft.)	(sq. ft.)	(sq. ft.)	(sq. ft.)	4' Above Unsuitable (sq. ft.)	Elevation	Floor Elev.	Opening	Elevation	Factor		Elevation	Elevation	Type	Graded
1	1	137,200	72,874	10,000	10,000	704	905.1	902.3	902.3	902.1	MOTTLED	SB1	904.09	902.9	SPLIT	NO
-		137,200	72,01	20,000							SOILS	SB2	906.89	902.7	ENTRY	
	_		_								PER SB3	\$B3	904.42	901.1	W/O	
_												SB4	900.9	900.9		
			-									SB15	900.67	900.2		
-		137,200	62,848	9,515	10,000	0	904.9	902.1	902.1	902.0	MOTTLED	SB5	904.77	903.4	SPLIT	NO
2	1	137,200	02,040	9,313	10,000		20.112				SOILS	586	904.81	901.0	ENTRY	
_											PER SB6	SB7	901.20	900,2	W/O	
			-									SB8	907.13	902.6		=
												SB14	899.64	899.0		
2		137.203	41,061	9,094	10,000	0	901.5	901.5	901.5	901.4	MOTTLED	SB9	906.37	902.0	SLAB	NO
3	1	137,205	41,001	3,034	10,000						SOILS	SB10	903.50	901.3	ON	
	_		_			-					PER SB12	SB11	901.18	900.0	GRADE	
												SB12	901.62	900.4		
			_				1					SB13	899,13	898.1		

155TH AVENUE NE

200

B

LOWEST FLOOR 9024

100 YEAR HWL = 895.4 PER COON CREEK

S89°45'43"E 600.00

LOWEST FLOOR 9020

C

155TH AVENUE NE

NE STREET

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 requiremer

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 Unsultable Soils. The Eligible Building Area may not be irregular in shape, and should be generally rectangular or ovold, 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 unsultable 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. fifty percent of the lineal perimeter of the Eligible Bullding 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 irragular in shape except within thirty feet of the locations where the Yard Area is contiguous to the Eligible Bullding 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.

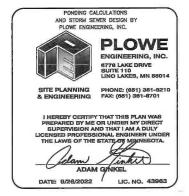
i) For walkout designs, the low floor elevation shall be at least one foot above the 100 year flood contour, but, notwithstanding the 100 year flood contour, not less than one foot above unsuitable soils, as

nood contour, not less than one not 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

- Field survey was completed by E.G. Rud and Sons, Inc. on 06/06/22.
- Bearings shown are on Anoka County datum.
- Parcel ID Number: 23-32-23-14-0003.
- This survey was prepared with the benefit of title work. Commitment for title Insurance prepared by Registered Abstracters, Inc. as Issuing agent for First American Title Insurance Company, Issuing Office File No. T22-08005, dated effective July 22, 2022 at 8:00 A.M was used to supplement this survey
- Wetland delineation completed by Jacobson Environmental.



Professional Land Surveyors 6776 Lake Drive NE, Suité 110 Lino Lakes, MN 55014 Tel. (651) 361-8200 Fax (651) 361-8701

LEGEND

DENOTES IRON MONUMENT FOUND AS LABELED DENOTES IRON MONUMENT SET, MARKED RLS# 41578 DENOTES EXISTING SPOT ELEVATION DENOTES PROPOSED SPOT ELEVATION × 952.36 ⊗(800.0) DENOTES FIBER OPTIC BOX DENOTES GUY WIRE DENOTES GUY WIRE
DENOTES MALIBOX
DENOTES POWER POLE
DENOTES SIGN
DENOTES SOIL BORING (BY MARK TRADEWELL)
DENOTES WELL

DENOTES FENCE DENOTES EXISTING CONTOURS DENOTES BITUMINOUS SURFACE

DENOTES CONCRETE SURFACE DENOTES GRAVEL SURFACE DENOTES PROPOSED BUILDING PAD AREA DENOTES PROPOSED YARD AREA

DENOTES PROPOSED SEPTIC AREA DENOTES AREA 1' ABOVE MOTTLES DENOTES ADJACENT PARCEL OWNER INFORMATION (PER ANOKA COUNTY TAX INFORMATION) BENCHMARK

ANOKA COUNTY BENCHMARK NO. 2005 ELEVATION = 905.730 (NAVD88)

TYPICAL EASEMENT DETAIL (SCALE: 1" = 50')



	I her
	or rei
	my di
-	duly
-	the la

LOWEST FLOOR 9014

3

(3.15 ACRES)

1

COUNTY DITCH NO. 44 PER ANOKA COUNTY MAPPING

reby certify that this survey, plan eport was prepared by me or under direct supervision and that I am a Registered Land Surveyor under laws of the State of Minnesota.

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

DEVELOPMENT DATA

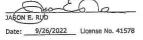
TOTAL SITE AREA = 10.00± ACRES 3 PROPOSED SINGLE-FAMILY LOTS

AVERAGE LOT SIZE = 3.15 ACRES

PROPOSED ZONING = R-1

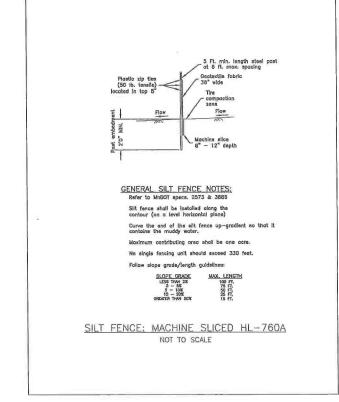
BUILDING SETBACKS

MINIMUM STREET FRONTAGE = 200 FEET



| DRAWN BY: CMB | JOB NO: 220630PP | DATE: 06/07/22 | CHECK BY: JER | FIELD CREW: BH / BJ 1 9-14-22 REVISE PER CITY COMMENTS JEN
2 9-26-22 REVISE PER CITY COMMENTS CMB SHEET **S3**

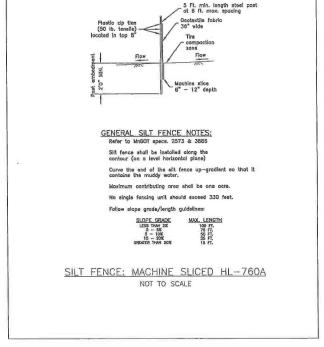
220630PP

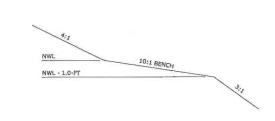


BOARD 2 ORIFICE

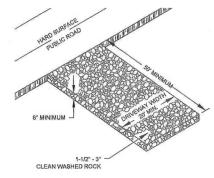
BOARD 2

FRONT VIEW

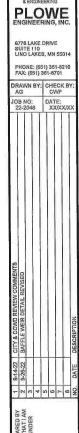




TYPICAL POND SECTION N.T.S.



ROCK CONSTRUCTION EXIT



SCHWARTZ ESTATES
HAM LAKE, MN
DETAILS
DETAILS

SHEET

C1.1

PLAN VIEW

BAFFLE WEIR

NOTES:

1. STAINLESS STEEL NON-RUSTING
BOLTS REQUIRED
2. USE 4' MAXIMUM SPACING
BETWEEN POSTS.

EL=896.9

EL=895.6

EL=894,6

· 2' X 6" PRESSURE TREATED BOARDS (TYP)

EL=694.0

-- BOARD 2 -- EL=896.1

SIDE VIEW

4.2 PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETE. [MINN. R. 7990]

CUMPLETE, MINN. N. 7990)

4.3 PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE, INCLIDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN OUT, OR TRANSFERRING OVERHOLD OF A SITE TO A MOTHER PRRYT. THE PERMITTEES COVERAGE UNDER THIS PERMIT THE PERMITTEES COVERAGE UNDER THIS PERMIT TERMINATES AT MIDITION OF THE SUBMISSION DATE OF THE NOT. [MINN. R. 7990]

4.4 PERMITTEES MAY TERMINATE PERMIT COVERAGE PRIOR TO COMPLETION OF ALL CONSTRUCTION ACTIVITY IF THEY MEET ALL OF THE FOLLOWING CONDITIONS:

A. CONSTRUCTION ACTIVITY HAS CEASED FOR AT LEAST 90 DAYS; AND

B. AT LEAST 90 PERCENT (BY AREA) OF ALL ORIGINALLY PROPOSED CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PERMANENT COVER HAS BEEN ESTABLISHED ON THOSE AREAS; AND

C. ON AREAS WHERE CONSTRUCTION ACTIVITY IS NOT COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED; AND D. THE SITE COMPLIES WITH ITEM 13.3 THROUGH 13.7.

AFTER PERMIT COVERAGE IS TERMINATED UNDER THIS TIEM, ANY SUBSEQUENT DEVELOPMENT ON THE REMAINING PORTIONS OF THE SITE WILL REQUIRE PERMIT COVERAGE IF THE SUBSEQUENT DEVELOPMENT ITSELF OR AS PART OF THE REMAINING COMMON PLAN OF DEVELOPMENT OR SALE WILL RESULT IN LAND DISTURBING ACTIVITIES OF ONE (1) OR MORE ACRES IN SIZE. [MINN. R. 7090]

4.5 PERMITTEES MAY TERMINATE COVERAGE UPON MPCA APPROVAL AFTER SUBMITTING INFORMATION DOCUMENTING THE OWNER CANCELED THE PROJECT. (MINN. R. 7080)

6.1 SWPPP AMENOMENTS. (MINN. R. 7990)
6.2 ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES. CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS. [PINN. R. 7090]
6.3 PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT PROBLEMS DIGNIFIED ON THE STRUCTURE OF T

TO SURFACE WATERS OR GROUNDWATER, IMINN R. 7090]

6.4 PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNER OR OPERATOR, USEPA OR MPCA OFFICIALS. INDICATE THE SWPP IS NOT FEFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES (E.G., NUISANCE CONDITIONS AS DEFINED IN MINIM. R. 7050.0210, SUBP. 2) OR THE SWPPP IS NOT CONSISTENT WITH THE OBJECTIVES OF A USEPA APPROVED TMOL. [MINN. R. 7050.0210]

7.1 BMP SELECTION AND INSTALLATION, [MINN. R. 7090]

7.2 PERMITTEES MUST SELECT, INSTALL, AND MAINTAIN THE BMPS IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES. [MINN. R. 7090]

8.1 EROSION PREVENTION PRACTICES. [MINN. R. 7090]

8.2 BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED. [MINN. R.

8.2 BERMITTEES MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN STEEP SLOPES MUST BE DISTURBED, PERMITTEES MUST USE TECHNIQUES SUCH AS PHASING AND TRAILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING). [MINN. R. 7090]

8.4 PERMITTEES MUST STRABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES, TRABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CLESSED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING TO ALENDAR DAYS. STRABILIZATION MUST BE COMPLETED NO LATER THAN T CALENDAR DAYS AFFER THE CONSTRUCTION ACTIVITY HAS CEASED. STRABILIZATION MUST BE COMPLETED NO LATER THAN T CALENDAR DAYS AFFER THE CONSTRUCTION ACTIVITY HAS CEASED. STRABILIZATION MUST BE COMPLETED NO LATER THAN T CALENDAR DAYS AS TABULIZATION MUST BE COMPLETED NO LATER THAN T CALENDAR DAYS AS TABULIZATION MUST BE COMPLETED ON CONSTRUCTED BASE COMPONENTS OF ROOMS, PRAKING LOTS AND SIMILAR SUBFACES. STRABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEPONICITION CONCRETE STOCKPILES, SAND STOCKPILES, SAND STOCKPILES SILT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE, (MINN. R. 7090]

8.5 FOR PUBLIC WATERS THAT THE MINNESOTA DAYS AFFENDED WORK IN WATER RESTRICTIONS* DURING SPECIFIED FISH SPAWNING TIME FRAMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 204 FEBRO FET OF THE WATER'S EDGE, AND THAT DRAIN TO THESE WATERS, WITHIN 24 HOURS DURING THE RESTRICTION PERMOD. (MINN. R. 7090]

8.6 PERMITTERS MUST STABILIZET THE NORMAL WETTER PERMITEER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR

AG FREMITTEES MUST STABILIZE THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE WITHIN 24 HOURS AFTER CONNECTING TO A SURPACE WATER OR PROPERTY EDGS. PERMITTEES MUST COMPLETE STABILIZATION OR FREMAINING PORTIONS OF TEMPORARY OR PERMANENT DITCHES OR SWALES WITHIN 7 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE AND CONSTRUCTION IN THAT PORTION OF THE DITCH TEMPORARILY OR PERMANENTLY CESSES, IMMN. R.

B. 7 TEMPORARY OR PERMANENT DITCHES OR SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION (WITH PROPERLY DESIGNED ROCK-DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. PERMITTEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAINMENT SYSTEM CEASES. [MINN. R. 7090]

CONTAINMENT STIPE CLEASES, IRMIN, N. 7990)

8.8 PERMITTEES MUST NOT USE MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES WITHIN ANY PORTION OF THE NORMAL WETTED PERMITTER OF A TEMPORARY OR PERMANENT DRAINAGE DITC! OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT, [MINN, R. 7890]

8.9 PERMITTEES MUST PROVIDE TEMPORARY OR PERMANENT ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM. (MINN. R. 7090) 8.10 PERMITTEES MUST NOT DISTURB MORE LAND (I.E., PHASING) THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 1.1. (MINN. R. 7090)

9.1 SEDIMENT CONTROL PRACTICES. [MINN. R. 7090]

2.4 SEQUIMENT CONTROL PRACTICES. [MINN. R. 7090]

9.2 PERMITTEES MUST ESTABLISH SEDIMENT CONTROL BMPS ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT AREAS OF THE SITE AND TOWNGRADIENT AREAS OF THE SITE AND TOWN AND SUPPORT OF THE SITE AND THE SYSTEMS. PERMITTEES MUST LOCATE SEDIMENT CONTROL PRACTICES BURGADIENT OF ANY BUFFER ZONES. PERMITTEES MUST INSTALL SEDIMENT CONTROL PRACTICES BEFORE ANY PURPORDIENT LONG SITURIENT SCATTUTIES BEGIN AND MUST KEEP THE SEDIMENT CONTROL PRACTICES IN PLACE UNTIL THEY ESTABLISH PERMANENT COVER, (MINN. R. 7090)

9.3 IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON REQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENTS, PERMITTEES MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO ELINIANTE THE OVERLOADING AND AMEND THE SWPPP TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUISED IN ITEM 6.3. [MINN. R. 7090]

A TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE OF SITE CONDITIONS. [MINN. R. 799]

REPROPULATE CONTROL POWER PROMISE. PRIMARY AND ASSESSMENT OF A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, PERMITTEES MUST IN AN UPLAND PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER, [MINN. R. 790] 9.6 PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR REUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED. PERMITTEES MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE. [MINN. R. 7090]

9.7 PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPS DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET. [MINN. R. 7090] 9.8 PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITTEES OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/MINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER), PERMITTEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP, (MIAN. R. 7090]

9.9 PERMITTEES MUST PROVIDE SITE FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERMETER, [MINN. R. 7090]
9.10 PERMITTEES MUST LOCATE STOCKPILES OUTSIDE OF NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORHWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORHWATER. [MINN. R. 7090]

9.11 PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE OR ONTO PAVED ROADS WITHIN THE SITE. [MINN. R. 7090]

9.12 PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING ONTO THE STREET, IMINN. R. 7090]

9.13 PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14. (MINN. R. 7090) 9.14 IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION. [MINN. R. 7090]

9.15 PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE, [MINN, R. 7090]

9.16 PERMITTEES MUST DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS UNLESS INFEASIBLE, [MINN. R. 7090] 9.1.) PERMITTEES MUST DIRECT DISCHARGES PROMISED TO VEGETATE AREAS UNLESS INTERSIBLE, (MINN. N. 7091)
9.1.) PERMITTEES MUST PRESENVE A 50 FOOT NATURAL BUFFER OR, IF A BUFFAR IS INFEASIBLE ON THE STIF, PROVIDE
REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE
PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. PERMITTEES MUST INSTALL
PERIMETER SEDIMENT CONTROLS AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE. NATURAL
BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER
CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. IF PRESERVING THE BUFFER IS INFEASIBLE,
PERMITTEES MUST DOCUMENT THE REASONS IT THE SWPPS, SHEET PILLING IS A REDUNDANT PERIMETER CONTROL IF
INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER. (MINN. R. 7090)

9.18 PERMITTEES MUST USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSI AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROL SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE, (MINN. R. 7090)

10.1 DEWATERING AND BASIN DRAINING. [MINN. R. 7090]

10.2 PERMITTEES MUST DISCHARGE TURBIO OR SEDIMENT-JADEN WATERS RELAYED TO DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCHJOTICH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENT BASIN OF HER PROJECT SITE UNLESS INFREASIBLE, PERMITTEES MAY DEWATER TO SUBFACE WATERS IF THEY YUSUALLY, CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2) WATER TO SUBFACE WATER TO A SEDIMENTATION BASIN PRIOR WATER TO A SEDIMENTATION BASIN PRIOR ensure adequal et reatment has been obtained and nuisarce conditions (see minn. R. 7950.021), obby. 2.
NOT RESULT PROUTHE DISCHARGE. IF PERMITTEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PR
TO ENTERING A SURFACE WATER, PERMITTEES MUST TREAT IT WITH APPROPRIATE BMPS SUCH THAT THE DISCHARGE
NOT ADVERSELY AFFECT THE SURFACE WATER NO ROWNSTREAM PROPERTIES (MINN. R. 7950.0210)

10.3 IF PERMITTEES MUST DISCHARGE WATER CONTAINING OIL OR GREASE, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G., CARTRIDGE FILTRS, ABSORBENTS PADS) PRIOR TO DISCHARGE, (MINN, R. 7090)

K. 7999) 10.5 IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION, IGNIN, R. 7990]

11.1 INSPECTIONS AND MAINTENANCE. [MINN. R. 7090]

11.2 PERMITTEES MUST ENSURE A TRAINED PERSON, AS IDENTIFIED IN ITEM 21.2.B, WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFFER A RAINFALL EVENT GREATER THAN 12. LINCH IN 24 HOURS. [MINN. R. 7990]

AFTER A RAINFALL EVENT GREATER THAN 1/2 INCH IN 24 HOURS, (MINN. R. 7090)

11.4 PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPS, [MINN. R. 7090]

11.4 PERMITTEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION
MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS, PERMITTEES MUST REPAIR, REPLACE OR
MANAGEMENT ALL NON-PUNCTIONAL BMPS WITH PUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS ACE AFTER
DISCOVERY UNLESS AND THE TIME FRAME IS SPECIFIED IN ITEM 1.1.5 OR 11.6, PERMITTEES MAY TAKE ADDITIONAL TIME
IF FIELD CONDITIONS PREVENT ACCESS TO THE AREA [MINN. R. 7990]

IF FIELD CONDITIONS PREVENT ACCESS TO THE AREA, [MINN. R. 7090]

11.5 DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND

11.5 DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND

CONVEYANCE SYSTEMS BUT NOT CURB AND GUITER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION.

PERMITTEES MUST REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS,

CATCH BASINS, AND OTHER PORAINAGE SYSTEMS AND RESTABLIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN

EXPOSED SOIL, PERMITTEES MUST COMPLETE REMOVAL AND STABILIZATION WITHIN SEVEN (?) CALENDAR DAYS OF

DISCOVERY UNLESS PRECLUDED BY LEGAR, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS, PERMITTEES MUST USE AL

REASONABLE EFPORTS TO OSTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN

(?) DAYS OF DOTANING ACCESS, PERMITTEES AND RESPONSED FOR THE MOST AND ACCESS. TO STABILIZATION WORLD AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (PLACE).

FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, FRIGR TO CONDUCTING ANY WORK IN SURFACE WATER

(MINN. R. 7090).

11.6. PERMITTEES MUST INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION PROMEROSION OR TRACKED SEDIMENT FROM VEHICLES, PERMITTEES MUST REMOVE SEDIMENT FROM VEHICLES, PERMITTEES MUST REMOVE SEDIMENT FROM DISCOVERY OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. MININ R. 7,000

11.7 PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE. [MINN, R. 7090] 11.8 PERMITTEES MUST DRAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME. [MINN, R. 7090] 11.9 PERMITTEES MUST ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE IN THREE (3) CALENDAR DAYS) IS TRAINED IN THE JOB DUTIES DESCRIBED IN ITEM 21.2.B. [MINN. R. 7090] 11.10 PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS:

A. INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE: OR

ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE, OR

B. WHERE SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCURRING
ANYWHERE ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY BE
SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTIONS TO
RESUME IF CONDITIONS WARRANT; OR

C. WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE SUSPENDED. INSPECTIONS MUST RESUME WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST. [MINN. R. 7090]

11.11 PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE: A. DATE AND TIME OF INSPECTIONS; AND

B. NAME OF PERSONS CONDUCTING INSPECTIONS: AND

C. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND

D. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND E. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES; AND

I FREMITTEES SILE SPECIFIC ANTIMAL DATA FROM RODAR SUBPRIANCES, AND
IF PREMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AN
DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND
OTHER OBVIOUS INDICATORS OF POLLUTANTS; AND

G. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS. (MINN. R. 7090)

12.1 POLLUTION PREVENTION MANAGEMENT MEASURES. [MINN. R. 7090]

12.1 POLIUTION PREVENTION MANAGEMENT MEASURES, IGNIN. A. 70991

12.2 PERMITTEES MUST PLACE BUILDING PRODUCTS AND LANDSCAPE MATERIALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOPS) OR PROTECT PRODUCTS AND LANDSCAPE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER, PERMITTEES ARE NOT REQUIRED TO COVER OF PROTECT PRODUCTS WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO GE ENOPED TO STORMWATER, [MINN. R. 7090]

12.3 PERMITTEES MUST PLACE PESTICLIDES, PERTILIZERS AND TRATMENT CHEMICALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOPS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER, [MINN. R. 7090]

WITH STUMPWALEK, (PINN. K. 7091)

12.4 PERMITTEES MUST STORE HAZAROOUS MATERIALS AND TOXIC WASTE, (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, FETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, DODITIVES, CURRING COMPOUNDS, AND ACIDS) IN SEALED CONTAINREST OF PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. STORAGE AND DISPOSAL OF HAZAROOUS WASTE MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDAR CONTAINMENT AS APPLICABLE, (MINN. R. 7090)

12.5 PERMITTEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035.

12.6 PERMITTEES MUST POSITION PORTABLE TOILETS SO THEY ARE SECURE AND WILL NOT TIP OR BE KNOCKED OVER PERMITTEES MUST PROPERLY DISPOSE SANITARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7041. [MINN. R. 7041] PERMITTEES MUST PROPERLY DISPOSE SANTIARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7941, [MINN. R. 7641]

1.7. PERMITTEES MUST TAKE REASONABLE STEEPS TO REVEWIT THE DISCHARGE OF SPILLED ON ELAEVE CHEMICALS, INCLIDING FUEL, IROM MAY AREA WHERE CHEMICALS OR RUEL WILL BE LOADED OR UNLOADED INCLIDING THE USE ORAP PANS OR ASSORBENTS UNLESS INVERSIBLE. PERMITTEES MUST ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD IS AVAILABLE FOR RECOVERED SPILLED MATERIALS. PERMITTEES MUST ENDER AND STULLE MASTERIALS. PERMITTEES MUST ENDER AND STULLE MASTERIALS. PERMITTEES MUST ENDER AND STORE SUPPLIES MUST ENDER AND STORE SUPPLIES MUST ENDER OF MASTERIALS. PERMITTEES MUST LITTEES MUST LITTEE FOR MUST BENDER OR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITTEES MUST LINTY UPHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITTEES MUST LINTY UPHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITTEES MUST LINTY OF THE WASHING ACTURITY PROPERLY. PERMITTEES MUST PROPERLY USE AND STORE SOADS, DETERGENTS, OR SOLVENTS. [MINN. R. 7990]

DEFENDENTS, OR SULVENTS. (MINN. R. 7090)

12.9 PERMITTEES MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (E.G., CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY, PERMITTEES MUST PREVENT LIQUID AND SOLID WASHOUT WASTES ROM CONTACTING THE GROUND AND MISTOR DESIGN THE CONTAINMENT SO IT DOES NOT RESULT IN RUNDER FROM THE WASHOUT OPERATIONS OR AREAS. PERMITTEES MUST PROPERLY DISPOSE LIQUID AND SOLID WASTES IN COMPLIANCE WITH MPCA RULES, PERMITTEES MUST INSTALL A SIGN INDICATING THE LOCATION OF THE WASHOUT FACILITY. [MINN. R. 7035, MINN. R. 7090]

13.1 PERMIT TERMINATION CONDITIONS. [MINN, R. 7090]

13.2 PERMITTEES MUST COMPLETE ALL CONSTRUCTION ACTIVITY AND MUST INSTALL PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTING THE NOT. VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A PENSITY OF 70 PERCENT OF 11S EXPECTED INAL GROWTH, VEGETATION IS NOT REQUIRED WHERE THE FUTTON OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER. [MINN. R.

13.3 PERMITTEES MUST CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEM OF ANY ACCUMULATED SEDIMENT AND MUST RANUKE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS IN SECTION 15 THROUGH 19 AND IS OPERATING AS DESIGNED, IMMIN R. 7080]

13.4 PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO SUBMITTING THE NOT, [MINN. R.

13.5 PERMITTEES MUST REMOVE ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPS PRIOR TO SUBMITTING THE NOT. PERMITTEES MAY LEAVE BMPS DESIGNED TO DECOMPOSE ON-SITE IN PLACE. [MINN. R. 7090] 13.6 FOR RESIDENTIAL CONSTRUCTION ONLY, PERMIT COVERAGE TERMINATES ON INDIVIDUAL LOTS IF THE STRUCTURES ARE FINISHED AND TEMPORARY EROSION PREVENTION AND DOWNGRADIENT PERMITER CONTROL IS COMPLETE, THE RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S "HOMEOWNER FACT SHEET" TO THE HOMEOWNER, [MINN. R. 7090]

14.1 TEMPORARY SEDIMENT BASINS, [MINN. R. 7090]

14.2 WHERE TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN TO PROVIDE TREATMENT OF THE MUST PROVIDE THE TEMPORARY SEDIMENT BASIN TO A REMAINENT BASIN FOR THE ADMINISTRATION OF THE ACRES OF DISTURBED OF DISTURBED SOIL TO BE SOIL TO BE SOIL TO BE SOIL TO A COMMON LOCATION, (MINN. R. 7080] 14.3 THE TEMPORARY BASIN MUST PROVIDE LIVE STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A TWO (2)-YEAR, 24-HOUR STORM PROM FACH ACRE DRAINED TO THE BASIN OR 1,800 CUBIC FEET OF LIVE STORAGE PER ACRE DRAINED, WHICHEVER IS GREATER, (MINN. R. 7090)

14.4 WHERE PERMITTEES HAVE NOT CALCULATED THE TWO (2)-YEAR, 24-HOUR STORM RUNOFF AMOUNT, THE TEMPORA BASIN MUST PROVIDE 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE OF THE BASINS' DRAINAGE AREA. (MINN. R. 7090) 14.5 PERMITTEES MUST DESIGN BASIN OUTLETS TO PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. (MINN. R. 7090)

14.6 PERMITTEES MUST DESIGN THE OUTLET STRUCTURE TO WITHDRAW WATER FROM THE SURFACE TO MINIMIZE THE DISCHARGE OF POLLUTANTS, PERMITTEES MAY TEMPORARILY SUSPEND THE USE OF A SURFACE WITHDRAWAL MECHANISM DURING FROZEN CONDITIONS. THE BASIN MUST INCLUDE A STABILIZED EMERGENCY OVERFLOW TO PREVENT FAILURE OF POND INTEGRITY. (MIRN. R. 7090)

14.7 PERMITTEES MUST PROVIDE ENERGY DISSIPATION FOR THE BASIN OUTLET WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER, [MINN, N. 7930] 14.8 PERMITTEES MUST LOCATE TEMPORARY BASINS OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONE REQUIRED IN ITEM 23.11. [MINN. R. 7090]

14.9 PERMITTEES MUST CONSTRUCT THE TEMPORARY BASINS PRIOR TO DISTURBING 10 OR MORE ACRES OF SOIL DRAINING TO A COMMON LOCATION, MINN, R. 70901

TO A CUMMON LOCATION, [MINN, R. 7990]

4.10 WHERE A TEMPORARY SEDIMENT BASIN MEETING THE REQUIREMENTS OF ITEM 14.3 THROUGH 14.9 IS INFEASIBLE,
PERMITTEES MUST INSTALL EFFECTIVE SEDIMENT CONTROLS SUCH AS SMALLER SEDIMENT BASINS AND/OR SEDIMENT
FAMES, SLIF FINESS, MISETANTIVE BUFFER STRIPS OR ANY APPROPRIATE COMBINATION OF MEASURES AS DICTATED BY
INDIVIDUAL SITE CONDITIONS. IN DETERMINING WHETHER INSTALLING A SEDIMENT BASIN IS INFEASIBLE, PERMITTEES
MUST CONSIDER PUBLIC SAFTY AND MAY CONSIDER FACTORS SUCH AS SITE SOILS, SLOPE, AND AVAILABLE AREA ON-SITE,
PERMITTEES MUST DOCUMENT THIS DETERMINATION OF INFEASIBILITY IN THE SWPPP, [MINN, R. 7990]

15,1 PERMANENT STORMWATER TREATMENT SYSTEM, [MINN, R. 7090]

15.2 PERMITTEES MUST DESIGN THE PROJECT SO ALL STORMWATER DISCHARGED FROM THE PROJECT DURING AND AFTER CONSTRUCTION ACTIVITIES DOES NOT CAUSE A VICULTION OF STATE WATER QUALITY STANDARDS, INCLUDING MUSANCE CONDITIONS, EROSION IN RECEIVING CHANNELS OR ON DOWNSLOPE PROPERTIES, OR A SIGNIFICANT ADVERSE IMPACT TO WETLANDS CAUSED BY INVINDATION OR DECREASE OF FLOW, [MINN. R. 7001]

15.3 PERMITTEES MUST DESIGN AND CONSTRUCT A PERMANENT STORMWATER TREATMENT SYSTEM TO TREAT THE WATER QUALITY VOLUME IF THE PROJECT'S ULTIMATE DEVELOPMENT REPLACES VEGETATION AND/OR OTHER PERMOUS SURFACES CREATING A NET INCREASE OF ONE (1) OR MORE CACES OF COMULCATIVE IMPREVIOUS SURFACE, [MINN. X, 7090] 15.4 PERMITTEES MUST CALCULATE THE WATER QUALITY VOLUME AS ONE (1) INCH TIMES THE NET INCREASE OF IMPERVIOUS SURFACES CREATED BY THE PROJECT. [MINN. R. 7090]

15.5 PERMITTEES MUST FIRST CONSIDER VOLUME REDUCTION PRACTICES ON-SITE (E.G., INFILTRATION OR OTHER) WHEN DESIGNING THE PERMANENT STORMWATER TREATMENT SYSTEM, IF THIS PERMIT PROHIBITS INFILTRATION AS DESCRIBED IN ITEM 16.14 HROUGH ITEM 16.21, PERMITTEES MAY CONSIDER A WET SEDIMENTATION BASIN, PILTRATION BASIN OR REGIONAL POND. THIS PERMIT DOES NOT CONSIDER WET SEDIMENTATION BASIN, PILTRATION BASIN OR VOLUME REDUCTION PRACTICES, ININN. R. 7,0901

VOLUME REDUCTION PRACTICES. [PIRIN. N. 7991]

15.6 FOR PROJECTS WHERE THE FULL VOLUME REDUCTION REQUIREMENT CANNOT BE MET ON-SITE, (E.G., THE SITE HAS INFILTRATION PROHIBITIONS), PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP. [MINN. R. 7050]

15.7 PERMITTEES MUST DISCHARGE THE WATER QUALITY VOLUME TO A PERMANENT STORMWATER TREATHERT SYSTEM PRIOR TO DISCHARGE TO A SURFACE WATER, FOR PURPOSES OF THIS ITEM, SURFACE WATERS OO NOT INCLUDE MANATER TO A PERMANENT STORMENT SYSTEM. [MINN. R. 7090] 15.8. WHERE THE PROXIMITY TO BEDROCK PRECLUDES THE INSTALLATION OF ANY OF THE PERMANENT STORMWATER TREATMENT PRACTICES REQUIRED BY SECTIONS 15 THROUGH 19, PERMITTEES MUST INSTALL OTHER TREATMENT SU GRASSED SWALES, SMALLER PONDS, OR GRIT CHAMBERS, PRIOR TO THE DISCHARGE OF STORMWATER TO SURFACE WATERS. [MINN. R. 7090]

WATERS, [MINN. R. 7090]

15.9 FOR LINEAR PROJECTS WHERE PERMITTEES CANNOT TREAT THE ENTIRE WATER QUALITY VOLUME WITHIN THE EXISTING RIGHTOF-WAY, PERMISTING RIGHTOF-WAY, PERMISTOR OR STORMWATER TREATMENT DURING THE PROJECT PLANNING PROCESS. DOCUMENTATION OF THESE ATTEMPTS HUST BE IN THE SWPPP, PERMITTEES MUST STILL CONSIDER VOLUME REDUCTION PRACTICES FIRST AS DESCRIBED IN THEM 15.5. IF PERMITTEES CANNOT OBTAIN ADDITIONAL RIGHT-OF-WAY, EASEMENT OF THE WATER QUALITY VOLUME PRIOR TO DISCHARGE TO OTHER PERMISSION, THEY MUST MAXIMIZE THE TREATMENT OF THE WATER QUALITY VOLUME PRIOR TO DISCHARGE TO

AND ANY ALTO MATCH MICH DESIGN OF THE DESIGN

16.3 PERMITTEES MUST DESIGN INFILTRATION SYSTEMS SUCH THAT PRE-EXISTING HYDROLOGIC CON WETLANDS IN THE VICINITY ARE NOT IMPACTED (E.G., INUNDATION OR BREACHING A PERCHED WAT A WETLAND). (MINN. R. 7090)

A WELLAND), (PINN), K. 7090]

16.4 PERMITTES MUST NOT EXCAVATE INFILTRATION SYSTEMS TO FINAL GRADE, OR WITHIN THREE (3) FEET OF FINAL GRADE, UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED UNLESS THEY PROVIDE RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS (E.G., DIVERSION BERMS) TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE INFILTRATION AREA. [MINN]. R. 7090]

16.5 WHEN EXCAVATING AN INFILITATION SYSTEM TO WITHIN THREE (3) FEET OF FINAL GRADE, PERMITTEES MUST STAKE OFF AND MARK THE AREA SO HEAVY CONSTRUCTION VEHICLES OR EQUIPMENT DO NOT COMPACT THE SOIL IN THE INFILITATION AREA. [AINN. R. 7909] INFLITORITOR ARCA, [UNINN, R. 7090]
16.6 PERMITTEES MUST USE A PRETREATMENT DEVICE SUCH AS A VEGETATED FILTER STRIP, FOREBAY, OR WATER QUALITY INLET (E.G., GRIT CHAMBES) TO REMOVE SOLIDS, FLOATING MATERIALS, AND OIL AND GREASE FROM THE RUNORF, TO IMMAXIMUM EXTENT PRACTICABLE, BEFORE THE SYSTEM ROUTES STORMWATER OT THE INFLITATION SYSTEM, (MINN, R.

1679 JERMITTEES MUST DESIGN INFILTRATION SYSTEMS TO PROVIDE A WATER QUALITY VOLUME (CALCULATED AS AN INSTANTANEOUS VOLUME) OF ONE (1) INCH OF RUNOFF, OR ONE (1) INCH MINUS THE VOLUME OF STORMWATER TREATED BY ANOTHER SYSTEM ON THE SITE, FROM THE NET INCREASE OF IMPERVIOUS SURFACES CREATED BY THE PROJECT. [MINN. R. 7090]

R. 7991)
16.9 PERMITTEES MUST DESIGN THE INFILTRATION SYSTEM TO DISCHARGE ALL STORMWATER (INCLUDING STORMWATER IN EXCESS OF THE WATER QUALITY VOLUME) ROUTED TO THE SYSTEM THROUGH THE UPPERMOST SOIL SURFACE OR ENGINEERED MEDIA SURFACE WITHIN 48 HOURS, PERMITTEES MUST ROUTE ADDITIONAL FLOWS THAT CANNOT INFILTRATE WITHIN 48 HOURS TO BYPASS THE SYSTEM THROUGH A STABILIZED DISCHARGE POINT, [MINN. R, 7999] 16.9 PERMITTEES MUST PROVIDE A MEANS TO VISUALLY VERIFY THE INFILTRATION SYSTEM IS DISCHARGING THROUGH THE SOIL SURFACE OR FILTER MEDIA SURFACE WITHIN 48 HOURS OR LESS. [MINN. R, 7090]

16.10 PERMITTEES MUST PROVIDE AT LEAST ONE SOIL BORING, TEST PIT OR INFILTROMETER TEST IN THE LOCATION OF THE INFILTRATION PRACTICE FOR DETERMINING INFILTRATION RATES. (MINN. R. 7090)

THE INPLINATION PRACTICE FOR UPIES PRINTINES INPLINATION FOLIAS. PIRMIN. A. 2015.

16.1.1 FOR DESIGN PURPOSES, PERMITTEES MUST DIVIDE FIELD MEASURED INFILITATION RAYES BY 2 AS A SAFETY FACTOR OR PERMITTEES CAN USE SOIL-BORING RESULTS WITH THE INFILITATION RATE CHART IN THE MINNESOTA STORNWARTE MANUAL. TO DETERMINE DESIGN INFILITATION RATES. WHEN SOIL BORINGS INDICATE TYPE A SOILS, PERMITTEES SHOULD PERFORM FIELD MEASUREMENTS TO VERIFY THE RATE IS NOT ABOVE 8.3 INCHES PER HOUR. THIS PERMIT PROHIBITS INFILITATION RATE IS ABOVE 8.3 INCHES PER HOUR. (MINN. R. 7090) 16.12 PERMITTEES MUST EMPLOY APPROPRIATE ON-SITE TESTING ENSURE A MINIMUM OF THREE (3) FEET OF SEPARATION FROM THE SEASONALLY SATURATED SOILS (OR FROM BEDROCK) AND THE BEASONALLY SATURATED SOILS (OR FROM BEDROCK) AND THE BOTTOM OF THE PROPOSED INFILTRATION SYSTEM, (MINN, R. 7090)

16.13 PERMITTEES MUST DESIGN A MAINTENANCE ACCESS, TYPICALLY EIGHT (8) FEET WIDE, FOR THE INFILTRATION SYSTEM. (MINN. R. 7090]

STS IEM, (MINN. K. 7991)

16.14 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS THAT RECEIVE RUNOFF FROM VEHICLE FUELING AND MAINTENANCE AREAS INCLUDING CONSTRUCTION OF INFILTRATION SYSTEMS NOT REQUIRED BY THIS PERMIT, (MINN. R. 7990)

INIS PERMIT, IQUINN, K. 7090]

16.15 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS WHERE INFILTRATING STORMWATER MAY MOBILIZE HIGH LEVELS OF CONTANINANTS IN SOIL OR GROUNDWATER, PERMITTEES MUST EITHER COMPLETE THE MPCA'S CONTANINATION SCREENING CHECKLIST OR CONDUCT THEIR OWN ASSESSMENT TO DETERMINE SUITABILITY FOR INFILTRATION, PERMITTEES MUST RETAIN THE CHECKLIST OR ASSESSMENT WITH THE SWIPP, FOR MO INFORMATION AND TO ACCESS THE MPCA'S CONTAMINATION SCREENING CHECKLIST SEE THE MINISESTOR STORMWAT

16.16 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS WHERE SOIL INFILTRATION RATES ARE FIELD MEASURED AT MORE THAN 8.3 INCRESS FER HOUR UNLESS THEY AMEND SOILS TO SLOW THE INFILTRATION RATE SELOW 9.3 INCHES PER HOUR, IMIN. R. 7090]

16.17 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILITATION SYSTEMS IN AREAS WITH LESS THAN THREE (3) FEET OF SEPARATION DISTANCE FROM THE BOTTOM OF THE INFILITATION SYSTEM TO THE ELEVATION OF THE SEASONALLY SATURATES SOILS OR THE TOP OF BEDROCK, LININN, R. 70901 16.18 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS OF PREDOMINATELY HYDROLOGIC SOIL GROUP TYPE D SOILS (CLAY). [MINN. R. 7090]

16.19 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS WITHIN A DRINKING WATER SUPPLY MANAGEMENT AREA (DWSMA) AS DEFINED IN MINN. R. 4720.5100, SUBP. 13, IF THE SYSTEM WILL BE LOCATED A. IN AN EMERGENCY RESPONSE AREA (ERA) WITHIN A DWSMA CLASSIFIED AS HAVING HIGH OR VERY HIGH VULNERABILITY AS DEFINED BY THE MINNESOTA DEPARTMENT OF HEALTH; OR

B. IN AN ERA WITHIN A DWSMA CLASSIFIED AS MODERATE VULNERABILITY UNLESS A REGULATED MS4 PERMITTEE PERFORMED OR APPROVED A HIGHER LEVEL OF ENGINEERING REVIEW SUFFICIENT TO PROVIDE A FUNCTIONING TREATMENT SYSTEM AND TO PREVENT ADVESTEE IMPACTS TO, ORGUNDWOMER; OR

C. OUTSIDE OF AN ERA WITHIN A DWSMA CLASSIFIED AS HAVING HIGH OR VERY HIGH VULNERABILITY, UNLESS A RESULATED MS PERMITTEE PERFORMED OR APPROVIDE A HIGHER LEVEL OF ENGINEERING REVIEW SUFFICIENT TO PROVIDE A FUNCTIONING T

SEE "HIGHER LEVEL OF ENGINEERING REVIEW" IN THE MINNESOTA STORMWATER MANUAL FOR MORE INFORMATION. [MINN. R. 7090]

16.20 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS WITHIN 1,000 FEET UPGRADIENT OR 100 FEET DOWNGRADIENT OF ACTIVE KARST FEATURES, (MINN. R. 7090) DISGRADIENT OR 100 FEET DOWNISCALIENT OF ACTIVE RADGE FEATURES. FIRMS, N. 7090]

16.21 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS THAT RECEIVE RUNOFF FROM THE FOLLOWING INDUSTRIAL FACILITIES NOT AUTHORIZED TO INFILTRATE STORMWATER UNDER THE NPDES STORMWATER PERMIT FOR INDUSTRIAL ACTUITIES AUTHORIZED TO INFILTRATE STORMWATER UNDER THE NPDES STORMWATER PERMIT FOR INDUSTRIAL ACTUITIES. AUTHORIZED AVANDS; SCARP RECYCLING AND WASTE RECYCLING FACILITIES; HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES; OR AIR TRANSPORTATION FACILITIES THAT CONDUCT DECISION ACTIVITIES, [MIN. R. 7090]

17.2 FILTRATION OPTIONS INCLUDE, BUT ARE NOT LIMITED TO: SAND FILTERS WITH UNDERDRAINS, BIOPILTRATION AREAS, SWALES USING UNDERDRAINS WITH IMPERMEABLE CHECK DAMS AND UNDERGROUND SAND FILTERS. IF PERMITTEES UTILIZE A FILTRATION SYSTEM TO MEET THE PERMANENT STORNWATER TREATMENT REQUIREMENTS OF THIS PERMIT, THEY MUST COMPLY WITH ITEMS 17.3 THROUGH 17.11. [MINN. R. 7090]

17.3 PERMITTEES MUST NOT INSTALL FILTER MEDIA UNTIL THEY CONSTRUCT AND FULLY STABILIZE THE CONTRIBUTING DRAINAGE AREA UNLESS THEY PROVIDE RIGOROUS ERGOSION PREVENTION AND SEDIMENT CONTROLS (E.G., DIVERSION BERNS) TO KEEP SEDIMENT AND RUNDEF CONTRIBUTELY AWAY FROM THE PILITATION AREA. [MINN. R. 70]. 17.4 PERMITTEES MUST DESIGN FILTRATION SYSTEMS TO REMOVE AT LEAST 80 PERCENT OF TSS. [MINN. R. 7090] 17.5. PERMITTEES MUST USE A PETEREATMENT DOVICE SUCH AS A VEGETATED FILTER STRIP, SMALL SEDIMENTATION BASIN, WATER QUALITY INLET, FOREBAY OR HYDRODYNAMIC SEPARATOR TO REMOVE SETTLEABLE SOLIDS, FLOATING MATERIALS, AND OLIS AND GREASE FROM THE RUNOFF, TO THE MAXIMUM EXTENT PRACTICABLE, BEFORE RUNOFF ENTERS THE FILTRATION SYSTEM. [MINN. R. 7090]

71.6 PERMITTEES MUST DESIGN PILITARTION SYSTEMS TO TREAT A WATER QUALITY VOLUME (CALCULATED AS AN INSTANTANEOUS VOLUME) OF ONE (1) INCH ON MINUS THE VOLUME OF STORMWATER TREATED BY ANOTHER SYSTEM ON THE SITE, FROM THE INCREASE OF IMPERVIOUS SURFACES CREATED BY THE ROJECT, (MINN

R. 7090]

17.7 PERMITTEES MUST DESIGN THE FILTRATION SYSTEM TO DISCHARGE ALL STORMWATER (INCLUDING STORMWATER IN EXCESS OF THE WATER QUALITY VOLUME) ROUTED TO THE SYSTEM THROUGH THE UPPERMOST SOIL SURFACE OR ROISINEERED MEDIA SUBPRACE WITHIN 48 HOURS. ADDITIONAL FLOWS THAT THE SYSTEM CANNOT FILTER WITHIN 48 HOURS MUST BYPASS THE SYSTEM OR DISCHARGE THROUGH AN EMERGENCY OVERFLOW. (MINN. R. 7090]

17.3 PERMITTEES MUST DESIGN THE FILTRATION SYSTEM TO PROVIDE A MEANS TO VISUALITY VERLY THE SYSTEM IS DISCHARGING THROUGH THE SOIL SURFACE OR FILTER MEDIA WITHIN 48 HOURS. [MINN. R. 7090]

17.9 PERMITTEES MUST EMPLOY APPROPRIATE ON-SITE TESTING TO ENSURE A MINIMUM OF THREE (3) FEET OF SEPARATION BETWEEN THE SEASONALLY SATURATED SOILS (OR FROM BEDROCK) AND THE BOTTOM OF THE PROPOSED FILTRATION SYSTEM, MININ, R. 7090)

17.10 PERMITTEES MUST ENSURE THAT FILTRATION SYSTEMS WITH LESS THAN THREE (3) FEET OF SEPARATION BETWEEN SEASONALLY SATURATED SOILS OR FROM BEDROCK ARE CONSTRUCTED WITH AN IMPERMEABLE LINER. [MINN. R. 7090] T.1.1 THE PREM

18,1 WET SEDIMENTATION BASIN. [MINN. R. 7090]

18.2 PERMITTEES USING A WET SEDIMENTATION BASIN TO MEET THE PERMANENT STORMWATER TREATMENT REQUIREMENTS OF THIS PERMIT MUST INCORPORATE THE DESIGN PARAMETERS IN ITEM 18.3 THROUGH 18.10. [MINN. R.

7939J
18.3 PERMITTEES MUST DESIGN THE BASIN TO HAVE A PERMANENT VOLUME OF 1,800 CUBIC FEET OF STORAGE BELOW THE
OUTLET PIPE FOR EACH ACRE THAT DRAINS TO THE BASIN. THE BASIN'S PERMANENT VOLUME MUST REACH A MINIMUM
DEPTH OF AT LEAST THREE (3) FEET AND MUST HAVE NO DEPTH GREATER THAN 10 FEET. PERMITTEES MUST CONFIGURE
THE BASIN TO MINIMIZE SCOUR OR RESUSPENSION OF SOLIDS. [MINN. R. 7290]

18.4 PERMITTEES MUST DESIGN THE BASIN TO PROVIDE LIVE STORAGE FOR A WATER QUALITY VOLUME (CALCULATED AS AN INSTANTANEOUS VOLUME) OF ONE (1) INCH OF RUNOFF, OR ONE (1) INCH MINUS THE VOLUME OF STORMWATER TREATED BY ANOTHER SYSTEM ON THE SITE, FROM THE NET INCREASE IN IMPERVIOUS SURFACES CREATED BY THE PROJECT. [MINN. R. 7090]

R. 7090]
18.5 PERMITTEES MUST DESIGN BASIN OUTLETS SO THE WATER QUALITY VOLUME DISCHARGES AT NO MORE THAN 5.66
CUBIC FEET PER SECOND (CFS) PER ACRE OF SURFACE AREA OF THE BASIN, (MINN. R. 7090)
18.6 PERMITTEES MUST DESIGN BASIN OUTLETS TO PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING
DEBRIS. BASIN OUTLETS MUST HAVE ENRERY DISSIPATION, (MINN. R. 7090)
18.7 PERMITTEES MUST DESIGN THE BASIN TO INCLUDE A STABILIZED EMPREGENCY OVERFLOW TO ACCOMMODATE STORM
EVENTS IN EXCESS OF THE BASIN'S HYDRAULC DESIGN. [MINN. R. 7090]

18.8 PERMITTEES MUST DESIGN A MAINTENANCE ACCESS, TYPICALLY EIGHT (8) FEET WIDE, FOR THE BASIN, IMINN, R.

7.09.01
18.9 PERMITTEES MUST LOCATE BASINS OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONE REQUIRED IN ITEM 23.11.
PERMITTEES MUST DESIGN BASINS TO AVOID DRAINING WATER FROM WETLANDS UNLESS THE IMPACT TO THE WETLAND
COMPLES WITH THE REQUIREMENTS OF SECTION 22. [MINN. 7.090]
18.10 PERMITTEES MUST DESIGN BASINS USING AN IMPERMEABLE LINER IF LOCATED WITHIN ACTIVE KARST TERRAIN,
[MINN. 8.7090]

19.1 REGIONAL WET SEDIMENTATION BASINS. [MINN. R. 7090]

19.1 REGIONAL WET SEDIMENTATION BASINS. [MINN. R. 7090]

19.2 WHEN THE ENTIRE WATER QUALITY VOLUME CANNOT BE RETAINED ONSITE, PERMITTEES CAN USE OR CREATE RESIDIAL WET SEDIMENTATION BASINS PROVIDED THEY ARE CONSTRUCTED BASINS, NOT A NATURAL WETLAND OR WATER RESIDIAL WET SEDIMENTATION BASINS PROVIDED THEY ARE CONSTRUCTED BASINS, NOT A NATURAL WETLAND OR WATER SEDIMENTATION BASIN CONFORMS TO ALL REQUIREMENTS FOR A WET SEDIMENTATION BASIN AS DESCRIBED IN TITEMS 18.3 THROUGH BASIN CONFORMS TO ALL REQUIREMENTS FOR A WET SEDIMENTATION BASIN AS DESCRIBED IN TITEMS 18.3 THROUGH BASIN CONFORMS TO ALL REQUIREMENTS FOR A WET SEDIMENTATION BASIN AS DESCRIBED IN TITEMS 18.3 THROUGH BASIN CONFORMS TO THE REGIONAL BASIN AS DESCRIBED IN TITEMS 18.3 REAR OF THE BASIN ADD MUST PROVIDE A LUBE STORAGE VOLUME OF DOES INCH THAN 5.6 CFS PER ACRE OF SURFACE AREAD FAIR DEADS NAD MUST PROVIDE A LUBE STORAGE VOLUME OF DOES INCH TIMES ALL THE IMPERVIOUS ADDRESSED ADAINING TO THE BASIN. PERMITTEES CANNOT SIGNIFICANTLY DESCRADE WATERWAYS BETWEEN THE PROJECT AND THE REGIONAL BASIN. THE OWNER MUST OPSIAL WAITTEN AUTHORIZATION FROM THE APPLICABLE LGU OR PRIVATE ENTITY THAT OWNS AND MAINTAINS THE REGIONAL BASIN. [MINN. R. 7090]

20.1 SWPPP AVAILABILITY. [MINN. R. 7090]

20.2 PERMITTEES MUST KEEP THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS AT THE SITE DURING NORMAL WORKING HOURS BY PERMITTEES WHO HAVE OPERATIONAL CONTROL OF THAT PORTION OF THE SITE, (MINN. R. 7050)

21.1 TRAINING REQUIREMENTS, [MINN, R, 7090]

21.2 PERMITTEES MUST ENSURE ALL OF THE FOLLOWING INDIVIDUALS RECEIVE TRAINING AND THE CONTENT AND EXTENT OF THE TRAINING IS COMMENSURATE WITH THE INDIVIDUAL'S JOB DUTIES AND RESPONSIBILITIES WITH REGARD TO ACTIVITIES COVERED UNDER THIS PERMIT: A. INDIVIDUAL'S PREPARING THE SWPPP FOR THE PROJECT.

 INDIVIDUALS OVERSEEING IMPLEMENTATION OF, REVISING AND/OR AMENDING THE SWPPP AND INDIVIDUALS PERFORMING INSPECTIONS FOR THE PROJECT. ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 27 A HOURS UPON REQUEST BY THE MPCA. C. INDIVIDUALS PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS. [MINN, R. 7090]

2. INVIDUALS PERFORMED ON DEPOYABING INTRODUCENS AND REPOYABLE OF THE STATE OF THE

24.1 GENERAL PROVISIONS, [MINN. R. 7090]

24.2 IF THE MPCA DETERMINES THAT AN INDIVIDUAL PERMIT WOULD MORE APPROPRIATELY REGULATE THE CONSTRUCTION ACTIVITY, THE MPCA MAY REQUIRE AN INDIVIDUAL PERMIT TO CONTINUE THE CONSTRUCTION ACTIVITY, COVERAGE UNDER THIS GENERAL PERMIT WILL REMAIN IN EFFECT UNTIL THE MPCA ISSUES AN INDIVIDUAL PERMIT, (MINN. R. 7001.0210, SUBP. 6)

24.3 IF THE PERMITTEE CANNOT MEET THE TERMS AND CONDITIONS OF THIS GENERAL PERMIT, AN OWNER MAY REQUEST AN INDIVIDUAL PERMIT, IN ACCORDANCE WITH MINN. R. 7001.0210 SUBP. 6. [MINN. R. 7001.0210, SUBP. 6] 24.4 ANY INTERESTED PERSON MAY PETITION THE MPCA TO REQUIRE AN INDIVIDUAL NPDES/SDS PERMIT IN ACCORDANCE WITH 40 CFR 122.28(B)(3), [40 CFR 122.29(B)(3)]

24.5 PERMITTES MUST MAKE THE SUPP, INCLUDING ALL INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING RECORDS AND OTHER INFORMATION REQUIRED BY THIS PERMIT, AVAILABLE TO FEDERAL, STATE, AND LOCAL OFFICIALS WITHIN THREE (3) DAYS UPON REQUEST FOR THE DURATION OF THE PERMIT AND FOR THREE (3) YEARS FOLLOWING THE NOT. [MINN. R. 7990]

ACCORDANCE
WITH THE APPLICABLE REQUIREMENTS OF ITEM 3.7 AND 3.8. [MINN. R. 7090]

WILL I DE APPLICABLE NEQUIREMENTS OF ITEM 3.7 AND 3.8. [MINN. R. 7090]

2.4. NOTHING IN THIS PERMIT MUST BE CONSTRUED TO RELIEVE THE PERMITTEES FROM CIVIL OR CRIMINAL PENALITIES FOR NONCOMPLIANCE WITH THE TERMS AND CONDITIONS PROVIDED HEREIN. NOTHING IN THIS PERMIT MUST BE CONSTRUED TO PRECLUDE THE INITIATION OF ANY LEGAL ACTION OR RELIEVE THE PERMITTEES FROM MY RESPONSIBILITIES, LIABILITIES, OR PENALITIES TO WHICH THE PERMITTEES IS JARR OR MAY BE SUBJECT TO UNDER SECTION 311 OF THE CLEAN WATER ACT AND MINN. STATS, SECT. 115 AND 116, AS AND MEMOED. PERMITTEES ARE NOT LIABLE FOR PERMIT REQUIREMENTS FOR ACTIVITIES OCCURRING ON THOSE PORTIONS OF A SITE WHERE THE PERMIT HAS BEEN TRANSFERRED TO ANOTHER PARTY AS REQUIRED IN ITEM 3.7 OR THE PERMITTEES HAVE SUBMITTED THE NOT AS REQUIRED IN SECTION 4. [MINN. R. 7090]

AS SECTION 4: (PRINK). A. 7999)
24.8 THE PROVISIONS OF THIS PERMIT ARE SEVERABLE. IF ANY PROVISION OF THIS PERMIT OR THE APPLICATION OF ANY PROVISION OF THIS PERMIT TO ANY CIRCUMSTANCES IS HELD INVALID, THE APPLICATION OF SUCH ROVISION TO OTHER CIRCUMSTANCES, AND THE REMAINDER OF THIS PERMIT WHICH THE PERMIT WHI 24.9 THE PERMITTEES MUST COMPLY WITH THE PROVISIONS OF MINN. R. 7001.0150, SUBP. 3 AND MINN. R. 7001.1090, SUBP. 1(A), 1(B), 1(C), 1(H), 1(I), 1(I), 1(K), AND 1(L). [MINN. R. 7090]

SUBP. (A), 1(p), 1(c), 1(f), 1

CR 122.41(1)
4.11. FOR THE PURPOSES OF MINN. R. 7890 AND OTHER DOCUMENTS THAT REFERENCE SPECIFIC SECTIONS OF THIS PERMIT, "STORMWATER DISCHARGE DESIGN REQUIREMENTS" CORRESPONDS TO SECTIONS 5, 6 AND 14 THROUGH 21; "CONSTRUCTION ACTIVITY REQUIREMENTS" CORRESPONDS TO SECTIONS 7 THROUGH 13; AND "APPENDIX A" CORRESPONDS TO SECTIONS 22 AND 23, (MINN. R. 7090)

PLOWE 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 5501 PHONE: (651) 361-8210 FAX: (651) 361-8701 DRAWN BY: CHECK BY JOB NO: DATE: 22-2048 XX/XX/XX

> NDER INCENS A DU

> > ATES EST, SWPPP SCHWARTZ E

SHEET

TAO\22PROJ\2048 LARRY SCHWARTZ - HAM LAKE\2048 CAD\2048 BASE 3.DWG

TOTAL DISTURBED AREA

TOTAL ESTIMATED PERVIOUS

SITE MAP WE EXISTING AND FINAL GRADES AND DESIGN CALCULATIONS SEE "STORMWATER DRAINAGE REPORT" FOR EXISTING AND PROPOSED AREA MAPS, DENOTING DRAINAGE AREA BOUNDARIES, DIRECTIONS OF FLOW, AND DISCHARGE POINTS WHERE STORMWATER LEAVES THE SIT

RECEIVING WATERS WITHIN ONE MILE

NAME OF WATER BODY	TYPE OF WATER BODY	SPECIAL WATER	IMPAIRED WATER
UNNAMED WETLANDS	WETLAND	NO	NO
COON CREEK	GREEK	NO	YES
	_		

THE SURFACE WATER PRESERVED? NOTE: NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS.

A) THERE IS A WETLAND FROM WHICH A 50-FT NATURAL BUFFER WILL NOT BE
 BOSCEDUEN BEDINDANT SEDIMENT CONTROL MEASURES ARE PROVIDED IN

TEMPORARY SEDIMENTATION BASINS

IF TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON NO N/A THE RUNOF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS

A) BECAUSE THE SITE HAS AN IMPAIRED WATER WITHIN ONE (1) MILE, THIS REQUIREMENT BECOMES FIVE (5) ACRES. THE CONTRACTOR WILL PROVIDE TEMPORARY SEDIMENTATION BASINS IF IVE (5) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION.

INFILTRATION FEASIBILITY

ARE THERE ANY INFILTRATION RESTRICTIONS FOR THE SITE (SEE 16.14
YES NO NIA THROUGH 16.21?

A) THE SITE HAS A MIX OF HSG A AND HSG D SOILS AND SO INFILTRATION IS NOT FEASIBLE IN ALL LOCATIONS.

ADDITIONAL STORMWATER MITIGATION MEASURES

YES NO . ENAPONEMENT TO THE MITTIGATION MEASURES PER:

ENDANGERED SPECIES REVIEW?

OTHER LOCAL, STATE OR FEDERAL REVIEW?

• OTHER LOCAL, STATE OR PEDERAL REVIEWY

FYEST OA MY OF THE ABOVE, DESCRIBE THE MITIGATION MEASURES. FOR PURPOSES OF THIS PERMIT, MITIGATION MEASURES MEANS ACTIONS NECESSARY TO AVOID, MINIMIZE, OR MITIGATE FOR IMPACTS RELATED TO RECESSARY OF SYSTEM, POLLUTION PREVENTION, SEGMENT CONTROL, THE PERMANENT STORMWATER TREATMENT SYSTEM, POLLUTION PREVENTION MANAGEMENT MEASURES AND DISCHARGES ASSOCIATED WITH THE PROJECT'S CONSTRUCTION ACTIVITY. MINN. R. 7000.

DOCUMENTATION OF TRAINED INDIVIDUALS

ADAM GINKEL PLOWE ENGINEERING, INC. 6776 LAKE DRIVE LINO LAKES MN 55014 651) 361-8234 idem@plowe.com

INDIVIDUAL(5) OVERSEEING IMPLEMENTATION OF, REVISING AND/OR AMENDING THI SWPPP AND INDIVIDUALS PERFORMING INSPECTIONS FOR THE PROJECT. ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA. [MINN.R. 7580]

CONTACT NAME	
CONTACT PHONE	
CONTACT E-MAIL:	

C. INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS, MINN. R. 7080]

CONTACT PHONE CONTACT F-MAIL:

LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER FACILITIES THE PROPOSED STORMWATER MANAGEMENT FEATURES FOR THIS SITE A STORMWATE POND - THESE WILL BE OPERATED AND MAINTAINED BY THE CITY OF HAM LAKE.

REVEGETATION SPECIFICATIONS

ITEM	MNDOT SPECIFICATION/NOTES
SOD	3878
SEED **	3876
* FOR TURF ESTABLISHMENT	
COMMERCIAL TO	JRF MNDOT MIX 25-131 (220 L88/ACRE)
RESIDENTIAL TI	IRF MNDOT MIX 25-131 (120 LBS/ACRE)
TEMPORARY FALL COV	/ER MNDOT MIX 21-112 (100 LBS/ACRE)
SPRING/SUMM	IER MNDOT MIX 21-111 (100 LBS/ACRE)
SOIL-BUILDING COV	/ER MNDOT MIX 21-113 (110 LBS/ACRE)
1-2 YEARS CO	/ER MNDOT MIX 22-111 (30.5 LBS/ACRE)
2-5 YEARS COV	/ER MNDOT MIX 22-112 (40 LBS/ACRE)
MULCH	3882 (TYPE 1 - DISC ANCHORED)
HYDROMULCH	3884
FERTILIZER	3881
WOOD FIBER BLANKET	3885 (CATEGORY 2)

** SEEDED AREAS SHALL BE EITHER MULCHED OR COVERED BY FIBROUS BLANKETS

QUANTITIES - ESTIMATED QUANTITIES FOR EROSION AND SEDIMENT CONTROL MEASURES

TYPE	QTY	UNIT
SILT FENCE	2,614	LINEAR FEET
REDUND. SEDIMENT CONTROL (E.G. SILT FENCE, BIOROLL)	565	EACH
RIP-RAP W. GEO-FABRIC	15	CUBIC YARDS
CATCH BASIN INLET PROTECTION	0	EACH
STABILIZED (SODDED) OVERFLOW	0	EACH
EROSION CONTROL BLANKET	0	SQUARE YARDS
SEED & MULCH (GENERAL)	2.2	ACRE
ROCK CONSTRUCTION ENTRANCE EXIST, GRAVEL DRIVE TO BE USED AS ROCK ENTRANCE	1	EACH

NARRATIVE - TIMING FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND SWPPP MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.
 CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLAN.

2. CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLAN.
21. ADDITIONAL SILT FENCE MAY BE NECESSARY IF LOCAL CONDITIONS REQUIRE.
22. THE CONTRACTOR SHALL MAINTAIN SILT FENCE, INCLUDING THE REMOVAL OF ACCUMULATED SEDIMENT, THROUGH COMPLETION OF BUILDING CONSTRUCTION.
23. SILT FENCE SHALL REMAIN IN-PLACE UNTIL SITE HAS BEEN STABILIZED.
CONTRACTOR SHALL INSTALL A ROCK CONSTRUCTION ENTERANCE AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTERIENT SITE.
5. CONTRACTOR TO INSTALL THEE PROTIECTION FENCINGS AS APPLICABLE
5. MINIMIZE UNSTABLIZED AREAS.
SIL CONTRACTOR ON SITE OF ACTION FENCING AS A PRICADE STABILIZED.
ACCOUNT ON THE STABILIZED AND SITE OF ACTIONS OF EXPOSED SOIL AREAS, AS DESCRIBED IN ITEM 84 OF THE PERMIT, AND COMPLETE THE STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS AFTER THE CONSTRUCTION ACTUATT IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY GEASES.

CEASES.

5.2. CONTRACTOR TO PROVIDE TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN

5.2. CONTRACTOR TO PROVIDE TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN SECTION 14.1 THROUGH 14.10.

CONTRACTOR TO SHALL PAY SPECIAL ATTENTION TO ADJACENT PROPERTY LINES TO ENSURE THE EROSION CONTROL PRACTICES INPLACE IN THOSE AREAS PREVENT MIGRATION OF SECURENT ONTO ADJACENT PROPERTIES.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS OR IMPLEMENTED IN THE FIELD SHALL BE IN ACCORDANCE WITH THE CITY AND MPDES PHASE IT PERMIT REQUIREMENTS.

CONTRACTOR TO PROVIDE ADDITIONAL SILT FENCE, BIOROLLS, EROSION CONTROL BLANKET, OR OTHER APPROVED EQUAL FOR ANY SLOPES THAT APPEAR TO BE

9. CONTRACTOR TO STABILIZE SOIL STOCKPILES; STABILIZATION SHALL BE INITIATED

IMMEDIATELY
10. CONTRACTOR SHALL FINAL GRADE SWALE AREAS UPON STABILIZATION OF UPSTREAM

AREAS,

11. CONTRACTOR SHALL BE RESPONSIBLE TO SWEEP/SCRAPE ADJACENT STREETS WHEN
MATERIALS OR DEBRIS HAVE WASHED/FLOWED ONTO ADJACENT STREETS OR AS
DIRECTED BY CITY

12. COORDINATE SMALL UTILITIES INSTALLATIONS (GAS, PHONE, ELECTRIC, CABLE,
FIBEROPITE, ETC) AFTER PAVEMENT INSTALLATION.

NPDES DEFINITIONS

BEST MANAGEMENT PRACTICES (BMPS) MEANS THE MOST EFFECTIVE AND PRACTICABLE MEANS OF EROSION PREVENTION AND BEDIMENT CONTROL, AND WATER GUALITY MANAGEMENT PRACTICES THAT AND EMINIATE FEFECTIVE AND PRACTICABLE MEANS OF TO CONTROL, PREVENT, AND MINIMIZE DEGRADATION OF SURFACE WATER, INCLUDING AVOIDANCE OF IMPACTS, CONSTRUCTION-PRISING, MINIMIZING THE LERGHT OF TIME SOIL AREAS ARE EXPOSED, PROHIBITIONS, POILUTION PREVENTION THROUGH GOOD HOUSEKCEEPING, AND OTHER MANAGEMENT FRACTICES PUBLISHED BY STATE OR DESIGNATED AREA-MIDE PLANNING AGENCIES. MINN. R. 7009)

"CONSTRUCTION ACTIVITY" MEANS ACTIVITIES INCLUDING CLEARING, GRADING, AND EXCAVATING, THAT RESULT IN LAND DISTRIBUTIONS, THAT RESULT IN LAND DISTRIBUTIONS, THAT ONE ACRES THAN ONE ACRES FOR THE DISTRIBUTION OF A CRES FOR THAT ONE ACRES FOR TOTAL LAND AREA THAT IS ACRES FOR THAT IS A CRESS FOR THAT IS A CRESS FOR THE ACRES FOR THAT IS A CRESS FOR THE ACRES FOR THAT IS A CRESS FOR THE THAT IS A CRESS FOR THAT IS A CRESS FOR THE THAT IS A CRESS FOR THE THAT IS A CRESS FOR THE THAT IS A CRESS FOR THE THAT IS A CRESS FOR THAT IS A CRESS FOR THE THAT IS A CRESS FOR THE THAT IS A CRESS COMMON PLAN WILL ULTIMATELY DISTURB EQUAL TO OR GREATER THAN ONE ACRE. THIS INCLUDES A DISTURBANCE OT THE LAND THAT RESULTS IN A CHANGE IN THE TOPOGRAPHY, EXISTING SOIL COVER, BOTH VEGETATIVE AND NONVEGETATIVE, OR THE CISTING SOIL OPPOGRAPHY THAT MAY RESULT IN A CCELERATED STORMWATER RUNOFF THAT MAY LEAD TO SOIL EROSION AND MOVEMENT OF SEDIMENT. CONSTRUCTION ACTIVITY DOES NOT INCLUDE A DISTURBANCE TO THE LAND OF LESS THAN THE ACRES FOR THE PURPOSE OF ROUTINE MAINTENANCE PERFORMED TO MAINTAIN THE ORIGINAL LINE AND GRADE, HYDRAULG CAPACITY, AND OSIGINAL PURPOSE OF THE FACILITY ROUTINE MAINTENANCE DOES NOT INCLUDE ACTIVITY DOES SUCH AS REPIRES, REPLACEMENT AND CHIEF TYPES OF NOT MOUTINE MAINTENANCE DOES NOT INCLUDE ACTIVITY DESIRED. PLAN THE WAS AND CHIEF TYPES OF NOT MOUTINE MAINTENANCE. PAYEMENT REFABILITATION THAT DOES NOT DISTURB THE UNDERLYING SOILS (E.G., MILL AND OVERLAY PROJECTS) IS NOT CONSTRUCTION ACTIVITY, BANKIN, R. 7999]

CONSTRUCTION ACTIVITY, MINN. R. 7000]

DEVATERING MEANS THE REMOVAL OF SURFACE OR GROUND WATER TO DRY ANDIOR SOLIDIFY A CONSTRUCTION SITE TO ENABLE CONSTRUCTION ACTIVITY. DEWATERING MAY REQUIRE A MINNESOTA DEPARTMENT OF NATURAL RESOURCES WATER APPROPRIATION PERMIT AND, TO EVALTERING WATER IS CONTAINMENTED, DISCHARGE OF SUCH WATER MAY REQUIRE AN INDIVIDUAL MPCA NPOESISDS PERMIT, MINN. R. 7090]

FERSION DEPENTATION LEAS MELECULATION.

EROSION PREVENTION MEANS MEASURES EMPLOYED TO PREVENT EROSION SUCH AS SOIL STABILIZATION PRACTICES, PERMANENT COVER OR CONSTRUCTION PHASING. [MINN.

R. 7080)

"GENERAL CONTRACTOR" MEANS THE PARTY WHO SIGNS THE CONSTRUCTION CONTRACT
WITH THE OWNER TO CONSTRUCT THE ENTIRE PROJECT DESCRIBED IN THE FINAL PLANS
AND SPECIFICATIONS, WHERE THE CONSTRUCTION PROJECT INVOLVIES MORE THAN ONE
CONTRACTOR, THE GENERAL CONTRACTOR IS THE PARTY RESPONSIBLE FOR MANAGING
THE ENTIRE PROJECT ON BEHALF OF THE OWNER. IN SOME CASES, THE OWNER IS THE
GENERAL CONTRACTOR, IN THESE CASES, THE OWNER SIGNS THE PERMIT APPLICATION
AS THE OPERATOR AND SECONDES THE SOLE PERMITTEE, MINN. R. 7090]

TO THE OFERSTION AND BECOMES INE SOLE FERMILLER, INSIGN, A. (1992)

"GROUNDWAYER MEANS THE WATER CONTAINED BELOWTHE SEARCE OF THE EARTH IN THE SATURATED ZONE INCLUDING, WITHOUT LIMITATION, ALL WATERS WHETHER UNDER CONFINED, UNCOMPINED, ON PERCHED CONDITIONS, IN HEAS SUFFACE LINCONSOLIDATED SEDIMENT OR REGOLITH, OR IN ROCK FORMATIONS DEEPER UNDERGROUND, [MINN, R. 1992].

HOMEOWNER FACT SHEET" MEANS AN MPCA FACT SHEET AVAILABLE ON THE MPCA CONSTRUCTION STORMWATER WIEBSITE FOR PERMITTEES TO GIVE TO HOMEOWNERS AT THE TIME OF SALE, MINN. R. 7060]

7880)

"INITIATED IMMEDIATELY" MEANS TAKING AN ACTION TO COMMENCE SOIL STABILIZATION AS SOON AS PRACTICABLE, BUT NO LATER THAN THE END OF THE WORK DAY, FOLLOWING INTED DAY MHEN THE LAND-DISTURBING ACTIVITIES TEMPORARILY OF PERMANENTLY CEASE, IF THE PERMITTEES KNOW THAT CONSTRUCTION WORK ON THAT PORTION OF THE SITE WILL BE TEMPORARILY CEASED FOR 14 OR MORE ADDITIONAL CALEINAR DAYS ORT

A. PREPPING THE SOIL FOR VEGETATIVE OR NON-VEGETATIVE STABILIZATION; OR B. APPLYING MULCH OR OTHER NON-VEGETATIVE PRODUCT TO THE EXPOSED SOIL AREA; OR

C. SEEDING OR PLANTING THE EXPOSED AREA: OR

D. STARTING ANY OF THE ACTIVITIES IN A - C ON A PORTION OF THE AREA TO BE STABILIZED, BUT NOT ON THE ENTIRE AREA; OR

IMINN, R. 70901

[MINN. R. 7990]

"MPERVIOUS BURFACE" MEANS A CONSTRUCTED HARD SURFACE THAT EITHER PREVENTS
OR RETARDS THE ENTRY OF WATER INTO THE SOIL, AND CAUSES WATER TO RUN OFF THE
SURFACE IN GREATER CULANTIES AND AT A MINGREASED RATE OF FLOW THAN PRIOR TO
DEVELOPMENT. EXAMPLES INCLUDE ROOFTORS, SIDEWALKS, DRIVEWAYS, PARKING LOTS,
AND CODORDETE, ASPHALT, OR GRAVEL ROADS. BRIDGES OVER SURFACE WATERS ARE
CONSIDERED IMPERVIOUS SURFACES, [MINN. R. 7690]

COMBINERED INFERVIOUS SURFIXES, (INIMIN. N. 1939)

THATIONAL POLITIVANT DISCHARGE ELIMINATION SYSTEM (INPDES)* MEANS THE PROGRAM FOR ISSUING, MODIFYING, REVOXING, REISSUING, TERMINATING, MONITORING, AND EMPORCING PERMITS UNDER THE CLEAN WATER ACT, AS AMENDED (33 U.S.C. 1251 ET SEQ. SECTION 1342 AND 40 GFR PARTS 122, 123, 124 AND 450), [MINN. R. 7080]

"NATURAL BUFFER" MEANS AN AREA OF UNDISTURBED COVER SURROUNDING SURFACE WATERS WITHIN WHICH CONSTRUCTION ACTIVITIES ARE RESTRICTED. NATURAL BUFFER INCLUDES THE VEGETATION, EXPOSED ROCK, OR BARREN GROUND THAT EXISTS PRIOR TO COMMENCEMENT OF EARTH-DISTURBING ACTIVITIES, MINN. R, 7090]

'NOTICE OF TERMINATION (NOT)" MEANS THE FORM (ELECTRONIC OR PAPER) REQUIRE! FOR TERMINATING COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT, (MINN. R.

"OPERATOR" MEANS THE PERSON (USUALLY THE GENERAL CONTRACTOR), FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY DESIGNATED BY THE CWINER WHO HAS DAY TO DAY OPERATIONAL CONTROL AND/OR THE ABILITY TO MODIFY PROJECT PLANS AND TO DAY OPERATIONAL CONTROL ANDIOR THE ABILITY TO MODIFY PROJECT PLANS AND SPECIFICATIONS RELATED TO THE SWPPP. THE PERMIT APPLICATION MUST LIST THE OPERATOR AS A PERMITTEE. SUBCONTRACTORS HIRED BY AND UNDER SUPERVISION OF THE GENERAL CONTRACTOR ARE NOT OPERATORS. [MINN. R. 7090]

THE SCHEMENT COME INVALUDIT AIR NOT DYPERTURES, MINN. R. 7080]

VONNERY MEANS THE PERSON, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY
POSSESSING THE TITLE OF THE LAND ON WHICH THE CONSTRUCTION ACTIVITIES WILL
OCCUR OR, IF THE CONSTRUCTION ACTIVITY IS FOR A LEASE, EASEMENT, OR MINERAL
RIGHTS LICENSE HOLDER, THE PARTY OR INDIVIDUAL IDENTIFIED AS THE LEASE,
EASEMENT OR MINERAR RIGHTS LICENSE HOLDER; OR THE CONTRACTING GOVERNMENT
AGENCY RESPONSIBLE FOR THE CONSTRUCTION ACTIVITY, MINN. R. 7080]

PERMANERY COMERN MEANS, SURFACE TOWER THAT WAS ADMINISTRATION ACTIVITY.

AGENCY RESPONSIBLE FOR THE CONSTRUCTION ACTIVITY, DMINN, R. 7999)

**PERMANIENT COVER* MEANS SURFACE TYPES THAT WILL PREVENT SOIL FAULURE UNDER
EROSIVE CONDITIONS, EXAMPLES INCLUDE: GRAVEL, CONCRETE, PERENHAL COVER, OR
OTHER LANDSCAPED MATERIAL THAT WILL PERMANIENTLY ARREST SOIL EROSION.
PERMITTEES MUSTE ESTABLESH A UNIFORM PERENNAL VEGETATIVE COVER (I.E., EVENLY
DISTRIBUTED, WITHOUT LANGE BARE ARRAS) WITH A DENSITY OF 70 PERCENT OF THE
MATIVE BACKGROUND VEGETATIVE COVER ON BALL AREAS NOT COVERED BY PERMANENT
STRUCTURES, OR EQUIVALENT PERMANENT STABILCATION MEASURES. PERMANENT
COVER DOES NOT INCLUDE TEMPORARY SEMPS SUCH AS WOOD FIERS BLANKET, MULCH,
AND ROLLED EROSION CONTROL PRODUCTS, (MINN, R. 7990)

PERMITTEES MEANS THE PERSONS FIRM GOVERNMENTS LAGENCY OR OTHER BUTTY.

PERMITTEES MEANS THE PERSONS, FIRM, COVERNMENTAL AGENCY, OR OTHER ENTITY IDENTIFIED AS THE OWNER AND OPERATOR ON THE APPLICATION SUBMITTED TO THE MPCA AND ARE RESPONSIBLE FOR COMPULANCE WITH THE TERMS AND CONDITIONS OF

ITIS FERMIT, (MIRKE, A., 1994)

PROCIECTISP HEARN ALL CONSTRUCTION ACTIVITY PLANNED ANDIOR CONDUCTED UNDER A PARTICULAR PERMIT, THE PROJECT OCCURS ON THE SITE OR SITES DESCRIBED IN THE PERMIT APPLICATION, THE SUPPEY AND IN THE ASSOCIATED PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS. [MINN. R. 7090]

"PUBLIC WATERS" MEANS ALL WATER BASINS AND WATERCOURSES DESCRIBED IN MINN. STAT, SECT, 103G,005 SUBP. 15, [MINN, R. 7090]

"SEDIMENT CONTROL" MEANS METHODS EMPLOYED TO PREVENT SUSPENDED SEDIMENT IN STORMWATER FROM LEAVING THE SITE (E.G. SILT FENCES, COMPOST LOGS AND STORM DRAIN INLET PROTECTION), [MINN, R. 7090]

DRAIN INLET PROTECTION), (MINN. R. 7090)

"STABILIZE", "STABILIZED", "STABILIZATION" MEANS THE EXPOSED GROUND SURFACE HAS BEEN COVERED BY APPROPRIATE MATERIALS SUCH AS MULCH, STAKED SOD, RIPRAP, EROSION CONTROL BLANKET, MATS OR OTHER MATERIAL THAT PREVENTS RESGION FROM COCURRING, GRASS SEEDING, AGRICULTURAL GROP SEEDING OR OTHER SEEDING ALONE IS NOT STABILIZATION, MULCH MATERIALS MUST ACHIEVE APPROXIMATELY 90 PERCENT GROUND COVERAGE (TYPICALLY 2 TON/ACRE), [MINN. R. 7090]

"STORMWATER" MEANS PRECIPITATION RUNOFF, STORMWATER RUNOFF, SNOWMELT RUNOFF, AND ANY OTHER SURFACE RUNOFF AND DRAINAGE. [MINN, R. 7090] *STEEP SLOPES" MEANS SLOPES THAT ARE 1:3 (V:H) (33.3 PERCENT) OR STEEPER IN GRADE, (MINN. R. 7090]

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)* MEANS A PLAN FOR STORMWATER DISCHARGE THAT INCLUDES ALL REQUIRED CONTENT UNDER IN SECTION 5 THAT DESCRIESE THE EROSION PREVENTION, SEDIMENT CONTENT AND WASTE CONTROL BMPS AND PERMANENT STORMWATER TREATMENT SYSTEMS, [MINN, R. 7980] BMP'S AND PERMANENT IS JORMINULE I REALIENCH STEEMS, LINKEN, A.TASUJ
SUBFACE WINTER OR WATERS MEANS ALL STREAMS, LAKES, PONDS, MARSHES,
WETLANDS, RESERVOIRS, SPRINGS, RIVERS, DRAINAGE SYSTEMS, WATERWAYS,
WATERCOURSES, AND IRRIGATION SYSTEMS WHETHER NATURAL OR ARTIFICIAL, PUBLIC
OR PRIVATE, EXCEPT THAT SURFACE WATERS DO NOT INCLUDE STORMWATER
TREATMENT SYSTEMS CONSTRUCTED FROM UPLAND. THIS PERMIT DOES NOT CONSIDER
STORMWATER TREATMENT SYSTEMS CONSTRUCTED IN WETLANDS AND MITIGATED IN
ACCORDANCE WITH SECTION 2.45 SURFACE WATERS, MINN. R. 7690]

ACCORDANCE WITH SECTION 22 AS SURFACE WATERS, [MINN. R. 7990]

WATERS OF THE STATE* (AS DEFINED IN MINN. STAT. SECT. 1.501, SUBP. 22) MEANS ALL
STREAMS, LAKES, PONDS, MARSHES, WATERCOURSES, WATERWAYS, WELLS, PPRINGS,
RESERVOIRS, ACUIFERS, IRRIGATION SYSTEMS, DRAINAGE SYSTEMS AND ALL OTHER
BODIES OR ACCOMUNILATIONS OF WATER, SURFACE OR UNDERGROUND, MATURAL OR
ARTIFICIAL, PUBLIC OR PRINATE, WATER ARE CONTAINED WITHIN, FLOW THROUGH, OR
BORDER UPON THE STATE OR ANY PORTION THEREOF, MINN. STAT. 11501, SUBP. 22

"WATER QUALITY VOLUME" MEANS ONE (1) NICH OF RUNOFF FROM THE NET INCREASE IN
MERENVOUS SURFACES ORGEATED BY THE PROJECT (CALCULATED AS AN INSTANTANEOUS
VOLUME). [MINN. R. 7090]

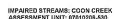
VOLUME, [MINN. R. 7090]
"WETLANDS" (AG DEFINED IN MINN. R. 7090.0188, SUBP. 1A.B.) MEANS THOSE AREAS THAT ARE INUNDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION SURFICIENT TO SUPPORT, AND UNDER NORMAL. GROUNSTANCES DO SUPPORT, A PREVALENCE OF VEGETATION TYPICALLY ADAPTED FOR LIFE IN SATURATED SOLIC CONDITIONS. WETLANDS GENERALLY INCLUDE SWAMPS, UNDER THE SATURATION OF THE S FOLLOWING ATTRIBUTES:

1. A PREDOMINANCE OF HYDRIC SQILS: AND

2. INUNDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION SUFFICIENT TO SUPPORT A PREVALENCE OF HYDROPHYTIC VEGETATION TYPICALLY ADAPTED FOR LIFE IN A SATURATED SOIL CONDITION; ARD

3. UNDER NORMAL CIRCUMSTANCES SUPPORT A PREVALENCE OF SUCH VEGETATION. [MINN. R. 7050.0188, SUBP. 1A.B]

MAP OF SURFACE WATERS



APPROVED TMDL PLAN FOR: BENTHIC MACROINVERTEBRATES

ADDITIONAL IMPAIRMENTS: FISH BIOASSESSMENTS NEW IMPAIRMENTS: FISH BIOASSESSMENTS

SPECIAL WATERS AND IMPAIRED WATERS

THE MS4 GENERAL PERMIT FOR MS4S NEAR SPECIALLY-PROTECTED WATERS REQUIRE ADDITIONAL CONTROLS, CONDITIONS OR AN INDIVIDUAL PERMIT:

MS4S THAT DISCHARGE NEAR WATERS WITH QUALITIES THAT WARRANT EXTRA PROTECTION (SPECIAL WATERS) MUST USE ADDITIONAL BEST MANAGEMENT PRACTICES AND ENHANCED RUNOFF CONTROLS (SEE PERMIT PART IX).



SITE PLANNING **PLOWE**

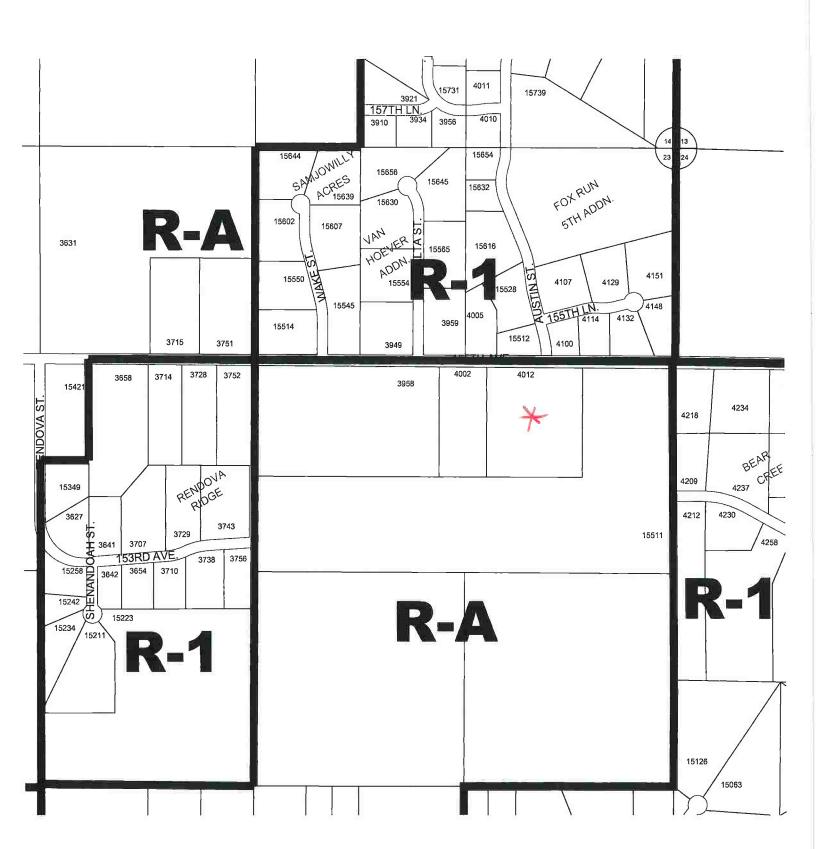
6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014

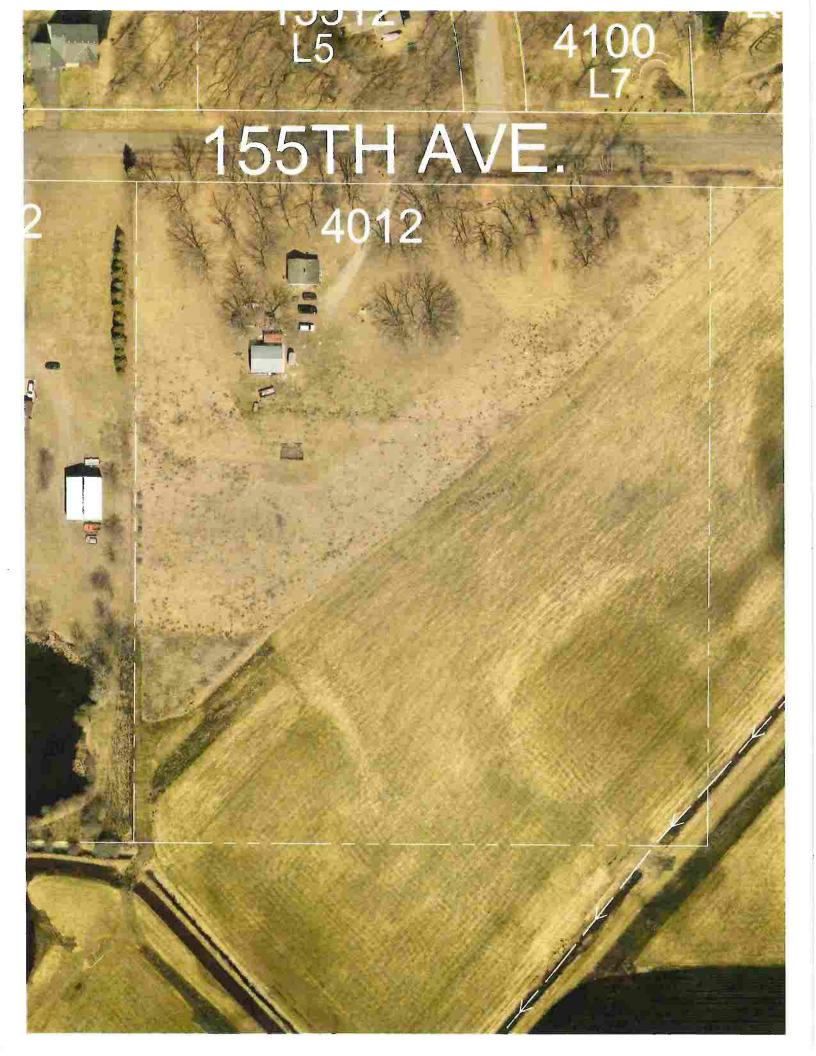
PHONE: (651) 361-8210 FAX: (651) 361-8701 RAWN BY: CHECK BY DB NO: DATE: 22-2048 XXXXXX

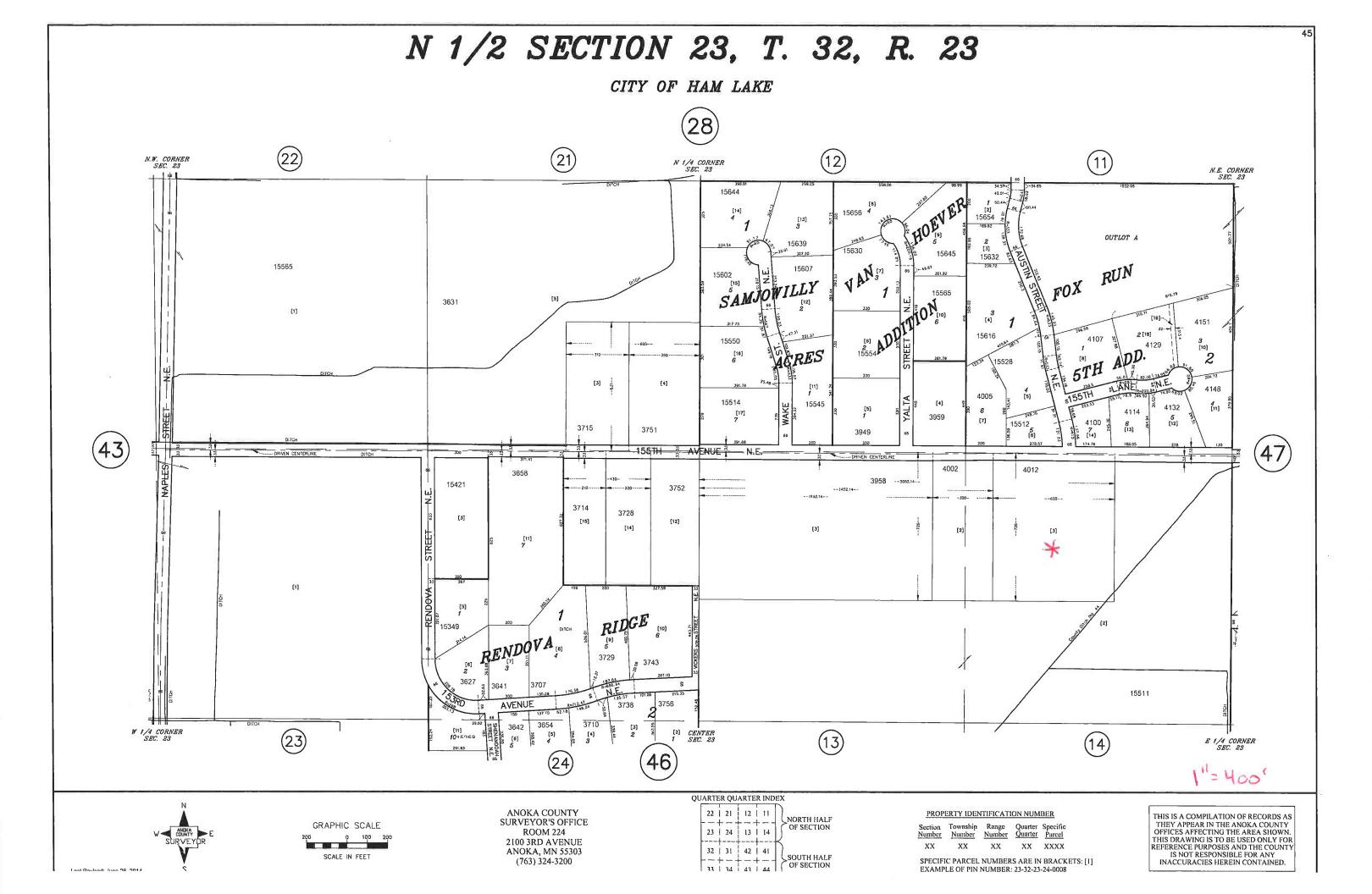
CHWARTZ ESTATES HAM LAKE, MN SWPPP

SHEET C2.2

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Tradewell Soil Testing 18330 Dahlia Street NW Cedar, MN 55011

September 20th, 2022

RFC Engineering 13635 Johnson Street NE Ham Lake, MN 55304 Attention: Tom Collins

Dear Mr. Collins:

As a licensed site evaluator who conducted the soil borings for Schwartz Estates for Larry & Joy Schwartz, I found the following: Each boring has at least 12" of natural, undisturbed and unmottled soil. In order to design and install a standard soil treatment system according to MN Chapter 7080 Code, at least 12" of natural soil with no signs of mottling is required. Therefore, each of the proposed lots will support 2 "standard" septic systems within the 7,500 square feet septic area as shown on the Grading Plan. Sincerely,

Sudewell

Mark Tradewell MPCA #307



NOTICE OF PERMIT APPLICATION STATUS

Project:

Schwartz Estates

Date:

September 21, 2022

Applicant:

Larry Schwartz

1543 105th Lane NW

Coon Rapids, MN 55433

Permit Application#:

P22-071

Purpose:

3 Single-Family Development

Location:

4021 155th Avenue NE, Ham Lake, MN 55304

At their meeting on September 12, 2022 the Board of Managers of the Coon Creek Watershed District **conditionally approved** the above referenced project with 5 conditions and 2 stipulations. **This is NOT a permit.**

Since your last submittal on 9/14/2022, the following condition remains which must be addressed before permit issuance (please see note below on how to address conditions).

1. Receipt of Escrows.

Please note that there are also 2 stipulations.

Please be advised that **this is NOT a permit**, and that work without a permit is a violation of the terms of the Coon Creek Watershed District Rule 5.1. If you have any questions, please call 763-755-0975.

Sincerely,

Erin Edison

Watershed Development Coordinator

cc:

File P22-071

Eileen Weigel, Stantec Danielle Tourtillott, Stantec Tom Collins, City of Ham Lake

Note: Please respond to each of these items in writing when resubmitting the revised plans to the District. Resubmittals can be sent via email to permitsubmittals@cooncreekwd.org. **Please submit written responses below the original typed comments, using extra sheets as necessary, addressing comments from the District. If you have any questions, feel free to contact Erin**

Edison at (763) 755-0975. Pursuant to Coon Creek rule 7.3 deficiencies must be addressed and resubmitted within 60 days. Failure to so shall be deemed a withdrawal of the permit application.





To: Erin Edison, Tim Kelly From: Jordan Wochenske, Stantec Consulting

Services Inc.

Coon Creek Watershed Cor

District

Copy:

Eileen Weigel, P.E., Stantec Consulting

Services Inc.

PAN: P22-071 Date: September 21, 2022

Reference: Schwartz Estates Update

Exhibits:

1. Grading Plan (1 sheet); by E.G. Rud & Sons, Inc., dated 09/14/2022, received 09/14/2022.

2. Preliminary Plat (1 sheet); by E.G. Rud & Sons, Inc., dated 09/14/2022, received 09/14/2022.

3. Final Plat (1 sheet); by E.G. Rud & Sons, Inc., dated 09/14/2022, received 09/14/2022.

4. SWPPP (1 sheet); by E.G. Rud & Sons, Inc., dated 09/14/2022, received 09/14/2022.

5. Livability Plan (1 sheet); by E.G. Rud & Sons, Inc., dated 09/14/2022, received 09/14/2022.

6. Stormwater Management Plan (18 pages); by Plowe Engineering Inc., dated 09/14/2022, received 09/14/2022.

7. Response to Comments (3 pages); by E.G. Rud & Sons, Inc., dated 09/14/2022, received 09/14/2022.

In Response to the Coon Creek Watershed District "Notice of Permit Application Status" dated September 12, 2022:

Receipt of Escrows. NO

2. Update the proposed HydroCAD model to

a. Include the secondary elevation of the proposed baffle- currently 896.6. YES

b. Match plans/details for the baffle weir width that will be activate during storm events.
 Currently modeled as 5 feet, shown on plan view as ~35 feet and also as 18 feet.
 YES

3. Provide dimension of riprap on details downstream of baffle to prevent erosion. Minimum length should correspond to typical FES riprap detail. **YES**

4. Update Construction Plans to include the following:

a. Update construction plans to consistently stabilize vegetation and soil stockpiles within 7 days of rough grading or inactivity. Update page C2.1. **YES**

 Provide erosion control measures to protect adjacent properties and stormwater ponds from construction activities. Double row of perimeter control at waterbodies/creeks/wetlands with a natural buffer < 50 feet. YES

5. Provide an O&M Agreement that meets District requirements. - will be City maintained

Findings: The outlet device for the proposed pond in the HydroCAD model was updated to align with the details and plan sheets. The secondary baffle elevation was not included in the model as the 100-year HWL in the model (896.9) was the same elevation as the proposed baffle (896.9). Dimensions for the riprap at the proposed outlet were provided and are adequate. Construction plan sheets were updated to include appropriate erosion control notes, covering all the requested conditions

Recommendation: Approval with 1 Condition and 2 Stipulations:

Conditions:

1. Receipt of Escrows.

Stipulations:

1. Submittal of as-builts for the following stormwater management practices, including volume and critical elevations:

Stormwater Treatment Practices	Number
Wet Sedimentation Pond	1
Outlet Control Structure	1

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.

CITY OF HAM LAKE PLANNING COMMISSION REQUEST APPLICATION INSPECTION REPORT

MEETING DATE:10/10/2022
INSPECTION ISSUED TO:Kyle Lejonvarn
APPLICANT/CONTACT:Dave Larson
TELEPHONE NUMBER: 612-987-8826 or davelarson@larsonsystems.com
BUSINESS/PLAT NAME:Larson Systems, Inc.
ADDRESS/LOCATION OF INSPECTION: 13847 Aberdeen St NE
APPLICATION FOR: Commercial Building Plan Approval
RECOMMENDATION:
DATE:
PLANNING COMMISSIONER SIGNATURE:



PLANNING REQUEST

CITY OF HAM LAKE

15544 Central Avenue NE Ham Lake, MN 55304

Phone (763) 434-9555 Fax (763) 235-1697

Date of Application 5/26/22	Date of Receipt 4 92 903				
Meeting Appearance Dates: Planning Commission 10-10-20					
Please check request(s): Metes & Bounds Conveyance Sketch Plan Preliminary Plat Approval* Final Plat Approval Rezoning* Multiple Dog License* *NOTE: Advisory Signage is required for land use at This application also requires a Public Hearing. Suc					
Development/Business Name: Larson Systems,					
Address/Location of property: 13847 Aberdeen Street					
Legal Description of property: LOT 1 BLK 2 ENTER	PRISE PLAZA 2ND ADD, SUBJ TO EASE OF REC				
Notes: Eastern building addition 1 addition 35,120 sqft and 1	7.716 sqf. Northern building				
addition 35,120 sqft and 1	rear building 9,900 sq ft				
Applicant's Name: David Larson					
Business Name: Larson Systems, Inc.					
Address 13847 Aberdeen Street NE					
City Ham Lake	State MN Zip Code 55304				
Phone 763-780-2131 Cell Phone 612	2-987-8826 Fax				
Email address davelarson@larsonsystems.com					
You are advised that the 60-day review period required begin to run until all of the required items have SIGNATURE					
- FOR STAFF USE ONLY -					
ACTION BY: Planning Commission	PROPERTY TAXES CURRENT YES NO				



Larson Systems Inc.

13847 Aberdeen Street NE Ham Lake, MN 55304-6789 www.larsonsystems.com Phone:

763-780-2131

Fax:

763-780-2182

Email:

info@larsonsystems.com

9/28/2022

To the City of Ham Lake Re: Planning Request

Larson Systems, Inc. is a manufacturing business located at 13847 Aberdeen Street NE, Ham Lake, MN 55304. Larson Systems Inc. manufactures world class spring testing equipment as well as commercial grade kennel equipment. The company is seeking approval to improve our business capabilities by adding additional industrial space to our property. In recent years we have employed 35-40 employees. Currently we employ approximately 50 full time employees and are utilizing first and second shifts.

We are proposing to build an approximately 9,900 SF building on the SE corner of our property. This building will provide a flexible space for warehousing our products. This will also help to accommodate the additional few trucks we may see per day with an additional loading dock.

We are also proposing to build an approximately 18,000 SF (east addition) and 35,000 SF (north addition) of space adjacent to our existing 24,000 SF building. The first 18,000 SF addition will add two additional angled loading docks for ideal routing of additional truck traffic as well as the potential for up to 50 more employees. The 35,000 SF future addition will further expand our continuous indoor space and allow for up to 50 additional employees. This space will be continuous to our existing building and will provide additional space for manufacturing, assembly, warehousing, and shipping of the products that Larson Systems, Inc. has become known for worldwide.

Thank you for considering our application.

Sincerely,

David Larson Owner



Office (763) 862-8000 Fax (763) 862-8042

Memorandum

Date:

October 6, 2022

To:

Planning Commissioners

From:

Tom Collins, City Engineer

Subject:

Larson Systems Building Additions

Introduction:

The proposed 17,776 square foot building addition (Building #1-B) is proposed to the existing 24,000 square foot Larson Systems building and a new 9,900 square foot building (Building #2) is proposed in the southeasterly portion of the 13847 Aberdeen Street parcel - https://gis.anokacountymn.gov/propertysearch/?find=32-32-23-13-0026. The 13847 Aberdeen Parcel, which is Lot 1, Block 2 of Enterprise Plaza 2nd Addition was combined with Lot 1, Block 2 of Larson Commercial Park on June 24th per Anoka County Property & Taxation. The combined area is 7.81 acres. The half section map, prior to the combination, is attached. The parcel is zoned Commercial Development Tier 1 (CD-1). A 120-scale aerial photo and a 300-scale zoning map are attached.

Discussion:

Title Sheet, Legend, Existing Conditions & Removals Plan, Civil Site Plan, Grading, Drainage and Erosion Control Plan, Utility Plan, Details & Notes and Storm Water Pollution Prevention Plan, received October 5th and the Drainage Report and Architectural Plans (Title Sheet, Site Plan, Landscape Plan, Floor Plans and Building Elevations) received October 4th address the prior review comments.

The parcel to the south is zoned Single Family Residential (R-1) and the parcels to the east are a residential use zoned PUD. Per 11-1853 of City Code, where property lines are adjacent to residential areas, a planting screen of conifers shall be required, of sufficient size and proximity to provide an intermingled screen within five years. Adequate screening is provided to the east, but not to the south adjacent to the residentially zoned 1555 138th Avenue parcel.

Three septic systems are proposed, which are all Type III systems. Per 11-450 of City Code, a Type III septic system is considered non-standard. The Monitoring and Mitigation Plan is attached, which will be reviewed by the Building Official during the building permit review, will per Code include the following:

- i) Inspections, as often as semi-annually, to standards described in the Management Plan;
- ii) Periodic pumping different than that described in Article 11-450.4(C) above;
- iii) Maintenance of a cash deposit or performance security on an ongoing basis to guarantee proper maintenance and inspections of the system;
- iv) Monitoring or inspections may be required to be made by independent agents.

Septic System #1, which is designed for 100 employees, is the expansion of the existing septic system to the west/southwest. Septic System #2, which is also designed for 100 employees, is to the east of the existing septic system. Septic System #3, which is designed for 20 employees, is located directly adjacent to the standing water to the west. This septic system, needs to be sited such that the rock bed is located outside of the 100-year flood elevation (894.73) to the west. This will be coordinated with the building permit issuance. A retaining wall may be required.

The 100-year flood elevation of the easterly proposed stormwater basin (NURP P2) is 894.96. This 100-year elevation results in portion of the bituminous to the north being under water by up to 1.23 feet. The owners email stating that this is acceptable is attached.

The Plans show a potential 35,120-square foot addition to the north and parking stalls to the north. Any future additions will require future approval by the City Council.

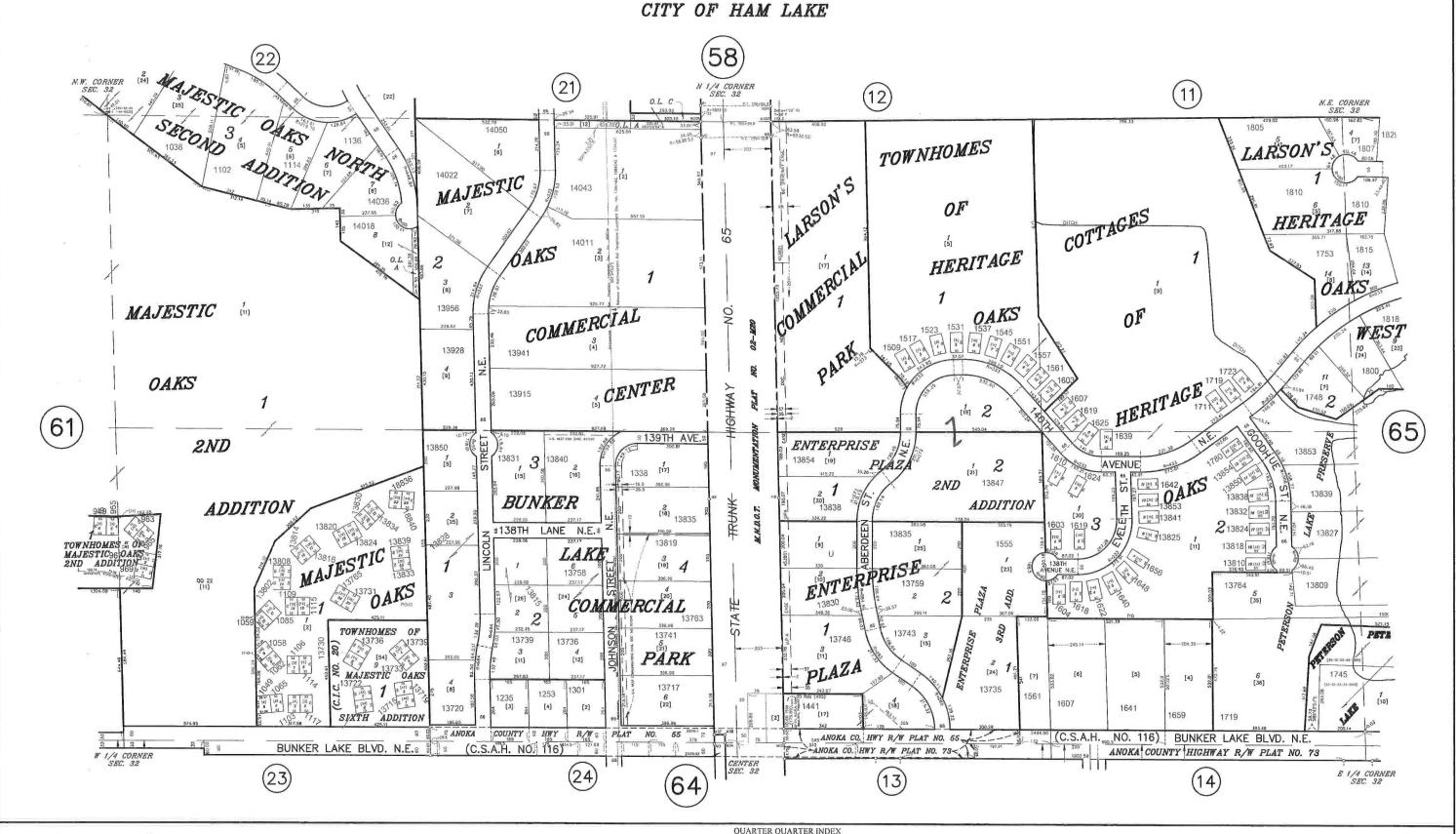
A public hearing will be scheduled for consideration of vacating drainage and utility easements dedicated. Easements to be considered for vacation include the northerly 10-feet of Lot 1, Block 2 Enterprise Plaza 2nd Addition, the southerly 10-feet of Lot 1, Block 2 Larson's Commercial Park and that portion of the south half of Lot 1, Block 2 Enterprise Plaza 2nd Addition that is being converted to stormwater for the building additions. An exhibit with legal descriptions is required.

Larson Systems was conditionally approved by the Coon Creek Watershed District (CCWD) Board of Managers at their August 22nd meeting. The Notice of Application Status is attached. The \$4,640 escrow and the execution of an Operation and Maintenance Agreement are required to obtain the CCWD Permit. A CCWD permit is required before grading operations can commence. A MPCA Construction Stormwater Permit is also required, because the disturbed area is over one-acre, before grading operations can commence.

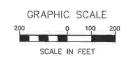
Recommendation:

It is recommended that plans for the Larson Systems Building Additions be recommended for approval. Approval is contingent on the following:

- Southeasterly septic area being outside of the 100-year elevations of the existing pond to the west (894.73) and the existing pond to the north (894.97). Septic siting will be coordinated with the Building Permit review. Retaining walls may be required to the west and/or north of this proposed septic area.
- Screening along that portion of the south property line adjacent to the residentially zoned 1555 138th Avenue parcel that meets the requirements of 11-1853 of City Code.
- City Council approval of the vacation of easements at a future Council meeting.







ANOKA COUNTY SURVEYOR'S OFFICE ROOM 224 2100 3RD AVENUE ANOKA, MN 55303 (763) 324-3200



PROPERTY IDENTIFICATION NUMBER
Section Township Range Quarter Specific

 Section Number
 Township Number
 Range Number
 Quarter Quarter
 Specific Parcel

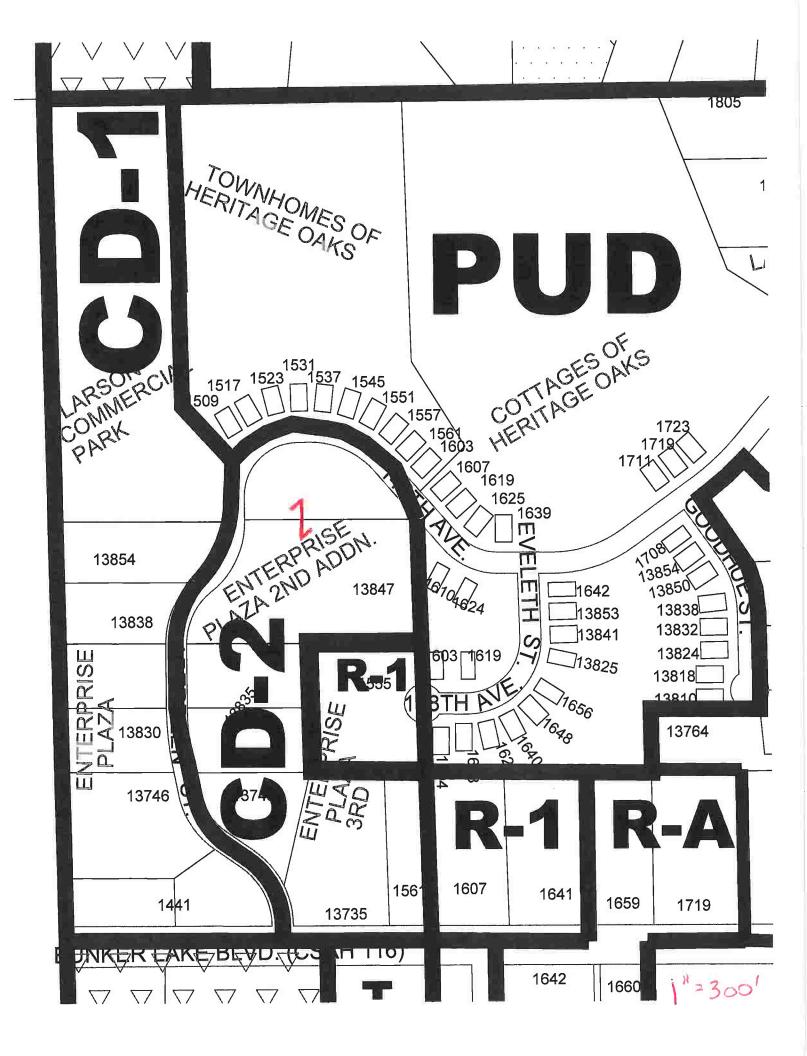
 XX
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SPECIFIC PARCEL NUMBERS ARE IN BRACKETS: [1] EXAMPLE OF PIN NUMBER: 32-32-23-13-0011

THIS IS A COMPILATION OF RECORDS AS THEY APPEAR IN THE ANOKA COUNTY OFFICES AFFECTING THE AREA SHOWN. THIS DRAWING IS TO BE USED ONLY FOR REFERENCE PURPOSES AND THE COUNTY IS NOT RESPONSIBLE FOR ANY INACCURACIES HEREIN CONTAINED.



11=1201



11-1800 LANDSCAPING IN COMMERCIALLY ZONED AREAS

In all areas of the City zoned CD-1, CD-2, CD-3 or CD-4, the following conditions shall apply to landscaping and ground cover.

11-1810 Landscape Plan Required No building permit shall be issued for construction on a vacant lot, nor for any addition to an existing building involving the addition of 500 square feet or more of additional building space, unless the applicant shall have first submitted and obtained approval of the City Council, after review by the Planning Commission, of a landscaping plan meeting the requirements of this code.

11-1820 Installation Required No certificate of occupancy shall be issued for any construction which required a landscaping plan unless the applicant has installed all of the elements of the landscaping plan, or unless the applicant has posted security acceptable to the City to guarantee timely installation of all landscaping.

11-1830 Time for Submission The landscaping plan shall be submitted, whenever possible, at the time of site plan approval. If the landscaping plan is not submitted at the time of site plan approval, it must be separately reviewed by the Planning Commission and approved by the City Council prior to the issuance of any building permits.

11-1840 Contents and Specifications

The landscaping plan shall be a quality document prepared at a scale of one-inch equals thirty feet, showing all relevant dimensions. Fifteen copies of the plan shall be submitted by the applicant. The following data shall be displayed on the plan, legibly labeled:

- A. Perimeter of all buildings, signs or other structures;
- B. Parking lots and walkways, identifying pavement material;
- C. Areas of decorative rock, identifying type of rock;
- D. Areas of lawn;
- **E.** Other areas where other than natural wooded vegetation is to be used as ground cover, identifying the ground cover to be used;
- F. Locations, trunk size, height and species of all trees to be planted;
- **G.** Locations where existing natural wooded vegetation will remain undisturbed;
- H. All other landscaping features to be used.

11-1850 MINIMUM LANDSCAPING REQUIREMENTS

<u>11-1851 Paved Surfaces</u> All surfaces upon which motor vehicles will be parked or driven, and all areas in which pedestrians will be walking from point to point shall be surfaced with asphalt or concrete, to specifications established by the City's engineer.

11-1852 Ground Cover On any side of a lot which abuts a public road, the area from the road right-of-way to the nearest building side shall be entirely covered with ground cover consisting of pavement, decorative rock bordered with edging, lawn grass intended for regular mowing, mulch, bark, wood chips or other commonly used landscaping ground cover. Shingles, aggregate and clay mixtures such as Class V material, recycled concrete or asphalt, and other non-conventional ground covers shall not be permitted. Loose ground cover shall be installed to a depth of at least three inches. Any area which is covered by landscaping ground cover (not lawn or pavement) shall also include one decorative shrub for each ten square feet of ground cover.

Side yards and rear yards which do not contain existing natural wooded vegetation shall either be covered with ground cover in the manner stated above for front yards, or shall be planted so as to encourage the emergence of natural wooded vegetation, through the planting of tree species expected to reach a height of at least twenty five feet. Areas so prepared shall not be required to have mown lawn areas, but may be allowed to return to a natural state.

11-1853 Tree Plantings Trees which are planted outside of areas intended to return to a natural wooded state shall be of a variety indigenous to the local climate. Deciduous trees shall, when planted, have a trunk size of at least one and one half inches at a height of four feet from ground level. Conifers shall have a height of at least five feet. Tree locations are subject to review and approval of the City in the landscaping plan review process, and while no specific number of trees are required, the following general principles shall be observed;



- A. Where property lines are adjacent to residential areas, a planting screen of conifers shall be required, of sufficient size and proximity to provide an intermingled screen within five years;
- **B.** Decorative trees shall be planted along the right of way lines of adjacent public roadways;
- **C.** The use of conifers shall be encouraged and preferred.
- **D.** Whenever possible, an attempt will be made to preserve stands of existing vegetation, particularly treed or wooded areas.

11-1860 Case by Case Evaluation

Recognizing that the City contains a wide variety of commercial land, the landscape approval process shall be on a case by case basis. Where wetlands are present, or where large distances separate a commercial lot from adjacent lands, for example, strict adherence to screening requirements may be unnecessary. Likewise, strict adherence to the remaining provisions of Article 11-1800 may be unnecessary where size, spatial relationships, topography or other physical features render a given landscaping plan aesthetically acceptable,

uniformly, the City Administrator may divide the City into three separate reporting groups. The City shall maintain a database which contains a complete inventory of every SSTS in the City, the name and address of the property owner, and such other data about each SSTS as may be available to the City. The inspection shall be performed by the owner of the real estate upon which the SSTS is located, or by the owner's designated inspector. The inspection shall be at the expense of the property owner. Inspections shall include, at a minimum, a thorough evaluation of whether or not any effluent is or has been percolating to the surface of the ground, and each inspection shall also include the following measurements:

- 1) The distance between sludge and the bottom of outlet baffles;
- 2) The distance between scum and the bottom of outlet baffles.

B. Standards, Reporting and Maintenance

Where there is less than 12 inches between sludge and the bottom of outlet baffles, or where the scum line is found to be less than 3 inches above the bottom of outlet baffles, this condition shall be noted on the inspection report. The inspector shall complete an inspection report on forms to be maintained by the City Building Official and shall forward copies to the City Building Official as soon as inspections are complete. Maintenance of SSTS shall be in accord with Minnesota Rules 7080.2450.

C. <u>Pumping</u>

If any inspection reveals that there is less than 12 inches between sludge and the bottom of outlet baffles, or where the scum line is found to be less than 3 inches above the bottom of outlet baffles, the SSTS shall be pumped within 30 days of the inspection, and the owner shall provide evidence to the City Building Official that pumping was completed. Pumping shall be performed only by pumpers who are licensed or otherwise approved by the Minnesota Pollution Control Agency.

D. <u>Identification of Failed System or Failing System</u>

If an SSTS is reported by an Inspector to be a Failed or Failing System and the property owner does not agree with the finding, the property owner may request that the City Building Official re-inspect the SSTS to provide a second opinion as to the status of the SSTS. A fee equal to the City's actual labor and mileage costs to perform such second opinion inspections may be established by resolution of the City Council. In such cases, the decision of the City's Building Official shall be deemed final.

*

E. <u>Special Provisions for Inspections of Systems Other than</u> Standard

Notwithstanding the provisions of Article 11-450.4 (A), (B) and (C) above, inspections of SSTS that are other than Standard Systems shall be in

accord with a Management Plan to be developed on a case-by-case basis at the time that a permit is issued for such a system. The Management Plan shall be established in writing by the System Designer, and may include, without limitation, the following features:

- i) Inspections, as often as semi-annually, to standards described in the Management Plan;
- ii) Periodic pumping different than that described in Article 11-450.4(C) above;
- iii) Maintenance of a cash deposit or performance security on an ongoing basis to guarantee proper maintenance and inspections of the system;
- **iv)** Monitoring or inspections may be required to be made by independent agents.

11-450.6 Types of SSTS Permitted, Standards and Requirements

All SSTS shall be constructed in accord with the standards imposed by Minnesota Rules 7080 and 7081, except that the following table shall be substituted for the table found in 7080.1930, subp. 1:

Number of Bedrooms	Septic Tank Liquid Capacity
4 or Less	1,500 Gallons (two compartments)
5 or 6	2,000 Gallons (two compartments)
7 or More	As determined by Building Official

A. Vacant Residential Land

For land which is not currently being used for residential purposes, meaning parcels which do not presently have an SSTS, including new residential development, the preferred type of SSTS shall be a Standard System. Notwithstanding the foregoing language, all lots in newly platted residential subdivisions shall be required to install Standard Systems.

B. Occupied Residential Land

For lots which currently have an SSTS which is a Failed or Failing System, the system shall, if possible, be replaced by a Standard System.

C. CD-1, CD-2, CD-3, CD-4 and I-P (Industrial Park Land)

SSTS's in the foregoing zoning districts may be Non-Standard Systems, provided that they meet the design criteria outlined in Minnesota Rules 7080, 7082 and 7083.

D. Flood Plain

Tradewell Soil Testing 18330 Dahlia Street NW Cedar, MN 55011

Job #22191

Name- Larson Systems, Inc.

A "Ty	pe 3	" septi	c system	requires a	monitoring	and mitig	gation pl	an For S	System	#1,	#2 #3	3
					E, Ham Lak							

Monitoring: The septic tanks will be pumped yearly for the first three years and every 3

years thereafter. At the time of pumping the pumper will evaluate the system to determine if it is failing (discharging to the surface) and submit a written statement to the homeowner with the invoice. The property owner will be responsible for submitting the information to the city.

Mitigation: If the system fails there are two options: 1. Use the alternate site if one is

available on the site or; 2. Remove the existing system and reconstruct on

same site.

Based on the foregoing, the property/ homeowner accepts responsibility for the operation of the sewer system and will or cannot hold the designer, city or installer liable for problems that may affect the performance of the soil treatment system.

In addition, the property/ homeowner agrees to the monitoring plan and will disclose information concerning "Type 3" system construction at the time of property transfer.

Mark Tradewell

Mark Tradewell MPCA #307

07/01/22 Date

Date

Property/ Homeowner

Date

^{**}Design is not valid without signed copy from homeowner. Signed copy to accompany design for permit.

TRADEWELL SOIL TESTING 18330 Dahlia Street NW Cedar, MN 55011 (763) 286-9095

Prepared for: Larson Systems, Inc. 13847 Aberdeen Street NE Ham Lake, MN 55304

July 1st, 2022

System #1 In the designing of this "Type 3" system every effort has been made in designing this system to comply with correct 7080 code standard, including water table separation and drainfield sizing. System is sized for commercial building with 100 existing employees, kitchen with a microwave and no dishwasher and restrooms. Because the location of the new system is in area that has been filled a "Type 3" system is needed. This system will need to be divided into two separate mound rock beds. The existing 63' rock bed will need to be lengthened to 95' long and a new 50' X 10' mound rock bed will be added adjacent to existing system. All "Type 3" systems are required to have a water meter and/ or event counter to verify flow. The design is based on the following criteria:

100 Employees @ 17.5 gallons per employee = 1750 GPD

Tank sizing: 1750 X .75 = 1312 + 1125 = 2437

**Use 1050 GPD Flow for drainfield design. **(System #1)

** Adding on to existing system: (System #1)

- Carefully remove West end of existing mound system back to end of rock bed. Then remove
 existing topsoil to a depth of approximately 10"- 12" below existing grade. At this point you
 should be encountering medium sand, loose and non- compacted.
- Completed hole should be 35' long X 20' wide x 12"deep. Extended rock bed to be centered on over-sized excavated area.
- Clean washed sand fill should be brought in and placed on top of fill sand to a depth even with existing grade. 30 cubic yards will be needed to fill excavated area even with existing grade. (This amount could vary depending on amount of material removed.)

Larson Systems, Inc. Page 2

- 4. Drainfield to be a pressurized mound system. New added rock bed size 32' X 10' X 6" deep of rock below pipe. Rock amount 10 cubic yards or 14 ton of clean rock (Rock to be 3/4"- 2 1/2" size). Total new rock bed length will be 95' X 10'.
- 5. Tanks- Install 2 new 1500 gallon septic tanks and 1-1500 gallon pump tank. Existing tanks to be pumped out, crushed and removed to make room for new tanks.
- 6. Use 3-2" laterals with 32-1/4" perforations per lateral for a total of 96 perforations. Use 2" manifold and supply line. The manifold and supply line pipe must have back drainage to the pumping chamber. The distribution pipes shall have their ends capped. Be sure the rock and sand fill materials are clean.
- 7. Pump system: 6 doses per day at 192 gallons per dose including drainback. Recommend a high flow Gould pump. Pump must be designed to deliver at least 71 GPM with at least 26' of total head. There will be alternating pumps with alternating dosing between both mound systems.
- 8. Site to be capped with 6" of topsoil over whole site. Seed or sod area as soon as possible to prevent erosion. Finished grade will be approximately 44" above existing grade. Grade to match existing mound elevations.
- 9. Use site and sound alarm on pump. The power supply and switches must be located outside the manhole and pumping chamber in a weatherproof enclosure. A warning device must be installed with a light and sound device, this is in case of a pump failure.
- 10. Keep all heavy equipment off of site before, during and after construction of system.
- 11. All existing and neighboring wells are located greater than 50' away from proposed treatment area.

Nothing other than gray water, (laundry, showers, etc.) human waste and toilet tissue should be disposed of into the septic tanks. Garbage disposals are not recommended. Smaller amounts of laundry soaps, dish soaps, cleaning agents, etc. are better for the system. Antibacterial soaps and chlorine agents may kill the bacteria needed to treat septic effluent properly. Additives are not recommended, they may cause harmful damage to your system. See Monitoring and Mitigation Plan for proposed pumping schedule. With proper installation and maintenance, this system should have no problem in treating septic effluent effectively.

Mark Tradewell
MPCA #307

TRADEWELL SOIL TESTING

18330 Dahlia Street NW Cedar, MN 55011 (763) 286-9095

Prepared for: Larson Systems, Inc. 13847 Aberdeen Street NE Ham Lake, MN 55304

July 1st, 2022

System #2 In the designing of this "Type 3" system every effort has been made in designing this system to comply with correct 7080 code standard, including water table separation and drainfield sizing. System is sized for commercial building with 100 existing employees, kitchen with a microwave and no dishwasher and restrooms. Because the location of the new system is in an area that has been filled a "Type 3" system is needed. All "Type 3" systems are required to have a water meter and/ or event counter to verify flow. The design is based on the following criteria:

100 Employees @ 17.5 gallons per employee = 1750 GPD

Tank sizing: 1750 X .75 = 1312 + 1125 = 2437

**Use 600 GPD Flow for drainfield design. **(System #2)

**Proposed new System #2

- 1. Carefully remove existing fill soil to a depth of approximately 14" below existing grade @ boring #2. At this point you should be encountering medium sand, loose and non-compacted.
- Completed hole should be 60' long X 20' wide x 14"deep. Rock bed to be centered on oversized excavated area.
- Clean washed sand fill should be brought in and placed on top of fill sand to a depth even with existing grade @ boring #2. 55 cubic yards will be needed to fill excavated area even with existing grade @ boring #2. (This amount could vary depending on amount of material removed.)

Larson Systems, Inc. Page 2

- 4. Drainfield to be a pressurized mound system. Rock bed size 50' X 10' X 6" deep of rock below pipe. Rock amount 16 cubic yards or 23 ton of clean rock (Rock to be 3/4"-2 1/2" size).
- 5. Tanks- Install 2- new 1500 gallon septic tanks and 1- 1500 gallon pump tank. Existing tanks to be pumped out, crushed and removed to make room for new tanks..
- 6. Use 3-2" laterals with 17-1/4" perforations per lateral for a total of 51 perforations. Use 2" manifold and supply line. The manifold and supply line pipe must have back drainage to the pumping chamber. The distribution pipes shall have their ends capped. Be sure the rock and sand fill materials are clean.
- 7. Pump system: 6 doses per day at 100 gallons per dose including drainback. Recommend a 1/2 horse pump. Pump must be designed to deliver at least 38 GPM with at least 17' of total head.
- 8. Site to be capped with 6" of topsoil over whole site. Seed or sod area as soon as possible to prevent erosion. Finished grade will be approximately 44" above existing grade.
- 9. Use site and sound alarm on pump. The power supply and switches must be located outside the manhole and pumping chamber in a weatherproof enclosure. A warning device must be installed with a light and sound device, this is in case of a pump failure.
- 10. Keep all heavy equipment off of site before, during and after construction of system.
- 11. All existing and neighboring wells are located greater than 50' away from proposed treatment area.

Nothing other than gray water, (laundry, showers, etc.) human waste and toilet tissue should be disposed of into the septic tanks. Garbage disposals are not recommended. Smaller amounts of laundry soaps, dish soaps, cleaning agents, etc. are better for the system. Antibacterial soaps and chlorine agents may kill the bacteria needed to treat septic effluent properly. Additives are not recommended, they may cause harmful damage to your system. See Monitoring and Mitigation Plan for proposed pumping schedule. With proper installation and maintenance, this system should have no problem in treating septic effluent effectively.

Mark Tradewell MPCA #307

Whe Sulewell

TRADEWELL SOIL TESTING 18330 Dahlia Street NW Cedar, MN 55011 (763) 286-9095

Prepared for: Larson Systems, Inc. 13847 Aberdeen Street NE Ham Lake, MN 55304

September 30th, 2022

** System #3 In the designing of this "Type 3" system every effort has been made in designing this system to comply with correct 7080 code standard, including water table separation and drainfield sizing. System is sized for commercial building with 20 existing employees and a unisex restroom. Because the location of the new system is in the same area of the existing mound and has been filled a "Type 3" system is needed. All "Type 3" systems are required to have a water meter and/ or event counter to verify flow. The design is based on the following criteria:

20 Employees @ 17.5 gallons per employee = 350 GPD

Tank sizing: $700 \times .75 = 263 + 1125 = 1388$

**Use 350 GPD Flow for drainfield design. **(System #3)

**Proposed new System #3

- 1. Carefully remove existing fill soils to a depth of approximately 36" below existing grade. At this point you should be encountering original medium fine sand, loose and non-compacted.
- Completed hole should be 53' long X 17' wide x 12"deep. Rock bed to be centered on oversized excavated area.
- 3. Clean washed sand fill should be brought in and placed on top of fill sand to a depth even with existing grade. 85 cubic yards will be needed to fill excavated area even with existing grade. (This amount could vary depending on amount of material removed.)

Larson Systems, Inc. Page 2

- 4. Drainfield to be a pressurized mound system. Rock bed size 43' X 7' X 6" deep of rock below pipe. Rock amount 10 cubic yards or 14 ton of clean rock (Rock to be 3/4"-2 1/2" size).
- 5. Tanks- Install a 1500 gallon 2- compartment septic tank and 1-1000 gallon pump tank.
- 6. Use 2-2" laterals with 14-1/4" perforations per lateral for a total of 28 perforations. Use 2" manifold and supply line. The manifold and supply line pipe must have back drainage to the pumping chamber. The distribution pipes shall have their ends capped. Be sure the rock and sand fill materials are clean.
- 7. Pump system: 4 doses per day at 94 gallons per dose including drainback. Recommend a 1/3 horse pump. Pump must be designed to deliver at least 21 GPM with at least 13' of total head.
- 8. Site to be capped with 6" of topsoil over whole site. Seed or sod area as soon as possible to prevent erosion. Finished grade will be even with existing proposed grade. (902.0)
- 9. Use site and sound alarm on pump. The power supply and switches must be located outside the manhole and pumping chamber in a weatherproof enclosure. A warning device must be installed with a light and sound device, this is in case of a pump failure.
- 10. Keep all heavy equipment off of site before, during and after construction of system.
- 11. All existing and neighboring wells are located greater than 50' away from proposed treatment area.

Nothing other than gray water, (laundry, showers, etc.) human waste and toilet tissue should be disposed of into the septic tanks. Garbage disposals are not recommended. Smaller amounts of laundry soaps, dish soaps, cleaning agents, etc. are better for the system. Antibacterial soaps and chlorine agents may kill the bacteria needed to treat septic effluent properly. Additives are not recommended, they may cause harmful damage to your system. See Monitoring and Mitigation Plan for proposed pumping schedule. With proper installation and maintenance, this system should have no problem in treating septic effluent effectively.

Mark Tradewell MPCA #307

Mule Fenderall

Mohammad Abughazleh

From:

davelarson@larsonsystems.com

Sent:

Tuesday, October 4, 2022 12:42 PM

To: Cc: Mohammad Abughazleh tim@larsonsystems.com

Subject:

Memo

Good afternoon Mohammad,

Based on our conversation on 10/4/2022 and your explanation that a 2-yr rain event will produce a water level of 893.72', water level of 894.18' for a 10-yr event, and a 100-yr rain event will produce a water level of 894.96' for the P2 basin, we understand that this will produce temporary levels of water over portions of our parking lot. This will produce a result that will be acceptable for our operations.

Thanks, and have a nice day.

Dave Larson President Larson Systems Inc.



NOTICE OF PERMIT APPLICATION STATUS

Project:

Larson Systems Building Additions

Date:

August 23, 2022

Applicant:

David A. Larson

13847 Aberdeen St NE Ham Lake, MN 55304

Permit Application#:

P22-056

Purpose:

Construction of three commercial buildings, drive aisles,

parking lots, and stormwater infrastructure adjacent to

an existing building

Location:

13847 Aberdeen St NE, Ham Lake, MN 55304

At their meeting on August 22, 2022, the Board of Managers of the Coon Creek Watershed District **conditionally approved** the above referenced project with 4 conditions and 2 stipulations: **This is NOT a permit.**

ISSUES/CONCERNS:

ISSUE	NEED
Escrows: \$2,000 + (5.28 ac * \$500/ac = \$4,640.00	Receipt of escrows.
 Stormwater & Hydraulics: The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation. The applicant is utilizing wet sedimentation ponds in lieu of infiltration due to high groundwater. A construction detail was not provided for the EOF for Pond 2. Additional spot elevations are needed on the berm between pond 2 and pond 4. 	 2. Provide a construction detail for the EOF for Pond 2. 3. Provide spot elevations along the berm between pond 2 and pond 4 to ensure any everflow from pond 2 is contained within the EOF.
Maintenance: A maintenance agreement has not been executed.	Execute an O&M Agreement that meets District requirements

To secure Board review and obtain your permit, the District must receive:

Conditions:

1. Receipt of escrows.

Provide a construction detail for the EOF for Pond 2.

Provide spot elevations along the berm between pond 2 and pond 4 to ensure any overflow from pond 2 is contained within the EOF.

4. Execute an O&M Agreement that meets District requirements.

After issuance, the permit will include the following stipulations that need to be fulfilled before permit closeout:

Stipulations:

1. Submittal of as-builts for the following stormwater management practices, including volume and critical elevations:

oldine and chideal elevations.	
Stormwater Treatment Practices	Number
Wet Sedimentation Pond	3
Outlet Control Structure	3

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.

Please be advised that **this is NOT a permit**, and that work without a permit is a violation of the terms of the Coon Creek Watershed District Rule 5.1. If you have any questions, please call 763-755-0975.

Sincerely.

Erin Edison

Watershed Development Coordinator

cc:

File P22-056

Eileen Weigel, Stantec Danielle Tourtillott, Stantec Tom Collins, Ham Lake

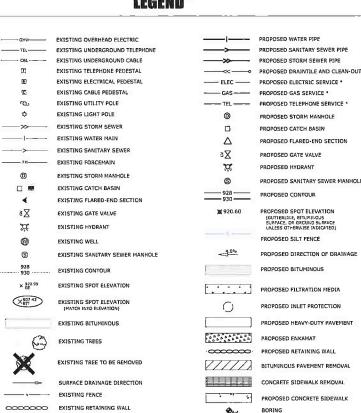
Note: Please respond to each of these items in writing when resubmitting the revised plans to the District. Resubmittals can be sent via email to permitsubmittals@cooncreekwd.org. **Please submit written responses below the original typed comments, using extra sheets as necessary, addressing comments from the District.** If you have any questions, feel free to contact Erin Edison at (763) 755-0975. Pursuant to Coon Creek rule 7.3 deficiencies must be addressed and resubmitted within 60 days. Failure to so shall be deemed a withdrawal of the permit application.

LARSON SYSTEMS BLDG ADDITIONS

TITLE SHEET, LEGEND, EXISTING CONDITIONS & REMOVAL PLAN

HAM LAKE, MINNESOTA

LEGEND



* NOT ALL SYMBOLS ARE APPLICABLE

SEPTIC BORING TIP-OUT CURB

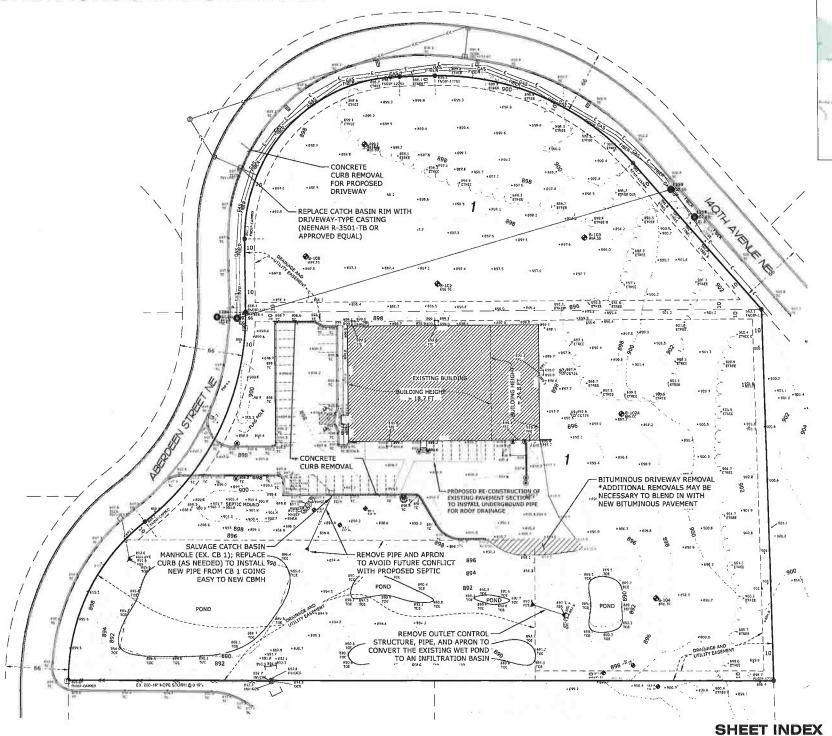
GENERAL NOTES

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTIN GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAK AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVIOID DAMAGE TO THESE UTILITIES

ALL UTILITIES THAT WILL BE OWNED AND MAINTAINED BY THE CITY AFTER CONSTRUCTION SHALL BE BUILT TO CITY STANDARDS.

STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.





NOT TO SCALE

VICINITY MAP

The War

TITLE SHEET, LEGEND, EXISTING CONDITIONS, & REMOVAL PLAN

GRADING, DRAINAGE & EROSION CONTROL PLAN

C2.2 GRADING, DRAINAGE & EROSION CONTROL PLAN GRADING, DRAINAGE & EROSION CONTROL PLAN

C5.1 STORM WATER POLLUTION PREVENTION PLAN C6.2 STORM WATER POLLUTION PREVENTION PLAN M.Q.A.

M.Q.A.

22-2023

MARCH 18 2022

DAVE LARSON

PREPARED FOR:

ENGINEERING, INC.

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

NORTH

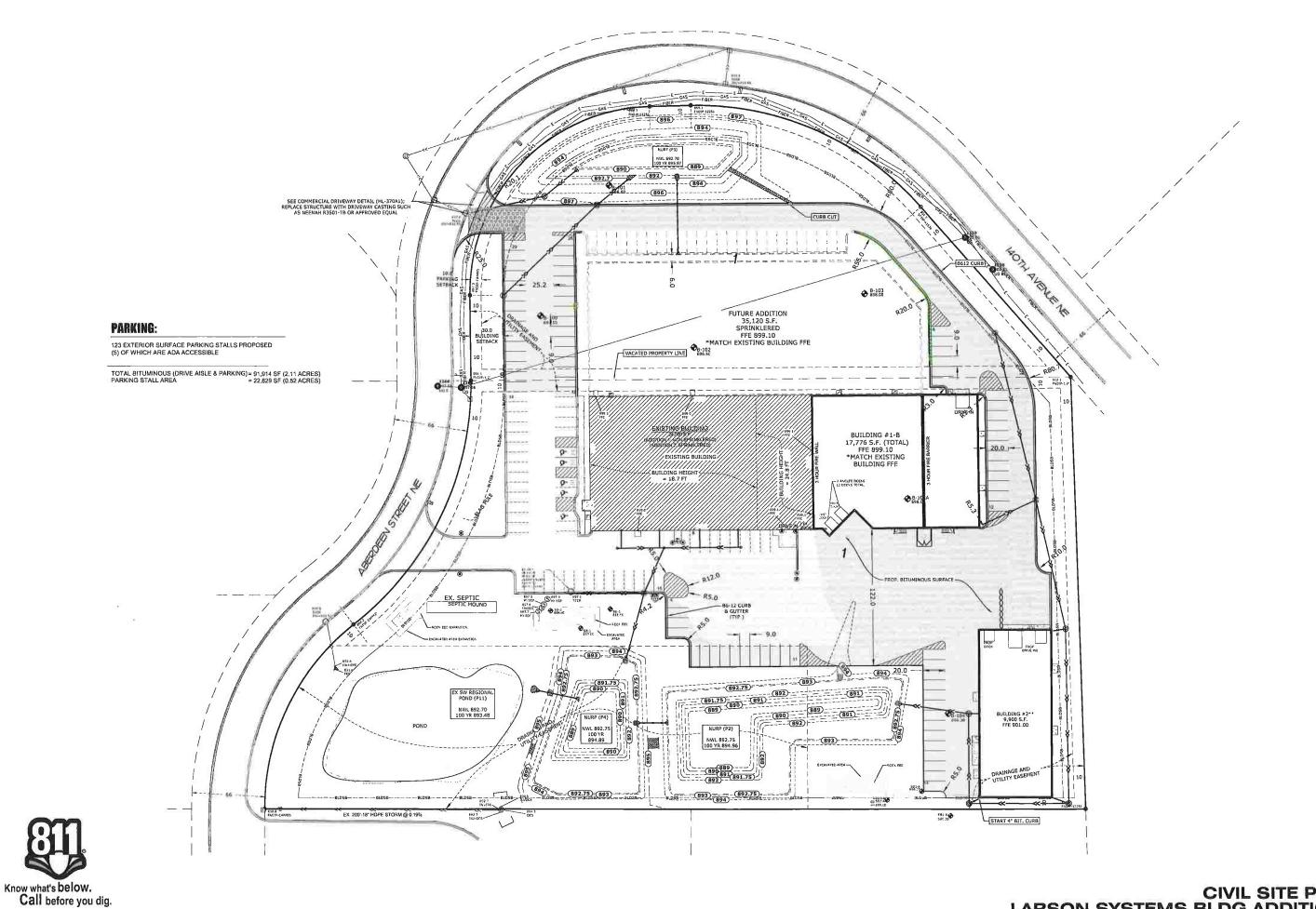


TITLE SHEET, LEGEND, EXISTING CONDITIONS, & REMOVAL PLAN LARSON SYSTEMS BLDG ADDITIONS

C2.1

CIVIL SITE PLAN

LITILITY PLAN **DETAILS & NOTES** C4.2 DETAILS & NOTES 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014



DESIGN BY M.Q.A. CHCKD BY: PROJ. NO. M.Q.A 22-2023 ORIGINAL DATE: MARCH 18, 2022

ADDITIONS
HAM LAKE MINNESOTA
CONL SITE PLAN

PREPARED FOR: DAVE LARSON

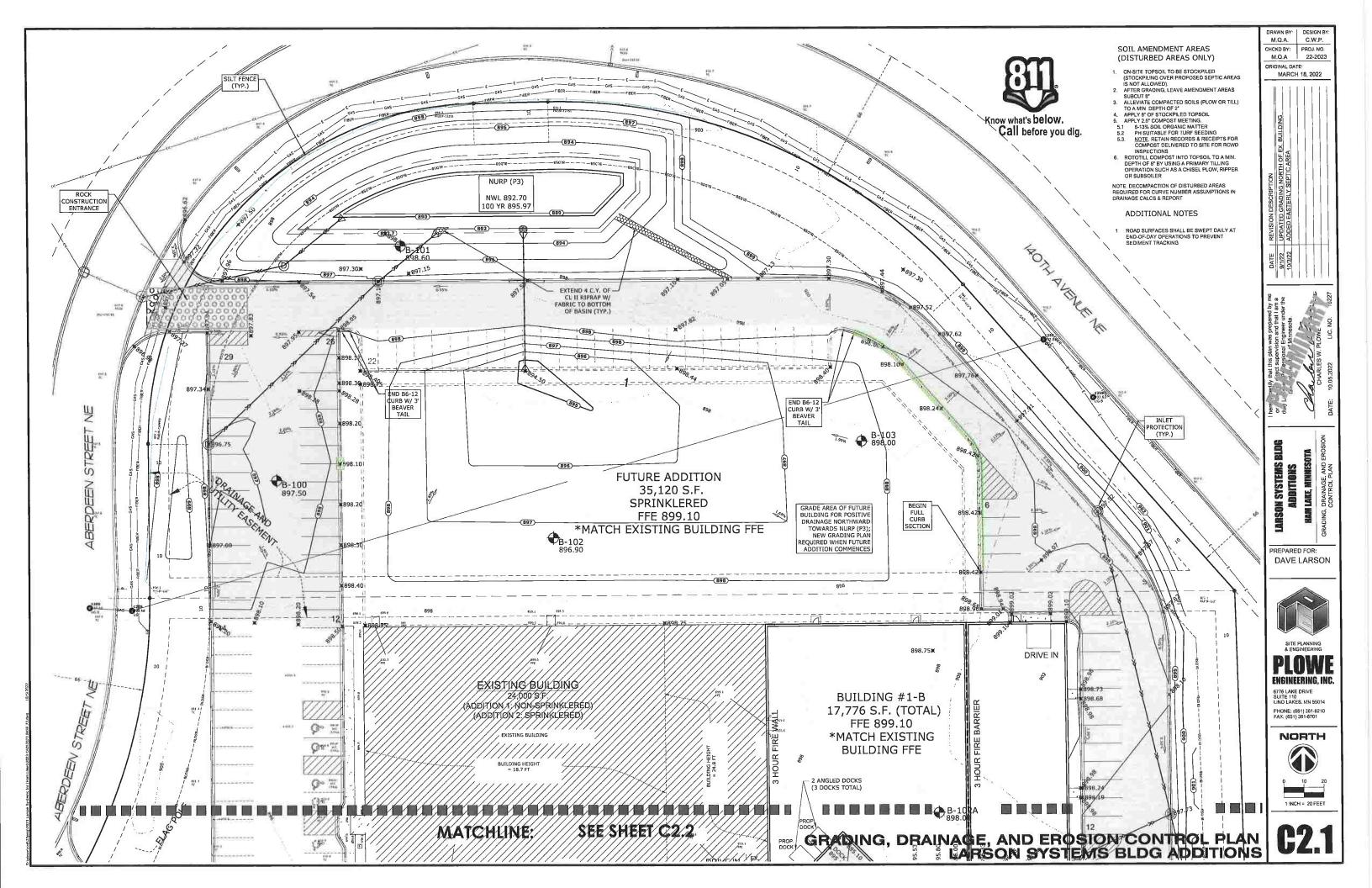


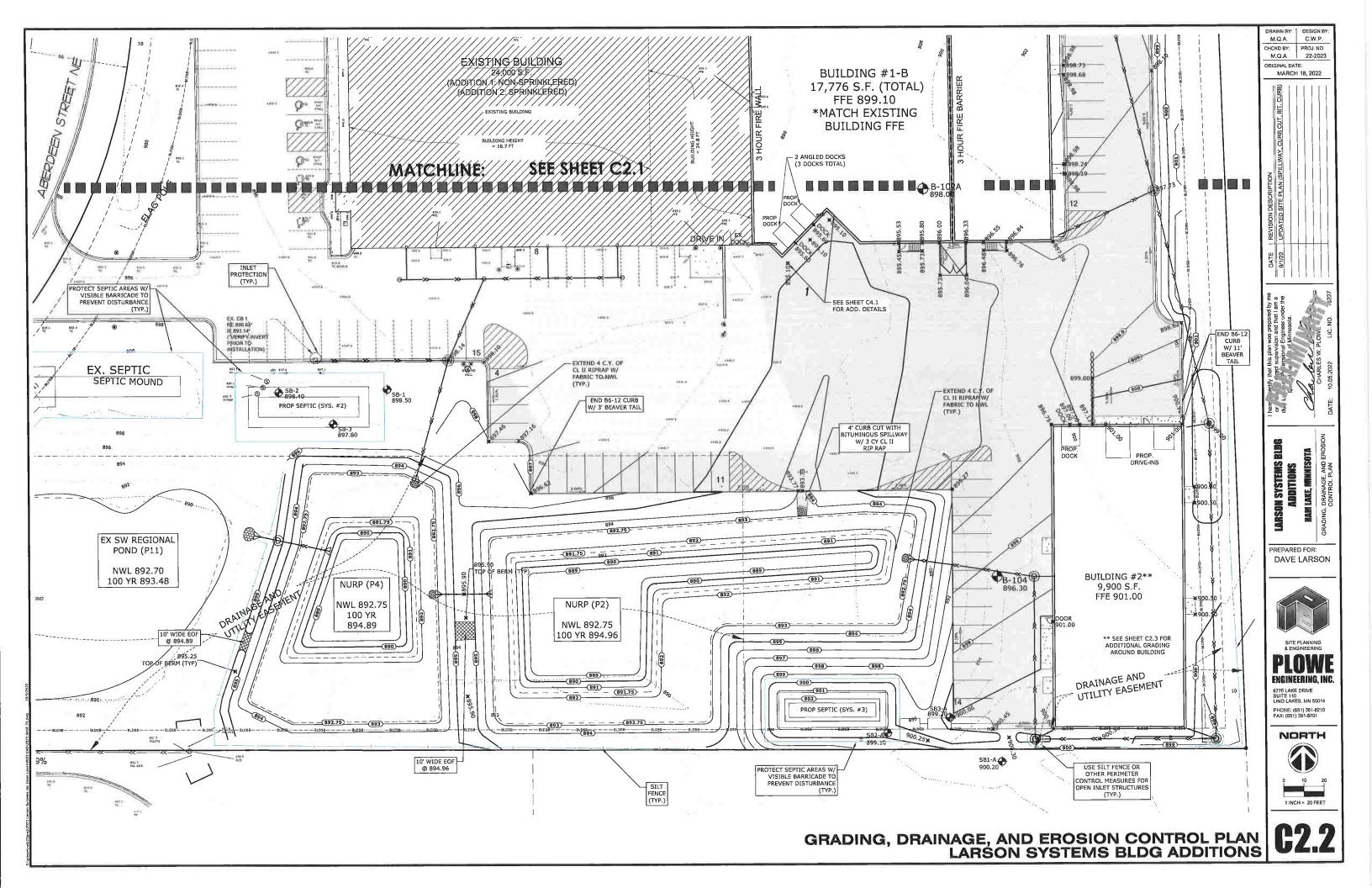
ENGINEERING, INC.

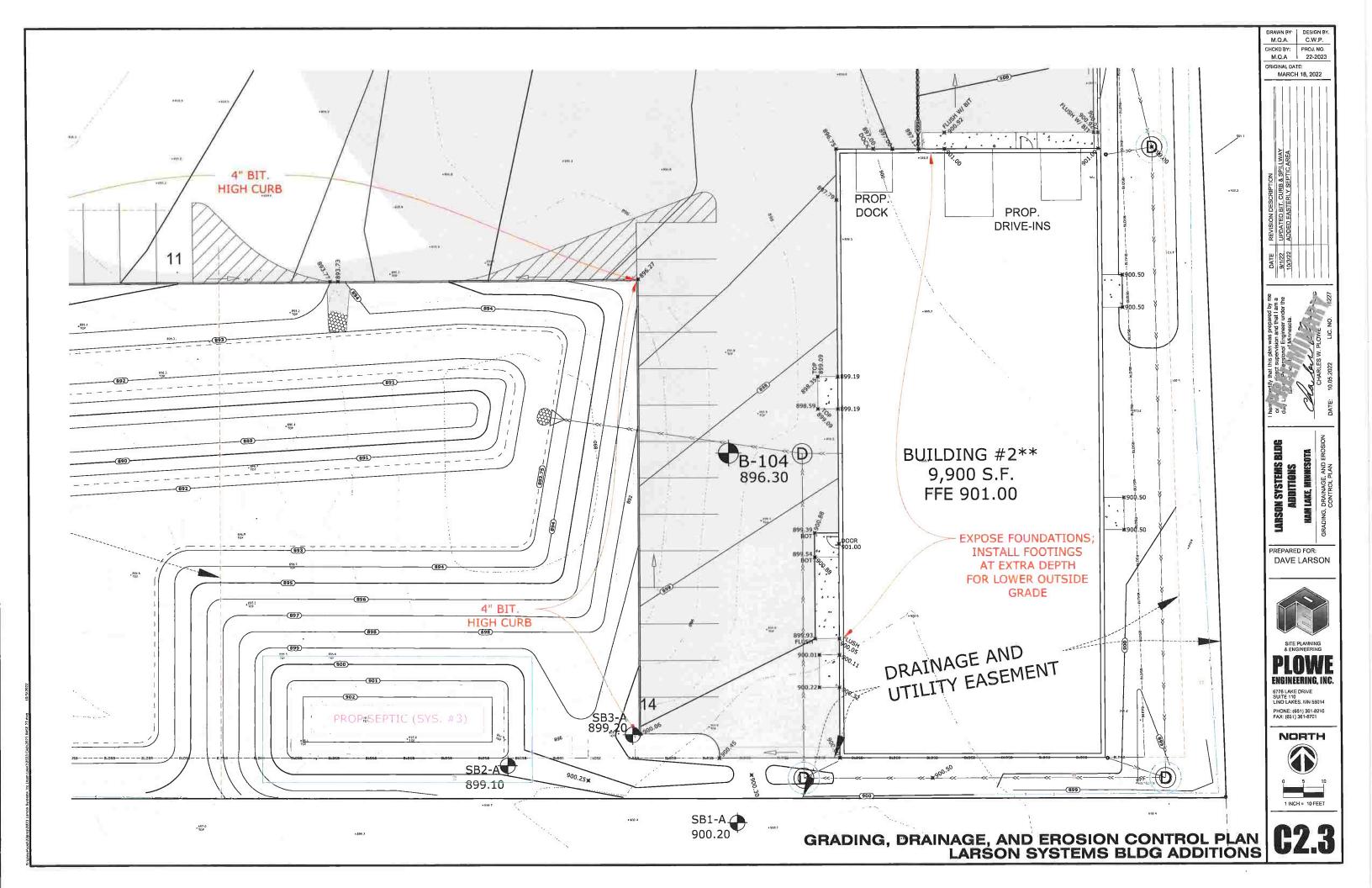
6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014 PHONE: (651) 361-8210 FAX: (651) 361-8701

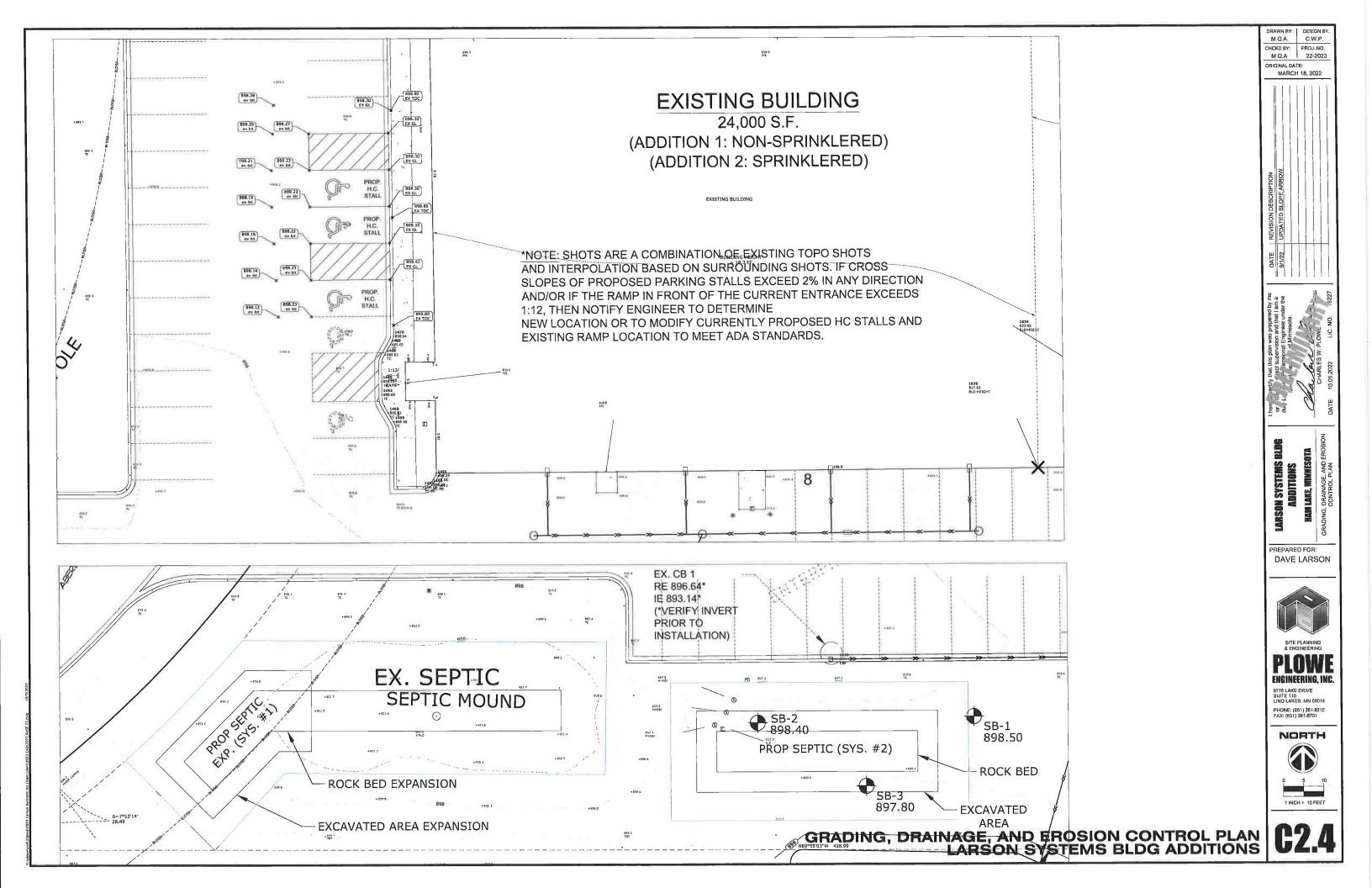


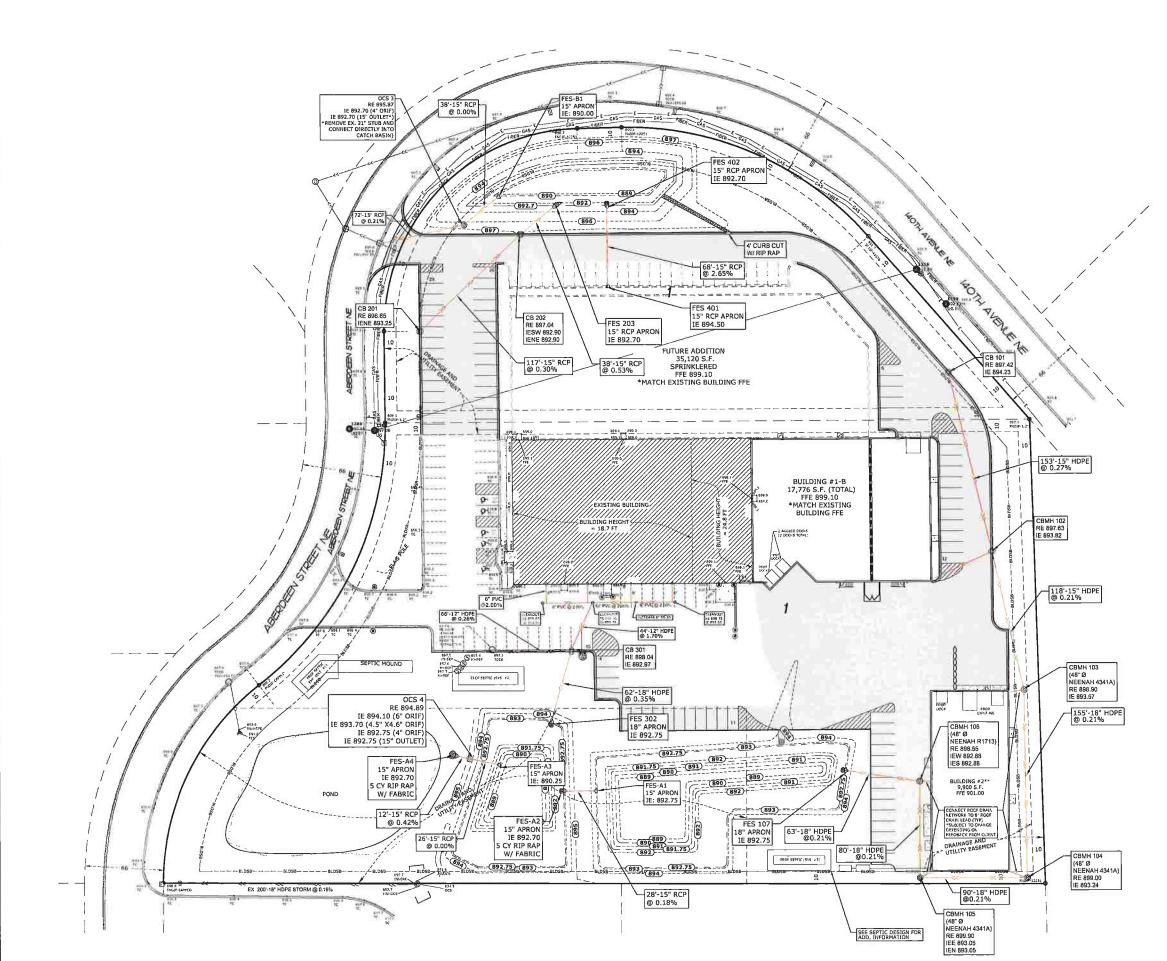












STORM SEWER NOTES

FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.

WHEN CALLED OUT AS PIPE, STORM SEWER SHALL BE REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS OR, IF ALLOWED BY CITY, HOPE PIPE MAY BE USED. (SEE PLAN FOR LOCATIONS WHERE RCF) IS REQUIRED. IN DIPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATERTIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HOPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTN 2321.

STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTIO LAYING LENGTH OF APRON TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.

ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MINNESOR RULES, PART 4715.2820.

STORM SEWER PIPES TO BE JOINED TO THE CATCH BASIN MANHOLES W/ APPROVED RESILENT RUBBER JOINTS TO MAKE THEM GASTIGHT OR WATERTIGHT. CEMENT MORTAR JOINTS ARE PERMITTED ONLY FOR REPAIRS AND CONNECTIONS OF EXISTING LINES CONSTRUCTED WITH SUCH JOINTS.

ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MINNESOTA RULES, PART 4715.2820.

DRAWN BY.
M.Q.A.
C.W.P.
CHCKO BY:
M.Q.A.
PROJ. NO.
22-2023

ORIGINAL DATE:
MARCH 18, 2022

ORIGINAL DATE:
MARCH 18, 2022

I here y -onlify that this plan was prepared by me or 'ord's supervision and that I am a duy, L. I all filmesota.

Is not in I me I mesota.

CHARLES W. PLOWE.

IARSON SYSTEMS BLDG ADDITIONS HAMIAKE MINNESOTA

PREPARED FOR: DAVE LARSON



PLOWE ENGINEERING, INC.

6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014 PHONE: (651) 361-8210 FAX: (651) 361-8701

NORTH

0 20 40 1 INCH = 40 FEET

Know what's below.

Call before you dig.

UTILITY PLAN LARSON SYSTEMS BLDG ADDITIONS

C3

GRADING, DRAINAGE & EROSION CONTROL NOTES

SILT FENCE AT DOWNSTREAM SIDE OF STOCKPILE LOCATIONS. IF STOCKPILE IS TO BE IN-PLACE LONGER THAN 7 DAYS, PROVIDE SEED AND MULCH.

THE CONTRACTOR SHALL PROVIDE ALL SOD, SEED, MULCH AND FERTILIZER WHICH SHALL CONFORM WITH THE FOLLOWING MNDOT SPECIFICATIONS AS MODIFIED BELOW

ITEM		MNDOT SPECIFICATION/NOTES	
SOD		3878	
SEED **		3876	
	ABLISHMENT OMMERCIAL TURF ESIDENTIAL TURF	MNDOT MIX 25-131 (220 LBS/ACRE) MNDOT MIX 25-131 (120 LBS/ACRE)	
SOIL-	FALL COVER SPRING/SUMMER BUILDING COVER -2 YEARS COVER -5 YEARS COVER	MNDOT MIX 21-112 (100 LBS/ACRE) MNDOT MIX 21-111 (100 LBS/ACRE) MNDOT MIX 21-113 (110 LBS/ACRE) MNDOT MIX 22-111 (30.5 LBS/ACRE) MNDOT MIX 22-112 (40 LBS/ACRE)	
MULCH		3882 (TYPE 1 - DISC ANCHORED)	
FERTILIZER:		3881	
WOOD FIBER BLA	NKET	3885 (CATEGORY 2)	

MOW A MINIMUM OF RESIDENTIAL TURF - ONCE PER 2 WEEKS COMMERCIAL TURF - ONCE PER 4 WEEKS

** SEEDED AREAS SHALL BE EITHER MULCHED OR COVERED BY FIBROUS BLANKETS TO

ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS OR IMPLEMENTED IN THE FIELD SHALL BE IN ACCORDANCE WITH THE CITY AND NPDES PHASE II PERMIT REQUIREMENTS, AND THE MPGAS' PROTECTING WATER QUALITY IN URBAN AREAS BEST MANAGEMENT PRACTICES FOR MINNESOTA."

THE CONTRACTOR SHALL PROVIDE DESIGNATED CONCRETE TRUCK WASHOUT AREA WITH APPROPRIATE SIGNAGE. WASHOUT AREA IS TO BE A MINIMUM OF SO FROM STORM DRAINS, DITCHES, PONDS, OR OTHER STORMWATER FEATURES. ALL LIQUID AND SOLID WASTE GENERATED BY CONCRETE WASHOUT OPERATIONS NUST BE CONTAINED IN A LEAK-PROOF CONTAINNENT FACILITY OR IMPERMEABLE LINER (E.G. COMPACTED CLAY LINER, IMPREMEABLE GEO-MEMBRANE). AFTER WASTE CONCRETE IS SET, BREAK-UP AND DISPOSE OF PROPERLY.

THE CONTRACTOR SHALL MAINTAIN SILT FENCE, INCLUDING THE REMOVAL OF ACCUMULATED SEDIMENT, THROUGH COMPLETION OF BUILDING CONSTRUCTION. SILT FENCE TO BE REMOVED ONLY AFTER COMPLETION OF BUILDING CONSTRUCTION AND UPON ESTABLISHMENT OF VEGETATION.

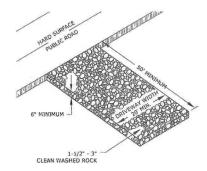
THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO ALL ADJACENT PROPERTY LINES AND MAKE SURE THE EROSION CONTROL PRACTICES IN-PLACE IN THOSE AREAS PREVENT MIGRATION OF SEDIMENT ONTO ADJACENT PROPERTIES.

THE CONTRACTOR SHALL FINAL GRADE SWALE AREAS UPON STABILIZATION OF UPSTREAM AREAS.

UPON GRADING COMPLETION THE CONTRACTOR SHALL PROVIDE NATIVE TOPSOIL, SEED, AND MULCH ANCHORED WITH A STRAIGHT SET DISC WITHIN 48 HOURS OF FINAL GRADING.

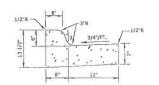
EXCESS SOIL SHOULD BE TREATED LIKE OTHER EXPOSED SOIL AND STABILIZED WITHIN 72 HOURS. ANY SOIL STOCKPILES ARE TO HAVE SILT FENCE PLACED ON DOWNSTREAM SIDES AND SHALL NOT BE PLACED IN SURFACE WATERS.

ADJACENT STREETS SHALL BE KEPT CLEAN OF CONSTRUCTION MATERIALS, DIRT, AND OTHER UNDESIRABLE MATERIALS. WHEN MATERIALS OR DEBRIS HAVE WASHED/FLOWED ONTO ADJACENT STREETS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO SWEEP/SCR



ROCK CONSTRUCTION ENTRANCE

PROVIDE 4" CLASS 5 LINDER CURB (TVP)

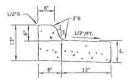


NOTE: FOR MECHANICALLY LAID CURB, SHOE MAY BE TILTED.

B612 CONCRETE CURB & GUTTER

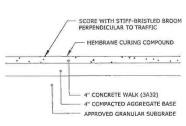
NOT TO SCALE

PROVIDE 4" CLASS 5 UNDER CURB (TYP)



B612 CONCRETE CURB & GUTTER (TIP-OUT)

NOT TO SCALE



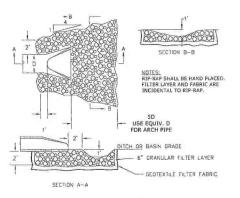
NOTES: 1) USE EXPANSION JOINT WHERE NEW CONCRETE MEETS EXISTING CONCRETE OR STRUCTURE.

2) CONTROL JOINTS SHALL BE CUT WITH A JOINTER HAVING A RADIUS OF 1/4" AND SPACED @ 5'-0" O.C. MAX. U.N.O.

3) EXPANSION JOINTS SHALL BE SPACED AT 20'-0" O.C. MAX. AND SHALL CONSIST OF A 1/2" PRE-FORMED JOINT FILLER.

TYPICAL CONCRETE SIDEWALK

NOT TO SCALE

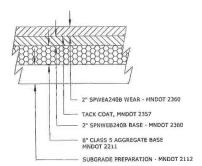


PIPE DIA.	RIP-RAP	PIPE DIA.	RIP-RAP	PIPE DIA.	RIP-RAP
.2"	4 5	24"	10	42"	23
'8"	6	30"	14	54"	34
21"	8	36"	1.9	60"	39

RIP-RAP AT OUTLETS

NOT TO SCALE

DOCK



PAVING SHALL CONFORM TO THE LATEST EDITION OF MNDOT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE CITY'S STANDARDS FOR STREET AND UTILITY CONSTRUCTION.

PAVING SECTION SHALL BE REVIEWED AND APPROVED BY HAUGO GEOTECHNICAL SERVICES (GEOTECHNICAL DESIGN ENGINEER) PRIOR TO ANY INSTALLATIONS, SEE REPORT DATED MAY 26, 2022.

BITUMINOUS - HEAVY DUTY

2" X 2" WOOD OR STEEL POST 7'-7" O.C.

FABRIC ANCHORAGE TRENCH BACKFILL TRENCH WITH TAMPED NATURAL SOIL.

1) WIRE MESH IS NOT REQUIRED 2) CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL EROSION CONTROL MATERIALS FOLLOWING TURF ESTABLISHMENT.

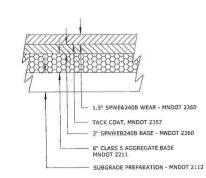
WIRE MESH REINFORCEMENT, STE

GEOTEXTILE FILTER FABRIC - OVERLAN

6" AND FASTEN AT 2' INTERVALS. LAY FABRIC IN TRENCH.

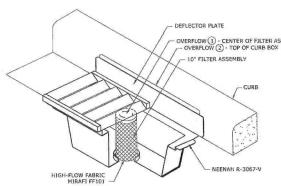
NOT TO SCALE

SILT FENCE



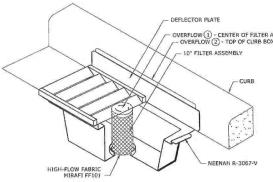
PAVING SHALL CONFORM TO THE LATEST EDITION OF MINDOT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND THE CITY'S STANDARDS FOR STREET AND UTILITY CONSTRUCTION.

BITUMINOUS - LIGHT DUTY



WIMCO INLET PROTECTION

NOT TO SCALE



PREPARED FOR: DAVE LARSON

LARSON SYSTEMS B ADDITIONS

CHCKD BY:

PROJ. NO.

MARCH 18, 2022

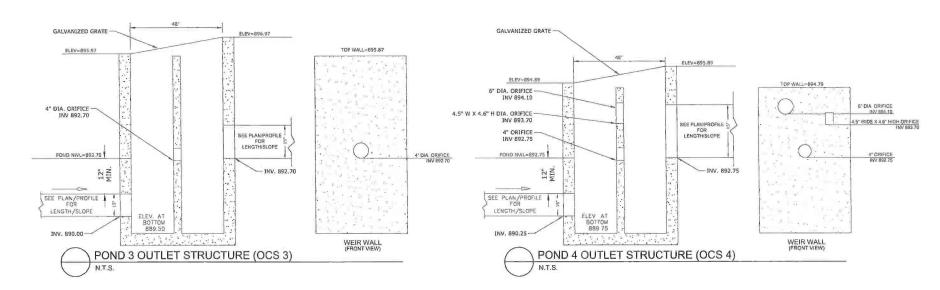


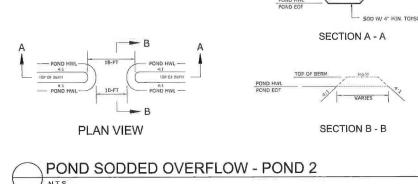
SUITE 110 LINO LAKES, MN 55014 PHONE: (651) 361-8210 FAX: (651) 361-8701

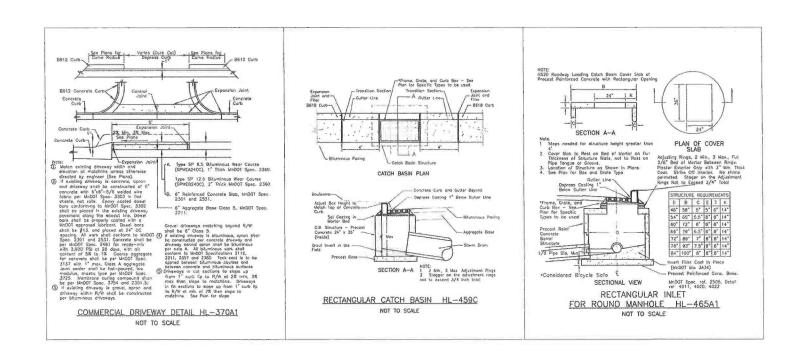
- ELEV. 899.10 6" HIGH BITUMINOUS @ ELEV. 895.60 ADD BITUMINOUS AGAINST DOCK/FOUNDATION INTERFACE ELEVATION 895.10 FOUNDATION -(DESIGN BY OTHERS) BITUMINOUS ADDITIONAL BITUMINOUS AT DOCK (BUILDING #1-B) N.T.S.

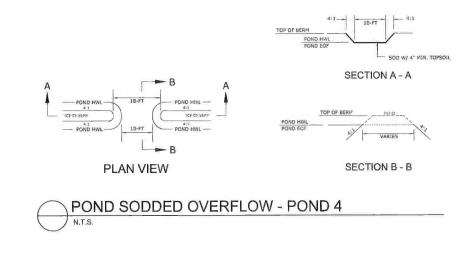
ANCHORAGE IN-SITU SOIL

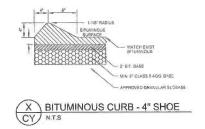
DETAILS & NOTES LARSON SYSTEMS BLDG ADDITIONS















ADDITIONS
HAM LAKE MINNESOTA

PREPARED FOR: DAVE LARSON



SITE PLANNING & ENGINEERING

ENGINEERING, INC 6776 LAKE DRIVE SUITE 110 UNO LAKES, MN 55014 PHONE: (651) 361-8210 FAX: (651) 361-8701 4.2 PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETE. [MINN. R. 7090]

4.3 PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE, INCLUDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN OUT. OR TRANSFERRING PORTIONS OF A SITE TO ANOTHER PARTY. THE PERMITTEES' COVERAGE UNDER THIS PERMITTEES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT. (MINN R. 7090)

4.4 PERMITTEES MAY TERMINATE PERMIT COVERAGE PRIOR TO COMPLETION OF ALL CONSTRUCTION ACTIVITY IF THEY MEET ALL OF THE FOLLOWING CONDITIONS:

- A. CONSTRUCTION ACTIVITY HAS CEASED FOR AT LEAST 90 DAYS; AND
- B. AT LEAST 90 PERCENT (BY AREA) OF ALL ORIGINALLY PROPOSED CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PERMANENT COVER HAS BEEN ESTABLISHED ON THOSE AREAS; AND

AFTER PERMIT COVERAGE IS TERMINATED UNDER 11 HIS ITEM. ANY SUBSEQUENT DEVELOPMENT ON THE REMAINING PORTIONS OF THE SITE WILL REQUIRE PERMIT COVERAGE IF THE SUBSEQUENT DEVELOPMENT ITSELF OR AS PART OF THE REMAINING COMMON PLAN OF DEVELOPMENT OR SALE WILL RESULT IN LAND DISTURBING ACTIVITIES OF ONE (1) OR MORE ACRES IN SIZE, MINN. R. 7809.

4.5 PERMITTEES MAY TERMINATE COVERAGE UPON MPCA APPROVAL AFTER SUBMITTING INFORMATION DOCUMENTING THE OWNER CANCELED THE PROJECT. [MINN. R. 7090]

5.1 STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CONTENT [MINN. R. 7090]

5.3 THE SWPPP MUST INCORPORATE SPECIFIC BEST MANAGEMENT PRACTICES (BMP) USED TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT [MINN. R. 7090]

5.4 THE SWPPP MUST INCLUDE A NARRATIVE DESCRIBING THE TIMING FOR INSTALLATION OF ALL EROSION PREVENTION A SEDIMENT CONTROL BMPs AND A DESCRIPTION OF THE PERMANENT STORMWATER TREATMENT SYSTEMS. [MINN. R. 7090] 5.5 THE SWPPP MUST INCLUDE THE LOCATION AND TYPE OF ALL TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BAPPS ALONG WITH PROCEDURES USED TO STABLISH ADDITIONAL TEMPORARY SMPS AS NECESSARY FOR THE SITE CONDITIONS DURING CONSTRUCTION. STABLAND DETAILS AND/OR SPECIFICATIONS FOR BIPS MUST BE INCLUDED IN THE FINAL PLANS AND SPECIFICATIONS FOR THE PROJECT. [MINN. R. 7090]

5,6 THE SWPPP MUST INCLUDE THE CALCULATIONS AND OTHER INFORMATION USED FOR THE DESIGN OF TEMPOR SEDIMENT BASINS AND ANY OF THE PERMANENT STORMWATER TREATMENT SYSTEMS REQUIRED IN SECTION 15. [MINN. R.

PROJECT FOR ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS (E.G., LINEAR FEET OF SILT FENCE OR SQUARE FEET OF EROSION CONTROL BLANKET). [MINN. R. 7090]

5.8 THE SWPPP MUST INCLUDE THE NUMBER OF ACRES OF IMPERVIOUS SURFACE FOR BOTH PRE- AND POST-CONST [MINN. R. 7090]

5.9 THE SWPPP MUST INCLUDE A SITE MAP WITH EXISTING AND FINAL GRADES, INCLUDING DRAINAGE AREA BOUNDARY DIRECTIONS OF FLOW AND ALL DISCHARGE POINTS WHERE STORAWATER IS LEAVING THE SITE OR ENTERING A SURFWATER.

SOIL TYPES AND LOCATIONS OF POTENTIAL POLLUTANT-GENERATING ACTIVITIES AS IDENTIFIED IN SECTION 12. [MINN, R. 7090] 5.10 THE SWPPP MUST INCLUDE A MAP OF ALL SURFACE WATERS, EXISTING WETLANDS, AND STORMWATER PONDS OR BASINS HAT CAN BE IDENTIFIED ON MAPS SUCH AS UNITED STATES GEOLOGICAL SURVEY 7.5 MINUTE QUADRANGLE MAPS, THE NATIONAL WETLAND INVENTORY MAP OR EQUIVALENT MAPS AND ARE WITHIN ONE MILE (AERIAL RADIUS MEASUREM FROM THE PROJECT BOUNDARIES THAT WILL RECEIVE STORMWATER FROM THE CONSTRUCTION SITE, DURING OR AFTER CONSTRUCTION, THE SWPPP MUST IDENTIFY IF THE SURFACE WATERS ARE SPECIAL OR IMPAIRED WATERS. [MINN, R. 7090]

5.11 THE SWPPP MUST INCLUDE A SITE MAP SHOWING CONSTRUCTION ACTIVITY AREAS THAT ARE ADJACENT TO AND DRAIN TO PUBLIC WATERS FOR WHICH THE DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES. [MINN. R 7090]

5.12 PERMITTEES MUST IDENTIFY LOCATIONS OF 50' BUFFER ZONES AS REQUIRED IN ITEM 9.17 AND 100' PERMANENT BUFFER ZONES AS REQUIRED IN ITEM 23.11, ON PLAN SHEETS IN THE SWPPP. [MINN. R. 7080]

5.13 IF PERMITTEES DETERMINE COMPLIANCE WITH THE FOLLOWING REQUIREMENTS IS INFEASIBLE, THEY MUST DOCUMENT THE DETERMINATION IN THE SWPPP.

TEMPORARY SEDIMENT BASIN AS DESCRIBED IN SECTION 14, AND

D. FOR LINEAR PROJECTS, IF THE PERMANENT STORMWATER TREATMENT SYSTEM CANNOT BE CONSTRUCTED WITHIN THE RIGHT-OF-WAY, A REASONABLE ATTEMPT MUST BE MADE TO OBTAIN ADDITIONAL RIGHT-OF-WAY (ITEM 15.9); AND c. BUFFER ZONES AS DESCRIBED IN ITEM 9.17 AND ITEM 23.11. [MINN. R. 7090]

5.14 IF PERMITTEES DETERMINE THAT A TEMPORARY SEDIMENT BASIN IS INFEASIBLE AS DESCRIBED IN ITEM 14.10, THE SWPPP MUST DESCRIBE THE ALTERNATIVE BMPS USED, [MINN. R. 7090]

5.15 WHERE SYSTEMS CANNOT MEET THE FULL VOLUME REDUCTION REQUIREMENT ON SITE, (E.G., THE SITE HAS INFILTRATION IONS, SEE ITEM 16:14 THROUGH ITEM 16:21) THE PERMITTEE MUST DOCUMENT THE REASONS IN THE SWPPP

5.16 THE SWPPP MUST INCLUDE ANY STORMWATER MITIGATION MEASURES PROPOSED TO BE PART OF THE FINAL PROJECT IN ANY ENVIRONMENTAL REVIEW DOCUMENT, ENDANGERED SPECIES REVIEW, ARCHEOLOGICAL OR OTHER REQUIRED LOCAL, STATE OR FEDERAL REVIEW CONDUCTED FOR THE PROJECT. FOR PURPOSES OF THIS PERMIT, MITIGATION MEASURES MEANS ACTIONS NECESSARY TO AVOID, MINIMIZE, OR MITIGATE FOR IMPACTS RELATED TO EROSION PREVENTION, SEDIMENT CONTROL, THE PERMANENT STORMWATER TREATMENT SYSTEM, POLLUTION PREVENTION MANAGEMENT MEASURES AND DISCHARGES ASSOCIATED WITH THE PROJECT'S CONSTRUCTION ACTIVITY. [MINN. R 7090]

5.17 THE SWPPP MUST DESCRIBE THE METHODS USED FOR PERMANENT COVER OF ALL EXPOSED SOIL AREAS. [MINN. R. 7090] 5.18 PERMITTEES MUST IDENTIFY THE LOCATIONS OF AREAS WHERE CONSTRUCTION WILL BE PHASED TO MINIMIZE THE DURATION OF EXPOSED SOIL AREAS IN THE SWPPP, [MINN. R. 7090]

5.19 FOR PROJECTS WITH A DISCHARGE POINT ON THE PROJECT WITHIN ONE (1) MILE (AERIAL RADIUS MEASUREMENT) OF AND 5.19 FOR PROJECTS WITH A DISCHARGE PUBLY OF THE MEQUEST WITH DRIVER PROJECT WITH ONE CTO MILE (REFRIGE PUBLY OF THE PROJECT STATES)

WHICH FLOWS TO AN IMPAIRED WATER, PERMITTEES MUST IDENTIFY THE IMPAIRED WATER, PERMITS STATES

ENVIRONMENTAL PROFESCORY (SECON) (SECON) FOR THE PROPROVED TOTAL MAXIMUM DAILY LOAD (TIMD) FOR THE

POLIUTARY (S) OR STRESSORY (S) DESCRIBED IN TEM 23.7. PERMITTEES MUST THE MAXIMUM DAILY LOAD (TIMD) FROM THE THORSE THE PROPERTY OF THE PROPERTY OF THE PROFESCORY (S) DESCRIBED IN TEM 23.7. PERMITTEES THE PROPERTY OF THE PROPERTY ROVED AT ANY TIME PRIOR TO PERMIT APPLICATION SUBMITTAL AND ARE STILL IN EFFECT. [MINN. R. 7090]

5.20 PERMITTEES MUST DOCUMENT IN THE SWPPP, ALL TRAINED INDIVIDUALS IDENTIFIED IN ITEM 21.2. DOCUMENTATION

MUST INCLUDE: NAMES OF PERSONNEL REQUIRED TO BE TRAINED; AND

DATES OF TRAINING AND NAME OF INSTRUCTOR(S) AND ENTITY PROVIDING TRAINING; AND CONTENT OF TRAINING COURSE

IF PERMITTEES DO NOT KNOW THE NAMES OF THE INDIVIDUALS AT THE TIME OF APPLICATION. THE PERMITTEES MUST

ENSURE THEY DOCUMENT TRAINING BEFORE CONSTRUCTION ACTIVITY COMMENCES, MINN. R. 70901
5.21 THE SWPPP MUST IDENTIFY A PERSON KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION REVENTION AND SEDIMENT CONTROL BMPS WHO WILL COORDINATE WITH ALL CONTRACTORS, SUBCONTRACTORS, AND OPERATORS ON-SITE TO OVERSEE THE IMPLEMENTATION OF THE SWPPP. IMINN. R. 70901

5.22 THE SWPPP MUST DESCRIBE ANY SPECIFIC CHEMICALS AND CHEMICAL TREATMENT SYSTEMS USED FOR ENHANCING THE SEDIMENTATION PROCESS AND HOW IT ACHIEVES COMPLIANCE WITH ITEM 9.18. [MINN. R. 7090]

5.23 THE SWPPP MUST IDENTIFY THE PERSON(S), ORGANIZATIONS, OR ENTITIES RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER TREATMENT SYSTEMS. [MINN. R. 7090]

5.24 THE SWPPP MUST DESCRIBE METHODS TO MINIMIZE SOIL COMPACTION AND PRESERVE TOPSOIL, MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES COMPACTION, IMINN, R. 70901 5.25 THE SWPPP MUST INCLUDE ANY SITE ASSESSMENTS FOR GROUNDWATER OR SOIL CONTAMINATION REQUIRED IN ITEM

5.26 THE SWPPP MUST ACCOUNT FOR THE FOLLOWING FACTORS IN DESIGNING TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL BMPS:

THE EXPECTED AMOUNT, FREQUENCY, INTENSITY, AND DURATION OF PRECIPITATION; AND

THE NATURE OF STORMWATER RUNOFF AND RUN-ON AT THE SITE, INCLUDING FACTORS SUCH AS EXPECTED FLOW FROM THE STORMWATER VOLUME, VELOCITY, AND PEAR FLOWBATES TO MINIMIZE DISCHARGE OF POLLUTANTS IN ITOTAWATER AND TO MINIMIZE CHANNEL AND STREAMBANK EROSION AND SOUR IN THE IMMEDIATE VICINITY OF DISCHARGE OINTS, AND

THE RANGE OF SOIL PARTICLES SIZES EXPECTED TO BE PRESENT. [MINN R 7090]

6.1 SWPPP AMENDMENTS. [MINN. R. 7090]

6.2 ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES, CHANGES INVOLVING THE USE OF A LESS STRINGENT BM MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTIC SIMNN. R. 7092.

6.3 PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT 6.3 PERMITTEES MUST AMERIC THE SYPPPY TO MODE AUDITIONAL OF MODIFIED AWAYS AS NO.EXCENT TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS STUATIONS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS HAVING A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER, MINN, R. 7090]

SURFACE WATERS OR GROUNDWATER, (MINN. 70 DIOLDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNERS OR OPERATOR, USEPA OR MECA OFFICIALS INDICATE THE SWEPPE IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER OR THE DISCHARGES ARE CAUSING WATER OUALITY STANDARD EXCEEDIANCES (E.G., NUISANCE CONDITIONS AS DEFINED IN MINN. R. 7050.0210, SUBP. 2) OR THE SWPPP IS NOT CONSISTENT WITH THE OBJECTIVES OF A USEPA APPROVED TIMD. (MIN. R. 7050.0210)

7.1 BMP SELECTION AND INSTALLATION. [MINN. R. 7090]

7.2 PERMITTEES MUST SELECT, INSTALL, AND MAINTAIN THE BIMPS IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES, IMMN. R 7050]

8.1 EROSION PREVENTION PRACTICES. [MINN. R. 7090]

8.2 BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED. (MINN, R. 7090) 3.3 PERMITTEES MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN STEEP SLOPES MUST BE DISTURBED, PERMITTEES MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES SESSIONED FOR STEEP SLOPES (C.G., SLOPE ORGANING AND TERRACING), IMMIN. R. 7990]

DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TEMPACING), [MINN. H. 7980]

8A PERMITTEES MUST STABILIZE ALL EXPOSED SOIL AREAS, INCLIDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL ERGSSON WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORABILY CEASED ON ANY POPTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEDENDR OF CALENDAR DAYS. STABILIZATION IN MUST BE COMPLETED NO LATER THAN 7 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON CONSTRUCTED BASE COMPONENTS OF ROONS, PARKING LOTS AND SIMILAR SUBFACES. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATS STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE. [MINN R. 7090]

8.5 FOR PUBLIC WATERS THAT THE MINNESOTA DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED

AS PERMITTEES MUST STABILIZE THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE WITHIN 24 HOURS AFTER CONNECTING SURFACE WATER OR PROPRETY DEGE. PERMITTEES MUST COMPLETE IS REALIZATION OF REMAINING PORTIONS OF TEMPORARY OR PERMANENT DITCHES OR SWALES WITHIN 7 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER PROPERTY EDGE AND CONSTRUCTION OF THE DITCH TEMPORARILY OR PERMANENTLY CEASES, (MINN. R

8.7 TEMPORARY OR PERMANENT DITCHES OR SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DI CONSTRUCTION (WITH PROPERLY DESIGNED ROCK-DITCH CHECKS, BIO ROLLS, SILT DIKES. ETC.) DO NOT NEED TO BE STABILIZED. PERMITTEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAI SYSTEM CEASES, IMINN, R 7090

8.8 PERMITTEES MUST NOT USE MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES WITHIN ANY PORTION OF THE NORMAL WETTED PERMITTER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT, MININ, R. 700.

8.9 PERMITTEES MUST PROVIDE TEMPORARY OR PERMANENT ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM, MINN, R. 70801 8.10 PERMITTEES MUST NOT DISTURB MORE LAND (I.E., PHASING) THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 11. [MINN. R. 7090]

9.1 SEDIMENT CONTROL PRACTICES, IMINN, R. 70901

9.7 DEDITION OF THE STABLISH SEDIMENT CONTROL BYPS ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT RESIDENCE THAT DRAIN OF SURFACE WATER, INCLUDING CURB AND EXPERIMETERS SYSTEM STABLES SEDIMENT CONTROL PRACTICES UPGRADIENT OF ANY BUFFER ZONES, PERMITTEES WHITE THAT DRAIN OF PRACTICES UPGRADIENT OF ANY BUFFER ZONES, PERMITTEES WHITE INSTALL SEDIMENT CONTROL PRACTICES FOR ANY DUPLET LAND CONTROL PRACTICES SEDIMENT CONTROL SEDIME

9.3 IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTER REQUIREMENTS, PERMITTEES MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDAN TO ELIMINATE THE OVERLOADING AND AMEND THE SWIPP TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN 6.3. [MINN, R. 7090]

9.4 TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE CONDITIONS, [MINN. R. 7695]

AFFACTORING FOR THE CONTINUES, INNIN. A. 1920.

9-5 A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE IMMEDIATELY AFTER THE SHORT TERA CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF PIR PAPA LONG THE SHORELINE) IN THAT PAREA IS COMPLETE, PERMITTES MUST INSTALL AN UPLAND PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER. [MINN. R. 7090]

PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER, (MINN. R. 7009)

9.6 PERMITTERS MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED, PERMITTEES MUST PROMINET SON THE INSTALL SEDIMENT CONTROL PRACTICES SEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE, (MINN. R. 7090)

9.7 PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPS DURING CONSTRUCTION UNTIL THE ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET, (MINN. R. 7080)

9.8 PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET FLOODING) FREEZEING) IS IDENTIFIED BY THE PERMITTEES OF THE JURISDICTIONAL AUTHORITY (E.G. CITY/COUNTY/TOWNSHIPMINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER), PERMITTEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWEPPP, (MINN. R. 7090) NEED FOR REMOVAL IN THE SWPPP, IMINN, R. 70901

9.9 PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THI DOWNGRADIENT PERIMETER, IMIN. R. 7090)

STORMWATER, IMINN, R. 70901

9.11 PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE OR ONTO PAVED ROADS WITHIN THE SITE. [MINN. R. 7080]
9.12 PERMITTEES MUST USE STREET SIWEEPING IF VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING ONTO THE STREET, [MINN. R. 7080]

9.13 PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14 [MINN. R. 7090] 9.14 IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR. PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION. (MINN. R. 7090) 9.15 PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE, [MINN. R. 7090]

9.16 PERMITTEES MUST DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS UNLESS INFEASIBLE, IMINN, R. 70901

9.10 PERMITTEES MUST DIRECT DISCHANGES PROM BMPS TO VEGETATED AREAS UNLESS INFEASIBLE, (IMIN. R. 7090)
9.17 PERMITTEES MUST PRESERVE A 59 FOOT NATURAL BUFFER OR, IF A BUFFER IS INFEASIBLE ON THE SITE, PROVIDE
REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEFT OF THE
PROJECTS EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER PERMITTEES MUST INSTALL
PERIMETER SEDIMENT CONTROLS AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE. NATURAL BUFFERS
ARE NOT REQUIRED ADJACEMENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE
CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS, IF PRESERVING THE BUFFER IS INFEASIBLE, PERMITTEES MUST
DOCUMENT THE REASONS IN THE SWAPPS, SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER
THAT RETAINS ALL STORMWATER (MINN. R. 7090) 9.18 PERMITTEES MUST USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE

WITH ACCEPTED ENGINEERING PRACTICES, DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURED OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROLS SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE, MINN R 70901

10.1 DEWATERING AND BASIN DRAINING. [MINN. R. 7090]

10.2 PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCHDITCH CUTS FOR DRAININGE) TO A TEMPORARY OR PERMANENT SEDIMENT BASIN PROJECT SITE UNILESS INFEASIBLE PERMITTEES MAY DEWATER TO SURFACE WATERS IF THEY VISUALLY CHECK TO ENSU ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS (SEE MINN. R 7050210, SUBP. 2) WILL NOT RES SURFACE WATER, PERMITTEES MUST TREAT IT WITH APPROPRIATE BMPS SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES, [MINN. R. 7050.0210]

10.3 IF PERMITTEES MUST DISCHARGE WATER CONTAINING OIL OR GREASE, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G., CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGE. [MINN. R. 7090] SUITABLE FILTMITTEES MUST DISCRETE. AND ADMINISTRATE FROM DEWARDS OF PROSPENDED AND ADMINISTRATION OF WETLANDS IN THE OFFI NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCRETE POWER DIVINITY OF INJUNION TO RILUNDATION OF WETLANDS IN THE IMMEDIATE VICINITY OF DISCRETAGE FORINTS THAT CAUSES SIGNIFICANT ADDRESS IMPACT TO THE WETLAND [MINN R. 7681]

INDICEDINE VILLIAN OF DISCUSSIONS CONTROL OF THE PROPERTY OF THE MUST HAVE THE BACKWASH WATER ANY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TRETON THE BACKWASH WATER TO THE BEGINNING OF THE TRETON THE TRETON THE BACKWASH WATER TO THE STEE THE BACKWASH WATER AND THE BACKWASH WATER TO THE STEE THE BACKWASH WATER TO THE BACKWASH WATER T

11.2 PERMITTEES MUST ENSURE A TRAINED PERSON. AS IDENTIFIED IN ITEM 21.2.B, WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE VERY'S SEVEN IT, DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 1/2 INCH IN 24 HOURS, IMIN. R. 7080]

11.3 PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPS. IMINN. R. 7090 1.3 FERMINITEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMYS. JAIRWIN. A. 1984)
AL 4 PERMINITEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMYS AND POLLUTION PREVENTION
ANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. PERMINITEES MUST REPAIR, REPLACE OR SUPPLIA
LL NONFUNCTIONAL BMYS WITH FUNCTIONAL BMYS BY THE END OF THE NEXT BUSINESS BAY AFTER DISCOVERY UNLESS
MOTHER TIME FRAME IS SPECIFED IN ITEM 11.5 OR 11.6. PERMITTEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS
REVENT ACCESS TO THE AREA (MINN. R. 7090)

PREVENT ACCESS TO THE AREA, (MINN. R. 7990)

11.5 DURING SEACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS BUT NOT CURB AND GUTTER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEFOSITION PERMITTEES MUST REMOVE ALL DELTAS, AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL. PERMITTEES MUST COMPLETE REMOVAL AND STRAILIZATION WITHIN SEVEN (7) CALENDAR ON YOU SOIL DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS, PERMITTEES MUST USE IN FREED WAS BEEN ONES BEEN ON STABILIZATION MUST TAKE PUT WITHIN SEVEN (7 ALENDAR WITHIN SEVEN WITHIN SEVEN (7 ALENDAR MUST TAKE PUT HIS MUST CASE PUT HIS DEFORM. AND A STABILIZATION MUST TAKE PUT HIS MUST HAVE PUT HIS MOST PUT HIS MUST PUT HIS MUS

11.6 PERMITTEES MUST INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES. PERMITTEES MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALLENDAR DAY OF DISCOVERY OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS, IMBN. R. 7990]

11.7 PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE. [MINN. R. 7690]

11,8 PERMITTEES MUST DRAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME. [MINN. R. 7090]

11.9 PERMITTEES MUST ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE IN THREE (3) CALENDAR DAYS) IS TRAINED IN THE JOB DUTIES DESCRIBED IN ITEM 21.2.B. [MINN. R. 7090] 11.10 PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS:

- A INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE; OR
- B. WHERE SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCUR? ANYWHERE ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTION IF CONDITIONS WARRANT, OR
- C. WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE SUSPENDED, INSPECTIONS MUST RESUME WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST JAINN, R. 7089]

11.11 PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP THESE RECORDS MUST INCLUDE

- A DATE AND TIME OF INSPECTIONS; AND B. NAME OF PERSONS CONDUCTING INSPECTIONS: AND
- C. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED;
- D. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND E DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTESS MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ON BY MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES; AND
- F. IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AT DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS; AND
- G ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS. (MINN. R. 7090)

12.1 POLLUTION PREVENTION MANAGEMENT MEASURES, IMINN, R, 70901

12.2 PERMITTEES MUST PLACE BUILDING PRODUCTS AND LANDSCAPE MATERIALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER, PERMITTEES ARE NOT RECUIRED TO COVER OR PROTECT PODUCTS WHICH ARE ETHER NOTA SOURCE OF TEMPORANT ROUPS) OR FROM THE MEDIAN DESIGNED TO COVER OR PROTECT PRODUCTS WHICH ARE EITHER CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER, [MINN. R. 7090]

12.3 PERMITTEES MUST PLACE PESTICIDES, FERTILIZERS AND TREATMENT CHEMICALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH

12.4 PERMITTEES MUST STORE HAZARDOUS MATERIALS AND TOXIC WASTE, INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIS, APAINT SOLVENT, PETROLEUM-BASED PROUTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN BEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE STORAGE AND DISPOSAL OF HAZARDOUS WASTE MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS A PPLICABLE, MINN. R. 7090.

12.5 PERMITTEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH, 7035.

[MINN. R. 7035]

12.6 PERMITTEES MUST PROPERLY DISPOSE SANITARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7041, [MINN. R. 7041]

12.7 PERMITTEES MUST TARE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEASED.

12.7 PERMITTEES MUST TARE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEASED.

13.7 PERMITTEES MUST TARE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEASED.

14.1 CLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP

PANS OR ASORBENTS UNLESS INFEASIBLE. PERMITTEES MUST ENSURE ADECULATE SUPPLIES ARE AVAILABLE FOR RECOVERED

TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD IS AVAILABLE FOR RECOVERED

SPILLED MATERIALS, PRINTITEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. 115.061;

USING DRY CLEAN UP MEASURES WHERE POSSIBLE, MINN. STAT. 115.061)

12.8 PERMITTEES MUST LIMIT VEHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE PERM MUST CONTAIN RUNOFF FROM THE WASHING AREA IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTRO MUST DISPOSE WASTE FROM THE WASHING ACTIVITY PROPERLY PERMITTEES MUST PROPERLY USE AND STORE SC DETERGENTS, OR SOLVENTS, IMINN R. 7090]

DETERGENTS, OR SOLVENTS (MINN N. 7090)

12.9 PERMITTEES MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (E.S., CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. PERMITTEES MUST PREVENT LIQUID AND SOLID WASHOUT WASTES FROM CONTACTING THE GROUND AND MUST DESIGN THE CONTAINMENT SO IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS, PERMITTEES MUST PROPERLY ORDERS LIQUID AND SOLID WASTES IN COMPLIANCE WITH MPCA RULES. PERMITTEES MUST PROPERLY ORDERS DELIQUID AND SOLID WASTES IN COMPLIANCE WITH MPCA RULES. PERMITTEES MUST INSTALL A SIGN INDICATING THE LOCATION OF THE WASHOUT FACILITY, (MINN. R. 7035, MINN. P. 7001).

13.1 PERMIT TERMINATION CONDITIONS, IMINN, R. 70901

13.2 PERMITTEES MUST COMPLETE ALL CONSTRUCTION ACTIVITY AND MUST INSTALL PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTING THE NOT. VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70 PERCENT OF 115 EXPECTED FINAL, GROWITH, VEGETATION IS NOT RECUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER, [MINN, R. 7090]

13.3 PERMITTEES MUST CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEM OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS IN SECTION 15 THROUGH 19 AND IS OPERATING AS

13.4 PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO SUBMITTING THE NOT. [MINN. R. 7090] 13.4 PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PHOON TO SUBMITTING THE NOT. IDENTIFY, TO A STATE OF THE NOT. PERMITTEES MAY TENDED ANY SYSTEMS ENDES OF THE NOT. PERMITTEES MAY LEAVE BMPS DESIGNED TO DECOMPOSE ON-SITE IN PLACE, IMININ, R 7090 13.6 FOR RESIDENTIAL CONSTRUCTION ONLY, PERMIT COVERAGE TERMINATES ON INDIVIDUAL LOTS IF THE STRUCTURES ARE FINISHED AND TEMPORARY EROSION PREVENTION AND DOWNGRADIENT PERMITTES ON ROPLETE, THE RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCAS "HOMEOWNER PACT SHEET" TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCAS "HOMEOWNER PACT SHEET" TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCAS "HOMEOWNER PACT SHEET" TO THE

13.7 FOR CONSTRUCTION PROJECTS ON AGRICULTURAL LAND (E.G., PIPELINES ACROSS CROPLAND), PERMITTEES MUST RETURN THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE PRIOR TO SUBMITTING THE NOT. [MINN R 7090]

14.1 TEMPORARY SEDIMENT BASINS. [MINN. R. 7090]

14.2 WHERE FIVE (5) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, PERMITTEES MUST PROVIDE / TEMPORARY SEDMENT BASIN TO PROVIDE TREATMENT OF THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OF ENTERS SUPFACE WATERS, PERMITTEES WAY CONVERT A TEMPORARY SEDMENT BASIN TO A PERMANENT BASIN AFTER CONSTRUCTION IS COMPLETE. THE TEMPORARY BASIN IS NO LONGER REQUIRED WHEN PERMANENT COVER HAS REDUCT THE ACREAGE OF DISTURBED SOIL TO LESS THAN FIVE (5) ACRES DRAINING TO A COMMON LOCATION. [PROVISIONS TO MINN 7 7080]

1/3/3 THE TEMPORARY BASIN MUST PROVIDE LIVE STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A TWO (2)-YEAR. 24-HOUR STORM FROM EACH ACRE DRAINED TO THE BASIN OR 1,800 CUBIC FEET OF LIVE STORAGE PER ACRE DRAINED, WHICHEVER IS GREATER, (MIN. R, 7050)

VYNIGHERE PERMITTEES HAVE NOT CALCULATED THE TWO (2)-YEAR, 24-HOUR STORM RUNOFF AMOUNT, THE TEMPORARY BASIN MUST PROVIDE 3,000 CUBIC FEET OF LIVE STORAGE PER ACRE OF THE BASINS DRAINAGE AREA. [MINN. R. 7090] 14.5 PERMITTEES MUST DESIGN BASIN OUTLETS TO PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. IMINN: R. 70901

ALS PERMITTEES MUST DESIGN THE OUTLET STRUCTURE TO WITHDRAW WATER FROM THE SURFACE TO MINIMIZE THE DISCHARGE OF POLLUTANTS, PERMITTEES MAY TEMPORARILY SUSPEND THE USE OF A SURFACE WITHDRAWAL MECHANISI DURING FROZEN CONDITIONS. THE BASIN MUST INCLUDE A STABILIZED EMERGENCY OVERFLOW TO PREVENT FAILURE OF POND INTEGRITY, (MINN. R. 7030)

14.7 PERMITTEES MUST PROVIDE ENERGY DISSIPATION FOR THE BASIN OUTLET WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER, (MINN, R. 7090) 14.8 PERMITTEES MUST LOCATE TEMPORARY BASINS OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONE REQUIRED IN ITEM 23.11 [MINN: R 7090]

14.9 PERMITTEES MUST CONSTRUCT THE TEMPORARY BASINS PRIOR TO DISTURBING 10 OR MORE ACRES OF SOIL DRAINING TO A COMMON LOCATION, IMNN, R. 70901

1.10 WHERE A TEMPORARY SEDMENT BASIN MEETING THE REQUIREMENTS OF ITEM 14.3 THROUGH 14.8 IS INFEASIBLE, PERMITTEES MUST INSTALL EFFECTIVE SEDMENT CONTROLS SUCH AS SMALLER SEDMENT EASINS AND/OR SEDMENT TRAPS, SLIT FENCES, VEGETATIVE BUFFER STRIPS OR ANY APPROPRIATE COMBINATION OF MEASURES AS DICTATE BY INDIVIDUAL, SITE CONDITIONS IN DETERMINING WHETHER INSTALLING A SEDMENT BASIN IS INFEASIBLE, PERMITTEES MUST CONSIDER FUELD SAFETY AND MAY CONSIDER FACTORS SUCH AS SITE SOLIS, SLOPE, AND AVAILABLE AREA ON-SITE, PERMITTEES MUST DOCUMENT THIS DETERMINATION OF INFEASIBLITY IN THE SWPPP, (MINN. R. 7090)

15.1 PERMANENT STORMWATER TREATMENT SYSTEM. [MINN. R. 7090]

15.2 PERMITTEES MUST DESIGN THE PROJECT SO ALL STORMWATER DISCHARGED FROM THE PROJECT DURING AND AFTER CONSTRUCTION ACTIVITIES DOES NOT CAUSE A VIOLATION OF STATE WATER QUALITY STANDARDS, INCLUDING NUISANCE CONDITIONS, EROSIGN IN RECEIVING CHANNELS OR ON DOWNSLOPE PROPERTIES, OR A SIGNIFICANT ADVERSE IMPACT TO WETLANDS CAUSED BY INUNDATION OR DECREASE OF FLOW [MINN. R. 7090]

THE SPERMITTEES MUST DESIGN AND CONTROL OF PLOY (BINNA, R. 1994)

15.3 PERMITTEES MUST DESIGN AND CONSTRUCT A PERMINENT STORMWATER TREATMENT SYSTEM TO TREAT THE QUALITY VOLUME IF THE PROJECTS ULTIMATE DEVELOPMENT REPLACES VEGETATION AND/OR OTHER PERVIOUS SUFFREE (PRINCIPLE) OF CHANNA THE PROPERTY INCREASE OF ONE (1) OR MORE ACRES OF CUMULATIVE IMPERVIOUS SURFACE, MINNA, R. 7090] 15.4 PERMITTEES MUST CALCULATE THE WATER QUALITY VOLUME AS ONE (1) INCH TIMES THE NET INCREASE OF IMPERVIOUS SURFACES CREATED BY THE PROJECT. (MINN. R. 7090)

SUMFACES CREATED BY THE PROJECT. (MINN. R. 7090)

15.5 PERMITTEES MUST FIRST CONSIDER VOLUME REQUCTION PRACTICES ON-SITE (E.G., INFILTRATION OR OTHER) WHEN DESIGNING THE PERMANENT STORMWATER TREATMENT SYSTEM. IF THIS PERMIT PROHIBITS INFILTRATION AS DESCRIBED IN ITEM 16.14 THROUGH ITEM 16.21, PERMITTEES MAY CONSIDER A WET SEDIMENTATION BASIN, FILTRATION BASIN OR REGIONAL POND. THIS PERMIT DOES NOT CONSIDER WET SEDIMENTATION BASINS AND FILTRATION SYSTEMS TO BE VOLUME REDUCTION PRACTICES. [MINN R. 7090]

16.5 PERMITTEES MUST FIRST CONSIDER VOLUME REDUCTION PRACTICES ON-SITE (E.G., INFILTRATION OR OTHER) WHEN DESIGNING THE PERMANENT STORMWATER TREATMENT SYSTEM. IF THIS PERMIT PROHIBITS INFILTRATION AS DESCRIBED INTERMEDIATION OF THE PROHIBITS INFILTRATION AS INCOME. THE MISTER SHAPE OF THE PROHIBITS INFILTRATION AS INCOME. OF REGIO POND. THIS PERMIT DOES NOT CONSIDER WET SEDIMENTATION BASINS, INFILTRATION BASINS OF DEVOLUME REDUC PRACTICES. (MINN. R. 7509)

15.6 FOR PROJECTS WHERE THE FULL VOLUME REDUCTION REQUIREMENT CANNOT BE MET ON-SITE, (E.G., THE SITE HAS INFILTRATION PROHIBITIONS), PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP [MINN. R. 7090]

INFILITATION PROBIBITIONS, PERMITTES MIGHT DECOMENT THE REASONS OF THIS TERMINENT STORMWATER TREATMENT SYSTEM PRIOR TO DISCHARGE TO A SURFACE WATER, FOR PURPOSES OF THIS TERM, SURFACE WATERS DO NOT INCLUDE MAY PRIOR TO DISCHARGE TO A SURFACE WATER, FOR PURPOSES OF THIS TERM, SURFACE WATERS DO NOT INCLUDE MAY BE ADMINED TO THIS TERMINENT SYSTEM, MINN. R 7050) DRAINAGE STOTEMS IT IN CONVEY 3 JOANNAY LET ON FEMALINE TO FEMALINE TO THE METALLATION OF ANY OF THE PERMANENT STORMWATER TREATMENT SHORT CITIES REQUIRED BY SECTIONS 15 THROUGH 19, PERMITTEES MUST INSTALL OTHER TREATMENT SUCH AS GRASSED SWALES, SMALLER PONDS, OR GRIT CHAMBERS, PRIOR TO THE DISCHARGE OF STORMWATER TO SURFACE WATERS

18.9 FOR LINEAR PROJECTS WHERE PERMITTEES CANNOT TREAT THE ENTIRE WATER OUALITY VOLUME WITHIN THE EXISTING RIGHTOF-WAY, PERMITTEES MUST MAKE A REASONABLE ATTEMPT TO OBTAIN ADDITIONAL RIGHT-OF-VAWAY, EASEMENT OR OTHER PERMISSION FOR STORMWATER TREATMENT DURING THE PROJECT PLANNING PROCESS. DOCUMENTON OF THESE ATTEMPTS MUST BE IN THE SWPPP, PERMITTEES MUST STILL CONSIDER VOLUME REDUCTION PRACTICES FIRST AS DESCRIBED IN THE SWPPP, PERMITTEES MUST STILL CONSIDER VOLUME REDUCTION PRACTICES FIRST AS DESCRIBED IN THE STREAM TO BE CANNOT OBTAIN ADDITIONAL RIGHT-OF-WAY. EASEMENT ON OTHER PERMISSION, THEY MUST MIZE THE TREATMENT OF THE WATER QUALITY VOLUME PRIOR TO DISCHARGE TO SURFACE WATERS. (MINN. R. 7090)

16.1 INFILTRATION SYSTEMS. [MINN. R. 7090]

16.1 INTERTOTION OF TIONS INCLUDE, BUT ARE NOT LIMITED TO: INFILTRATION BASINS, INFILTRATION TRENCHES, RAINWATER GARDENS, BIORETENTION AREAS WITHOUT UNDERGRAINS, SWALES WITH IMPERMEABLE CHECK DAMS, AND NATURAL DEPRESSION. IF PERMITTEES UTILEZ AS INFILTRATION SYSTEM TO MEET THE REQUIREMENTS OF THIS PERMIT, THEY MUST INCORPORATE THE DESIGN FARMMETERS IN THE AS THE ADDITIONAL SHAPE THE ADDITIONAL OF THE METATION PROHIBITION IN 1FEM 16.1 A MAYTIME AN INFILTRATION SYSTEM IS DESIGNED, INCLUDING THOSE NOT REQUIRED BY THIS

16.3 PERMITTEES MUST DESIGN INFILTRATION SYSTEMS SUCH THAT PRE-EXISTING HYDROLOGIC CONDITIONS OF WETLAN THE VICINITY ARE NOT IMPACTED (E.G., INUNDATION OR BREACHING A PERCHED WATER TABLE SUPPORTING A WETLAND) (MINN. R 780).

16.4 PERMITTEES MUST NOT EXCAVATE INFILTRATION SYSTEMS TO FINAL GRADE, OR WITHIN THREE (3) FEET OF FINAL GRADE, UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED UNLESS THEY PROVIDE RIGOROUS RESOND PREVENTION AND SEDIMENT CONTROLS, (E.G., DIVERSION BERMS) TO KEEP SEDIMENT AND RUNOFF COMPLETELY AWAY FROM THE INFILTRATION AREA. [MINN. R. 7090]

16.5 WHEN EXCAVATING AN INFILTRATION SYSTEM TO WITHIN THREE (3) FEET OF FINAL GRADE, PERMITTEES MUST STAKE OFF AND MARK THE AREA SO HEAVY CONSTRUCTION VEHICLES OR EQUIPMENT DO NOT COMPACT THE SOIL IN THE INFILTRATION AREA, [MINN. R. 7980]

16.6 PERMITTEES MUST USE A PRETREATMENT DEVICE SUCH AS A VEGETATED FILTER STRIP, FOREBAY, OR WATER QUALITY 10.0 PERMIT LEGS MUST USE A PHE INCEL MENT IDENTICE SOUTH AS A VEGE TATED PILLER STRIP, POREBRY, OR WATER OUGHLY NEED THE MASKIMUM EXTENDED. AND OIL AND GREAGES FROM THE MUNOFF, TO THE MASKIMUM EXTENT PRACTICABLE, DEFORE THE SYSTEM ROUTES STORMWATER TO THE INFILITATION SYSTEM, MINN. 7.7090]
16.7 PERMITTERS MUST DESIGN INFILITATION SYSTEMS TO PROVIDE A WATER OUGHLY COLLINE (CALCULATED AS AN INSTANTANEOUS VOLUME) OF ONE (1) INCH OF RUNOFF, OR ONE (1) INCH MINNS THE VOLUME OF STORMWATER TREATMEND AND STREATES OF A FROLECT, MINN R. RANOTHER SYSTEM ON THE SITE, FROM THE NET INCERCISE OF IMPERVIOUS SURFACES ORGATED BY THE PROJECT, MINN R.

168 PERMITTEES MUST DESIGN THE INFILTRATION SYSTEM TO DISCHARGE ALL STORMWATER (INCLUDING STORMWATER IN EXCESS OF THE WATER OUALITY VOLUME) ROUTED TO THE SYSTEM THROUGH THE UPPERMOST SOIL SURFACE OR EXCINIENCE OR WEIGH AS HE OF STORM SOIL SURFACE OR EXCINIENCE OF WITHIN 48 HOURS PERMITTEES MUST ROUTE ADDITIONAL FLOWS THAT CANNOT INFILTRATE WITHIN 48 HOURS TO BYPASS THE SYSTEM THROUGH A STABILIZED DISCHARGE POINT. [MINN. R. 7080]

16.9 PERMITTEES MUST PROVIDE A MEANS TO VISUALLY VERIFY THE INFILTRATION SYSTEM IS DISCHARGING THROUGH THE SOIL SURFACE OR FILTER MEDIA SURFACE WITHIN 48 HOURS OR LESS. [MINN, R. 7090] 16.10 PERMITTEES MUST PROVIDE AT LEAST ONE SOIL BORING, TEST PIT OR INFILTROMETER TEST IN THE LOCATION OF THE INFILTRATION PRACTICE FOR DETERMINING INFILTRATION RATES. [MINN R, 7690]

INTILITIATION FROM THE FARM DETERMINING INFILEMATION FAILES, [DIRING R. (2004)]

16.11 FOR DESIGN PURPOSES, PERMITTEES MUST DIVIDE FIELD MEASURED INFILEMATION RATES BY 2 AS A SAFETY FACTOR OR PERMITTEES CAN USE SOIL-BORING RESULTS WITH THE INFILEMATION RATE CHART IN THE MINNESSTAT STORMATER WHEN DOLD FROM THE OFFICE AND THE STORMATER WHEN DOLD FROM THE OFFICE TYPE A SOILS, PERMITTEES SHOULD PERFORM FIELD MEASUREMENTS TO VERIFY THE RATE IS NOT ASOVE S. SINGHINGS INDICATE TYPE A SOILS, PERMITTEES SHOULD PERFORM FIELD MEASUREMENTS TO VERIFY THE RATE IS NOT ASOVE S. SINGHINGS INDICATE THE PREVAILED FOR THE PROMISE SHOULD FROM THE PROMISE SHOULD FROM

16.12 PERMITTEES MUST EMPLOY APPROPRIATE ON-SITE TESTING ENSURE A MIMIMUM OF THREE (3) FEET OF SEPARATION FROM THE SEASONALLY SATURATED SOILS (OR FROM BEDROCK) AND THE BOTTOM OF THE PROPOSED INFILTRATION SYSTEM, IMMIN. R 7090.

16.13 PERMITTEES MUST DESIGN A MAINTENANCE ACCESS, TYPICALLY EIGHT (8) FEET WIDE, FOR THE INFILTRATION SYSTEM. 16.14 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS THAT RECEIVE RUNOFF FROM VEHICLE FUELING AND MAINTENANCE AREAS INCLUDING CONSTRUCTION OF INFILTRATION SYSTEMS NOT REQUIRED BY THIS PERMIT, IMM

PERMIT, MMN. N. 7090)

16 IS THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS WHERE INFILTRATING STORMWATER MAY MOBILIZE HIGH LEVELS OF CONTAMINANTS IN SOIL OR GROUNDWATER, PERMITTEES MUST EITHER COMPLETE THE MAY MOBILIZE HIGH LEVELS OF CONSULT THEIR OWN ASSESSMENT TO DETERMINE THE SUITABILITY FOR INFILTRATION, PERMITTEES MUST RETAIN THE CHECKLIST OR ASSESSMENT WITH THE SWYPPP, FOR MORE INFORMATION AND TO ACCESS THE MPICA'S CONTAMINATION SCREENING CHECKLIST OR ASSESSMENT WITH THE SWYPPP, FOR MORE INFORMATION AND TO ACCESS THE MPICA'S "CONTAMINATION SCREENING CHECKLIST" SEE THE MINISEOTA STORMWATER MANUAL MINN R.

FAILE DELOW AS JUNGTHEE FOR HOUSE FORM, TORING, AT STROME OF THE STROME PROBLEM FOR THE STROME OF TH

16.18 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS OF PREDOMINATELY HYDROLOGIC SOIL GROUP TYPE D SOILS (CLAY), [MINN. R. 7080] 16-19 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS WITHIN A DRINKII MANAGEMENT AREA (DWSMA) AS DEFINED IN MINN. R. 4720.5100, SUBP. 13. IF THE SYSTEM WILL BE LOCATED

A. IN AN EMERGENCY RESPONSE AREA (ERA) WITHIN A DWSMA CLASSIFIED AS HAVING HIGH OR VERY HIGH VULNERABILITY AS DEFINED BY THE MINNESOTA DEPARTMENT OF HEALTH: OR B. IN AN ERA WITHIN A DWSMA CLASSIFIED AS MODERATE VULNERABILITY UNLESS A REGULATED MS4 PERI

PERFORMED OR APPROVED A HIGHER LEVEL OF ENGINEERING REVIEW SUFFICIENT TO PROVIDE A FUNCTIO TREATMENT SYSTEM AND TO PREVENT ADVERSE IMPACTS TO GROUNDWATER; OR C. OUTSIDE OF AN ERA WITHIN A DWSMA CLASSIFIED AS HAVING HIGH OR VERY HIGH VULNERABILITY. UNLESS A REGULATED MSA PERMITTEE PERFORMED OR APPROVED A HIGHER LEVEL OF ENGINEERING REVIEW SUFFICIENT TO PROVIDE A FUNCTIONING TREATMENT SYSTEM AND TO PREVENT ADVERSE IMPACTS TO GROUNDWATER.

SEE "HIGHER LEVEL OF ENGINEERING REVIEW" IN THE MINNESOTA STORMWATER MANUAL FOR MORE INFORMATION, [MINN, R. 7090] 16.20 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFILTRATION SYSTEMS IN AREAS WITHIN 1,000 FEET UPGRADIENT OR 100 FEET DOWNGRADIENT OF ACTIVE KARST FEATURES. [MINN. R. 7090]

DEPARABLEST OF TO THE DUMYNORMIENT OF ACTIVE PARST PERTURES, [MINN. 7, 789]

16.21 THIS PERMIT PROHIBITS PERMITTEES FROM CONSTRUCTING INFLITATION SYSTEMS IN AREAS THAT RECEIVE RUNOFF FROM THE FOLLOWING INDUSTRIAL FACILITIES NOT AUTHORIZED TO INFLITATE STORMATER UNDER THE NPCES STORMATER UNDER THE NPCES STORMATER PERMIT FOR INDUSTRIAL ACTIVITIES, AUTHORIZED TO INFLITATE STORMATER UNDER THE RECYCLING AND WASTE RECYCLING FACILITIES: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES; OR AIR TRANSPORTATION FACILITIES THAT CONDUCT DELICING ACTIVITIES, MINN. R. 7890

17.1 FILTRATION SYSTEMS. [MINN. R, 7090]

17.2 FILTRATION OPTIONS INCLUDE, BUT ARE NOT LIMITED TO: SAND FILTERS WITH UNDERDRAINS, BIOFILTRATION AREAS, SWALES USING UNDERDRAINS WITH IMPERMEABLE CHECK DAMS AND UNDERGROUND SAND FILTERS. IF PERMITTEES UTILIZE A FILTRATION SYSTEM TO MEET THE PERMANENT STORMWATER TREATMENT REQUIREMENTS OF THIS PERMIT, THEY MUST COMPLY WITH ITEMS 17.3 THROUGH 17.11. [MINN. R. 7690]

17.3 PERMITTEES MUST NOT INSTALL FILTER MEDIA UNTIL THEY CONSTRUCT AND FULLY STABILIZE THE CONTRIBUTING DRAIMAGE AREA UNLESS THEY PROVIDE RIGOROUS EROSION PREVENTION AND SEDIMENT CONTROLS (E.G., DIVERSIO) BERMS) TO KEEP SEDIMENT AND RUNDEF COMMETELY ANALY FROM THE FILTERATION AREA, MINN. R. 75991 17.4 PERMITTEES MUST DESIGN FILTRATION SYSTEMS TO REMOVE AT LEAST 80 PERCENT OF TSS. [MINN. R. 7090]

17.5 PERMITTEES MUST USE A PRETREATMENT DEVICE SUCH AS A VEGETATED FILTER STRIP. SMALL SEDIMENTATION BASIN WATER QUALITY INLET. FOREBAY OR HYDRODYNAMIC SEPARATOR TO REMOVE SETTLEABLE SOLIDS, FLOATING MATERIALS AND QUIS AND GREASE FROM THE RUNOFF, TO THE MAXIMUM EXTENT PRACTICABLE. BEFORE RUNOFF ENTERS THE FILTRATION SYSTEM. [MINN. R. 7090] 17.6 PERMITTEES MUST DESIGN FILTRATION SYSTEMS TO TREAT A WATER QUALITY VOLUME (CALCULATED AS AN

17 7 PERMITTEES MUST DESIGN THE FILTRATION SYSTEM TO DISCHARGE ALL STORMWATER (INCLUDING STORMWATER IN EXCESS OF THE WATER QUALITY VOLUME) ROUTED TO THE SYSTEM THROUGH THE UPPERMOST SOIL SURFACE OR ENGINEERED REPORTS SUTTHIN 48 HOURS. ADDITIONAL FLOWS THAT THE SYSTEM CANNOT FLITER WITHIN 48 HOURS MUST BYPASS THE SYSTEM CANDOT FLITER WITHIN 48 HOURS MUST BYPASS THE SYSTEM CANDOT FLITER WITHIN 48 HOURS MUST BYPASS THE SYSTEM OR DISCHARGE THROUGH AN EMERGENCY OVERFLOW. [MINN R: 7090]

17.8 PERMITTEES MUST DESIGN THE FILTRATION SYSTEM TO PROVIDE A MEANS TO VISUALLY VERIFY THE SYSTEM IS DISCHARGING THROUGH THE SOIL SURFACE OR FILTER MEDIA WITHIN 48 HOURS. [MINN. R. 7090] 17.9 PERMITTEES MUST EMPLOY APPROPRIATE ON-SITE TESTING TO ENSURE A MINIMUM OF THREE (3) FEET OF SEPARATION BETWEEN THE SEASONALLY SATURATED SOILS (OR FROM BEDROCK) AND THE BOTTOM OF THE PROPOSED FILTRATION SYSTEM, IMMN. R. 7080]

17.10 PERMITTEES MUST ENSURE THAT FILTRATION SYSTEMS WITH LESS THAN THREE (3) FEET OF SEPARATION BETWEEN SEASONALLY SATURATED SOILS OR FROM BEDROCK ARE CONSTRUCTED WITH AN IMPERMEABLE LINER, [MINN, R. 7090] 17.11 THE PERMITTEES MUST DESIGN A MAINTENANCE ACCESS, TYPICALLY EIGHT (8) FEET WIDE, FOR THE FILTRATION SYSTEM IMINN. R. 7090!

STORM WATER POLLUTION PREVENTION PLAN LARSON SYSTEMS BLDG ADDITIONS

HCKD BY: PROJ NO. M.Q.A 22-2023 RIGINAL DATE:

M.Q.A.

C.W.P.



N SYSTEMS Additions

DAVE LARSON



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

16.1 WELL SELDIMENTATION DESCRIPTIONS ASIN TO MEET THE PERMANENT STORMWATER TREATMENT REQUIREMENTS OF THIS PERMIT MUST INCORPORATE THE DESIGN PARAMETERS IN ITEM 18.3 THROUGH 18.10, IMINN, 7.090)

18.3 PERMITTEES MUST DESIGN THE BASIN TO HAVE A PERMANENT VOLUME OF 1.800 CUBIC FEET OF STORGE BELOW THE OUTLET PIPE FOR EACH ACRE THAT DRAINS TO THE BASIN THE BASIN'S PERMANENT VOLUME MUST REACH A MINIMUM DEPTH OF AT LEAST THREE (3) FEET AND MUST HAVE NO DEPTH GREATER THAM 10 FEET PERMITTEES MUST CONFIGURE THE BASIN TO MINIMUSE SCOUR OR RESUSPENSION OF SOLIDS. [MINN. R. 7890]

18.4 PERMITTEES MUST DESIGN THE BASIN TO PROVIDE LIVE STORAGE FOR A WATER QUALITY VOLUME (CALCULATED AS AN INSTANTANEOUS VOLUME) OF ONE (1) INCH OF RUNOFF, OR ONE (1) INCH MINUS THE VOLUME OF STORMWATER TREADED ANOTHER SYSTEM ON THE SITE, FROM THE ART INCREASE IN MIPERVIOUS SUPERACES CREATED BY THE PROJECT, IMIND. R

18.5 PERMITTEES MUST DESIGN BASIN OUTLETS SO THE WATER QUALITY VOLUME DISCHARGES AT NO MORE THAN 5.66 CUBIC FEET PER SECOND (CFS) PER ACRE OF SURFACE AREA OF THE BASIN. [MINN. R. 7090]

18.6 PERMITTEES MUST DESIGN BASIN OUTLETS TO PREVENT SHORT-CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. BASIN OUTLETS MUST HAVE ENERGY DISSIPATION. [MINN. R. 7090]

18.7 PERMITTEES MUST DESIGN THE BASIN TO INCLUDE A STABILIZED EMERGENCY OVERFLOW TO ACCOMMODATE STORM EVENTS IN EXCESS OF THE BASIN'S HYDRAULIC DESIGN. IMINN. R, 7090]

18.8 PERMITTEES MUST DESIGN A MAINTENANCE ACCESS. TYPICALLY EIGHT (8) FEET WIDE, FOR THE BASIN. [MINN. R. 7090] 18.9 PERMITTEES MUST LOCATE BASINS OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONE REQUIRED IN ITEM 23.11. PERMITTEES MUST DESIGN BASINS TO AVOID DAMNING WATER FROM WETLANDS UNLESS THE IMPACT TO THE WETLAND COMPLIES WITH THE REQUIREMENTS OF SECTION 22, JAMNIA R 7690)

18.10 PERMITTEES MUST DESIGN BASINS USING AN IMPERMEABLE LINER IF LOCATED WITHIN ACTIVE KARST TERRAIN. [MINN. R

19.1 REGIONAL WET SEDIMENTATION BASINS, [MINN. R. 7090]

19.2 WHEN THE ENTIRE WATER QUALITY VOLUME CANNOT BE RETAINED ONSITE, PERMITTEES CAN USE OR CREATE REGIONAL WET SEDIMENTATION BASINS PROVIDED THEY ARE CONSTRUCTED BASINS, NOT A NATURAL WETLAND OR WATER BODY, (WETLAND USED A SREGIONAL BASINS MUST BE MITIGATED FOR J. SEE SECTION 22. THE OWNER MUST ENSURE THE REGIONAL BASIN CHORNOR TO ALL RECOUNTED THEY ARE CONSTRUCTED BASIN AND A NATURAL WETLAND OR WATER BODY, (WETLAND USED AS REGIONAL BASIN MUST BE LARGE ENOUGH TO ACCOUNT FOR THE ENTIRE AREA THAT DRAINS TO THE REGIONAL BASIN PERMITTEES MUST VERIFY THAT THE REGIONAL BASIN WILL DISHORARGE AT NO MORE THAN SO, OF 5P PER ACRE OF SURFACE AREA OF THE BASIN AND MUST PROVIDE A LIVE STORAGE VOLUME OF ONE INCH TIME HE PROVIDED AND THE MASIN STORAGE VOLUME OF ONE INCH TIME PROVIDE AND THE MASIN STORAGE VOLUME OF ONE INCH TIME PROVIDE AND THE MASIN STORAGE VOLUME OF ONE INCH TIME PROVIDE AND THE MASIN STORAGE VOLUME OF ONE INCH TIME PROVIDE AND THE MASIN STORAGE VOLUME OF ONE INCH TIME PROVIDE AND THE MASIN STORAGE VOLUME OF ONE INCH TIME PROVIDED AND THE REGIONAL BASIN. THE COUNCE MUST OBTAIN YENTER AUTHORIZATION FROM THE APPLICABLE LIGU OR PRIVATE ENTITY THAT OWNS AND MAINTAINS THE REGIONAL BASIN, LIMINE, 77.0890]

20.1 SWPPP AVAILABILITY. [MINN. R. 7090]
20.2 PERMITTEES MUST KEEP THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS AT THE SITE DURING NORMAL WORKING HOURS BY PERMITTEES WHO HAVE OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. [MINN. R. 7090]

21.1 TRAINING REQUIREMENTS. [MINN. R. 7090]
21.2 PERMITTEES MUST ENSURE ALL OF THE FOLLOWING INDIVIDUALS RECEIVE TRAINING AND THE CONTENT AND EXTENT OF THE TRAINING IS COMMENSURATE WITH THE INDIVIDUAL'S JOB DUTIES AND RESPONSIBILITIES WITH REGARD TO ACTIVITIES

**RECEIVED THE PRESENCE OF THE PROPERTY OF THE PROPERTY

A INDIVIDUALS PREPARING THE SWPPP FOR THE PROJECT.

B. INDIVIDUALS OVERSEEING IMPLEMENTATION OF, REVISING ANDIOR AMENDING THE SWPPP AND INDIVIDUALS PERFORMING INSPECTIONS FOR THE PROJECT ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA.

C INDIVIDUALS PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPS. [MINN. R. 7090] 21.3 PERMITTEES MUST ENSURE INDIVIDUALS IDENTIFIED IN SECTION 21 RECEIVE TRAINING FROM LOCAL, STATE, FEDERAL AGENCIES, PROFESSIONAL ORGANIZATIONS, OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, PROFESSIONAL ORGANIZATIONS, OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, PREVAMENT SET ATTEMPT AND THE MININESOTA A PROFESSION CONSTRUCTION STOWNATER FERMITTEES MUST ENSURE THESE INDIVIDUALS ATTEND A REFRESHER-TRAINING COURSE EVERY THREE (3) YEARS, [MINN, R. 7000]

23.1 ADDITIONAL REQUIREMENTS FOR DISCHARGES TO SPECIAL (PROHIBITED, RESTRICTED, OTHER) AND IMPARIED WATERS. [MINN. R. 7090]

23.6 DISCHARGES TO THE TROUT STREAMS (OTHER SPECIAL WATER) LISTED IN MINN. R. 6264.0050, SUBP. 4 MUST INCORPORAT THE BMPS OUTLINED IN ITEMS 23.9, 23.10, 23.11, AND 23.12, [MINN.R.6264.0050, SUBP. 4]

23.9 PERMITTEES MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS, AS DESCRIBED IN ITEM 8.4 AND COMPLETE STABILIZATION WITHIN SEVEN (?) CALEDARD ADVAS ATER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE STITE TEMPORARILY OR PERMANENTLY CEASES, IMMN. R. 7090)

23.10 PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN AS DESCRIBED IN SECTION 14 FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME. (MINN.R. 7090)

LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME. (MINN.R. 7090)
23.11 PERMITTES MUST INCLUDE AN UNDISTURBED BUFFER ZONE OF NOT LESS THAN 100 UNEAR FEET FROM A SPECIAL
WATER (NOT INCLUDING TRIBUTARIES) AND MUST MAINTAIN THIS BUFFER ZONE AT ALL TIMES. BOTH DURING CONSTRUCTION,
AND AS A PERMANENT FEATURE POST CONSTRUCTION, EXCEPT WHERE A WATER CROSSING OR OTHER ROORACHMENT IS
NECESSARY TO COMPLETE THE PROJECT. PERMITTEES MUST FULLY DOCUMENT THE CIRCUMSTANCE AND REASONS THE
BUFFER ENGROACHMENT IS NECESSARY IN THE SWIPPD AND INCLUDE RESTORATION ACTIVITIES. THIS PERMIT ALLOWS
REPLACEMENT OF EXISTING IMPERVIOUS SURFACE WITHIN THE BUFFER. PERMITTEES MUST MINIMIZE ALL POTENTIAL WATER
COULDLY, SCENIC AND OTHER ENVIRONMENTAL IMPACTS OF THESE SECRETIONS BY THE USE OF ADDITIONAL OR REDUNDANT
(DOUBLE) BMPS AND MUST DOCUMENT THIS IN THE SWIPPD FOR THE PROJECT [MINN.R. 7080]

23.12 PERMITTEES MUST DESIGN THE PERMANENT STORMWATER TREATMENT SYSTEM SO THE DISCHARGE FROM THE PROJE MINIMIZES ANY INCREASE IN THE TEMPERATURE OF TROUT STREAMS RESULTING FROM THE ONE (1) AND TWO (2) YEAR 24-HC PRECIPITATION EVENTS. THIS INCLUDES ALL TRIBUTARIES OF DESIGNATED TROUT STREAMS LOCATED WITH THE SAME PUB LAND SURVEY SYSTEM (PLSS) SECTION. PERMITTEES MUST INCORPORATE ONE OR MORE OF THE FOLLOWING MEASURES, IN ORDER OF PREFERENCE.

a. PROVIDE STORMWATER INFILTRATION OR OTHER VOLUME REDUCTION PRACTICES AS DESCRIBED IN ITEM 15.4 AND 15.5, TO REDUCE RUNOFF, INFILTRATION SYSTEMS MUST DISCHARGE ALL STORMWATER ROUTED TO THE SYSTEM WITHIN 24 HOURS. b. PROVIDE STORMWATER FILTRATION AS DESCRIBED IN SECTION 17. FILTRATION SYSTEMS MUST DISCHARGE ALL STORMWATER ROUTED TO THE SYSTEM WITHIN 24 HOURS.

c. MINIMIZE THE DISCHARGE FROM CONNECTED IMPERVIOUS SURFACED BY DISCHARGING TO VEGETATED AREAS, OR GRASS SWALES, AND THROUGH THE USE OF NON-STRUCTURAL CONTROLS.

d. IF PONDING IS USED, THE DESIGN MUST INCLUDE AN APPROPRIATE COMBINATION OF MEASURES SUCH AS SHADING, VEGETATED SWALE DISCHARGES OR CONSTRUCTED WETLAND TREATMENT CELLS THAT LIMIT TEMPERATURE INCREASES. THE POND MUST BE DESIGNED AS A DRY POND AND SHOULD DRAW DOWN IN 24 HOURS OR LESS.

e, OTHER METHODS THAT MINIMIZE ANY INCREASE IN THE TEMPERATURE OF THE TROUT STREAM. [MINN. R. 7090]

24.1 GENERAL PROVISIONS, [MINN, R. 7090] 24.2 IF THE MPCA DETERMINES THAT AN INDIVIDUAL PERMIT WOULD MORE APPROPRIATELY REGULATE THE CONSTRUCTION ACTIVITY. THE MPCA MAY REGUIRE AN INDIVIDUAL PERMIT TO CONTINUE THE CONSTRUCTION ACTIVITY. COVERAGE UNDER THIS GENERAL PERMIT VILL REMAIN IN EFFECT I DETAIL THE MFCA ISSUES AN MONIPULAL PERMIT, IMININ, R 700,0210, SUBP (6) 24.3 IF THE PERMITTEE CANNOT MEET THE TERMS AND CONDITIONS OF THIS GENERAL PERMIT, AN OWNER MAY REQUEST AN INDIVIDUAL PERMIT, IN ACCORDANCE WITH MINN. R. 7001.0210 SUBP. 6, [MINN. R. 7001.0210, SUBP. 6]

24.4 ANY INTERESTED PERSON MAY PETITION THE MPCA TO REQUIRE AN INDIVIDUAL INPOESIOS PERMIT IN ACCORDANCE WITH 40 CFR 122.28(B)(3), [40 CFR 122.29(B)(3)]

24.5 PERMITTEES MUST MAKE THE SWYPP). INCLUDING ALL INSPECTION REPORTS, MAINTENANCE RECORDS, TRAINING RECORDS AND OTHER INFORMATION REQUIRED BY THIS PERMIT, AVAILABLE TO FEDERAL, STATE, AND LOCAL OFFICIALS WITHIN THREE (3) DAYS UPON REQUEST FOR THE DURATION OF THE PERMIT AND FOR THIREE (3) YEARS FOLLOWING THE NOT.

24.6 PERMITTEES MAY NOT ASSIGN OR TRANSFER THIS PERMIT EXCEPT WHEN THE TRANSFER OCCURS IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF ITEM 3.7 AND 3.8. [MINN. R. 7090]

THE APPLICABLE NEGULINEMENTS OF ITEM 3.7 AND 38, MINNIN, K. 7090]

24.7 NOTHING IN THIS PERMIT MUST BE CONSTRUED TO RELIEVE THE PERMITTEES FROM CIVIL OR CRIMINAL PENALTIES FOR NONCOMPLIANCE WITH THE TERMS AND CONDITIONS PROVIDED HEREIN, NOTHING IN THIS PERMIT MUST BE CONSTRUED. PRECLUDE THE INITIATION OF ANY LEGAL ACTION OR RELEVE THE PERMITTEES FROM ANY RESPONSIBILITIES, OR PENALTIES TO WHICH THE PERMITTEES IS/ARE OR MAY BE SUBJECT TO UNDER SECTION 31 OF THE CLIEBAM WATER ACT AND MINNI STAL SECTION 34 OF THE CLIEBAM WATER ACT AND MINNI STAL SECTION 34 OF THE CLIEBAM THE ACTIVITIES OCCUPIENNEON THE CONTROL OF A SITE WHITEE THE PERMIT HAS BEEN TRANSFERRED TO MOTHER PARTY AS REQUIRED IN SECTION 34 (MINN T. 7080)

24.8 THE PROVISIONS OF THIS PERMIT ARE SEVERABLE. IF ANY PROVISION OF THIS PERMIT OR THE APPLICATION OF ANY PROVISION OF THIS PERMIT TO ANY CIRCUMSTANCES IS HELD INVALID. THE APPLICATION OF SUCH PROVISION TO OTHER CIRCUMSTANCES, AND THE REMAINDER OF THIS PERMIT MUST NOT BE AFFECTED THEREBY, MINN. R. 7899.

24.9 THE PERMITTEES MUST COMPLY WITH THE PROVISIONS OF MINN. R. 7001.0150, SUBP. 3 AND MINN. R. 7001.1090, SUBP. 1(A), 1(B), 1(C), 1(H), 1(I), 1(J), 1(K), AND 1(L), [MINN. R. 7090]

42.1 OTHE PERMITTEES MUST ALLOW ACCESS AS PROVIDED IN 40 CFR 122 41(I) AND MINN. STAT. SECT. 115.04. THE PERMITTEES MUST ALLOW REPRESENTATIVES OF THE MPCA OR ANY MEMBER. EMPLOYEE OR AGENT THEREOF, WHEN AUTHORIZED BY IT, UPON PRESENTATION OF CREDENTIALS, TO ENTER UPON ANY PROPERTY, PUBLIC OR PRINTATE, FOR THE PURPOSE OF OBTAINING INFORMATION OR EXAMINATION OF RECORDS OR CONDUCTING SURVEYS OR INVESTIGATIONS. (40 CFR 122.41(II)) 24.11 FOR THE PURPOSES OF MINN, R. 7660 AND OTHER DOCUMENTS THAT REFERENCE SPECIES SECTIONS OF THIS PERMIT. "STORMWATER DISCHARGE DESIGN REQUIREMENTS" CORRESPONDS TO SECTIONS 5, 8 AND 14 THROUGH 21," FONSTRUCTION ACT

DOCUMENTATION OF TRAINED INDIVIDUALS

PROJECT NAME

LARSON SYSTEMS BLDG ADDITIONS

PROJECT LOCATION PID 32-32-23-12-0018 & 32-32-23-13-0021

LATITUDE: 45.222 LONGITUDE: -93.231

DEVELOPER TED

NARRATIVE - PERMANENT STORMWATER TREATMENT SYSTEMS THE PROJECT CONSISTS OF THE CONSTRUCTION OF 3 COMMERCIAL BUILDINGS AND TWO STORMWATER BASINS FOR STORMWATER TREATMENT.

PERMANENT STORMWATER MANAGEMENT TREATMENT SYSTEMS PER MPCA RULES, CITY OF HAM LAKE. AND COON CREEK WATERSHED DISTRICT ARE REQUIRED FOR THIS PROJECT.

SITE IMPERVIOUS AREAS

BEFORE CONSTRUCTION	AFTER CONSTRUCTION
7.81	ACRES
1.34 ACRES	4.28 ACRES
6.47 ACRES	3.53 ACRES
	7.81 / 1.34 ACRES

TOTAL DISTURBED AREA

SITE MAP W/ EXISTING AND FINAL GRADES AND DESIGN CALCULATIONS

SEE "STORMWATER DRAINAGE REPORT" FOR EXISTING AND PROPOSED AREA MAPS, DENOTING DRAINAGE AREA BOUNDARIES, DIRECTIONS OF FLOW, AND DISCHARGE POINTS

RECEIVING WATERS WITHIN ONE MILE

NAME OF WATER BODY	WATER BODY	WATER	WATER
COON CREEK	CREEK	NO	YES
ON-SITE REGIONAL POND	BASIN	NO	NO
ON-SITE INFILTRATION BASINS (PROP)	BASIN	NO	NO

FTHE SITE DRAINS TO A SURFACE WATER, IS A 50-FT NATURAL BUFFER ADJACENT TO YES NO NIA THE SURFACE WATER PRESERVED? NOTE: NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS,

TEMPORARY SEDIMENTATION BASINS

UE FIVE (5) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, IS A TEMPORARY SEDIMENT BASIN PROVIDED FOR ITERATIVENT OF THE RUNDET BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS

STORM DRAIN INLETS, AND SEDIMENT BASINS.

INFILTRATION FEASIBILITY

ARE THERE ANY INFILTRATION RESTRICTIONS FOR THE SITE (SEE 16.14
YES NO N/A THROUGH 16.21?

ADDITIONAL STORMWATER MITIGATION MEASURES

- YES NO ENVIRONMENTAL REVIEW DOCUMENTS

 - ENDANGERED SPECIES REVIEW?
 - ARCHAEOLOGICAL REVIEW?
 - OTHER LOCAL, STATE OR FEDERAL REVIEW?

If YES TO ANY OF THE ABOVE, DESCRIBE THE MITIGATION MEASURES, FOR PURPOSES OF THIS PERMIT, MITIGATION MEASURES MEANS ACTIONS NECESSARY TO AVOID, MINIMEZ, OR MITIGATE FOR IMPACTS RELATED TO EROSION PREVENTION, SEDIMENT CONTROL, THE PERMANENT STORMWATER TREATMENT SYSTEM, POLLUTION PREVENTION NANOSEMENT MEASURES AND DISCHARGES ASSOCIATED WITH THE PROJECTS CONSTRUCTION ACTIVITY.

ONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER FACILITIES

COMPANY

THE PERMANENT STORMWATER MANAGEMENT FACILITIES ARE PRIVATELY OWNED AND THE LONG-TERM OPERATIONS AND MAINTENANCE WILL BE PROVIDED BY THE OWNER THE CITY OF HAM LAKE SHALL NOT BE RESPONSIBLE FOR LONG-TERM OPERATIONS AND MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES.

REVEGETATION SPECIFICATIONS

TEM		MNDOT SPECIFICATION/NOTES	
SOD	3878		
SEED		3876	
FOR TURF ESTABLIS	HMENT		
COMME	RCIAL TURF	MNDOT MIX 25-131 (220 LBS/ACRE)	
RESIDENTIAL TURF		MNDOT MIX 25-131 (120 LBS/ACRE)	
TEMPORARY	FALL COVER	MNDOT MIX 21-112 (100 LBS/ACRE)	
SPRII	NG/SUMMER	MNDOT MIX 21-111 (100 LBS/ACRE)	
SOIL-BUILD	DING COVER	MNDOT MIX 21-113 (110 LBS/ACRE)	
1-2 YE	ARS COVER	MNDOT MIX 22-111 (30.5 LBS/ACRE)	
2-5 YE	ARS COVER	MNDOT MIX 22-112 (40 LBS/ACRE)	
MULCH	ĺ	3882 (TYPE 1 - DISC ANCHORED)	
FERTILIZER		3881	
WOOD FIBER BLANKET		3885 (CATEGORY 0)	

· MOW A MINIMUM OF. RESIDENTIAL TURF - ONCE PER 2 WEEKS COMMERCIAL TURF - ONCE PER 4 WEEKS

" SEEDED AREAS SHALL BE EITHER MULCHED OR COVERED BY FIBROUS BLANKETS TO PROTECT SEEDS AND LIMIT EROSION.

QUANTITIES - ESTIMATED QUANTITIES FOR EROSION AND SEDIMENT CONTROL MEASURES

TYPE	QTY	UNIT
SILT FENCE	1,100	LINEAR FEET
RIP-RAP W. GEO-FABRIC		CUBIC YARDS
TURF REINFORCEMENT MAT (ENKAMAT)		SQUARE YARDS
SEED & MULCH (GENERAL)	1.65	ACRE
ROCK CONSTRUCTION ENTRANCE	1	EACH
SOD	-	SQUARE YARDS
EROSION CONTROL BLANKET		SQUARE YARDS
INLET PROTECTION	9	EACH

NARRATIVE - TIMING FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND SWPPP
MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES.

CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLAN.

2.1. ADDITIONAL SILT FENCE MAY BE NECESSARY IF LOCAL CONDITIONS REQUIRE.

2.2. THE CONTRACTOR SHALL MAINTAIN SILT FENCE, INCLUDING THE REMOVAL OF
ACCUMULATED SEDIMENT, THROUGH COMPLETION OF BUILDING CONSTRUCTION

3. SILT FENCE SHALL REMAIN IN-PLACE UNTIL SITE HAS BEEN STABILIZED.

CONTRACTOR SHALL INSTALL THE ROCK CONSTRUCTION ENTRANCE WHEREVER
CONSTRUCTION TARTETIC ENTERS ONTO EXISTING PAYED SUFFACES.

4. CONTRACTOR SHALL PREPROM SITE GRADING ON AN AREA-BY-AREA BASIS TO
MINIMIZE UNSTABILIZED AREAS.

5.1. CONTRACTOR SHALL PREPROM SITE GRADING ON AN AREA-BY-AREA BASIS TO
MINIMIZE UNSTABILIZED AREAS.

5.1. CONTRACTOR SHALL SIT IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL MIMIMIZE UNSTABILIZED AREAS.
5.1. CONTRACTOR MUST IMBEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL.
AREAS, AS DESCRIBED IN ITEM 8.4 OF THE PERMIT. AND COMPLETE THE
STABILIZATION WITHIN SEVEN (T) CALENDAR DAYS AFTER THE CONSTRUCTION
ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY

CEASES.

CONTRACTOR TO PROTECT PERMANENT STORMWATER MANAGEMENT FACILITIES

6. CONTRACTOR TO PROTECT PERMANENT STORMWATER MANAGEMENT FACILITIES FROM CONSTRUCTION BUNG-FF.

8.1. INFILITEATION SYSTEMS MUST NOT BE EXCAVATED TO FINAL GRADE UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY STABILIZED.

1. CONTRACTOR TO SHALL PAY SPECIAL ATTENTION TO ADJACENT PROPERTY LINES TO ENSURE THE EROSION CONTROL PRACTICES INPIACE IN THOSE AREAS PREVENT MIGRATION OF SEDIMENT ONTO ADJACENT PROPERTIES.

8. ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS OR IMPLEMENTED IN THE FILED SHALL BE IN ACCORDANCE WITH THE CITY AND INPOES PHASE II PERMIT REQUIREMENTS.

1. CONTRACTOR TO PROYULE ADDITIONAL SILT FENCE, BIOROLLS, EROSION CONTROL BLANKET, OR OTHER APPROVED EQUAL FOR ANY SLOPES THAT APPEAR TO BE FAILING.

10 CONTRACTOR TO STABILIZE SOIL STOCKPILES; STABILIZATION SHALL BE INITIATED

IMMEDIATELY

11. CONTRACTOR SHALL FINAL GRADE SWALE AREAS UPON STABILIZATION OF UPSTREAM AREAS.

12. CONTRACTOR SHALL BE RESPONSIBLE TO SWEEP/SCRAPE ADJACENT STREETS WHEN MATERIALS OR DEBRIS HAVE WASHED/FLOWED ONTO ADJACENT STREETS OR AS DIRECTED BY CITY

13. COORDINATE SMALL UTILITIES INSTALLATIONS (GAS, PHONE, ELECTRIC, GAS, ETC.) AFTER CURB & GUTTER INSTALLATION.

THIS CREEK HAS AN EPA-APPROVED IMPAIRMENT FOR BENTHIC MACROINVERTIERATE BIOASSESSMENTS, ESCHERICHA COLL AND FISH BIOASSESSMENTS, THESE IMPAIRMENTS ARE CONSIDERED TO BE CONSTRUCTION RELATED PARAMETERS AND REQUIRE THE ADDITIONAL BEST MANAGEMENT PRACTICES FOUND IN ITEMS 23 & 23.10.

BEST MANAGEMENT PRACTICES (BUPS)* MEANS THE MOST EFFECTIVE AND PRACTICABLE MEANS OF EROSION PREVENTION AND SEDIMENT CONTROL, AND WATER QUALITY ANAGEMENT PRACTICES THAT ARE THE MOST EFFECTIVE AND PRACTICABLE MEANS OF O CONTROL, PREVENT, AND MINIMIZE DEGRADATION OF SURFACE WATER, INCLUDING VOIDANCE OF IMPACTS, CONSTRUCTION-PRASING, MINIMIZING THE LENGTH OF TIME SOIL. AREAS ARE EXPOSED, PROHIBITIONS, POLLUTION PREVENTION THROUGH OUSEKEEPING, AND OTHER MANAGEMENT PRACTICES PUBLISHED BY STATE OR DESIGNATED AREA-WIDE PLANNING AGENCIES. [MINN R 7090]

DESIGNATED AREA-WIDE PLANNING AGENCIES. [MINN R 7090]

CONSTRUCTION ACTURITY MEANS ACTIVITIES INCLUDING CLEARING, GRADING, AND EXCAVATING, THAT RESULT IN LAND DISTURBANCE OF EQUAL TO OR GREATER THAN ONE ACRE, INCLUDING THE DISTURBANCE OF LESS THAN ONE ACRE, OF TOTAL LAND AREA THAT IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE IF THE LANGER COMMON PLAN WILL ULTIMATELY DISTURBE EQUAL TO OR GREATER THAN ONE ACRE. THIS INCLUDES A DISTURBANCE TO THE LAND THAT RESULTS IN A CHANGE IN THE EXISTING SOIL COVER, BOTH VEGETATIVE AND NONVEGETATIVE, OR THE EXISTING SOIL TO POORAPHY THAT MAY RESULT IN ACCELERATED STORMAYTER RUNOF THAT MAY LEAD TO SOIL EROSION AND MOVEMENT OF SECIMENT CONSTRUCTION ACTIVITY ODES NOT INCLUDE INSTITUTION ACTIVITY ODES UNDERLYING SOILS (E.G., MILL AND OVERLAY PROJECTS) IS NOT CONSTRUCTION ACTIVITY MINN. R. 70901

MAY REQUIRE AN INDIVIDUAL MPCA NPDES/SDS PERMIT (MINN, R. 7090)

GENERAL CONTRACTOR* MEANS THE PARTY WHO SIGNS THE CONSTRUCTION CONTRACT WITH THE OWNER TO CONSTRUCT THE ENTIRE PROJECT DESCRIBED IN THE FINAL PLANS AND SPECIFICATIONS. WHERE THE CONSTRUCTION PROJECT INVOLVES MORE THAN ONE CONTRACTOR. THE GENERAL CONTRACTOR IS THE PARTY RESPONSIBLE FOR MANAGING THE ENTIRE PROJECT ON BEHALF OF THE COVINER. IN SOME CASES, THE OWNER IS THE AS THE OPERATOR AND BECOMES THE SOLE PERMITTEE. [MINN. R. 7090]

GROUNDWATER' MEANS THE WATER CONTAINED BELOW THE SURFACE OF THE EARTH IN THE SATURATED ZONE INCLUDING, WITHOUT LIMITATION, ALL WATERS WHETHER UNDER ZONFINED, UNCONFINED, OR PERCHED CONDITIONS, IN NEAS SURFACE LUNCONSOLIDATED SEDIMENT OR REGOLITH, OR IN ROCK FORMATIONS DEEPER UNDERGROUND, [MINN. R.

"INFEASIBLE" MEANS NOT TECHNOLOGICALLY POSSIBLE OR NOT ECONOMICALLY PRACTICABLE AND ACHIEVABLE IN LIGHT OF THE BEST INDUSTRY PRACTICES, [MINN. R.

"INITIATED IMMEDIATELY" MEANS TAKING AN ACTION TO COMMENCE SOIL STABILIZATION AS SOON AS PRACTICABLE, BUT NO LATER THAN THE END OF THE WORK DAY, FOLLOWING THE DAY WHEN THE LAND DISTURBING ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE, IF THE PERMITTEES KNOW THAT CONSTRUCTION WORK ON THAT PORTION OF THE SITE WILL BE TEMPORARILY CEASED FOR 14 OR NORE ADDITIONAL CALENDAR DAYS OR 7 CALENDAR DAYS WHERE TIEM 23 APPLIES, PERMITTEES CAN INITIATE STABILIZATION BY A. PREPPING THE SOIL FOR VEGETATIVE OR NON-VEGETATIVE STABILIZATION; OR

APPLYING MULCH OR OTHER NON-VEGETATIVE PRODUCT TO THE EXPOSED SOIL AREA

SEEDING OR PLANTING THE EXPOSED AREA, OR

D. STARTING ANY OF THE ACTIVITIES IN A - C ON A PORTION OF THE AREA TO BE STABILIZED, BUT NOT ON THE ENTIRE AREA: OR

E FINALIZING ARRANGEMENTS TO HAVE STABILIZATION PRODUCT FULLY INSTALLED IN COMPLIANCE WITH THE APPLICABLE

COMPLIANCE WITH THE APPLICABLE

BEADLINE FOR COMPLETING STABILIZATION. [MINN. R. 7980]

IMPERVIOUS SURFACE" MEANS A CONSTRUCTED HARD SURFACE THAT EITHER PREVENTS

OR RETARDS THE ENTRY OF WATER INTO THE SOIL AND CAUSES WATER TO RUN OFF THE

SURFACE IN GREATER QUANTITIES AND AT AN INCREASED BATE OF FLOW THAN PRIOR TO

DEVELOPMENT. EMAPPLES RICLIDE ROOFFORS, SIDEWAKS, DRIVEWAYS, PARKING LOTS,

AND CONCRETE, ASPHALT, OR GRAVEL ROADS. BRIDGES OVER SURFACE WATERS ARE

DEVELOPMENT WATERS ARE USEASES BAIND AT AND AT THE PROPERTY OF THE PROPERTY CONSIDERED IMPERVIOUS SURFACES. [MINN. R. 7090]

"NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)" MEANS THE PROGRAM FOR ISSUING, TERMINATION, MODIFYING, REVOKING, REISSUING, TERMINATING, MONITORING, AND ENFORCING PERMITS UNDER THE CLEAN WATER ACT, AS AMENDED (33 U.S.C. 1251 ET SED SECTION 1342 AND 40 CFR PARTS 122, 123, 124 AND 450), (MINN R. 7090)

"NATURAL BUFFER" MEANS AN AREA OF UNDISTURBED COVER SURROUNDING SURFACE WATERS WITHIN WHICH CONSTRUCTION ACTIVITIES ARE RESTRICTED. NATURAL BUFFER INCLUDES THE VEGETATION, EXPOSED ROCK, OR BARREN GROUND THAT EXISTS PRIOR TO COMMENCEMENT OF EARTH-DISTURBING ACTIVITIES. (MINN. R 7090) NOTICE OF TERMINATION (NOT)" MEANS THE FORM (ELECTRONIC OR PAPER) REQUIRED OR TERMINATING COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT. (MINN. R.

"OPERATOR" MEANS THE PERSON (USUALLY THE GENERAL CONTRACTOR), FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY DESIGNATED BY THE OWNER WHICHAS DAY TO DAY OPERATIONAL CONTROL AND/OR THE ABILITY TO MODITY PROJECT PLANS AND SPECIFICATIONS RELATED TO THE SWIPPP. THE PERMIT APPLICATION MUST LIST THE OPERATOR AS A PERMITTEE, SUBCONTRACTORS HIRED BY AND UNDER SUPERVISION OF THE GENERAL CONTRACTOR ARE NOT OPERATORS, IMINN R 7000]

"OWNER" MEANS THE PERSON, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY DESSESSING THE TITLE OF THE ABOND WING'ENTITY THE TOTHER SHITLE.

'UWMEN' MEANS THE PERSON, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY POSSESSING THE TITLE OF THE LAND ON WHICH THE CONSTRUCTION ACTIVITY IS FOR A LEASE, EASEMENT, OR MINERAL RIGHTS LICENSE HOLDER, THE PERTY OR INDIVIDUAL IDENTIFIED AS THE LEASE, EASEMENT OR MINERAL RIGHTS LICENSE HOLDER; OR THE CONTRACTING GOVERNMENT AGENCY RESPONSIBLE FOR THE CONSTRUCTION ACTIVITY, MINNE, 7, 2009.

AGENCY RESPONSIBLE FOR THE CONSTRUCTION ACTIVITY, (MINN. N. 7080)
"FERMANENT COVER" MEANS SURFACE TYPES THAT WILL PREVENT SOIL FAILLIRE UNDER
EROSIVE CONDITIONS. EXAMPLES INCLUDE: GRAVEL, CONCRETE, PERENNIAL COVER, OR
OTHER LANDSCAPED MATERIAL THAT WILL PERMANENTLY ARREST SOIL REROSION.
PERMITTEES MUST ESTABLISH A UNIFORM PERENNIAL VEGETATIVE COVER (IE. EVENLY
DISTRIBUTED, WITHOUT LARGE BARE ARRES) WITH A DEBIXTY OF 70 PERCENT OF THE
NATIVE BACKGROUND VEGETATIVE COVER ON ALL AREAS NOT COVERED BY PERRAMENT.

PERMITTEES" MEANS THE PERSONS, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY IDENTIFIED AS THE OWNER AND OPERATOR ON THE APPLICATION SUBMITTED TO THE MYPCA AND ARE RESPONSIBLE FOR COMPLANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT. [MINN. R: 7090]

"PROJECT(S)" MEANS ALL CONSTRUCTION ACTIVITY PLANNED AND/OR CONDUCTED UNDER A PARTICULAR PERMIT, THE PROJECT OCCURS ON THE SITE OR SITES DESCRIBED IN THE PERMIT APPLICATION, THE SWPPP AND IN THE ASSOCIATED PLANS, SPECIFICATIONS AND CONTRACT DECILIENTS ISLAND R. 70001 CONTRACT DOCUMENTS. [MINN. R. 7090]

"PUBLIC WATERS" MEANS ALL WATER BASINS AND WATERCOURSES DESCRIBED IN MINN. STAT. SECT. 103G.005 SUBP. 15. [MINN. R. 7090]

"SEDIMENT CONTROL" MEANS METHODS EMPLOYED TO PREVENT SUSPENDED SEDIMENT IN STORMWATER FROM LEAVING THE SITE (E.G. SILT FENCES, COMPOST LOGS AND STORM DRAIN INLET PROTECTION), [MINN. R. 7090]

STABILIZED: "STABILIZED: "STABILIZED: "STABILIZED MEANS THE EXPOSED GROUND SURFACE HAS BEEN COVERED BY APPROPRIATE MATERIALS SUCH AS MULCH, STAKED SOD, RIPRAP, EROSION CONTROL BLANKER, MATS OR OTHER MATERIAL THAT PREVENTS EROSION FROM OCCURRING, GRASS SEEDING, AGRICULTURAL CROP SEEDING OR OTHER SEEDING ALONE IS NOT STABILIZATION, MULCH MATERIALS MUST ACHIEVE APPROXIMATELY SO PERCENT GROUND COVERAGE (TYPICALLY 2 TONIACRE), MINNE, R. 7089]

"STORMWATER" MEANS PRECIPITATION RUNOFF, STORMWATER RUNOFF, SNOWMELT RUNOFF, AND ANY OTHER SURFACE RUNOFF AND DRAINAGE. [MINN. R. 7090]

"STORM WAYER POLLUTION PREVENTION PLAN (SWPPP)" MEANS A PLAN FOR STORMWATER DISCHARGE THAT INCLUDES ALL REQUIRED CONTENT UNDER IN SECTION 5 THAT DESCRIBES THE EROSION PREVENTION, SEDIMENT CONTROL AND WASTE CONTROL BMPS AND PERMANENT STORMWATER TREATMENT SYSTEMS. [MINN, R. 7090]

"SURFACE WATER OR WATERS" MEANS ALL STREAMS, LAKES, PONDS, WARSHES,
WETLANDS, RESERVOIRS, SPRINGS, RIVERS, DRAINAGE SYSTEMS, WATERWAYS,
WATERCOURSES, AND IRRIGATION SYSTEMS WHETHER NATURAL OR ARTIFICIAL, PUBLIC
OR PRIVATE, EXCEPT THAT SURFACE WATERS DO NOT INCLUDE STORMWATER
TREATMENT SYSTEMS CONSTRUCTED FROM UPLAND. THIS PERMIT DOES NOT COMSIDER
STORMWATER TREATMENT SYSTEMS CONSTRUCTED IN WETLANDS AND MITIGATED IN
ACCORDANGE WITH SECTION 25 AS SIREADE WATERS INJUN 3 75001 ACCORDANCE WITH SECTION 22 AS SURFACE WATERS, MINN R. 70901

"WATERS OF THE STATE" (AS DEFINED IN MINN. STAT. SECT. 115.01, SUBP 22) MEANS ALL STREAMS, LAKES, POXIOS, MARSHES, WATERCOURSES, WATERWAYS, WELLS, SPRINGS, RESERVOIRS, AQUIFERS, IRRIGATION SYSTEMS, DRAINAGE SYSTEMS AND ALL OTHER BODIES OR ACCUMULATIONS OF WATER, SURFACE OR LINDERGROUND, NATURAL OR ARTIFICIAL, PUBLIC OR PRIVATE, WHICH ARE CONTAINED WITHIN, FLOW THROUGH, OR BORDER UPON THE STATE OR ANY PORTION THEREOF, (MINN, STAT, 115.01, SUBP. 22) "WATER QUALITY VOLUME" MEANS ONE (1) INCH OF RUNOFF FROM THE NET INCREASE IN IMPERVIOUS SURFACES CREATED BY THE PROJECT (CALCULATED AS AN INSTANTANEOUS

VOLUME, INTIMA, N. 10909

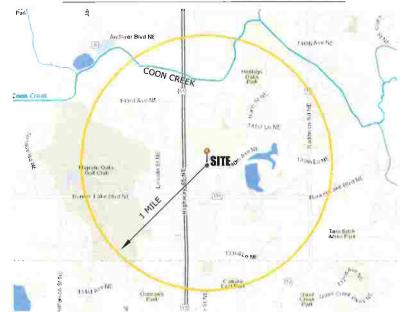
"WELLANDS' (AS DEFINED IN MINN. R. 7050 0186, SUBP. 1A.B.) MEANS THOSE AREAS THAT ARE INUNDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION BUFFICIENT TO SUPPORT, AND UNDER NORMAL CIRCUMSTANCES DO SUPPORT, A PREVALENCE OF VECETATION TYPICALLY ADAPTED FOR LIFE IN SATURATED SOLI, CONDITIONS, WELTAINDS GENERALLY, INCLUDE SWAMPS, MARSHES, BOOS, AND SIMILAR AREAS, CONSTRUCTED WETLANDS DESIGNED FOR WASTEWATER TREATMENT ARE NOT WATERS OF THE STATE, WETLANDS MUST HAVE THE FOLLOWING ATTRIBUTES

1. A PREDOMINANCE OF HYDRIC SOILS, AND

INJINDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION SUFFICIENT TO SUPPORT A PREVALENCE OF HYDROPHYTIC VEGETATION TYPICALLY ADAPTED FOR LIFE IN A SATURATED SOIL CONDITION, AND

3. UNDER NORMAL CIRCUMSTANCES SUPPORT A PREVALENCE OF SUCH VEGETATION. [MINN. R. 7050.0186. SUBP. 1A.B]

MAP OF SURFACE WATERS



STORM WATER POLLUTION PREVENTION PLAN LARSON SYSTEMS BLDG ADDITIONS

DIGINAL DATE MARCH 18, 2022

M.Q.A.

M.Q.A.

C.W.P.

22-2023

LARSON SYSTEMS

PREPARED FOR: DAVE LARSON



ENGINEERING, INC.

LINO LAKES MN 55014 PHONE: (651) 361-8210 FAX: (651) 361-8701

ADAM GINKEL PLOWE ENGINEERING, INC. 6776 LAKE DRIVE LINO LAKES MN 55014 (651) 361-8234

University of Minnesota

Design of Construction SWPPP (May 31 2023)

Erosion and Stormwater Management areals) shown or the reverse of the card. Certification expire.

you dates appear after each configuration and SWIPP AND INDIVIDUALS PERFORMING INSPECTIONS FOR THE PROJECT. ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA. [MINN. R. 7090]

ADDRESS 2

NAME ADDRESS 1

INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AN REPAIR OF BMPS. [MINN. R. 7090] PHONE.

OWNER LARSON

13847 Aberdeen St Ni Ham Lake, MN 55304 Phone: 612-987-8826 Contact: Dave Larson Email: davelarson@larsonsystems.com

ENGINEER

STROH

PO Box 1058 Jerome, AZ 86331 Phone: 808-633-4744 Contact: Bernie Stroh Email: strohengineering@1791.com

ARCHITECT LAMPERT ARCHITECTS

420 Summit Ave St. Paul, MN 55102 Phone: 763-755-1211 Contact: Laurel Schmidt Email: lourel@lampert-arch.com

CIVIL ENGINEER

PLOWE ENGINEERING 6776 Lake Drive, Suite 110 Lino Lakes, MN 55014 Phone: 651-361-8210 Contact: Mohammad Abughazleh Fmail: moe@plawe.com

VICINITY MAD

SHEET SCHEDILLE

Sheet	Description	→ 11	
Ti	Title Sheet	-	/—SITE
1	Londscope Plan		6/
A1	Site Plan		(Company of the comp
A2	Floor Plans	139TH AVE NE	and A.
A3	Building Elevations		, LOTH ME M
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ANSI/ASHRAE STANDARD 90.1-2016

Compliance Is For Building Envelope Only. The Design-Build HVAC and Electrical Designers Must Submit Documentation Proving Compliance With HVAC, Lighting, And Water Heating

GENERAL

- A. Space Conditioning Category (5.1.2)

 1. Nonresidential Conditioned Space
- B. Climate (5.1.4)

 1. Zone 6 Southern Minnesota

COMPLIANCE PATH A. Prescriptive Building Envelope Option (5.2)

MANDATORY PROVISIONS

- A Components Of The Building Envelope Shall Comply With Section 5.4

 1. Insulation (5.4.1) Shall Comply With Section 5.8.1.1 5.8.1.9

 2. Fenestration/ Door Performance (5.4.2) Shall Comply With
- Section 5.8.2 3. Air Leakage (5.4.3)

- 3. Air Leokage (5.4.3)
 The Building Envelope Shall Contain An Air Barrier And Be Sealed AI The Foliowing Areas:

 Joints Around Fenestration And Door Frames
 Junctions Batween Holls and Floors, Malls At Building Corners, Malls and Roofs or Cellings
 Penestrations of Utility Services AI Walls, Floors, and Roofs
 Building Assemblies Used As Duats Of Flenums
 Barrier Molerfals Between Floors of Changes In Air Barrier Molerfals
 Fenestration and Doors According To 5.4.3.2
 Vestibules Required According To 5.4.3.3
 Vestibules Required According Enverse According To 5.4.3.4

PRESCRIPTIVE REQUIREMENTS

Table 5.5-6 Building Component	Moximum Assembly	Minimum Insulation	Proposed
ROOF: Entirely Above Deck	U-0,032	R-30 (cl)	R-30 (cl)
WALLS: Moss	U-0.080	R-13.3 (cl)	U-0.076
S. O. G. FLOORS: Unheated	F-0.510	R-10.0 (3ft)	R-10 (3ft)
OPAQUE DOORS: Swinging	U-0	.370	U-0.20
OPAQUE DOORS: Non-Swinging	U-(0.310	U-0.147
FENESTRATION: 0-40% Glazing BUILDING #2	U-0.360 (0.36 SHGC)	U-0.340
Toble 5.5-6 Building Component	Moximum Assembly	Minimum Insulation	Proposed
ROOF: Metal Building	U-0.031	R-25 + R-11 Ls	By Big Supplier
WALLS: Metal Building	U-0.050	R-0 +	By Bla Supplier

bullaing Component	Assembly	Insulation	rropused
ROOF: Metal Building	U0.031	R-25 + R-11 Ls	By Big Suppli
WALLS: Metal Building	U-0.050	R-0 + R-19 (ci)	By Blg Suppli
S. O. G. FLOORS: Unheated	F-0.510	R-10.0 (3ft)	R-10.0 (3ft)
OPAQUE DOORS: Swinging	U-0	370	U-0.20
OPAQUE DOORS: Non-Swinging	U-0	0.310	U-0.147
FENESTRATION: 0-40% Glozing	U-0.360 (0.36 SHGC)	U-0.340

SUBMITTALS

A. Contractor To Provide Product Submittols If Requested By The Building Official

PRODUCT INFORMATION AND INSTALL, REQ. A. Building Components Must Identify R-Values Or U-Values Clearly Labeled On The Product in Accordance With Section 5.8

REVISION NOTES

5/31/22 - CITY SUBMITTAL 1. City Submittel (Tl. A1, A2, A3)

8/8/22 - CITY COMMENTS

B/B/22 — CITY COMMENTS

1. Povement Design Notes Eliminated, Sea Civil For Pavement Design (TI)

2. Porking Adjusted For Stoli Size And Setbock From Buildings (TI, Al, LI)

3. Walking Trail Eliminated (TI, Al, LI)

4. Additional Plantings Added For Screening Adjocent To Residential (LI)

5. Curb Radius Dimensions Added (AI)

5. Porking Stoli Quantity Descrepancy Between Site Plan And Required Parking Colculation Corrected (TI)

7. Coordination For Employee Plantic Area And Panding (TI, Al, LI)

8. Dimensions Added At Future Parking Stalis (AI)

9. Coordination For Septic System Areas (TI, Al, LI)

10. Owner Revisions (TI, Al, LI, Az, Až)

10. Building ji & § 7 Boots Principe

11. Building ji & § 7 Boots Principe

12. Building ji & § 7 Boots Principe

13. Building ji & § 7 Boots Principe

14. Building ji & § 7 Boots Principe

8/19/22 - CITY COMMENTS

1. Employee Picnic And Recreation Area Eliminated (A1, L1)
2. Bituminous Curb Added At South Parking Areas (A1, L1) 9/16/22 - PLANNING COMMISSION SET

Drawings For Planning Commission Review (T1, A1, L1, A2, A3) 10/3/22 - PLANNING COMMISSION SET

Updated For Coordination With Civil For Septic And Retaining
 Wall Locations (A1, L1)
 Re-Issue For Planning Commission Review (T1, A1, L1, A2, A3)

COMMERCIAL PLAN REVIEW FOR CODE COMPLIANCE

GENERAL INFORMATION

A. PROJECT NAME: Larson Systems B. PROJECT LOCATION: 13847 Aberdeen St NE Harn Loke, Minnesola

C. ZONING AND LAND USE: CD-2 Commercial Development Tier 2 O. LOT SIZE: 7.81 Acres (340,480 s.f.)

APPLICABLE CODES:

B. MINNESOTA STATE BUILDING CODE (MSBC) 2020 Edition

- INCLUDING
C. CHAPTER 1305 - INT'L BUILDING CODE 2018 Edition

D. CHAPTER 1311 - INT'L EXISTING BUILDING CODE 2020 Edition

E. CHAPTER 1315 - NATIONAL ELECTRIC CODE 2020 Edition

F. CHAPTER 1322/23 - INT'L EXERCY CONSERVATION CODE 2018 Edition

G. CHAPTER 1341 - MN ACCESSIBILITY CODE 2020 Edition

H. CHAPTER 1346 - INT'L MCCHANICAL CODE 2018 Edition

I. CHAPTER 1341 - UNIT MCCHANICAL CODE 2020 Edition

1. CHAPTER 1474 - UNIT OF MINISTRA CODE 2020 Edition

BUILDING CLASSIFICATION

A. OCCUPANCY GROUPS/ TYPE OF CONST (IBC Chpt 3 & IBC Chpt 6) BUILDING #1

Office - Group B - 3,996 s.f. Existing

Metal Fobrication Worehouse - Group F-1 & S-1
 - 20,004 s.f. Existing
 - 17,776 s.f. Addition

3. Type Of Construction

4. Proposed Height - 24'-0", 1 Story

5. Mixed Occupancy (IBC 508)

- Groups 9, F-1 And S-1 Are Non-Separated Within Fire Areas 6. Incidental Uses (IBC 509)

BUILDING #2 Worehouse - Group S-1
 - 9,900 s.f.
 Type Of Construction
 - II-B

- II-B

4. Proposed Height
- 27'-6", 1 Story

5. Mixed Occupancy (IBC 508)
- Group B is Accessory To Group S-1

6. Incidental Uses (IBC 509)

B. FIRE-RESISTANCE-RATED CONSTRUCTION

Element	Rating
Structural Frame	0 Hours
Exterior Bearing Walls	0 Hours
Interior Bearing Walls	0 Hours
Exterior Non-Bearing Walls	0 Hours
Interior Non-Bearing Walls	0 Hours
Floor Construction	0 Hours
Roof Construction	0 Hours

- !	erior Wall Openings Separation Distance	30 Ft Or Greater	
	Classification	Area of Opening	
_	Unprotected	No Limit	
	Protected	No Limit	
w en.	Walle (IDC 706)		

Fire Wall	Rating	Opening
Between Building '1-A' & '1-B'	3 Hours	3 Hours
4, Fire Borriers (IBC 707)		,
Fire Borrier	Rating	Opening

_	Between Building #1-B Fire Areas	3 Hours	3 Hours
	e Partitions (IBC 708)	la co	la
-	Fire Partition	Roting	Opening
	Corridor Walls	1 Hours	20 Minu
ROILU	ING #2		

Element	Rating
Structural Frame	0 Hours
Exterior Bearing Walls	0 Hours
Interior Bearing Walls	0 Hours
Exterior Non-Bearing Walls	0 Hours
Interior Non-Bearing Walls	0 Hours
Floor Construction	0 Hours
Roof Construction	0 Hours

	Separation Distance	25 Ft To Less Than 30 Ft (East Only) Area of Opening
=	Unprotected	70%
	Protected	No Limit
-	Separation Distance	10 Ft To Less Thon 15 Ft (South Only)
	Classification	Area of Opening
_	Unprotected	15%

45% Area of Opening Unprotected

3. Fire Wolls (IBC 706) 4. Fire Borriers (IBC 707) 5. Fire Partitions (IBC 708) Rating Opening

C. ROOF AND INTERIOR FINISH REQUIREMENTS

1. Minimum Woll And Ceiling Finish Requirement (IBC Table 803.13) | Building Component Finish Class Vertical Exits/ Class B - Group B Class C - Group F-1 & S-1 Exit Passageways

Exit Access Corridors/
Other Exit ways Class C Rooms and Enclosed Cinss C

Minimum Roof Covering Classification (IBC Table 1505.1) = Class C - (Contractor To Provide Class A Roof Assembly)

AUTOMATIC SPRINKLER REQUIREMENTS

A. AN AUTOMATIC SPRINKLER SYSTEM IS NOT PROVIDED (IBC 903.2.11)
Requirements Of Buildings Exceeding 1,500 s.f. Of Floor Areo

Requirements Of Buildings Exceeding 1,500 s.f. of Floor Area

1. Below Grade Openings Must Occur in Every 50 Lineol Feet
On One Side of The Story And Lead To Ground Level By
By Way Of A Stair Or Romp

2. Above Grade Openings Must Be A Minimum OI 20 s.f. And
Occur in Every 50 Lineol Feet On One Side OI The Story.
Openings Sholl Be 4* Moximum Above the Finished Floor,
— Minimum Opening Dim = 30'. Openings Sholl Be Accessible
To The Fire Dept From The Exterior (ISB 903.2.11.1.1)
— The Opposite Walf From The Wall Containing 20 s.f. Openings
Must Be Less Than 75 Feet Away, Or Openings Must Be
Provided On 2 Sides Of The Building (IBC 903.2.11.1.2)
— No Point Within A Bosement May Be More Than 75 Feet
From 20 s.f. Openings or Obstruct Water From A Hose Stream
(IBC 903.2.11.1.3)

ALLOWARIE HEIGHT, ALLOWARIE AREA

BUILDING #1 Group F-1 is Most Restrictive ALLOWABLE HEIGHT (IBC Table 504.3/504.4)

1. ALLWABLE HEIGHT (BC 16018 004.3/504

1. Group F-1, Type II-B

- Not Sprinklered 55'-0", 2 Stories

2. Height Check

- 1 Story < 2 Stories

- 24'-0" < 55'-0"

C. ALLOWABLE AREA (IBC Toble 506.2) 1. Group F-1, Type II-B - Tobular Area - Frontage Increase (IBC 506.3)

= 15,500 s.f.

BUILDING #2 A. ALLOWABLE HEIGHT (IBC Tobie 504.3/504.4)

1. Group 5-1, Type II-8

- Not Sprinklered 55'-0", 2 Stories
2. Height Check
- 1 Story < 2 Stories
- 27'-6" < 55'-0" B. ALLOWABLE AREA (IBC Table 506.2)

1. Group S-1. Type II-B = 17,500 s.f. - Tabular Area - Frontage Increase (IBC 506.3) $\frac{432^{\circ}-0^{\circ}}{432^{\circ}-0^{\circ}} -.25\right) \times \frac{25^{\circ}}{30^{\circ}} = 10,938 \text{ s.f.}$

Per Floor = 28,438 s.f. - Multi-Story Increase (IBC 506.4)

28,438 x 1

Whole Building = 28,438 s.f. Zo, areo Check

- Building Areo Check

9,900/28,438 = 35% < 100%

MEANS OF EGRESS A, DESIGN OCCUPANT LOAD (IBC Chpt 1004)
BUILDING #1

1. Group B = 3,958 s.f. **0** 1/150 = 27 2. Group F-1 (50% Exist.+25% Addition) = 14,445 s.f. **0** 1/100 = 144 3. Group S-1 (50% Exist.+25% Addition) = 23,334 s.f. **0** 1/500 = 47 4. 218 Total Occupants

BUILDING #1

B. FXIT / FXIT ACCESS xii ACCLSS

ber Required (IBC Toble 1006.2.1, 1006.3.2) = 2 (BLDG //1) 2. Number of Accessible Required (IBC 1009)

 Arrongement (IBC 1007)
 Not Less Than 1/2 Overall Diagonal (Non-Sprinklered Building) 4. Travel Distance Maximums

- Exit Access (IBC 1017)

- Common Poth of Egress (IBC 1006.2.1)

Dead Ends (IBC 1020.4) Sizing (The Greater of Two Conflicting Widths Shall Be Used)
 Design Egress Sizing (IBC 1005.3)

Egress Sizing (IBC 1005.3)
Stairways (Occ Load x .3)
Other Components (Occ Load x Stoirways (IBC 1011.2) Corridors (IBC 1020.2)

- Exit Passageways (IBC 1024.2) - Exit Doors (IBC 1010.1.1)

48" Max Nom

5. Doors

Swing (IBC 1010.1.2.1)
Side Hinged Swinging Out At Occupant Load Of 50 Or More
Londings (IBC 1010.1.6)
Width Not Less Than Width of Door Or Stolrway
Length in Direction of Travel Not Less Than 44"

Thresholds (IBC 1010.1.7)
Max Height = 1/2" - 1:2 Bevelet Edge if 1/4"-1/2"

Door Arrangement (IBC 1010.1.8) 48" + Door Width Aport
Lock or Lotch (IBC 1010.1.8)
Operable From Egress Side Without Use of Knowledge or Keys.
Manually Operated Flush Bolts Permitted an Inactive leaf.
Ponic/ Fire Exit Hardware (IBC 1010.1.0)
Not Required At Exit/Exit Access Doors

PLUMBING FIXTURES

PLUMBING FIXTURES REQUIRED (IBC 2902.1)

1. Urinois May Be Substituted For Up To 2/3 Df Required Water Closets (Footnote k.)

2. A Drinking Fountain Shall Not Be Required in Buildings Or Tenant Spaces Having An Occupant Load Of Less Than 50 (Footnote h.)

3. Bottlied Water May Be Substituted For Drinking Fountains When Approved By The Building Official

4. Separate Facilities Shall Not Be Required in Building Or Tenant Spaces With An Occupant Load 25 Or Less (MSBC 2902.2 Exc. #2)

BUILDING #1 1. Group B (Office)

- 27 Occupants - 13 Male Occupants, 14 Female Occupants

Required Men Fixture Men Women

13 0 1/25 = 0.52 14 0 1/25 = 0.56 13 0 1/40 = 0.33 | 14 0 1/40 = 0.35 Drinking Fountains
Service Sink 27 0 1/100 = 0.27

2. Group F-1 (Fobrication)

- 144 Occupants

- 72 Male Occupants, 72 Female Occupants Required Fixture | Water Closets | 72 0 1/100 = 0.72 | 72 0 1/100 = 0.72 | Lovatories | 72 0 1/100 = 0.72 | 72 0 1/100 = 0.72 | 144 @ 1/400 = 0.36

3. Group S-1 (Warehouse) - 47 Occupants

F	Required			
Fixture	Men	Women		
Water Closets	24 0 1/100 = 0.24	23 0 1/100 = 0.23		
Lavatories	24 @ 1/100 = 0.24	23 0 1/100 = 0.23		
Drinking Fountoins	47 @ 1/1,000 = 0.05			
Service Sink		_		

3. Total Number of Plumbing Fixtures Required

	Fixture	Required		Provided		
	Fixture	Men	Women	Men	Women	Unîsex
_	Water Closets	1.48=2	1.51=2	2	2	2
	Urinols	-	- 1	1	_	-
-	Lavatories	1.29=2	1.30=2	1	1	2+Brodle
-	Drinking Fountains	0.6	8=1	Note 3		
_	Candan Sink	1	1		1	

BUILDING #2 1. Group S-1 (Warehouse)

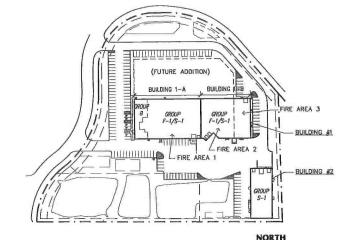
Fixture	Required	Provided		
rixture	Unisex	Men	Women	Unisex
Woter Closets	0.20=1	-	-	1
Urinals	-	-	-	-
Lavatories	0.20=1	-	-	1
Drinking Fountains	_	1	-	
Service Sink	1	1		

B. LOCATION OF FIXTURES (IBC 2902.3.3)
 Not More Than 1 Stary Above Or Below Regular Working Area
 Travel Distance Less Than 500 ft

C. SIGNAGE (IBC 2902.4) - A Legible Sign For Each Sex Shall Be Provided Near The Entrance To The Toilet Facility

NOTE TO ALL DESIGN/BUILD CONTRACTORS AND THEIR SUB-CONTRACTORS:

THE DESIGN/BUILD CONTRACTOR IS RESPONSIBLE FOR REVIEWING ALL MECHANICAL, ELECTRICAL, PLUMBING, FIRE SPRINKLER, OR ANY OTHER DESIGN/BUILD SUB-CONTRACTOR'S DOCUMENTS AS PERTANNING TO THE WORK FOR THIS PROJECT. IT IS THE DESIGN/BUILD SUB-CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE DESIGN/BUILD CONTRACTOR OF ANY CONFLICTS WITH THE ARCHITECTURAL AND STRUCTURAL DOCUMENTS DUE TO SIZES, LOCATIONS, QUANTITIES, ROUH-IN DIMENSIONS AND CODE INTERPRETATIONS. THE DESIGN/BUILD CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE ARCHITECT IMMEDIATELY OF ANY ARCHITECTURAL REVISIONS REQUIRED DUE TO THE COORDINATION OF EACH DESIGN/BUILD SUB-CONTRACTOR'S DOCUMENTS.





UTHER

A ACCESSIBILITY

1. Buildings Are Accessible

B. GUARDS (BIG 1015)

1. 42" High Minimum Guords Shall Be Installed Where A Change In Levels Drops 30" or More.

C. ROOF ACCESS (BIG 306.5)

1. BUILDING 71: Existing Access Provided

2. BUILDING 72: No Roof Mounted Equipment Proposed, Access Nat Resources

E. VENTILATION

1. Attics (IBC 1202.2) - N/A

2. Under-Floors (IBC 1202.4) - N/A

F. SAFETY CAZING (IBC 2401.4)

5. Safety Grains Shall Be instelled in Hazardous Locations As Specified in IBC 2406.4

Isoto: 79 s.t. Required
 In Fire Alarm And Detection Systems
 In Fire Alarm And Detection System Not Required (IBC 907.2)
 In Required Provide Audilia And Visible Alarm Notification Devices (IBC 907.5, NPA 72)
 IS MOKE AND HEAT VEXTS (IBC 910)

Required For Group F-1 or S-1 Occupancies With 50,000 s.f. of Undivided Area Unless on ESFR Sprinkler System is Provided PARKING AND MANEUYERING (Hom Loke Zoning Ordinance)
 Parking Stall Calculation

ng: 3,996 s.f. 0 1/250 s.f.

MANUFACTURING Existing ±50%: 10,002 s.f. © 1/500 s.f. Addition ±25%: 4,500 s.f. © 1/500 s.f.

WAREHOUSE - BUILDING #1 Existing ±50%: 10,002 s.f. © 1/2,000 Addition ±75%: 13,500 s.f. © 1/2,000 s.f.

Accessible Requirement Per 125 Stolls (IBC Toble 1106.1)

2. Stoil Size 3. Aisle Size - 9'-0" x 18'-0" - 24'-0"

WAREHOUSE - BUILDING #2 9,900 s.f. 0 1/2,000

MANUFACTURING

16 Stolls

5 Stolls 7 Stolls

Stolls

62 Stalls 125 Stalls

5 Stolls

4. Striping - 4" White Stripes

Specified in 180 24/05.4

SPACE (MSBC 1303,1500)

1. Group B: .0025 x 3,996 s.f. = 10 s.f.
2. Group F-1: .0025 x 1,502 s.f. = 36 s.f.
3. Group S-1: .001 x 33,402 s.f. = 33 s.f.
4. Totol: 79 s.f. Required

D. CONCEALED SPACES

1. Floors (IBC 718.3) - N/A 2. Attics (IBC 718.4) - N/A E. VENTILATION

LAMPERT ARCHITECTS

420 Summit Avenue St. Paul, MN 55102 Fhone:763.755.1211 Fax:70

ARCHITECT CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIR SUPERVISION AND THAT I AM A DULL

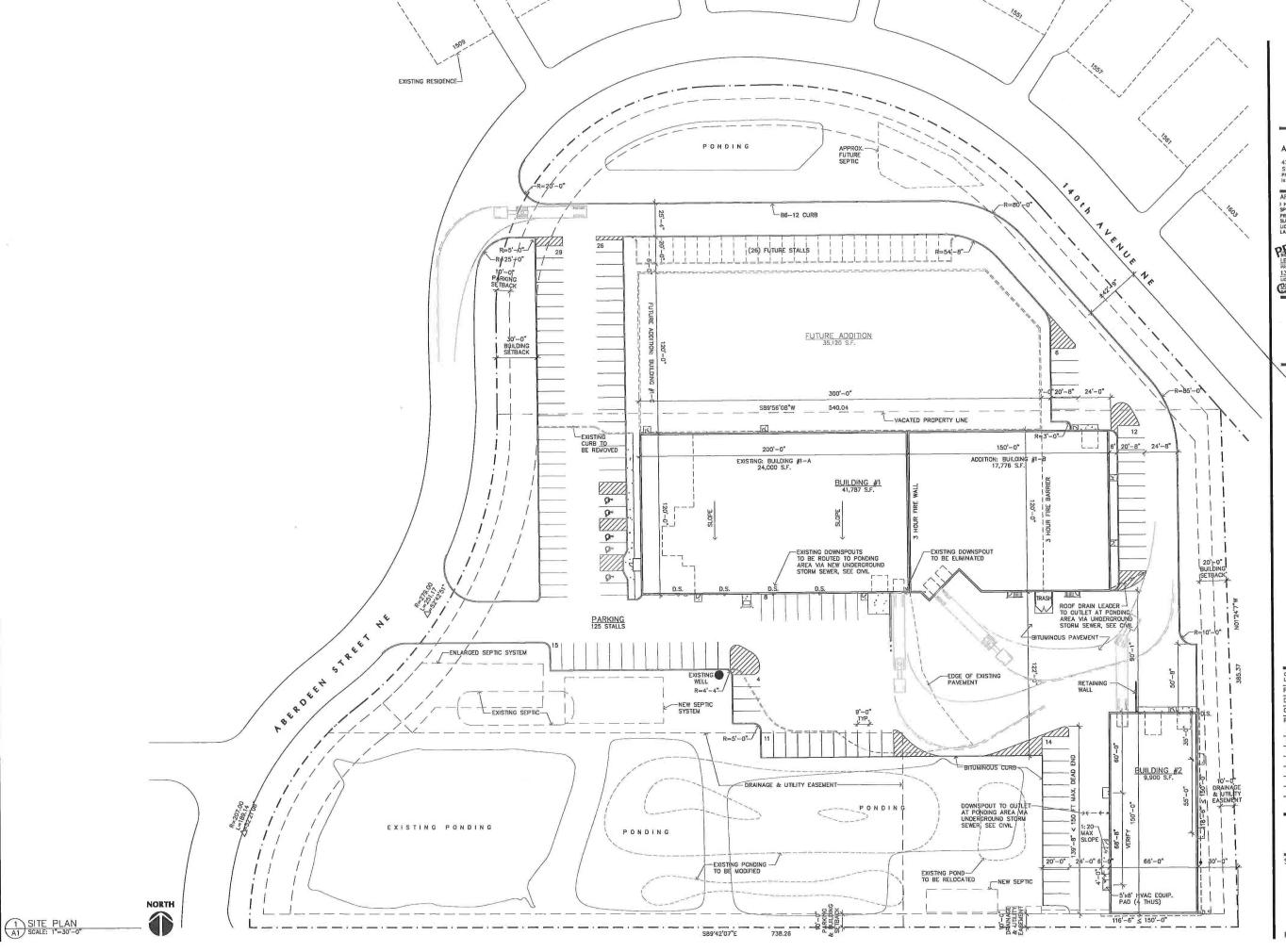
SUPERVISION AND THAT I AM A DULY UCENSED ARCHITECT UNDER THE EAWS OF THE STATE ON A DULY UNDER T ECNAPO TUPERT PRAIT 13669 13569 COLDSTRUCTION

> Minnesota S EM. Lake, Ham S > S 岂 0 St S Aberdeen N 1 13847

Copyright 2022 Project Designer: L. SCHMIDT Checked By: LL 5/31/22 | CITY SUBMITTAL 8/8/22 CITY COMMENTS 9/16/22 CITY SUBMITTAL 10/3/22 CITY SUBMITTAL

TITLE SHEET

Sheet Number





LAMPERT ARCHITECTS

ARCHITECT CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN,
SPECIFICATION OR REPORT WAS
SUPERVISON AND THAT I AM A DULY
LICENSED ARCHITECT UNDER ACCUMENT AND THAT I AM A DULY
LICENSED ARCHITECT UNDER ACCUMENT AND THAT I AM

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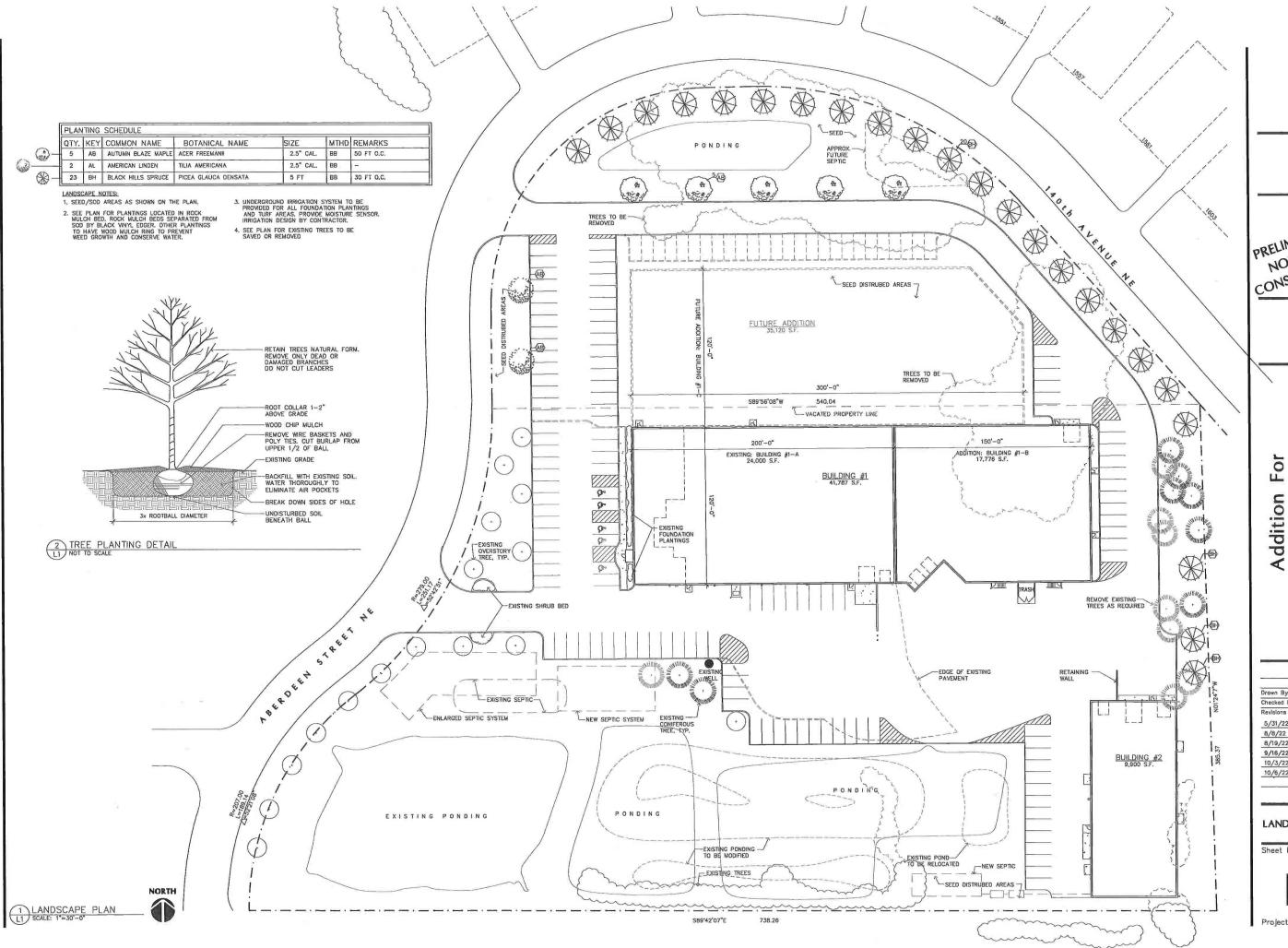
SYSTEMS
- Ham Lake, Minnesota LARSON Aberdeen St NE 13847

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5/31/22 CITY SUBMITTAL 8/8/22 CITY COMMENTS 8/19/22 CITY COMMENTS 9/16/22 CITY SUBMITTAL 10/3/22 CITY SUBMITTAL 10/6/22 COORDINATION

SITE PLAN

Sheet Number



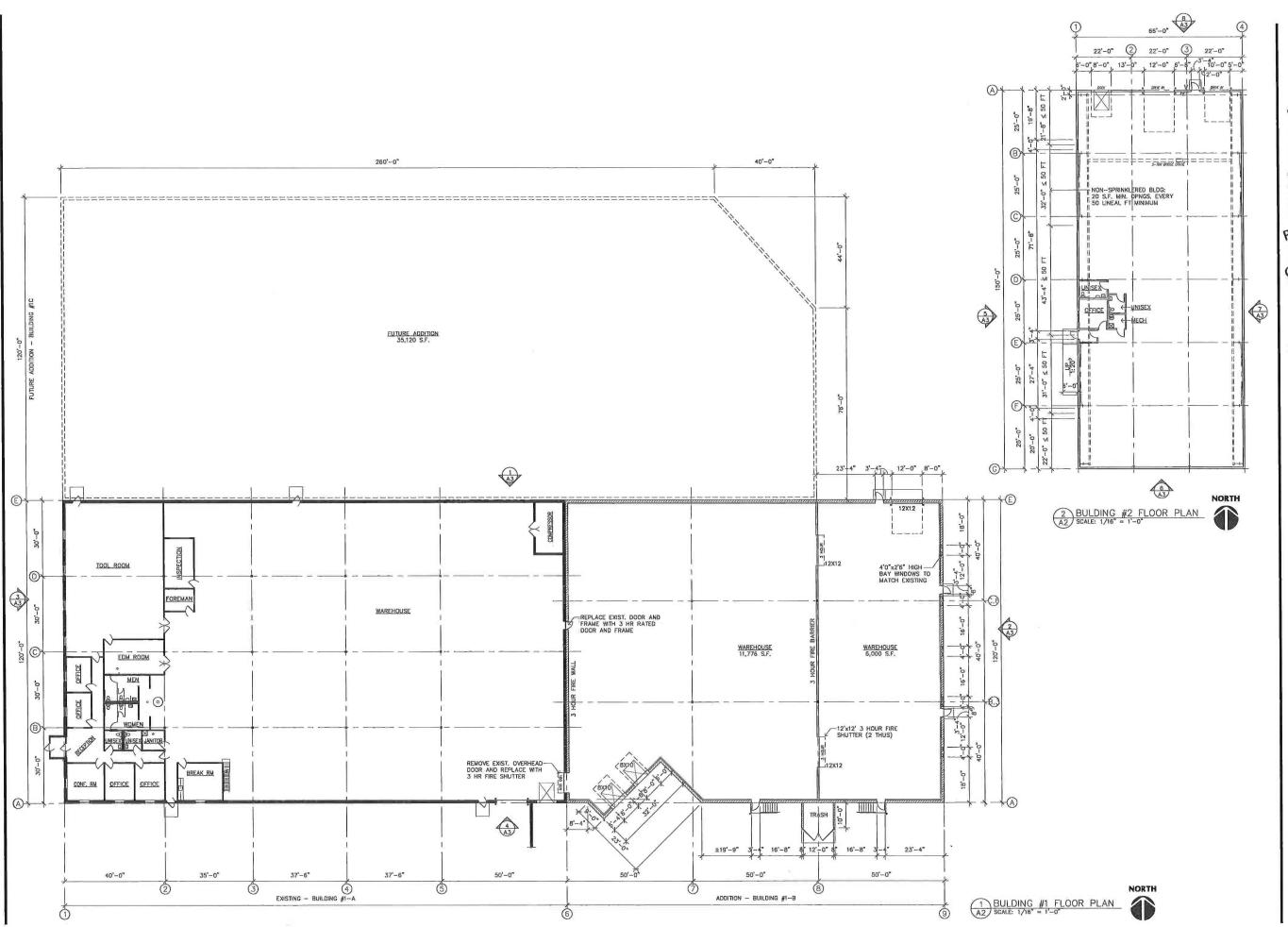
PRELIMINARY NOT FOR CONSTRUCTION

> - Ham Lake, Minnesota SYSTEMS ARSON 岁 Aberdeen St 13847

Drown By: LLS Checked By: LL 5/31/22 CITY SUBMITTAL 8/8/22 CITY COMMENTS 8/19/22 CITY COMMENTS 9/16/22 CITY SUBMITTAL 10/3/22 CITY SUBMITTAL 10/6/22 COORDINATION

LANDSCAPE PLAN

Sheet Number





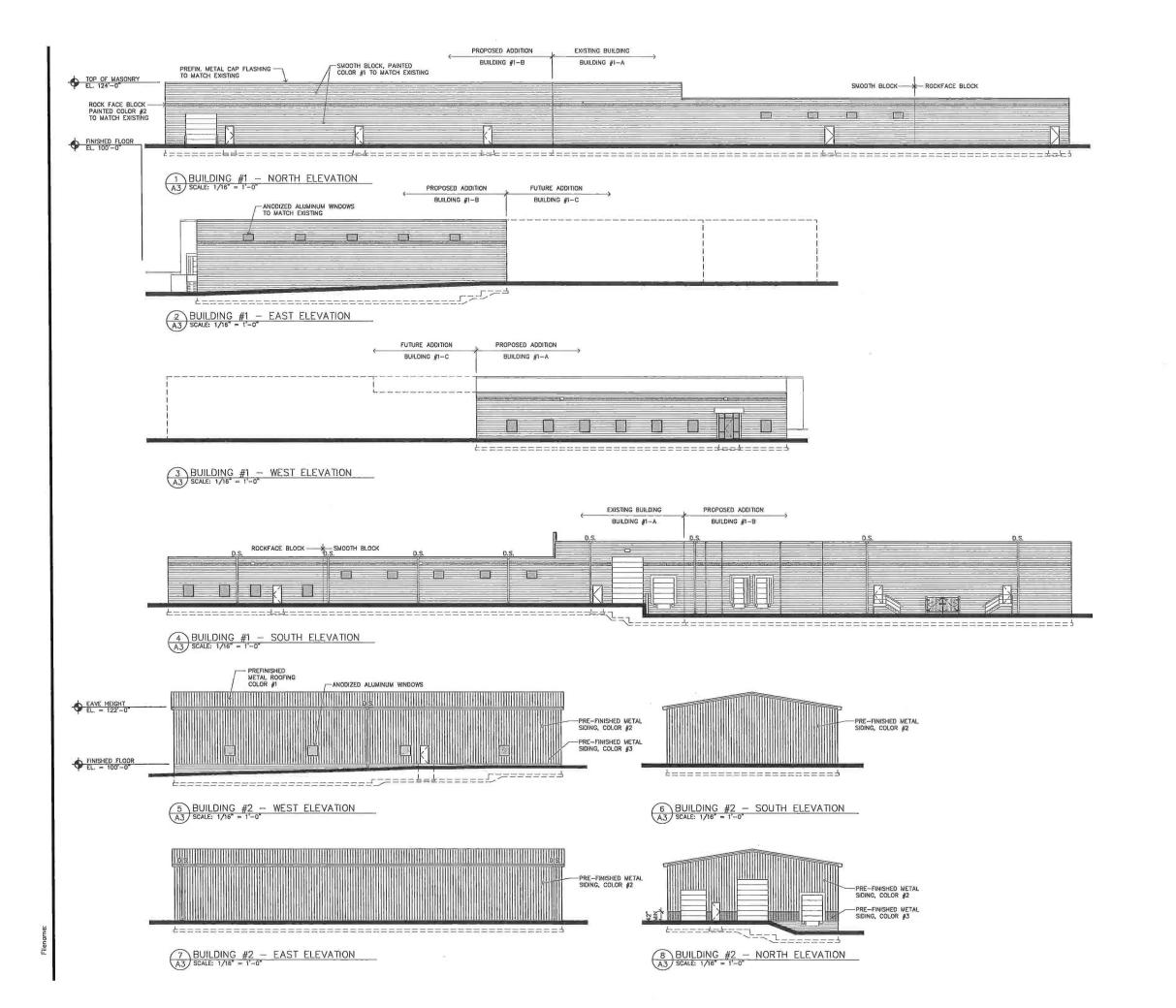
420 Summit Avenue St. Paul, MN 55102 Phone:783.755.1211 Fax:763.757.284 Iamperf@lamperf_arch.com

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- Ham Lake, Minnesota LARSON SYSTEMS Aberdeen St NE - Ham Lake, Mi For Addition 13847

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FLOOR PLANS





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Project Designer: L. SCHMIDT
Drawn By: LLS
Checked By: LL
Revisions
5/31/22 CITY SUBMITTAL
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BUILDING ELEVATIONS

Sheet Number

A3Project No. 210304–1