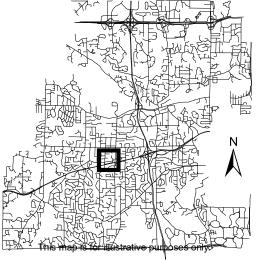
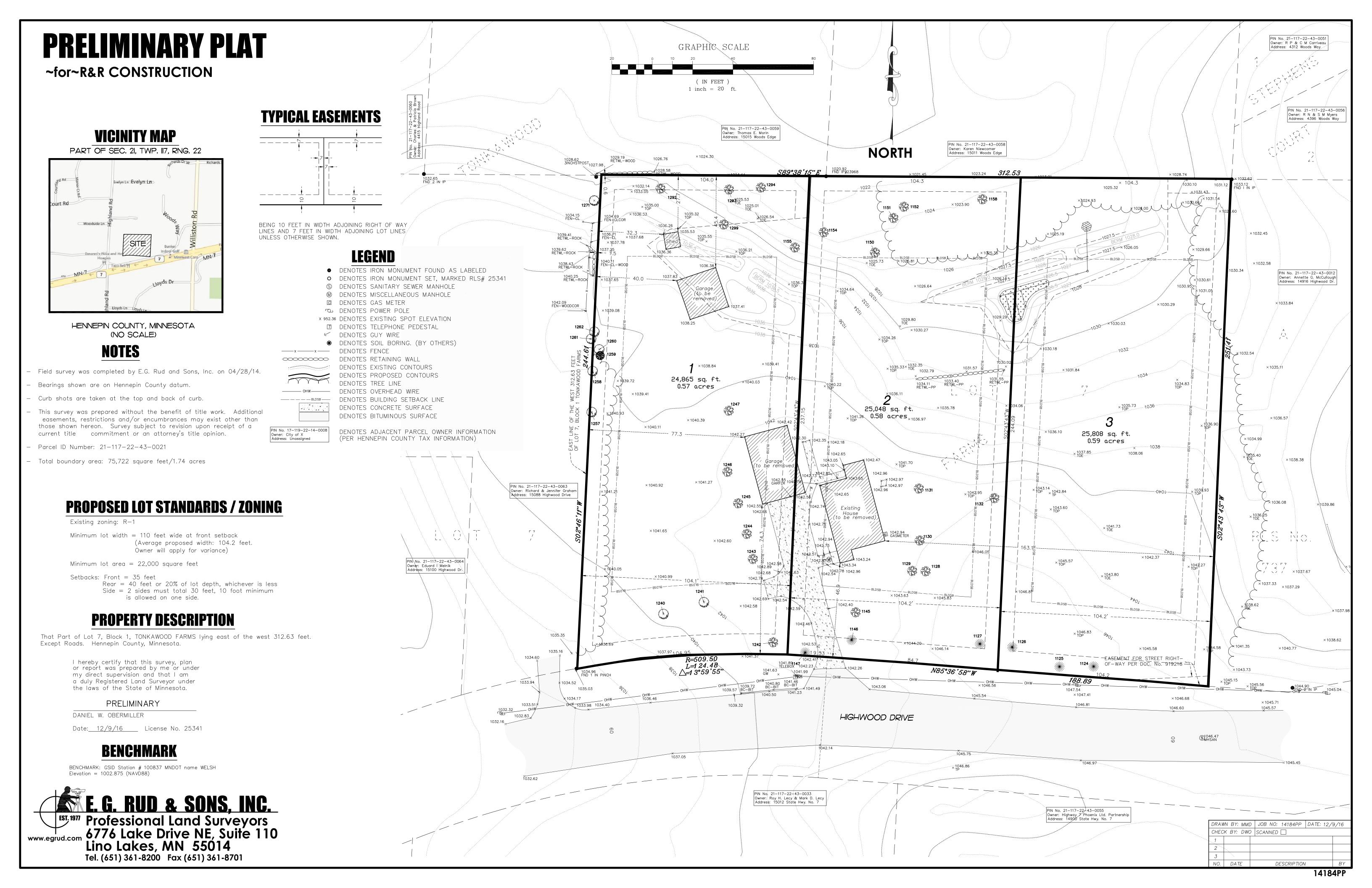




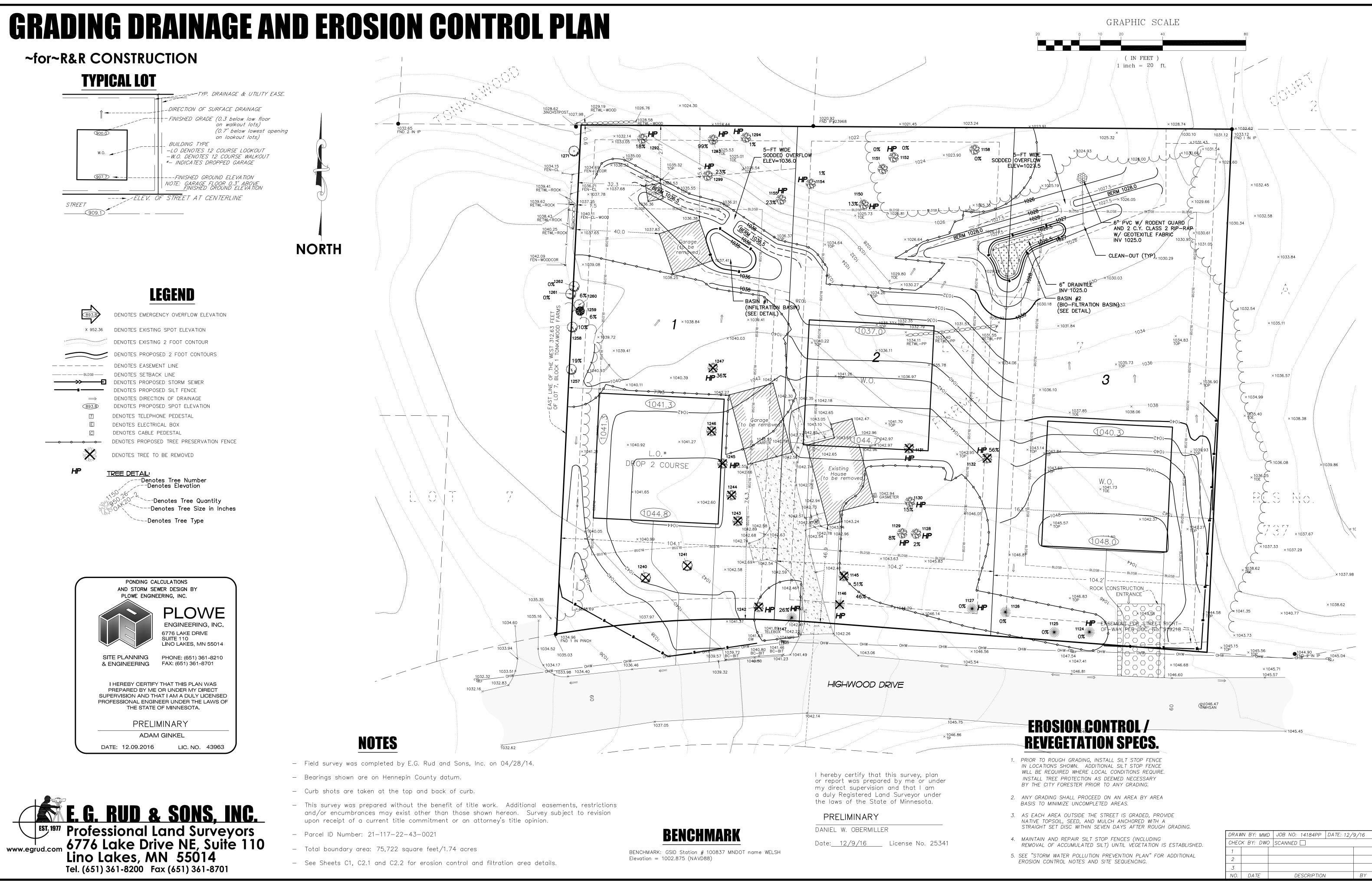
Location Map

Project: Tonkawood Farms 3rd Addn Address: 15014 Highwood Dr





KNOW ALL PERSONS BY THESE PRESENTS: That John M. Tesar and Janice M. Tesar, husband and wife; Timothy M. Neutgens and Lynelle M. Neutgens, husband and wife; Matthew M. Neutgens and Julie M. Neutgens, husband and wife; James J. Payne and Lori A. Payne, husband and wife; and Thomas A. Neutgens and Elizabeth B. Neutgens, husband and wife, fee owners of the following described property situated in the County of Hennepin, State of Minnesota to—wit:	TONKAWOOD FARMS THIR	D ADDITION	O Denotes set 1/2 inch by 14 inch iron pipe marked RLS. No. 25341. Denotes found 1/2 inch iron pipe marked	R.T. DOC. NO
All that part of Lot 7, Block 1, "TONKAWOOD FARMS" described as follows, to—wit: Beginning at the Southeast corner of said Lot 7, thence North along the East line of said Lot a distance of 253.65 feet to the Northeast corner of said Lot, thence West along the North line of said Lot a distance of 312.63 feet to a point 312.63 feet East of the Northwest corner of said Lot 7, thence South parallel with the West line of said Lot to the Southerly line of said Lot to the point of beginning.			as indicated. For the purpose of this plat the east line Lot 7, Block 1, "TONKAWOOD FARMS" is assumed to bear North 02 degrees 43 minutes 43 seconds East.	
Have caused the same to be surveyed and platted as TONKAWOOD FARMS THIRD ADDITION and do hereby dedicate to the public for public use the public way and the easements for drainage and utility purposes as created by this plat.	NORTHWEST CORNER OF LOT 7, BLOCK 1	POINT 312.63 FEET EAST OF THE NORTHWEST CORNER OF LOT 7, BLOCK 1	NORTH LINE OF LOT 7, BLOCK 1 (312.63 DESC N89°38'15"W 312.81 MEA	NORTHEAST CORNER OF LOT 7, BLOCK 1
In witness whereof said John M. Tesar and Janice M. Tesar, husband and wife, have hereunto set their hands this day of, 20	FOUND IRON 312.63 PIPE #24992 S89'38'15"E	104.29	N89°38'15"W 312.81 MEA	72.60 $104.26 / \begin{array}{c} & & & & & \\ & & & & \\ & & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & $
John M. Tesar STATE OF COUNTY OF		91.60 /S85*10'23"W		DRAINAGE AND UTILITY EASEMENT
This instrument was acknowledged before me this day of, 20, by John M. Tesar and Janice M. Tesar.		UTILITY EASEM	N65249	60.34 60.34 80
(Signature)(Print) Notary Public, County, My Commission Expires		TH THE WEST L TONKAWOOD FA 243.51	77 - 27.75 - 7 N84"11'54"W CA 12'E 17 17 17 17 18 17 18 18 18 18	16 MEAS. 3.65 PLAT)
In witness whereof said Timothy M. Neutgens and Lynelle M. Neutgens, husband and wife, have hereunto set their hands this day of, 20		RALLEL W BLOCK 1	2.07	248 248 100K 1
Timothy M. Neutgens STATE OF COUNTY OF This instrument was acknowledged before me this day of, 20, by Timothy M.	LOT 7, BLOCK 1-	T I I I I I I I I I I I I I I I I I I I	BLOCK 1	3 244.16 LOT 7, BILLINE
Neutgens and Lynelle M. Neutgens. (Signature)	LINE OF	W.,11,,M	2.43'43" 2.43'43" 20	#3"E
Notary Public, County, (Print) My Commission Expires	22.46'11"W 358.50 WES	SOS.4	S02 S08 S1,W	N02°43'.
In witness whereof said Matthew M. Neutgens and Julie M. Neutgens, husband and wife, have hereunto set their hands this day of, 20	[3] 	DRAINAGE AND UTILITY EASEMENT	S02*43'4	
Matthew M. Neutgens STATE OF COUNTY OF		$\Delta = 4.26'56''$ $\Delta = 4.26'56''$ $\Delta = 1.50'28''$	Δ=2°23'03" 21.20	S87°06'47"W 40.18
This instrument was acknowledged before me this day of, 20, by Matthew Mi- Neutgens and Julie M. Neutgensi-		126.50 R=509.50 Δ=14°1 FOUND 1 INCH SOUTHERLY LINE OF LOT TONKAWOOD FARMS"	S85°44'26"F	64.21 187.21 5.00 42.10
(Signature) (Print) Notary Public, County,			EASEMENT FO OF-WAY PER	DR STREET RIGHT- DOC. NO. 919218 40.00 SOUTHEAST CORNER OF LOT 7, BLOCK
My Commission Expires				HIGHWOOD [!] DRIVE
In witness whereof said James J. Payne and Lori A. Payne, husband and wife, have hereunto set their hands this day of, 20				
James J. Payne Lori A. Payne STATE OF COUNTY OF		// -I- /\		
This instrument was acknowledged before me this day of, 20, by James J. Payne and Lori A. Payne.				
Notary Public, County,	FOUND HENNEPIN COUNTY DISK			
In witness whereof said Thomas A. Neutgens and Elizabeth B. Neutgens, husband and wife, have hereunto set their hands this day of	STATE OF MINNESOTA COUNTY OF This Instrument was acknowledged before me this day of, 20,			TYPICAL EASEMENTS
Thomas A. Neutgens Elizabeth B. Neutgens	by Daniel W. Obermiller (Signature)		NORTH	RAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:
STATE OFCOUNTY OF	Notary Public, County, My Commission Expires	30 	GRAPHIC SCALE 0 15 30 60 120	
This instrument was acknowledged before me this day of, 20, by Thomas A. Neutgens and Elizabeth B. Neutgens.	CITY COUNCIL, CITY OF MINNETONKA, MINNESOTA	SURVEY DIVISION, HENNEPIN COUNTY, MINNESOTA	(SCALE IN FEET)	
(Signature)	This plat of TONKAWOOD FARMS THIRD ADDITION was approved and accepted by the City Council of the City of	Pursuant to MN. STAT. Sec. 383B.565 (1969), this plat hthis, 20		
Notary Public, County, My Commission Expires	Minnetonka, Minnesota, at a regular meeting thereof held this day of, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subdivision 2.	Chris F. Mavis, County Surveyor By		
I Daniel W. Obermiller do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been, or will be correctly set within one year; that all water boundaries and wet lands as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled	RESIDENT AND REAL ESTATE SERVICES, HENNEPIN COUNTY, MINNESOTA I hereby certify that taxes payable in and prior years have been paid for land described on this plat, dated day of 20	REGISTRAR OF TITLES, HENNEPIN COUNTY, MINNESOTA I hereby certify that the within plat of TONKAWOOD FARM this day of, 20, at _	o'clock M.	BEING 10 FEET IN WIDTH ADJOINING RIGHT OF WAY LINES AND 7 FEET IN WIDTH ADJOINING LOT LINES UNLESS OTHERWISE SHOWN.
on this plat; and all public ways are shown and labeled on this plat. Dated day of, 20,	Mark V. Chapin, County Auditor By, Deputy	Martin McCormick, Registrar of Titles By	Deputy E.G.	RUD & SONS, INC. ssional Land Surveyors
Daniel W. Obermiller, Licensed Land Surveyor Minnesota License No. 25341			Profe ""	ssionai Lana Surveyors





~for~R&R CONSTRUCTION

LEGEND

DENOTES PROPOSED TREE PRESERVATION FENCE

DENOTES TREE TO BE REMOVED

TREE DETAIL:

--Denotes Tree Number
--Denotes Elevation

--Denotes Tree Quantity
--Denotes Tree Size in Inches

-Denotes Tree Type

TREE PRESERVATION NOTES I KEE I TREE # DESCRIPTION H

Before construction, grading or land clearing begins, the city—approved tree protection fencing or other method must be installed and maintained at the critical root zones of the trees to be protected. The location of the fencing must be in conformance with the approved tree preservation p[lan. This fencing must be inspected by city staff before site work begins.

No. construction, compaction, construction access, stock piling of earth, storage of equipment or building materials, or grading of any kind may occur within the critical root zone areas of trees to be protected.

A healthy protected tree that was not a hazard to personal safety or property damage and that was removed or otherwise destroyed by unnatural causes within three years before a development application will be regarded as if it were present at the time of construction or a development application. This provision does not apply if e number of protected trees removed is less than 5% of the protected trees existing five years before the application.

An area of new or compensatory water storage may not be located where there are woodland preservation areas, high priority trees or significant trees, unless approved by the city. Mitigation will be required for the loss of woodland preservation areas and high priority trees due to ponding. The compensatory storage area must be created in a manner that prevents erosion into any nearby water

Total number of trees: 37 Trees to be removed: 12 High Priority Trees: 20

High Priority Trees to be removed: 6 (35% of total)

TREE TABLE

TREE #	DESCRIPTION	HIGH PRIORITY	REMOVE
1124	SPRUCE6	YES	NO
1125	SPRUCE4	NO	NO
1126	SPRUCE4	NO	NO
1127	SPRUCE6	YES	NO
1128	OAK24	YES	NO
1129	OAK24	YES	NO
1130	OAK18	YES	NO
1131	MAPLE22	YES	YES
1132	OAK24	YES	YES
1145	ASH12	NO	YES
1146	SPRUCE14	YES	YES
1147	SPRUCE12	YES	NO
1150	OAK32	YES	NO
1151	OAK28	NO	NO
1152	OAK20	YES	NO
1154	OAK20	YES	NO
1155	OAK1-24-2-18	YES	NO
1158	MAPLE20	NO	NO
1240	TREE14	NO	YES
1241	TREE14	NO	YES
1242	MAPLE30	YES	YES
1243	MAPLE14	NO	YES
1244	MAPLE14	NO	YES
1245	MAPLE36	YES	YES
1246	MAPLE26	NO	YES
1247	OAK28	YES	YES
1257	TREE12	NO	NO
1258	TREE14	NO	NO
1259	ASPEN14	NO	NO
1260	TREE16	NO	NO
1261	TREE14	NO	NO
1262	TREE10	NO	NO
1271	TREE22	NO	NO
1292	MAPLE20	YES	NO
1293	OAK20	YES	NO
1294	OAK24	YES	NO
1299	OAK16	YES	NO

NOTES

- $-\,$ Field survey was completed by E.G. Rud and Sons, Inc. on 04/28/14.
- Bearings shown are on Hennepin County datum.
- Curb shots are taken at the top and back of curb.
- This survey was prepared without the benefit of title work. Additional easements, restrictions and/or encumbrances may exist other than those shown hereon. Survey subject to revision upon receipt of a current title commitment or an attorney's title opinion.
- Parcel ID Number: 21-117-22-43-0021
- Total boundary area: 75,722 square feet/1.74 acres

PROPERTY DESCRIPTION

That Part of Lot 7, Block 1, TONKAWOOD FARMS lying east of the west 312.63 feet. Except Roads. Hennepin County, Minnesota.

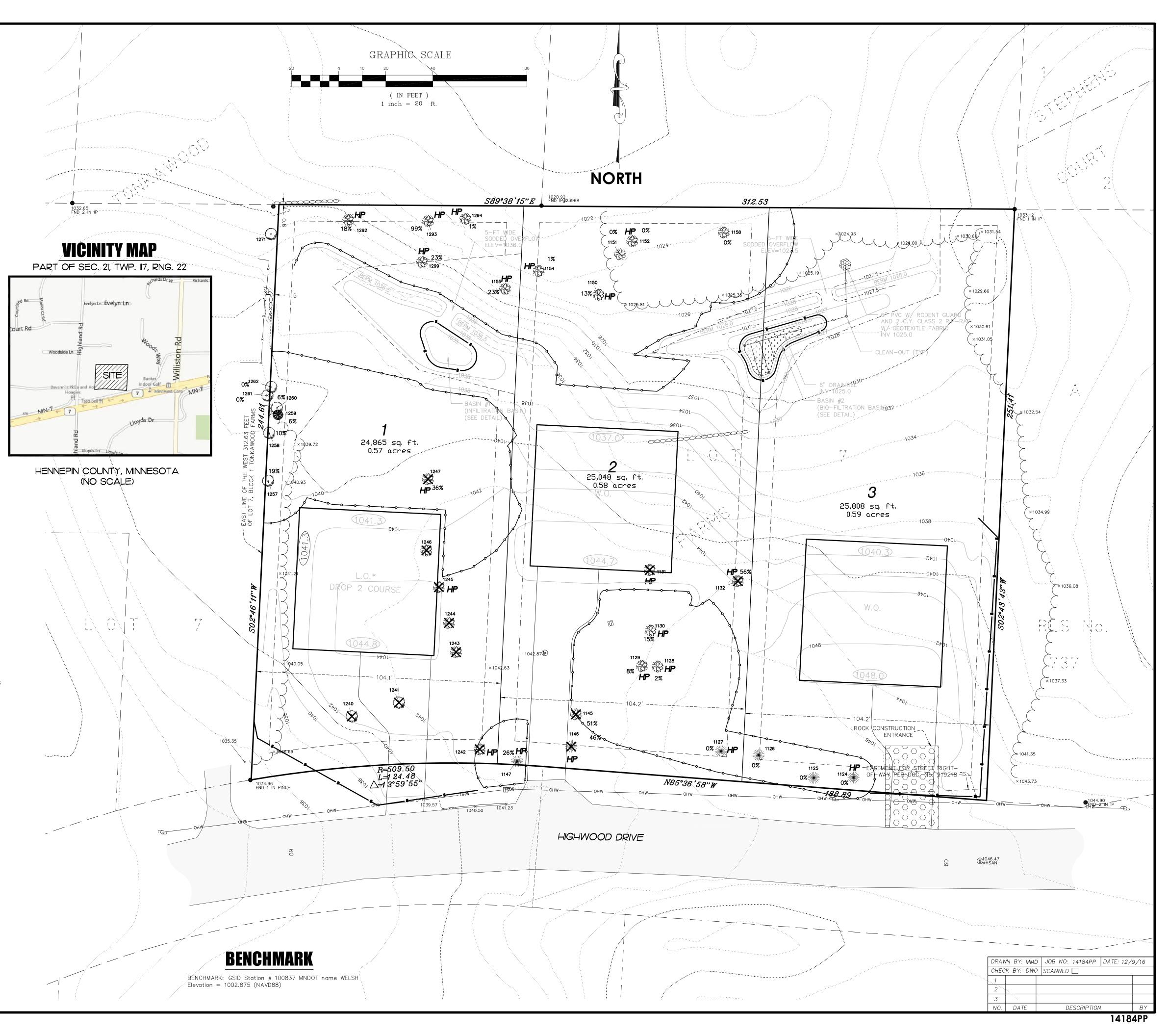
I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

PRELIMINARY

DANIEL W. OBERMILLER

D | 40 /0 /40 | 1: N 0574





MINNETONKA LOT SPLIT

MINNETONKA, MINNESOTA **DETAILS**

1. USE LOW-IMPACT, EARTH MOVING EQUIPMENT (WIDE TRACK OR MARSH TRACK EQUIPMENT, OR LIGHT-EQUIPMENT WITH TURF-TYPE TIRES.)

- 2. NO MINING OF SANDY SOILS ALLOWED IN BASIN.
- 3. FINAL GRADE ONLY UPON STABILIZATION OF UPSTREAM AREAS.
- 4. BASIN TO REMAIN UNLINED.

5. PROTECT BASIN FROM RUN-OFF DURING CONSTRUCTION ACTIVITIES. EXCAVATE BASIN TO FINAL GRADE ONLY UPON STABILIZATION OF CONTRIBUTING

PLANTING SUGGESTIONS

BIG BLUESTEM BLUE JOINT GRASS

BLUE VERVAIN PRAIRIE BLAZINGSTAR

NEW ENGLAND ASTER

SANDBAR WILLOW

BLACK WILLOW

RED-OSIER DOGWOOD

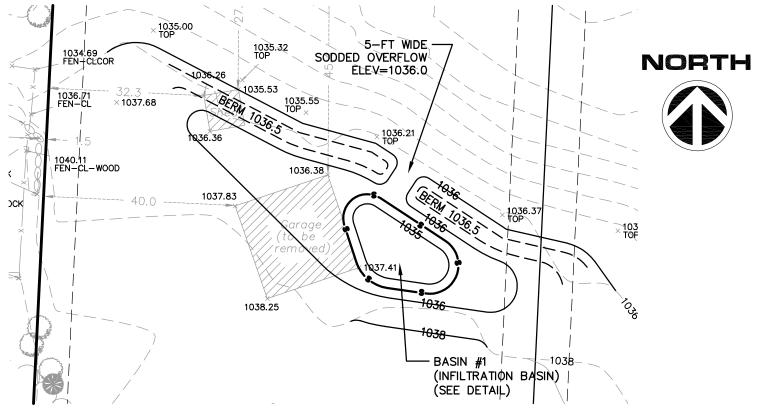
BLACK CHOKECHERRY

BOTTOM OF BASIN	SIDE SLOPES
NATIVE PLANTINGS GIANT BUR-REED WOOL GRASS SEDGE CORD GRASS BLUE FLAG IRIS SWAMP MILKWEED	NATIVE PLANTINGS BIG BLUESTEM BLUE JOINT GRA SWITCH GRASS BLUE VERVAIN PRAIRIE BLAZING
TAMARACK JOE-PYE WEED NEW ENGLAND ASTER PRAIRIE BLAZINGSTAR BONESET	TAMARACK NEW ENGLAND A RED-OSIER DOG' SANDBAR WILLOV BLACK CHOKECH

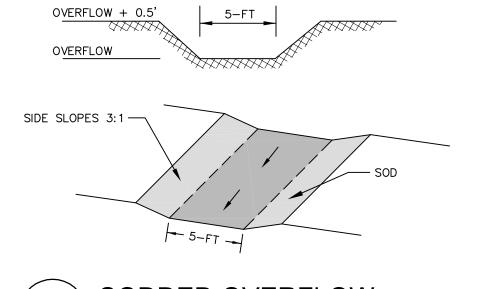
PLANT MATERIAL TOLERANT OF INUNDATION AND DROUGHT (NATIVE PLANS RECOMMENDED - SEE TABLE TO LEFT) _OR_ USE MnDOT SEED MIX 33-261 (APPLICATION RATE=35 LBS/ACRE) PROVIDE 3" FIBROUS SHREDDED WOOD CHIPS AROUND NEW EROSION CONTROL BLANKET SUITABLE FOR SEEDING (E.G. STRAW-COCONUT BLANKET) NOTE: MIX IN SALVAGED ON-SITE TOPSOIL INTO TOP 6" (MAX.) OF INFILTRATION BASIN NOTE: ALLEVIATE ANY COMPACTED SOILS (BY USING A PRIMARY TILLING OPERATION SUCH IN-SITU SOILS NOTES: AS A CHISEL PLOW, RIPPER OR SUBSOILER) 1) NO MINING OF SANDY SOILS IN BASIN AREA

2) NO BURYING OF SILTY MATERIALS IN BASIN AREA

3) DO NO OVER-EXCAVATE BASIN AREA

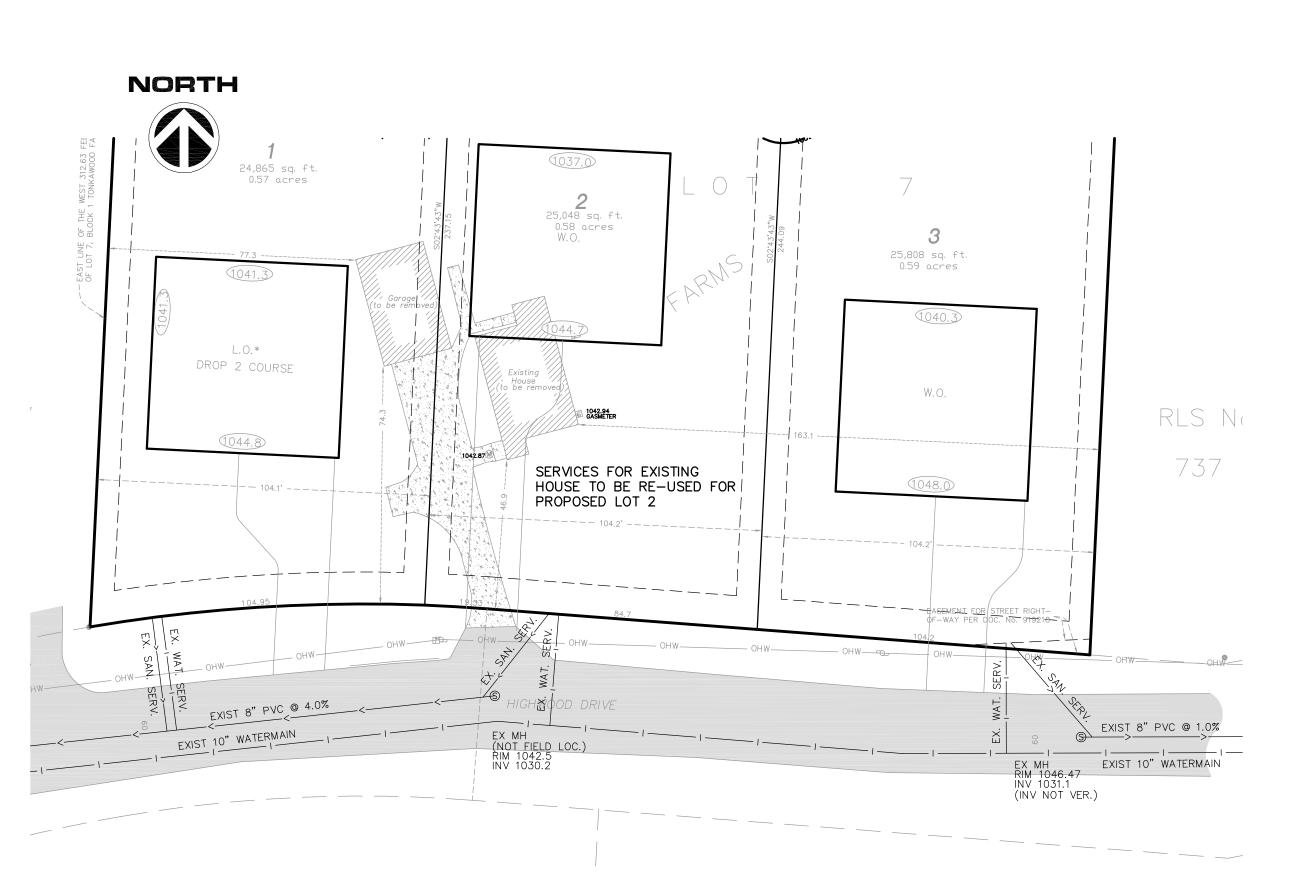


BASIN #1 - INFILTRATION BASIN SCALE = 1:20 (THIS DETAIL ONLY)



SODDED OVERFLOW

BASIN #1 - INFILTRATION BASIN



TO 6" MIN. DEPTH OF FINAL BASIN GRADE

SEWER AND WATER SERVICES APPROXIMATE - NOT FIELD LOCATED SCALE = 1:30

W/ GEOTEXITLE FABRIC NORTH – 6" DRAINTILE³⁰ INV 1025.0 BASIN #2 (BIO-FILTRATION BASIN) 32 (SEE DETAIL) SCALE = 1:20 (THIS DETAIL ONLY) PVC SCREW CAP -(2 INCHES ABOVE GRADE) PLANTING SUGGESTIONS BOTTOM OF BASIN SIDE SLOPES SOLID STANDPIPE (MIN 4" — NATIVE PLANTINGS NATIVE PLANTINGS NON-PERFORATED SCHEDULE 40 PVC) GIANT BUR-REED BIG BLUESTEM 1. WELL-BLENDED FILTRATION MEDIA TO BE COMPRISED OF (BY VOLUME): 70-85% CLEAN CONSTRUCTION SAND (AASHTO M-6 OR ASTM C-33, GRAIN WOOL GRASS SEDGE BLUE JOINT GRASS USE 45 DEGREE WYE AND FITTING SIZE 0.02"-0.04") CORD GRASS SWITCH GRASS OR EQUIVALENT TO CONNECT 15-30% ORGANIC LEAF COMPOST: MnDOT GRADE 2 COMPOST BLUE FLAG IRIS BLUE VERVAIN UNDERDRAIN TO STANDPIPE SWAMP MILKWEED PRAIRIE BLAZINGSTAR 2. NO MINING OF SANDY SOILS ALLOWED IN BASIN. TAMARACK TAMARACK WATERTIGHT PVC CAP-3. FINAL GRADE ONLY UPON STABILIZATION OF UPSTREAM AREAS. JOE-PYE WEED NEW ENGLAND ASTER ON UPSTREAM END OF NEW ENGLAND ASTER RED-OSIER DOGWOOD UNDERDRAIN 4. BASIN TO REMAIN UNLINED. SANDBAR WILLOW PRAIRIE BLAZINGSTAR 5. PROTECT BASIN FROM RUN-OFF DURING LOT CONSTRUCTION ACTIVITIES. BONESET BLACK CHOKECHERRY EXCAVATE BASIN TO FINAL GRADE ONLY UPON STABILIZATION OF CONTRIBUTING

BLACK WILLOW

EROSION CONTROL BLANKET SUITABLE FOR SEEDING (E.G. STRAW-COCONUT BLANKET)

- 18" WELL-BLENDED FILTRATION MEDIA

- PLANT MATERIAL TOLERANT OF INUNDATION AND

DROUGHT (NATIVE PLANS RECOMMENDED - SEE

(APPLICATION RATE=35 LBS/ACRE)

(SEE NOTE #1)

-AGGREGATE BED W/ 6" PERFORATED

DRAINTILE (SEE DETAIL AT RIGHT)

TABLE ABOVE) _OR_ USE MnDOT SEED MIX 33-261

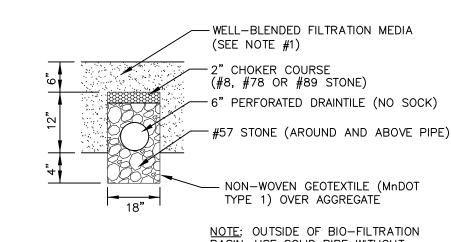
BLACK WILLOW

" PVC W/ RODENT GUARD AND 2 C.Y. CLASS 2 RIP-RAP **BASIN #2 - BIO-FILTRATION BASIN**

PERFORATED PIPE

DRAIN TILE CLEAN-OUT

NOT TO SCALE



NOTE: OUTSIDE OF BIO-FILTRATION BASIN, USE SOLID PIPE WITHOUT ROCK AND FABRIC

DRAINTILE

NOT TO SCALE

BASIN #2 - BIO-FILTRATION BASIN N.T.S.

6. USE LOW-IMPACT, EARTH MOVING EQUIPMENT (WIDE TRACK OR MARSH

PROVIDE 3" FIBROUS SHREDDED -

WOOD CHIPS AROUND NEW

TRACK EQUIPMENT, OR LIGHT-EQUIPMENT WITH TURF-TYPE TIRES.)

NOTE: ALLEVIATE ANY COMPACTED SOILS (BY USING A PRIMARY TILLING OPERATION SUCH

AS A CHISEL PLOW, RIPPER OR SUBSOILER)

TO 6" MIN. DEPTH PRIOR TO PLACING

PLANTING MEDIA

PREPARED FOR:

R&R

CONSTRUCTION

& ENGINEERING

PLOWE

ENGINEERING, INC.

LINO LAKES, MN 55014

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

6776 LAKE DRIVE SUITE 110

PROJ. NO.

C.W.P. | 15-1534

DECEMBER 9, 2016

CHCKD BY:

ORIGINAL DATE:

MINNETONKA LOT SPLIT

MINNETONKA, MINNESOTA

STORM WATER POLLUTION PREVENTION PLAN

PART II.C. - TERMINATION OF COVERAGE

1. TERMINATION OF COVERAGE WHEN CONSTRUCTION IS COMPLETE: ALL PERMITTEE(S) MUST SUBMIT A NOTICE OF TERMINATION (NOT) TO THE MPCA ON A FORM PROVIDED BY THE COMMISSIONER WITHIN 30 DAYS AFTER ALL ACTIVITIES REQUIRED FOR FINAL STABILIZATION (SEE PART IV.G.) ARE COMPLETE. THE PERMITTEE(S)' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT

2. TERMINATION OF COVERAGE WHEN TRANSFER OF OWNERSHIP OCCURS: ALL PERMITTEE(S) MUST SUBMIT A NOT ON A FORM PROVIDED BY THE COMMISSIONER 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 PERMITTEE(S)' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT.

3. PERMITTEE(S) MAY TERMINATE PERMIT COVERAGE PRIOR TO COMPLETION OF ALL CONSTRUCTION ACTIVITY IF ALL OF THE FOLLOWING CONDITIONS ARE MET. AFTER THE PERMIT IS TERMINATED UNDER THIS PART, IF THERE IS ANY SUBSEQUENT DEVELOPMENT ON THE REMAINING PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WAS NOT COMPLETE, NEW PERMIT COVERAGE MUST BE OBTAINED 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

- A. CONSTRUCTION ACTIVITY HAS CEASED FOR AT LEAST 90 DAYS.
- B. AT LEAST 90 PERCENT (BY AREA) OF ALL ORIGINALLY PROPOSED CONSTRUCTION ACTIVITY HAS BEEN COMPLETED AND PERMANENT COVER ESTABLISHED ON THOSE AREAS.
- C. ON AREAS WHERE CONSTRUCTION ACTIVITY IS NOT COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED.
- D. THE SITE IS IN COMPLIANCE WITH PART IV.G.2. AND PART IV.G.3. AND WHERE APPLICABLE, PART

4. PERMITTEE(S) MAY TERMINATE COVERAGE UPON APPROVAL BY THE MPCA IF INFORMATION IS SUBMITTED TO THE MPCA DOCUMENTING THAT TERMINATION IS APPROPRIATE BECAUSE THE PROJECT IS

PART III.A.3 - TRAINING DOCUMENTATION

TRAINING DOCUMENTATION: THE PERMITTEE(S) SHALL ENSURE THE INDIVIDUALS IDENTIFIED IN PART III.F. HAVE BEEN TRAINED IN ACCORDANCE WITH THIS PERMIT'S TRAINING REQUIREMENTS. THE PERMITTEE(S) SHALL ENSURE THE TRAINING IS RECORDED IN OR WITH THE SWPPP BEFORE THE START OF CONSTRUCTION OR AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. DOCUMENTATION SHALL INCLUDE:

- A. NAMES OF THE PERSONNEL ASSOCIATED WITH THIS PROJECT THAT ARE REQUIRED TO BE TRAINED PER PART III.F.1. OF THIS PERMIT.
- B. DATES OF TRAINING AND NAME OF INSTRUCTOR(S) AND ENTITY PROVIDING TRAINING. C. CONTENT OF TRAINING COURSE OR WORKSHOP INCLUDING THE NUMBER OF HOURS OF TRAINING.

PART III.B - SWPPP AMENDMENTS

THE PERMITTEE(S) MUST AMEND THE SWPPP AS NECESSARY TO INCLUDE ADDITIONAL REQUIREMENTS, SUCH AS ADDITIONAL OR MODIFIED BMPS THAT ARE DESIGNED TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER:

 THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR UNDERGROUND WATERS.

2. INSPECTIONS OR INVESTIGATIONS BY SITE OWNER OR OPERATORS, USEPA OR MPCA OFFICIALS INDICATE THE SWPPP IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR UNDERGROUND WATERS OR THAT THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES (E.G., NUISANCE CONDITIONS AS DEFINED IN MINN. R. 7050.0210, SUBP. 2).

3. THE SWPPP IS NOT ACHIEVING THE GENERAL OBJECTIVES OF MINIMIZING POLLUTANTS IN STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY, OR THE SWPPP IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THIS PERMIT.

4. AT ANY TIME AFTER PERMIT COVERAGE IS EFFECTIVE, THE MPCA MAY DETERMINE THAT THE PROJECT'S STORMWATER DISCHARGES MAY CAUSE, HAVE REASONABLE POTENTIAL TO CAUSE, OR CONTRIBUTE TO NON—ATTAINMENT OF ANY APPLICABLE WATER QUALITY STANDARD, OR THAT THE SWPPP DOES NOT INCORPORATE THE APPLICABLE REQUIREMENTS IN PART III.A.8., (IMPAIRED WATERS AND TMDLS). IF A WATER QUALITY STANDARD CHANGES DURING THE TERM OF THIS PERMIT, THE MPCA WILL MAKE A DETERMINATION AS TO WHETHER A MODIFICATION OF THE SWPPP IS NECESSARY TO ADDRESS THE NEW STANDARD. IF THE MPCA MAKES SUCH DETERMINATION(S) OR ANY OF THE DETERMINATIONS IN PARTS III.B.1.—3., THE MPCA WILL NOTIFY THE PERMITTEE(S) IN WRITING. IN RESPONSE, THE PERMITTEE(S) MUST AMEND THE SWPPP TO ADDRESS THE IDENTIFIED CONCERNS AND SUBMIT INFORMATION REQUESTED BY THE MPCA, WHICH MAY INCLUDE AN INDIVIDUAL PERMIT APPLICATION. IF THE MPCA'S WRITTEN NOTIFICATION REQUIRES A RESPONSE, FAILURE TO RESPOND WITHIN THE SPECIFIED TIMEFRAME CONSTITUTES A PERMIT VIOLATION.

PART III.C. - TEMPORARY SEDIMENT BASINS

WHERE FIVE (5) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, THE PERMITTEE(S) MUST PROVIDE A TEMPORARY SEDIMENT BASIN TO PROVIDE TREATMENT TO THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS SURFACE WATERS. A TEMPORARY SEDIMENT BASIN MAY BE CONVERTED TO A PERMANENT BASIN AFTER CONSTRUCTION IS COMPLETE. THE TEMPORARY BASIN IS NO LONGER REQUIRED WHEN PERMANENT COVER HAS REDUCED THE ACREAGE OF DISTURBED SOIL TO LESS THAN FIVE (5) ACRES DRAINING TO A COMMON LOCATION. THE PERMITTEE(S) IS/ARE ENCOURAGED, BUT NOT REQUIRED, TO INSTALL TEMPORARY SEDIMENT BASINS WHERE APPROPRIATE IN AREAS WITH STEEP SLOPES OR HIGHLY ERODIBLE SOILS EVEN IF LESS THAN FIVE (5) ACRES DRAINS TO ONE AREA. THE BASINS MUST BE DESIGNED AND CONSTRUCTED ACCORDING TO THE FOLLOWING REQUIREMENTS:

1. THE BASINS MUST PROVIDE LIVE STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A TWO-YEAR, 24-HOUR STORM FROM EACH ACRE DRAINED TO THE BASIN, EXCEPT THAT IN NO CASE SHALL THE BASIN PROVIDE LESS THAN 1,800 CUBIC FEET OF LIVE STORAGE FROM EACH ACRE DRAINED TO THE BASIN.

2. WHERE THE CALCULATION IN PART III.C.1. HAS NOT BEEN PERFORMED, A TEMPORARY SEDIMENT BASIN PROVIDING 3,600 CUBIC FEET OF LIVE STORAGE PER ACRE DRAINED TO THE BASIN SHALL BE PROVIDED FOR THE ENTIRE DRAINAGE AREA OF THE TEMPORARY BASIN.

3. TEMPORARY BASIN OUTLETS MUST BE DESIGNED TO PREVENT SHORT—CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS. THE BASIN MUST BE DESIGNED WITH THE ABILITY TO ALLOW COMPLETE BASIN DRAWDOWN FOR MAINTENANCE ACTIVITIES, AND MUST INCLUDE A STABILIZED EMERGENCY OVERFLOW TO PREVENT FAILURE OF POND INTEGRITY. THE OUTLET STRUCTURE MUST BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE IN ORDER TO MINIMIZE THE DISCHARGE OF POLLUTANTS, EXCEPT THAT THE USE OF A SURFACE WITHDRAWAL MECHANISM FOR DISCHARGE OF THE BASIN MAY BE TEMPORARILY SUSPENDED DURING FROZEN CONDITIONS. ENERGY DISSIPATION MUST BE PROVIDED FOR THE BASIN OUTLET (SEE PART IV.B.S.).

4. SEDIMENT BASINS MUST BE SITUATED OUTSIDE OF SURFACE WATERS AND ANY BUFFER ZONE REQUIRED UNDER APPENDIX A.C.3, AND MUST BE DESIGNED TO AVOID DRAINING WATER FROM WETLANDS UNLESS THE IMPACT TO THE WETLAND IS IN COMPLIANCE WITH THE REQUIREMENTS OF APPENDIX A, PART D.

5. THE TEMPORARY BASINS MUST BE CONSTRUCTED AND MADE OPERATIONAL PRIOR TO 10 OR MORE ACRES OF DISTURBED SOIL DRAINING TO A COMMON LOCATION.

6. WHERE A TEMPORARY SEDIMENT BASIN MEETING THE REQUIREMENTS OF THIS PART IS INFEASIBLE, EQUIVALENT SEDIMENT CONTROLS SUCH AS SMALLER SEDIMENT BASINS, AND/OR SEDIMENT TRAPS, SILT FENCES, VEGETATIVE BUFFER STRIPS, OR ANY APPROPRIATE COMBINATION OF MEASURES ARE REQUIRED FOR ALL DOWN—SLOPE BOUNDARIES OF THE CONSTRUCTION AREA AND FOR SIDE—SLOPE BOUNDARIES AS DICTATED BY INDIVIDUAL SITE CONDITIONS. IN DETERMINING WHETHER INSTALLING A SEDIMENT BASIN IS INFEASIBLE, THE PERMITTEE(S) MUST CONSIDER PUBLIC SAFETY AND MAY CONSIDER FACTORS SUCH AS SITE SOILS, SLOPE, AND AVAILABLE AREA ON SITE. THIS DETERMINATION OF INFEASIBILITY MUST BE DOCUMENTED IN THE SWPPP PRE PART III.A.5.

PART III.E - RECORD RETENTION

THE SWPPP (ORIGINAL OR COPIES) INCLUDING, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE PERMITTEE(S) WHO HAS/HAVE OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER THE FIELD OFFICE OR IN AN ON-SITE VEHICLE DURING NORMAL WORKING HOURS.

ALL OWNER(S) MUST KEEP THE FOLLOWING RECORDS ON FILE FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOT AS OUTLINED IN PART II.C. THIS DOES NOT INCLUDE ANY RECORDS AFTER SUBMITTAL OF

PART III.E - RECORD RETENTION (CONT)

1. THE FINAL SWPPP

2. ANY OTHER STORMWATER RELATED PERMITS REQUIRED FOR THE PROJECT

3. RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION (PART IV.E. INSPECTIONS AND MAINTENANCE)

4. ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT—OF—WAY, CONTRACTS, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE AND

5. ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

PART III.F. - TRAINING REQUIREMENTS

THE PERMITTEE(S) SHALL ENSURE THE FOLLOWING INDIVIDUALS IDENTIFIED IN THIS PART HAVE BEEN TRAINED IN ACCORDANCE WITH THIS PERMIT'S TRAINING REQUIREMENTS.

. WHO MUST BE TRAINED:
A. INDIVIDUAL(S) PREPARING THE SWPPP FOR THE PROJECT

B. INDIVIDUAL(S) OVERSEEING IMPLEMENTATION OF, REVISING, AND AMENDING THE SWPPP AND INDIVIDUAL(S) PERFORMING INSPECTIONS AS REQUIRED IN PART IV.E. ONE OF THESE INDIVIDUAL(S) MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA.

C. INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF

BMPS. AT LEAST ONE INDIVIDUAL ON A PROJECT MUST BE TRAINED IN THESE JOB DUTIES.

2. TRAINING CONTENT: THE CONTENT AND EXTENT OF TRAINING MUST BE COMMENSURATE WITH THE INDIVIDUAL'S JOB DUTIES AND RESPONSIBILITIES WITH REGARD TO ACTIVITIES COVERED UNDER THIS PERMIT FOR THE PROJECT. AT LEAST ONE INDIVIDUAL PRESENT ON THE PERMITTED PROJECT SITE (OR

AVAILABLE TO THE PROJECT SITE IN 72 HOURS) MUST BE TRAINED IN THE JOB DUTIES DESCRIBED IN

3. THE PERMITTEE(S) SHALL ENSURE THAT THE INDIVIDUALS ARE TRAINED BY LOCAL, STATE, FEDERAL AGENCIES, PROFESSIONAL ORGANIZATIONS, OR OTHER ENTITIES WITH EXPERTISE IN EROSION PREVENTION, SEDIMENT CONTROL, PERMANENT STORMWATER MANAGEMENT AND THE MINNESOTA NPDES/SDS CONSTRUCTION STORMWATER PERMIT. AN UPDATE REFRESHER—TRAINING MUST BE ATTENDED EVERY THREE (3) YEARS STARTING THREE (3) YEARS FROM THE ISSUANCE DATE OF THIS DEPMIT

IV.B. EROSION PREVENTION PRACTICES

PART III.F.1.B. AND PART III.F.1.C.

1. THE PERMITTEE(S) MUST PLAN FOR AND IMPLEMENT APPROPRIATE BMPS SUCH AS CONSTRUCTION PHASING, VEGETATIVE BUFFER STRIPS, HORIZONTAL SLOPE GRADING, INSPECTION AND MAINTENANCE OF PART IV.E. AND OTHER CONSTRUCTION PRACTICES THAT MINIMIZE EROSION AS NECESSARY TO COMPLY WITH THIS PERMIT AND PROTECT WATERS OF THE STATE. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE DELINEATED (E.G., WITH FLAGS, STAKES, SIGNS, SILT FENCE ETC.) ON THE PROJECT SITE BEFORE WORK BEGINS. THE PERMITTEE(S) MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT THAT HAVE STEEP SLOPES. FOR THOSE SLOPED AREAS WHICH MUST BE DISTURBED, THE PERMITTEE(S) MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING).

2. THE PERMITTEE(S) MUST STABILIZE ALL EXPOSED SOIL AREAS (INCLUDING STOCKPILES). STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHENEVER ANY CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 7 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 14 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

3. IF USING STORMWATER CONVEYANCE CHANNELS, THE PERMITTEE(S) MUST DESIGN THE CHANNELS TO ROUTE WATER AROUND UNSTABILIZED AREAS ON THE SITE AND TO REDUCE EROSION, UNLESS INFEASIBLE. THE PERMITTEE(S) MUST USE EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES SUCH AS CHECK DAMS, SEDIMENT TRAPS, RIPRAP, OR GROUTED RIPRAP AT OUTLETS WITHIN AND ALONG THE LENGTH OF ANY CONSTRUCTED STORMWATER CONVEYANCE CHANNEL, AND AT ANY OUTLET, TO PROVIDE A NON-EROSIVE FLOW VELOCITY, TO MINIMIZE EROSION OF CHANNELS AND THEIR EMBANKMENTS, OUTLETS, ADJACENT STREAM BANKS, SLOPES, AND DOWNSTREAM WATERS DURING DISCHARGE CONDITIONS.

4. THE PERMITTEE(S) MUST STABILIZE THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY

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 HAS TEMPORARILY OR PERMANENTLY CEASED.

TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT

THE PERMITTEE(S) SHALL COMPLETE STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR

SYSTEM DURING CONSTRUCTION (WITH PROPERLY DESIGNED ROCK—DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED DURING THE TEMPORARY PERIOD OF ITS USE AS A SEDIMENT CONTAINMENT SYSTEM. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.

PRACTICES IS NOT ACCEPTABLE STABILIZATION IN ANY PART OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE.

APPLYING MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION

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

6. UNLESS INFEASIBLE DUE TO LACK OF PERVIOUS OR VEGETATED AREAS, THE PERMITTEE(S) MUST DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS OF THE SITE (INCLUDING ANY NATURAL BUFFERS) IN ORDER TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORMWATER INFILTRATION. THE PERMITTEE(S) MUST USE VELOCITY DISSIPATION DEVICES IF NECESSARY TO PREVENT EROSION WHEN DIRECTING STORMWATER TO VEGETATED AREAS.

PART IV.C. - SEDIMENT CONTROL PRACTICES

1. THE PERMITTEE(S) MUST EMPLOY SEDIMENT CONTROL PRACTICES AS NECESSARY TO MINIMIZE SEDIMENT FROM ENTERING SURFACE WATERS, INCLUDING CURB AND GUTTER SYSTEMS AND STORM SEWER INLETS. A. TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS THAT ARE 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.

B. IF THE DOWN GRADIENT SEDIMENT CONTROLS ARE OVERLOADED (BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENT), THE PERMITTEE(S) MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN PART III.B 1.—3.

2. SEDIMENT CONTROL PRACTICES MUST BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS AND BE LOCATED UPGRADIENT OF ANY BUFFER ZONES. THE PERIMETER SEDIMENT CONTROL PRACTICE MUST BE IN PLACE BEFORE ANY UPGRADIENT LAND—DISTURBING ACTIVITIES BEGIN. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH PART IV.G.

3. THE PERMITTEE(S) SHALL RE-INSTALL ALL SEDIMENT CONTROL PRACTICES THAT HAVE BEEN ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY HAS BEEN COMPLETED. THE PERMITTEE(S) SHALL COMPLETE ANY SHORT-TERM ACTIVITY THAT REQUIRES REMOVAL OF SEDIMENT CONTROL PRACTICES AS QUICKLY AS POSSIBLE. THE PERMITTEE(S) MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE.

4. ALL STORM DRAIN INLETS MUST BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED BY THE PERMITTEE(S) OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/MNDOT ENGINEER).THE PERMITTEE(S) MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP.

PART IV.C. - SEDIMENT CONTROL PRACTICES (CONT.)

5. TEMPORARY SOIL STOCKPILES MUST HAVE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS, AND CANNOT BE PLACED IN ANY NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS, OR CONDUITS AND DITCHES UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER.

- 6. WHERE VEHICLE TRAFFIC LEAVES ANY PART OF THE SITE (OR ONTO PAVED ROADS WITHIN THE SITE):

 A. THE PERMITTEE(S) MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF
- SEDIMENT FROM THE CONSTRUCTION SITE. EXAMPLES OF VEHICLE TRACKING BMPS INCLUDE (BUT ARE NOT LIMITED TO) ROCK PADS, MUD MATS, SLASH MULCH, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT SYSTEMS.
- B. THE PERMITTEE(S) MUST USE STREET SWEEPING IF SUCH VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET (SEE PART IV.E.5.D.).

7. THE PERMITTEE(S) MUST INSTALL TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN PART III.C. OF THIS PERMIT.

8. THE PERMITTEE(S) MUST MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL. MINIMIZING SOIL COMPACTION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA OF THE SITE DICTATES THAT IT BE COMPACTED.

9. THE PERMITTEE(S) MUST PRESERVE A 50 FOOT NATURAL BUFFER OR (IF A BUFFER IS INFEASIBLE ON THE SITE) PROVIDE REDUNDANT SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. THE PERMITTEE(S) IS/ARE NOT REQUIRED TO ENHANCE THE QUALITY OF THE VEGETATION THAT ALREADY EXISTS IN THE BUFFER OR PROVIDE VEGETATION IF NONE EXIST. HOWEVER, PERMITTEE(S) CAN IMPROVE THE NATURAL BUFFER WITH VEGETATION.

PART IV.D. - DEWATERING AND BASIN DRAINING

1. THE PERMITTEE(S) MUST DISCHARGE TURBID OR SEDIMENT—LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. THE PERMITTEE(S) MAY DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASINS TO SURFACE WATERS IF THE BASIN WATER HAS BEEN VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2) WILL NOT RESULT FROM THE DISCHARGE. IF THE WATER CANNOT BE DISCHARGED TO A SEDIMENTATION BASIN PRIOR TO ENTERING THE SURFACE WATER, IT MUST BE TREATED WITH THE APPROPRIATE BMPS, SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE RECEIVING WATER OR DOWNSTREAM PROPERTIES. IF THE PERMITTEE(S) MUST DISCHARGE WATER THAT CONTAINS OIL OR GREASE, THE PERMITTEE(S) MUST USE AN OIL—WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G. CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGING THE WATER. THE PERMITTEE(S) MUST ENSURE THAT DISCHARGE POINTS ARE ADEQUATELY PROTECTED FROM EROSION AND SCOUR. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SAND BAGS, PLASTIC SHEETING, OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES.

2. ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES MUST BE DISCHARGED IN A MANNER THAT DOES NOT CAUSE NUISANCE CONDITIONS, EROSION IN RECEIVING CHANNELS OR ON DOWNSLOPE PROPERTIES, OR INUNDATION IN WETLANDS CAUSING SIGNIFICANT ADVERSE IMPACT TO THE WETLAND.

3. IF THE PERMITTEE(S) IS/ARE USING FILTERS WITH BACKWASH WATER, THE PERMITTEE(S) 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. THE PERMITTEE(S) MAY DISCHARGE BACKWASH WATER TO THE SANITARY SEWER IF PERMISSION IS GRANTED BY THE SANITARY SEWER AUTHORITY. THE PERMITTEE(S) MUST REPLACE AND CLEAN THE FILTER MEDIA USED IN DEWATERING DEVICES WHEN REQUIRED TO RETAIN ADEQUATE FUNCTION

PART IV.E. - INSPECTIONS AND MAINTENANCE

1. THE PERMITTEE(S) MUST ENSURE THAT A TRAINED PERSON (AS IDENTIFIED IN PART III.A.3.A.) WILL ROUTINELY INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. FOLLOWING AN INSPECTION THAT OCCURS WITHIN 24 HOURS AFTER A RAINFALL EVENT, THE NEXT INSPECTION MUST BE CONDUCTED WITHIN SEVEN (7) DAYS AFTER THE RAINFALL EVENT.

2. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED WITHIN 24 HOURS IN WRITING AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP IN ACCORDANCE WITH PART III.E. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:

- A. DATE AND TIME OF INSPECTIONS
- B. NAME OF PERSON(S) CONDUCTING INSPECTIONS
- C. FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED
- D. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES)

E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCH (0.5 INCHES) IN 24 HOURS. RAINFALL AMOUNTS MUST BE OBTAINED BY A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN 1 MILE OF YOUR LOCATION OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES.

F. IF ANY DISCHARGE IS OBSERVED TO BE OCCURRING DURING THE INSPECTION, A RECORD OF ALL POINTS OF THE PROPERTY FROM WHICH THERE IS A DISCHARGE MUST BE MADE, AND THE DISCHARGE SHOULD BE DESCRIBED (I.E., COLOR, ODOR, FLOATING, SETTLED, OR SUSPENDED SOLIDS, FOAM, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS) AND PHOTOGRAPHED.

G. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN PART III.B. WITHIN SEVEN (7) CALENDAR DAYS.

3. INSPECTION FREQUENCY ADJUSTMENT

A. WHERE PARTS OF THE PROJECT SITE HAVE PERMANENT COVER, BUT WORK REMAINS ON OTHER PARTS OF THE SITE, THE PERMITTEE(S) MAY REDUCE INSPECTIONS OF THE AREAS WITH PERMANENT COVER TO ONCE PER MONTH.

B. WHERE CONSTRUCTION SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AREAS AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE, THE SITE MUST BE INSPECTED DURING NON-FROZEN GROUND CONDITIONS AT LEAST ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS. FOLLOWING THE TWELFTH MONTH OF PERMANENT COVER AND NO CONSTRUCTION ACTIVITY, INSPECTIONS MAY BE TERMINATED UNTIL CONSTRUCTION ACTIVITY IS ONCE AGAIN INITIATED UNLESS THE PERMITTEE(S) IS/ARE NOTIFIED IN WRITING BY THE MPCA THAT EROSION ISSUES HAVE BEEN DETECTED AT THE SITE AND INSPECTIONS NEED TO RESUME.

C. WHERE WORK HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, THE INSPECTIONS MAY BE SUSPENDED. THE REQUIRED INSPECTIONS AND MAINTENANCE SCHEDULE MUST BEGIN WITHIN 24 HOURS AFTER RUNOFF OCCURS AT THE SITE OR 24 HOURS PRIOR TO RESUMING CONSTRUCTION, WHICHEVER COMES FIRST.

4. THE PERMITTEE(S) IS/ARE RESPONSIBLE FOR THE INSPECTION AND MAINTENANCE OF TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT BMPS, AS WELL AS ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS, UNTIL ANOTHER PERMITTEE HAS OBTAINED COVERAGE UNDER THIS PERMIT ACCORDING TO PART II.B.5. OR THE PROJECT HAS UNDERGONE FINAL STABILIZATION, AND AN NOT HAS BEEN SUBMITTED TO THE MPCA.

5. THE PERMITTEE(S) MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS DURING ALL ROUTINE AND POST—RAINFALL EVENT INSPECTIONS. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS UNLESS ANOTHER TIME FRAME IS SPECIFIED BELOW. THE PERMITTEE(S) MUST INVESTIGATE AND COMPLY WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS:

A. ALL PERIMETER CONTROL DEVICES MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES ONE—HALF (1/2) OF THE HEIGHT OF THE DEVICE. THESE REPAIRS MUST BE MADE BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR THEREAFTER AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

PART IV.E. - INSPECTIONS AND MAINTENANCE (CONT.)

B. TEMPORARY AND PERMANENT SEDIMENTATION BASINS MUST BE DRAINED AND THE SEDIMENT REMOVED WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES ONE—HALF (1/2) THE STORAGE VOLUME. DRAINAGE AND REMOVAL MUST BE COMPLETED WITHIN 72 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS (SEE PART IV.D.).

C. SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS, MUST BE INSPECTED FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION DURING EACH INSPECTION. THE PERMITTEE(S) 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. THE REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. THE PERMITTEE(S) SHALL USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) CALENDAR DAYS OF OBTAINING ACCESS. THE PERMITTEE(S) IS/ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS.

D. CONSTRUCTION SITE VEHICLE EXIT LOCATIONS MUST BE INSPECTED FOR EVIDENCE OF OFF—SITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES BOTH ON AND OFF SITE WITHIN 24 HOURS OF DISCOVERY, OR IF APPLICABLE, WITHIN A SHORTER TIME TO COMPLY WITH PART IV.C.6.

E. STREETS AND OTHER AREAS ADJACENT TO THE PROJECT MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE ACCUMULATIONS OF SEDIMENT. IF SEDIMENT IS PRESENT, IT MUST BE REMOVED IN A MANNER AND AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT IN STREETS COULD BE WASHED INTO STORM SEWERS BY THE NEXT RAIN AND/OR POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS).

6. ALL INFILTRATION AREAS MUST BE INSPECTED TO ENSURE THAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY IS REACHING THE INFILTRATION AREA. ALL INFILTRATION AREAS MUST BE INSPECTED TO ENSURE THAT EQUIPMENT IS NOT BEING DRIVEN ACROSS THE INFILTRATION AREA.

PART IV.F. - POLLUTION PREVENTION MANAGEMENT MEASURES

THE PERMITTEE(S) SHALL IMPLEMENT THE FOLLOWING POLLUTION PREVENTION MANAGEMENT MEASURES ON THE SITE:

1. STORAGE, HANDLING, AND DISPOSAL OF CONSTRUCTION PRODUCTS, MATERIALS, AND WASTES: THE PERMITTEE(S) SHALL COMPLY WITH THE FOLLOWING TO MINIMIZE THE EXPOSURE TO STORMWATER OF ANY OF THE PRODUCTS, MATERIALS, OR WASTES. PRODUCTS OR WASTES WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER ARE NOT HELD TO THIS REQUIREMENT:

(E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY A SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.

B. PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPE MATERIALS MUST BE UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT THE DISCHARGE OF POLLUTANTS OR PROTECTED BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.

A. BUILDING PRODUCTS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS MUST BE UNDER COVER

C. HAZARDOUS MATERIALS, TOXIC WASTE, (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM—BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) MUST BE PROPERLY STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE OR HAZARDOUS MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE.

D. SOLID WASTE MUST BE STORED, COLLECTED AND DISPOSED OF PROPERLY IN COMPLIANCE WITH

E. PORTABLE TOILETS MUST BE POSITIONED SO THAT THEY ARE SECURE AND WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE DISPOSED OF PROPERLY IN ACCORDANCE WITH MINN. R.

2. FUELING AND MAINTENANCE OF EQUIPMENT OR VEHICLES; SPILL PREVENTION AND RESPONSE: THE PERMITTEE(S) SHALL TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP PANS OR ABSORBENTS UNLESS INFEASIBLE. THE PERMITTEE(S) MUST CONDUCT FUELING IN A CONTAINED AREA UNLESS INFEASIBLE. THE PERMITTEE(S) 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. THE PERMITTEE(S) MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. § 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE.

3. VEHICLE AND EQUIPMENT WASHING: IF THE PERMITTEE(S) WASH THE EXTERIOR OF VEHICLES OR EQUIPMENT ON THE PROJECT SITE, WASHING MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF FROM THE WASHING AREA MUST BE CONTAINED IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROLS AND WASTE FROM THE WASHING ACTIVITY MUST BE PROPERLY DISPOSED OF. THE PERMITTEE(S) MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS. NO ENGINE DEGREASING IS ALLOWED ON SITE.

4. CONCRETE AND OTHER WASHOUTS WASTE: THE PERMITTEE(S) MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. THE LIQUID AND SOLID WASHOUT WASTES MUST NOT CONTACT THE GROUND, AND THE CONTAINMENT MUST BE DESIGNED SO THAT IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA RULES. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES.

PART IV.G. FINAL STABILIZATION

THE PERMITTEE(S) MUST ENSURE FINAL STABILIZATION OF THE SITE. FINAL STABILIZATION IS NOT COMPLETE UNTIL ALL REQUIREMENTS OF PARTS IV.G.1.—5. ARE COMPLETE:

1. ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND ALL SOILS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH DENSITY OVER THE ENTIRE PERVIOUS SURFACE AREA, OR OTHER EQUIVALENT MEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSIVE CONDITIONS.

2. THE PERMANENT STORMWATER MANAGEMENT SYSTEM IS CONSTRUCTED, MEETS ALL REQUIREMENTS IN PART III.D. AND IS OPERATING AS DESIGNED. TEMPORARY OR PERMANENT SEDIMENTATION BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS HAVE BEEN CLEANED OF ANY ACCUMULATED SEDIMENT. ALL SEDIMENT HAS BEEN REMOVED FROM CONVEYANCE SYSTEMS AND DITCHES ARE STABILIZED WITH PERMANENT COVER.

3. ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPS (SUCH AS SILT FENCE) HAVE BEEN REMOVED ON THE PORTIONS OF THE SITE FOR WHICH THE PERMITTEE(S) IS/ARE RESPONSIBLE. BMPS DESIGNED TO DECOMPOSE ON SITE (SUCH AS SOME COMPOST LOGS) MAY BE LEFT IN PLACE.

4. FOR RESIDENTIAL CONSTRUCTION ONLY, INDIVIDUAL LOTS ARE CONSIDERED FINALLY STABILIZED IF THE STRUCTURE(S) ARE FINISHED AND TEMPORARY EROSION PROTECTION AND DOWNGRADIENT PERIMETER CONTROL HAS BEEN COMPLETED AND THE RESIDENCE HAS BEEN SOLD TO THE HOMEOWNER. ADDITIONALLY, THE PERMITTEE HAS DISTRIBUTED THE MPCA'S "HOMEOWNER FACT SHEET" TO THE HOMEOWNER TO INFORM THE HOMEOWNER OF THE NEED FOR, AND BENEFITS OF, PERMANENT COVER.

5. FOR CONSTRUCTION PROJECTS ON AGRICULTURAL LAND (E.G., PIPELINES ACROSS CROP, FIELD PASTURE OR RANGE LAND) THE DISTURBED LAND HAS BEEN RETURNED TO ITS PRECONSTRUCTION AGRICULTURAL USE.

DRAWN BY:
C.M.
A.G.
CHCKD BY:
PROJ. NO.
15-1534

ORIGINAL DATE:
DECEMBER 9, 2016

PERVISION AND THAT I AM A DULY
ED PROFESSIONAL ENGINEER UNDEF
AWS OF THE STATE OF MINNESOTA.

RELIMINARY

ADAM GINKEL

INNETONKA LOT
SPLIT
MINNETONKA, MN

PREPARED FOR:

R & R

CONSTRUCTION



& ENGINEERING

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

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

C2.1

MINNETONKA LOT SPLIT

MINNETONKA, MINNESOTA

STORM WATER POLLUTION PREVENTION PLAN

SITE SPECIFIC INFORMATION

MINNETONKA LOT SPLIT

PROJECT LOCATION

15014 HIGHWOOD DR MINNETONKA, MINNESOTA 55345

LATITUDE: 44.9222 LONGITUDE: -93.471

PROJECT OWNER

R & R CONSTRUCTION ATTN: BOB REHBERG 612-272-8472

CONSTRUCTION ACTIVITY DESCRIPTION

THIS PROJECT INCLUDES THE SUBDIVISION OF AN EXISTING 1.74-ACRE RESIDENTIAL LOT INTO INTO 3 SINGLE-FAMILY RESIDENTIAL LOTS.

SITE IMPROVEMENTS WILL INCLUDE HOME/DRIVEWAY CONSTRUCTION AND STORM WATER MANAGEMENT IMPROVEMENTS.

THE EXISTING HOUSE AND OUT-BUILDINGS ARE TO BE REMOVED. THREE (3) SINGLE-FAMILY LOTS WITH DRIVEWAY ACCESS TO HIGHWOOD DRIVE ARE

CITY STORM WATER MANAGEMENT REQUIREMENTS INCLUDE: 1.RATE CONTROL FOR 2-, 10- AND 100-YEAR STORMS 2. VOLUME CONTROL FOR THE 1-INCH STORM EVENT

TO ADDRESS STORM WATER MANAGEMENT, ONE (1) INFILTRATION BASIN AND ONE (1) BIO-FILTRATION BASIN ARE PROPOSED. (NOTE THAT INFILTRATION IS NOT PROPOSED IN BOTH LOCATIONS DUE TO THE PRESENCE OF TYPE D SOILS IN THE BIO-FILTRATION BASIN AREA.) THESE BASINS ARE IN THE REAR OF THE LOTS, OUTSIDE OF THE EXISTING TREE LINE, AND WILL COLLECT REAR ROOF AND REAR YARD RUN-OFF.

<u>SI</u>	TE AREAS	BEFORE CONSTRUCTION	AFTER CONSTRUCTIO
	TOTAL SITE AREA	1.74 /	ACRES
	TOTAL ESTIMATED IMPERVIOUS	0.09 ACRES	0.29 ACRES

TOTAL INCREASE IN IMPERVIOUS IS LESS THAN 1.0 ACRE; THEREFORE, NO PERMANENT STORM WATER MANAGEMENT FEATURES ARE REQUIRED (PER MPCA GENERAL STORMWATER PERMIT)

1.65 ACRES 1.45 ACRES

TOTAL DISTURBED AREA 1.20 ACRES

RECEIVING WATERS WITHIN ONE MILE

TOTAL ESTIMATED PERVIOUS

NAME OF WATER BODY	TYPE OF WATER BODY	SPECIAL WATER	IMPAIRED WATER
ON-SITE BASINS	FILTRATION	NO	NO

SITE MAP AND DESIGN CALCULATIONS

SEE STORM WATER DRAINAGE REPORT FOR QUANTIFICATION OF STORM WATER MANAGEMENT REQUIREMENTS AND DRAINAGE AREA MAPS.

SOILS, SLOPES, VEGETATION

SOIL TYPE(S): TWO SOIL BORINGS WERE COLLECTED BY HAUGO GEOTECHNICAL SERVICES (APRIL 9, 2015). ONE BORING INDICATED SILTY SAND (SM) AND POORLY GRADED SAND WITH SILT (SP-SM); THE OTHER SILTY LEAN CLAY (CL-ML) AND LEAN CLAY WITH SAND (CL).

SLOPES: PROPOSED SLOPES WILL BE GENERALLY MODERATE AND ARE NOT EXPECTED TO EXCEED 3:1.

VEGETATION: SITE IS MOSTLY OPEN LAND WITH SOME TREE COVERAGE. TREES WILL BE REMOVED AS NECESSARY FOR CONSTRUCTION. SEED AND MULCH AND/OR SOD IS PROPOSED TO RESTORE DISTURBED AREAS.

PERSON WHO PREPARED SWPPP ("DESIGNER")

ADAM GINKEL

6776 LAKE DRIVE LINO LAKES MN 55014 (651) 361-8200

PERSON WHO WILL OVERSEE IMPLEMENTATION OF SWPPP ("CONTRACTOR")

PERSON(S) WHO WILL INSPECT ON-SITE ESC MEASURES ("INSPECTOR")

TRAINING DOCUMENTATION

DOCUMENTATION MUST ACCOMPANY THE SWPPP INDICATING THAT THE INDIVIDUALS IDENTIFIED IN PART III.F. HAVE BEEN TRAINED IN ACCORDANCE WITH THE REQUIREMENTS OF PART III.F. DOCUMENTATION SHALL INCLUDE:

- A. NAMES OF THE PERSONNEL ASSOCIATED WITH THIS PROJECT THAT ARE REQUIRED TO BE TRAINED PER PART III.F.1. OF THIS PERMIT.
- B. DATES OF TRAINING AND NAME OF INSTRUCTOR(S) AND ENTITY
- C. CONTENT OF TRAINING COURSE OR WORKSHOP INCLUDING THE NUMBER OF HOURS OF TRAINING.

SITE SEQUENCING & ESC NOTES

PRIOR TO ANY LAND-DISTURBING ACTIVITY, THE CONTRACTOR SHALL INSTALL SILT FENCE AS SHOWN ON PLAN. ADDITIONAL SILT FENCE MAY BE NECESSARY IF LOCAL CONDITIONS REQUIRE. SILT FENCE SHALL REMAIN IN-PLACE UNTIL THE FINAL STABILIZATION HAS BEEN ESTABLISHED IN ACCORDANCE WITH PART IV.G.

THE CONTRACTOR SHALL PERFORM SITE GRADING ON AN AREA-BY-AREA BASIS TO MINIMIZE UNSTABILIZED AREAS. AS EACH AREA IS COMPLETED, ALL EXPOSED SOILS MUST HAVE TEMPORARY EROSION CONTROL PROTECTION OR PERMANENT COVER WITHIN SEVEN (7) DAYS.

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

ITEM	MNDOT SPECIFICATION/NOTES	
SOD	3878	
SEED **	3876	
* FOR TURF ESTABLISHMENT		
COMMERCIAL 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)	
SPRING/SUMMER	MNDOT MIX 21-111 (100 LBS/ACRE)	
SOIL-BUILDING COVER	MNDOT MIX 21-113 (110 LBS/ACRE)	
1-2 YEARS COVER	MNDOT MIX 22-111 (30.5 LBS/ACRE)	
2-5 YEARS COVER	MNDOT MIX 22-112 (40 LBS/ACRE)	
MULCH	3882 (TYPE 1 - DISC ANCHORED)	
FERTILIZER	3881	
WOOD FIBER BLANKET	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 PROTECT SEEDS AND LIMIT EROSION.

TEMPORARY OR PERMANENT MULCH MUST BE UNIFORMLY APPLIED BY MECHANICAL OR HYDRAULIC MEANS AND STABILIZED BY DISC-ANCHORING OR USE OF HYDRAULIC SOIL STABILIZERS.

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 MPCA'S "PROTECTING WATER QUALITY IN URBAN AREAS BEST MANAGEMENT PRACTICES FOR MINNESOTA."

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

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 PROVIDE WOOD FIBER BLANKET FOR ALL AREAS OF CONCENTRATED FLOW AND FOR ALL SLOPES 3:1 OR GREATER.

PROTECT ALL STORM WATER MANAGEMENT FACILITIES FROM CONSTRUCTION RUN-OFF. CONTRACTOR TO INSTALL AND CONSTRUCT SAID FACILITIES ONCE SITE HAS BEEN STABILIZED.

IF ANY SLOPES APPEAR TO BE FAILING, THE CONTRACTOR SHALL PROVIDE ADDITIONAL SILT FENCE, BIOROLLS AND EROSION CONTROL BLANKET AS NEEDED.

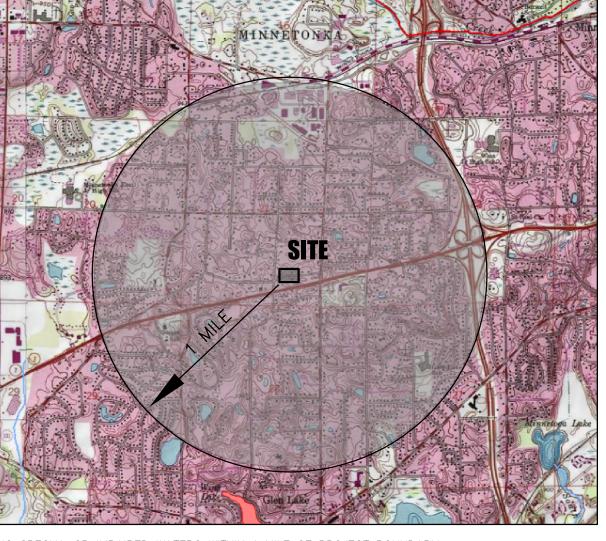
THE CONTRACTOR SHALL FINAL GRADE SWALE AREAS UPON STABILIZATION OF UPSTREAM AREAS.

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

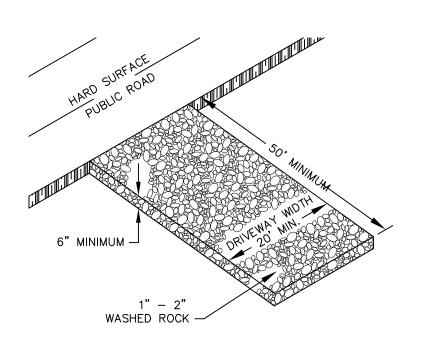
EXCESS SOIL SHOULD BE TREATED LIKE OTHER EXPOSED SOIL AND STABILIZED WITHIN 72 HOURS. ANY SOIL STOCKPILES ARE TO HAVE SILT FENCE PLACED ON DOWNSTREAM SIDES AND SHALL NOT BE PLACED IN SURFACE WATERS.

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/SCRAPE STREETS AS NECESSARY OR AS DIRECTED BY

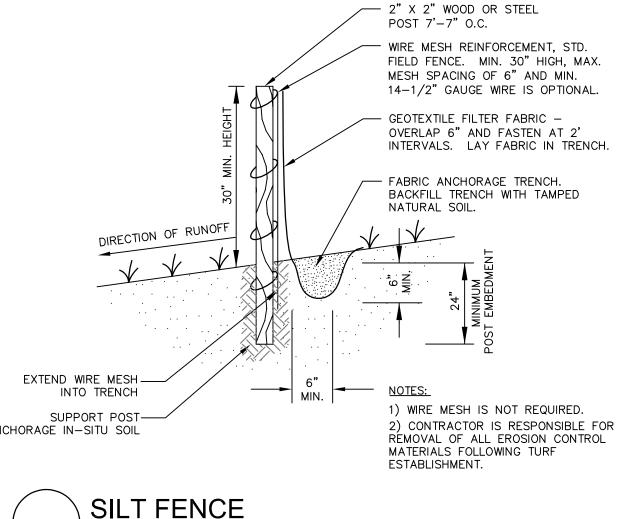
MAP OF SURFACE WATERS



NO SPECIAL OR IMPAIRED WATERS WITHIN 1 MILE OF PROJECT BOUNDARY







ANCHORAGE IN-SITU SOIL SILT FENCE

A.G. CHCKD BY: PROJ. NO. C.W.P. | 15-1534 ORIGINAL DATE: **DECEMBER 9, 2016**

PREPARED FOR: CONSTRUCTION



& ENGINEERING

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