

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, SEPTEMBER 23, 2024

CALL TO ORDER: 6:00 p.m.

PLEDGE OF ALLEGIANCE

APPROVAL OF MINUTES: September 9, 2024

PUBLIC HEARING: None

NEW BUSINESS:

1. Jeff Stalberger, MN Developments LLC, requesting Final Plat approval of the plat of Swedish Chapel Estates located at 2506 Swedish Drive NE (47 Single Family Residential lots and 3 outlots) in Section 4.

COMMISSION BUSINESS:

1. City Council Update

CITY OF HAM LAKE
PLANNING COMMISSION MINUTES
MONDAY, SEPTEMBER 9, 2024

The Ham Lake Planning Commission met for its regular meeting on Monday, September 9, 2024 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, Dave Ringler, Jeff Entsminger, David Ross, and Erin Dixson

MEMBERS ABSENT: Commissioner Jonathan Fisher

OTHERS PRESENT: City Attorney Mark Berglund, City Engineer Dave Krugler, Building Official Mark Jones 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:

Commissioner Dixson asked that the spelling of her last name be corrected in the motion for adjournment. **Motion by Lejonvarn, seconded by Ross, to approve the minutes of the June 24, 2024 Planning Commission meeting with the correction. All present in favor, motion carried.**

PUBLIC HEARING:

Roger and Sue Haugen, S & R Developers LLC, requesting Preliminary Plat approval for Enchanted Estates 4th Addition (9 Single Family Residential lots) in Section 14

Roger and Sue Haugen were present. Jason Rud from E.G. Rud & Sons Inc. spoke on behalf of the applicant. Mr. Rud stated this plat is the final phase of the Enchanted Estates subdivision. Mr. Rud stated the preliminary plat of the overall development was approved in 2005 but due to the amount of time that has passed, a refresh of this final phase was done. Mr. Rud stated this phase of the plat will have a total of nine lots, one less than originally approved. Mr. Rud stated two of the lots, east of Austin Street NE, have existing homes on them. Chair Pogalz asked Mr. Rud and Mr. and Mrs. Hagen if they had seen the memos written by the City Engineer and Building Official. All acknowledged that they had. Mr. Haugen stated what the accessory buildings are used for and stated the block building will be taken down. Mr. Haugen expressed his appreciation for the efforts of city staff and appointed and elected officials over the years. Chair Pogalz asked the

commissioners if they had any questions. Commissioner Dixon verified that the parkland dedication fees for Lots 1-7 is \$1850 per lot. Commissioner Lejonvarn asked if all accessory buildings shown on the plans were still on the property. Engineer Krugler stated that they are. Engineer Krugler stated the road infrastructure is in place and septic certifications from 2005 are being used. Engineer Krugler stated a lot line adjustment will be done between Lots 8 and 9 and encroachment agreements are needed for Lots 2, 3 and 6, Block 1 due to septic lines crossing drainage and utilities easements. Engineer Krugler stated the accessory building noted as the *existing shop* on Lot 8 is oversized but was approved with the original plat; the accessory building (block building) south of the oversized building was to be removed as shown on the attached Enchanted Estates exhibit from 2005. Building Official Jones stated the block building will need to be demolished and the pole structure that will be on proposed Lot 9 needs to have an exterior finish that matches the color, texture and style, as closely as practical, to the surface of the dwelling unit to be compliant with City Code. Building Official Jones stated the steel roof could remain on the pole structure. Commissioner Dixon completed the inspection; a copy which is on file. Commissioner Dixon stated she drove to the site and spoke with Mr. Haugen. Commissioner Dixon stated the accessory buildings that have been mentioned are still on the property. Commissioner Dixon stated she talked with Mr. Haugen about removing one accessory building and bringing the other building into compliance to ensure he was aware of the City's requirements for the plat. Commissioner Dixon stated the street infrastructure is in place and there is a park at the end of the street so this final phase will finish off the development.

Chair Pogalz opened the public hearing at 6:13 p.m. and asked for public comment; with there being none, Chair Pogalz closed the public hearing at 6:14 p.m.

Motion by Dixon, seconded by Entsminger, to recommend approval of the Preliminary Plat of Enchanted Estates 4th Addition in Section 14 as presented by Roger and Sue Haugen of S & R Developers LLC, subject to updating the survey to show all existing accessory building sizes before submission of the Final Plat for approval and updating the survey to show that the southerly building on proposed Lot 8 will be demolished, updating the exterior finish of the accessory building on 16207 Austin Street NE to match the color, texture and style of the like surfaces on the existing dwelling unit, meeting all requirements of the City Engineer and Building Official and meeting all City, County, and State requirements. All present in favor, motion carried. *This application will be placed on the City Council's Monday, September 16, 2024 agenda.*

NEW BUSINESS:

Joseph Radach of Contour Development LLC, requesting Sketch Plan approval for Elwell Farms (107 Single Family Residential lots and 4 outlots) in Section 36

Mr. Joseph Radach was present. Mr. Radach stated Jesse Neumann from Design Earth Contracting and Steve Jones with Keller Williams were attending on behalf of the project as well. Mr. Radach stated Elwell Farms residential development will have 107 single family lots that range in size from one to 19 acres. Mr. Radach stated access to the development is going to be from the west via 137th Lane NE or the north via Opal Street NE through the Hidden Forest East subdivision. Mr. Radach stated four outlots are

proposed. Mr. Radach stated one outlot is land for a park that he envisions will include some walking trails with benches, scenic overlooks, a playground and some parking along the street. Mr. Radach stated two of the other outlots are for wetland restoration and preservation. Mr. Radach stated they intend to restore the sod fields into native wetland habitat and create a wetland bank with which wetland credits can be offered for other projects in the area that may have wetland impacts that need those credits. Mr. Radach stated many septic borings have been taken and they have confirmed each lot has adequate space for a primary and secondary septic system; livability has been proven on every lot as well. Mr. Radach stated a wetland delineation and threatened and endangered species survey have been completed. Mr. Radach stated the hope is to break ground in the spring. Chair Pogalz asked Engineer Krugler to comment on the development. Engineer Krugler stated the proposed 107 lot development is located on just over 500 acres in section 36. Engineer Krugler stated the sketch plan does not include names for all streets; the unnamed streets will need to follow the naming model of the Anoka County grid system and proposed cul-de-sacs within the development may need to be modified as they cannot exceed 1,100-feet in length. Engineer Krugler stated access to the development will be via a connection to 137th Lane NE in the Red Fox Hollow 2nd Addition development and via a connection to Opal Street NE in the Hidden Forest East development. The plan includes extending 138th Avenue NE from Ghia Street NE to connect lots 75 and 76. Engineer Krugler commented on the outlots stating Outlot B will be conveyed to the adjacent 4611 139th Lane NE parcel which will then require the parcel to be addressed from Opal Street NE, Outlot C is a proposed park and Outlots A and D are proposed wetland banks which Attorney Berglund will comment on. Engineer Krugler stated access to Lexington Avenue NE for Lots 75 & 76 is via gravel roads in the Elwell Heights subdivision; it is required that the portions of 138th Avenue NE, Fraizer Street NE and 139th Lane NE between these lots and Lexington Avenue NE be upgraded. Engineer Krugler stated there is a 66-foot wide ingress/egress easement traversing from 138th Avenue NE thru parcels 67, 68, 69, 75 and 76 to the 4611 139th Lane NE that will need to be rescinded and the driveway for 4611 139th Avenue NE will need to be relocated to Opal Street NE. Engineer Krugler stated 138th Avenue NE is currently a private easement, not a city street, so it will have to be dedicated as part of the plat. Engineer Krugler stated the Park Committee met to discuss parkland dedication for the proposed Elwell Farms development; the Park Committee determined parkland dedication fees will be collected rather than requiring dedication of land or trail easements as residents of the Elwell Farms development will have street access to the nearby parks within the Hidden Forest East Park Addition and Red Fox Hollow 2nd Addition subdivisions. Engineer Krugler stated a 20-foot wide Flint Hills Resources easement (Minnesota Pipeline) traverses through the northerly portion of the sketch plan; written approval from Flint Hills Resources must be provided for streets, driveways and grading within the easement. Engineer Krugler stated there are existing buildings, accessory buildings, farm buildings, wells and septic systems located within the proposed sketch plan and future submittals will need to show that the buildings will be removed. Engineer Krugler stated demolition permits will be required to remove the buildings and documentation will need to be provided to prove the wells have been sealed and the septic systems abandoned. Engineer Krugler stated an FAA recognized flying field for radio-controlled aircraft is located on parcel 36-32-23-14-0001. Engineer Krugler stated research will need to be done to determine if the FAA has any rules related to discontinuing use of the area.

Engineer Krugler stated Trail #84A of the Rice Creek Snowmobile Trail Association traverses thru the easterly portion of the proposed plat. Engineer Krugler stated Coon Creek Watershed approval is required. Engineer Krugler stated the northerly portion of the proposed development is identified as a FEMA Zone A designation; a FEMA Letter of Map Amendment will be required for lots located within Zone A. Engineer Krugler stated a Natural Heritage Information System data review has been completed and a habitat assessment/survey is required. Chair Pogalz stated he likes what he sees in the development in relation to providing additional access points to a few other subdivisions in the area. Chair Pogalz asked if an extension of Bunker Lake Boulevard NE could be considered with the plat. Mr. Radach stated the northwestern corner of the proposed development does not extend far enough west to create an extension of Bunker Lake Boulevard NE and the composition of the land is peat and wetland. There was discussion about improving and extending 138th Avenue NE east to connect with what is currently labeled as Street A on the plans and improving 137th Lane NE from Ghia Street NE east and other potential access points to Lexington Avenue NE. Chair Pogalz stated that another access point out to Lexington Avenue NE should be considered so that residents occupying 107 new homes in the development don't have only two ingress/egress points. Chair Pogalz stated he disagrees with the Park Committee's recommendation to accept monies in lieu of parkland. Chair Pogalz stated this is a large development. Chair Pogalz stated there are ball fields in the central part of the city and several parks with playground equipment throughout the city, but no ball or soccer fields in the eastern side of Ham Lake. Mr. Radach stated they are planning for a park and obtaining credit toward parkland dedication. Engineer Krugler explained parkland dedication options in respect to paying \$2,500 per lot dependent on the ratio of upland vs wetland, dedicating land or a combination of both. Commissioner Lejonvarn asked Mr. Radach if he was working with the Rice Creek Snowmobile Trail Association. Mr. Radach stated he received a call from Mr. Ken Anderson (Mr. Anderson was present.) today but had not had a chance to speak with him. Mr. Radach stated he wasn't familiar with where the trail was within the proposed development but was willing to talk with Mr. Anderson. Chair Pogalz stated if the trail system through the development isn't possible, snowmobilers will have no trail access from the north to the south side of the city and vice versa. There was discussion about a permanent trail being dedicated within the development to be a recreational trail in the summer and a snowmobile trail in the winter. Chair Pogalz asked Mr. Radach to comment on the St. Paul Modelers Radio Controllers Club (SPMRC) use of the airfield. Mr. Radach stated their lease will be terminated. Chair Pogalz asked if the SPMRC was aware that the lease will be terminated. Mr. Radach stated the Elwell's have notified the club that the lease will be terminated. Attorney Berglund stated the City Council supports having wetland banks in Ham Lake and work is being done to codify an ordinance related to wetland banks. Attorney Berglund stated he has been exploring conditions the city will have for developers interested in wetland banking such as requiring a Conditional Use Permit, requiring the dedication of a trail through the wetland bank area, have a fee paid to the city that is a percentage of each wetland bank credit sold as the city anticipates that developers will abandon the land once all credits have been sold and the city will then be responsible for maintaining the land. Mr. Radach questioned if a trail would be possible in a wetland area as creating an upland trail could impact the wetlands and would create additional expense. There was discussion about the process of gaining approval from the Board of Soil and Water Resources and the Army Corp of Engineers for a

wetland bank, initial restrictions on the sale of credits, oversight of the location, vegetation requirements, etc. Mr. Radach stated he has created wetland bank prospectus to submit to various regulatory agencies for review. Mr. Radach stated he should know in three months whether or not the plan is acceptable. Chair Pogalz reviewed the list of items noted in the September 5, 2024 memo from the City Engineer that need to be addressed. Mr. Radach stated he has noted the items he needs to address. There was additional discussion about these items. Building Official Jones stated that, currently, the City Code does not allow wetland banks under a Conditional Use Permit and that the city should update City Code to allow for wetland banks before approving the sketch plan for this development as it could potentially include a wetland bank area. Commissioner Lejonvarn asked if the sketch plan could be approved to allow the developer to continue to address the comments from the City Engineer while the City created the code related to wetland banks. Attorney Berglund stated the City Council supports the creation of wetland banks within the city. Attorney Berglund stated this concept has been studied for the past several months and the plan is to create an ordinance to allow wetland banks. Attorney Berglund stated the ordinance has not been created yet so wetland banks are currently not a permitted use. Attorney Berglund stated once an ordinance is created, it will take some time to hold a public hearing, obtain approval of the ordinance and adhere to statutory timelines for acceptance of the ordinance. Chair Pogalz suggested the application be tabled until the wetland bank ordinance has been approved. Mr. Radach asked if the sketch plan could be approved so they could begin work on a preliminary plat. Attorney Berglund stated his recommendation is to table the application for now. Mr. Radach stated the development team would like to know if the commission is in favor of the project. Attorney Berglund asked Mr. Radach if going forward with the development is contingent on getting approval to have a wetland bank. Mr. Radach stated it was. Attorney Berglund stated his recommendation is to table the application. Commissioner Lejonvarn asked how many acres would be dedicated to the wetland bank in the development. Mr. Radach stated approximately 70 acres. Mr. Radach asked the commissioners if they were generally in favor of the project. All commissioners were of the opinion that they were in favor of the development. **Motion by Lejonvarn, seconded by Pogalz, to table Sketch Plan Approval for the plat of Elwell Farms as submitted by Joseph Radach of Contour Development LLC. All present in favor, motion carried.**

OLD BUSINESS:

Gary Magnuson requesting Sketch Plan approval for the minor Plat of Magnuson Estates (2 lots) in Section 9

Mr. Magnuson was not present. Chair Pogalz asked Building Official Jones to comment on the plat. Building Official Jones stated he has talked with Mr. Magnuson several times about the corn crib that was converted to a garage. Building Official Jones stated he went to Mr. Magnuson's property to measure the distance between the building and the property line and found that the structure is within the front yard setback. Building Official Jones stated the garage must be removed to come into compliance with City Code. Building Official Jones stated a permit was issued to Mr. Magnuson for an accessory building several years ago under the agreement that the garage would be removed and that did not happen. Building Official Jones stated anytime a resident requests a lot split, their property must be brought into compliance with City Code if something is found to be

non-compliant. Commissioner Lejonvarn asked Building Official Jones what Mr. Magnuson has said about removal of the building. Building Official Jones stated each time he has spoken with Mr. Magnuson he has said the building has been there for years and he is not removing it. **Motion by Pogalz, seconded by Dixon, to recommend denial of Gary Magnuson's Sketch Plan approval request for the minor Plat of Magnuson Estates (2 lots) in Section 9, due to the owner not willing to remove the building located in the front yard set-back. All present in favor, motion carried.** *This application will be placed on the City Council's Monday, September 16, 2024 agenda.*

COMMISSION BUSINESS:

City Council Update

Chair Pogalz stated the City Council concurred with the Planning Commission's recommendations to approve the Conditional Use Permit for A Class Sounds and the minor plat Sketch Plan submitted by Entsminger Enterprises, LLC. Chair Pogalz will attend the September 16, 2024 City Council meeting.

ADJOURNMENT:

Motion by Dixon, seconded by Lejonvarn, to adjourn the Planning Commission meeting at 7:20 p.m. All present in favor, motion carried.

Jennifer Bohr
Building and Zoning Clerk



CITY OF HAM LAKE

PLANNING REQUEST

15544 Central Avenue NE

Ham Lake, MN 55304

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

Date of Application 8/16/24 Date of Receipt _____

Receipt # _____ Amount \$ _____

Meeting Appearance Dates:
Planning Commission 9-23-2024 City Council _____

Please check request(s):

- | | |
|---|---|
| <input type="checkbox"/> Metes & Bounds Conveyance | <input type="checkbox"/> Commercial Building Permit |
| <input type="checkbox"/> Sketch Plan | <input type="checkbox"/> Certificate of Occupancy |
| <input type="checkbox"/> Preliminary Plat Approval* | <input type="checkbox"/> Home Occupation Permit |
| <input checked="" type="checkbox"/> Final Plat Approval | <input type="checkbox"/> Conditional Use Permit (New)* |
| <input type="checkbox"/> Rezoning* | <input type="checkbox"/> Conditional Use Permit (Renewal) |
| <input type="checkbox"/> Multiple Dog License* | <input type="checkbox"/> Other _____ |

**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: MN Developments LLC - Swedish Chapel Estate

Address/Location of property: Swedish Drive and Xylite

Legal Description of property: _____

PIN # 04-32-23-14-0001 Current Zoning RA Proposed Zoning R1

Notes: 47 single family lots and three cottages

Applicant's Name: Jeff Stalberger

Business Name: MN Developments LLC

Address 17404 Ward Lake Drive NW

City Andover State MN Zip Code 55304

Phone 6127991471 Cell Phone 6127991471 Fax _____

Email address stally68@msn.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.

SIGNATURE [Signature] DATE 8/16/24

- FOR STAFF USE ONLY -

ACTION BY: Planning Commission _____
City Council _____

PROPERTY TAXES CURRENT YES NO

Memorandum

Date: September 19, 2024
To: Planning Commissioners
From: David A. Krugler, City Engineer
Subject: Swedish Chapel Estates



Introduction:

The Final Plat was received on August 28th, the Title Sheet, Preliminary Plat, Grading, Erosion Control and Tree Protection Plan, Livability Plan, Livability Chart, Removals plan, Street & Storm Sewer Plan & Profile, Intersection & C-D-S Details, Stormwater Pollution Prevention Plan, Detail, Turn Lane Plans and Geotechnical Report were received July 29th, the Livability Chart was received August 8th, and the Storm Sewer Sizing Calculations was received July 2nd for the proposed 47 lot residential development located on the 111.42 acre parcel 04-32-23-14-0001. The parcel is currently zoned Rural Single Family Residential (R-A), per the attached, and the new lots will be zoned Single Family Residential (R-1). The three outlots will remain R-A. All of the prior review comments have been addressed.

Discussion:

The Final Plat generally conforms with the Preliminary Plat that was approved at the June 17th City Council meeting. Anoka County Highway Department approval of the plans on July 8th is attached. The Coon Creek Watershed District (CCWD) conditionally approved the development at the May 13th Board of Managers meeting. The attached amended CCWD Permit was issued on August 8th. The project conforms to the Upper Rum River Watershed Management Organization rules for storm runoff and wetland buffer requirements.

The CCWD review for potential impacts to state-listed species and other rare features found that several state endangered plants have been found and Blanding's turtles have been reported in the vicinity of the proposed project and may be encountered on site. If during construction Blanding's turtles are encountered the contractor is to move them by hand out of harm's way. Otherwise, the turtles are to be left undisturbed. The plants that are within the parcel are not shown to be disturbed and will not require a taking permit. There is an inactive eagle nest located on Lot 4 Block 1. The US Fish and Wildlife recommends that a permit be requested for any disturbance within 100-feet of the nest. A letter discussing the project and the recommendations made by the US Fish and Wildlife agency is attached.

Swedish Drive was shown to be relocated north of the current alignment by approximately 140 feet. An exhibit for vacation of the existing Swedish Drive roadway easement is attached. All utilities within the existing right-of-way have been removed and new utilities will be installed during the project. The Swedish Drive roadway easement vacation public hearing will occur on the October 7th Council meeting.

The septic certification has been received by Tradewell that each of the proposed lots will support two standard septic systems in accordance with Minnesota Rules 7080. The Lot 3 Block 3 septic area was disturbed during construction and has been recertified to supporting two standard septic systems to the satisfaction of the Building Official. The Braun Geotechnical Exploration Report, dated July 25th, adequately addressed prior review comments.

A 15-foot-wide trail easement, per the attached will be required on Lots 1, 3, 4, 5, 6, 7, 8 and 9 of Block 1 and Lots 1, 3 and 4 of Block 3. The June 17th City Council approval required a 20-foot-wide easement. After further discussion with the Developer, it is recommended to reduce the 20-foot requirement to a 15-foot trail easement to match other developments along County Roadways. The Developer is to record the trail easement deeds with Anoka County immediately after recording the Plat. The Development Agreement will stipulate that no building permits will be issued on any lots until proof of recording the trail deeds is received. In addition, parkland dedication fees will be collected rather than parkland dedication. The trail easement will be a credit toward those fees.

Outlots A, B and C will be required to be conveyed to adjacent properties within the Development Agreement. The Development Agreement will stipulate that no building permits will be issued on any lots until proof of outlot conveyance is received.

FEMA Letters of Map Amendments (LOMA) are required for Lots 8 and 9 of Block 1; Lots 4 thru 13 of Block 2; and Lots 7, 8, 9, 10, 13, 14, 15, 20 and 21 of Block 3. The Development Agreement will stipulate that that no building permits will be issued until the LOMAs is approved by FEMA. An Encroachment Agreement will be required due to the Lot 6, Block 3 septic sewer pipe that will cross the drainage and utility easement.

Recommendations:

It is recommended that the Final Plat of Swedish Chapel Estates be recommended for approval, contingent on the vacation of the Swedish Drive roadway easement.

PRELIMINARY COPY
UNRECORDED AS OF 08-27-24

KNOW ALL PERSONS BY THESE PRESENTS: That MN Developments LLC, a Minnesota limited liability company, owner of the following described property:

The Northeast Quarter of Section 4, Township 32, Range 23, excepting the following described tracts of land:

- The West 15 acres of the said Northeast Quarter of Section 4, Township 32, Range 23, heretofore sold and deeded to the Swedish Lutheran Society.
- A plot of ground, commencing at a point 23.49 chains South and 5.15 chains East (Variation 8 degrees 51 minutes in 1887) of Quarter corner on North side of Section 4, Township 32, Range 23; thence South 29 degrees East (Variation 8 degrees 51 minutes in 1887) 9 1/2 rods, to a tamarac stake; thence North 64 degrees East, 14 1/2 rods; thence North 29 degrees West, 10 1/2 rods; thence South 60 1/2 degrees West, 14 1/2 rods to point of commencement, containing 1 acre, more or less, being a part of the Southwest Quarter of Northeast Quarter of Section 4, Township 32, Range 23.
- Commencing at the Northeast corner of Section 4, Township 32, Range 23 and running thence West on and along town line between Towns of Bethel and Ham Lake a distance of 37 1/2 rods to East boundary line of Bethel and Minneapolis Road so called; thence in a Southerly direction on and along East road limit of said Bethel and Minneapolis Road as now located a distance of about 43 rods; thence in an Easterly direction a distance of about 24 1/2 rods to intersect the Section line running North and South between Sections 3 and 4 in said Township 32 and Range 23 at a point on said Section line a distance South from said Northeast corner of said Section 4, 34 rods; thence North on and along said Section line to place of commencement being a part of the Northeast Quarter of Northeast Quarter of Section 4, Township 32, Range 23, containing about 7 acres.
- That part of the Northeast Quarter of Section 4, Township 32, Range 23, described as follows: Commencing at a point 289 feet East and 732 feet North of the Southwest corner of said Northeast Quarter; thence Northeasterly along the center of the road 424 feet; thence Northwesterly 701 feet to the point, which is 289 feet East of the West line of the said Northeast Quarter; thence South to the point of beginning.
- Commencing at a point 1550.34 feet (23.49 chains) South and 339.9 feet (5.15 chains) East of the Quarter corner on the North side of Section 4; thence South 29 degrees East for 156.75 feet; thence South 64 degrees West for 187.4 feet; thence North, parallel with and 247.5 feet East of the Quarter Section line for 142.15 feet to the Southerly line of a public road; thence North 50 degrees 10 minutes East along said Southerly road line to the point of beginning, also all right of title in said adjacent public road to the center line thereof, Anoka County, Minnesota.

Has caused the same to be surveyed and platted as SWEDISH CHAPEL ESTATES and does hereby dedicate to the public for public use the public ways and the drainage and utility easements as shown on this plat. Also dedicating to the County of Anoka the right of access onto County Road No. 68 as shown on this plat.

In witness whereof said MN Developments LLC, a Minnesota limited liability company, has caused these presents to be signed by its proper officer this _____ day of _____, 20__.

MN DEVELOPMENTS LLC

Jeffrey A. Stalberger, Co-Administrator

STATE OF _____
COUNTY OF _____

This instrument was acknowledged before me this _____ day of _____, 20__ by Jeffrey A. Stalberger, Co-Administrator of MN Developments LLC, a Minnesota limited liability company.

(Signature)

(Print Name)

Notary Public, _____ County, Minnesota
My Commission Expires _____

I Jason E. Rud 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 on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 20__.

Jason E. Rud, Licensed Land Surveyor
Minnesota License No. 41578

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me this _____ day of _____, 20__ by Jason E. Rud.

(Signature)

(Print Name)

Notary Public, _____ County, Minnesota
My Commission Expires _____
CITY COUNCIL, CITY OF HAM LAKE, MINNESOTA

This plat of SWEDISH CHAPEL ESTATES was approved and accepted by the City Council of the City of Ham Lake, Minnesota at a regular meeting thereof held this _____ day of _____, 20__, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

City Council, City of Ham Lake, Minnesota

By _____ Mayor By _____ Clerk

COUNTY SURVEYOR

I hereby certify that in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this _____ day of _____, 20__.

David M. Ziegler
Anoka County Surveyor

SWEDISH CHAPEL ESTATES

CITY OF HAM LAKE
COUNTY OF ANOKA
SEC. 4, T32N, R23W



NORTH



(SCALE IN FEET)
1 inch = 200 feet

LEGEND

- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
- DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
- ⊕ DENOTES ANOKA COUNTY CAST IRON MONUMENT, UNLESS OTHERWISE SHOWN
- △ DENOTES RIGHT OF ACCESS DEDICATED TO THE COUNTY OF ANOKA.
- DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.

FOR ADDITIONAL BOUNDARY INFORMATION ON EXCEPTION NUMBERS 2, 4 AND 5, SEE INSERTS ON SHEETS 4 AND 6 OF 6 SHEETS.

W1/4 OF CORNER OF SEC. 4-T32N-R23W.
(FOUND 2 INCH BY 2 INCH TELSPAR MONUMENT)

S1/4 OF CORNER OF SEC. 4-T32N-R23W.

COUNTY AUDITOR/TREASURER

Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, taxes payable in the year 20__ on the land hereinbefore described have been paid. Also, pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes and transfer entered this _____ day of _____, 20__.

Property Tax Administrator

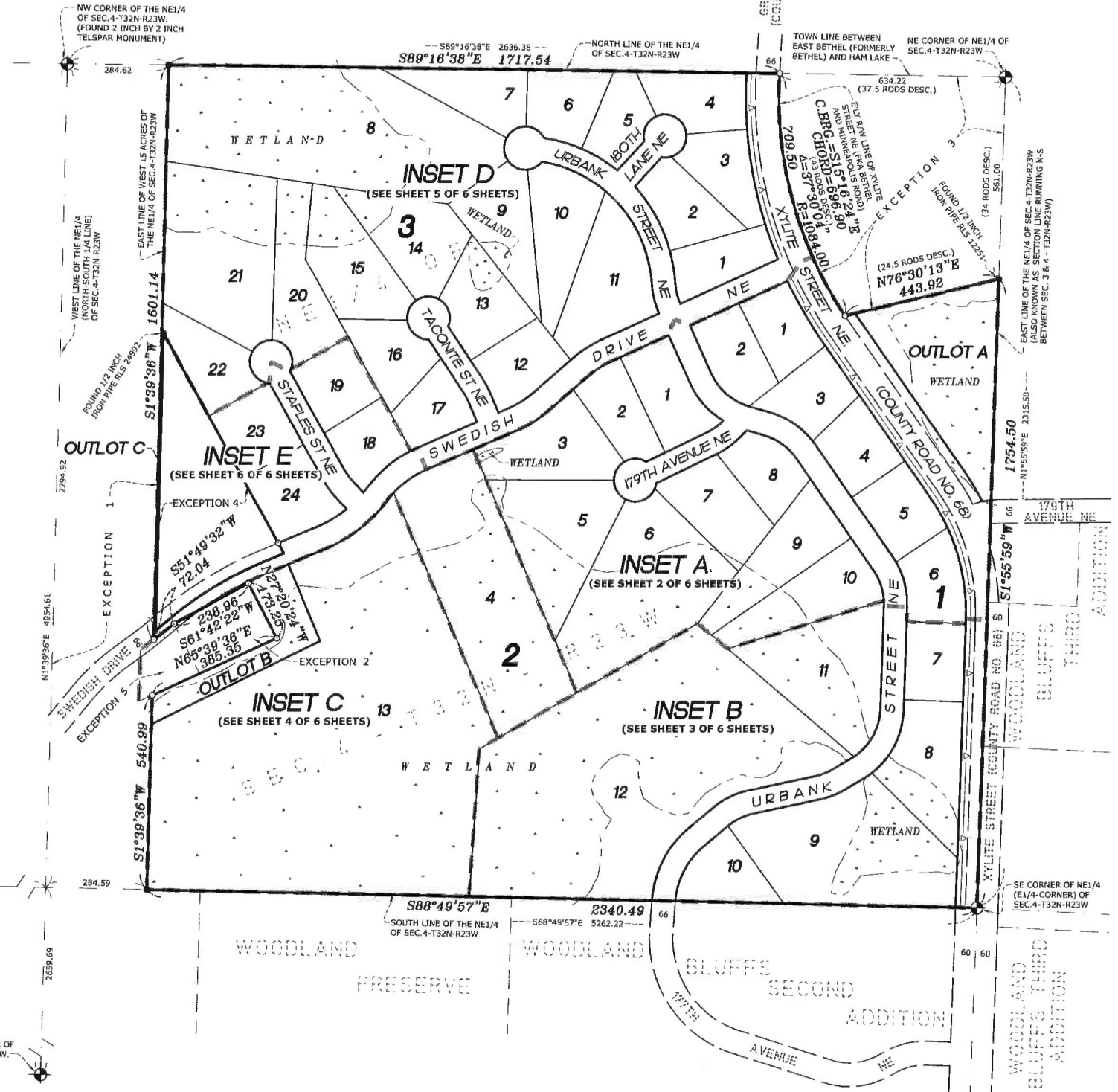
By _____, Deputy

COUNTY RECORDER/REGISTRAR OF TITLES
COUNTY OF ANOKA, STATE OF MINNESOTA

I hereby certify that this plat of SWEDISH CHAPEL ESTATES was filed in the office of the County Recorder/Registrar of Titles for public record on this _____ day of _____, 20__, at _____ o'clock _____ M. and was duly recorded as Document Number _____.

County Recorder/Registrar of Titles

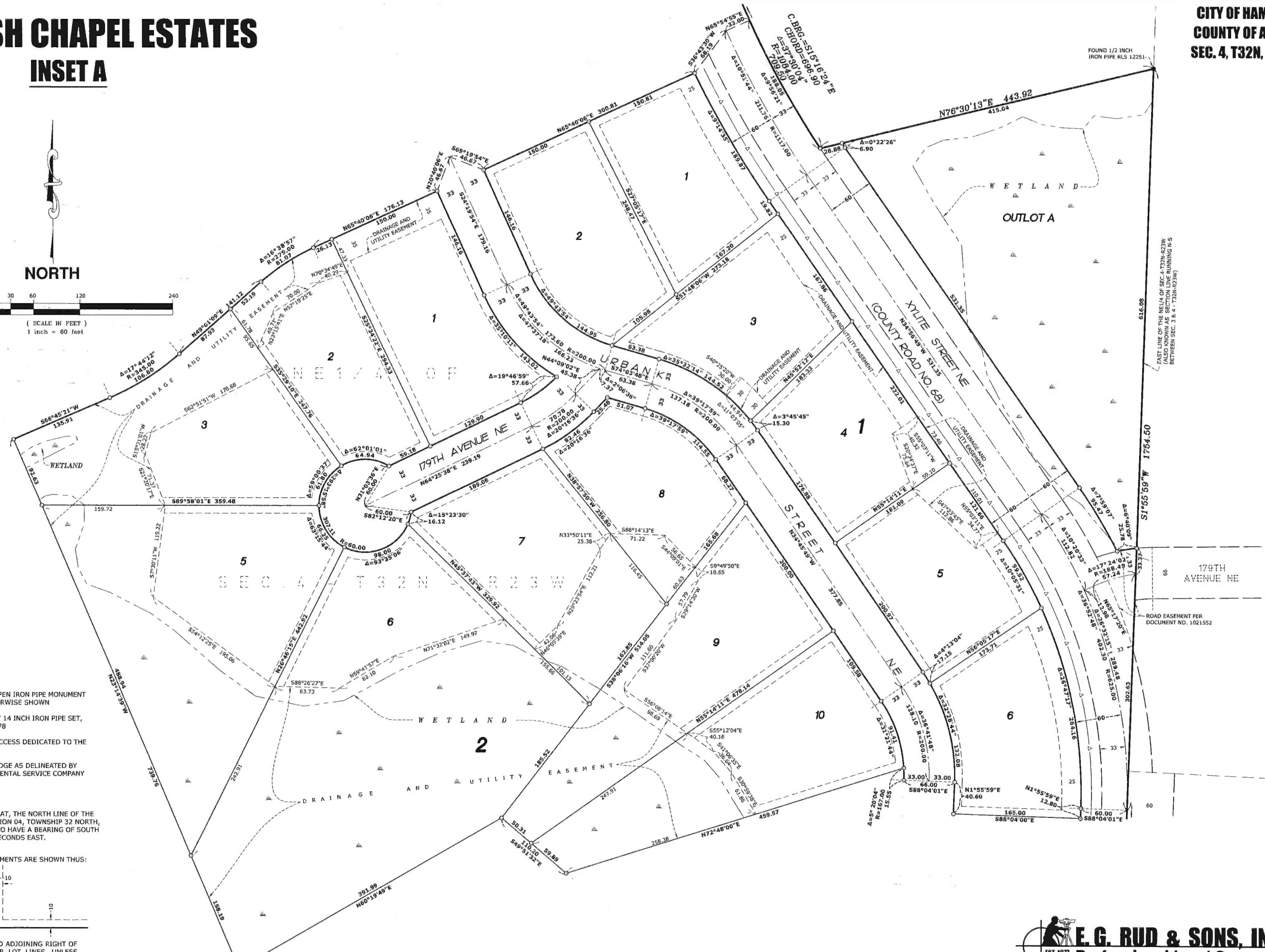
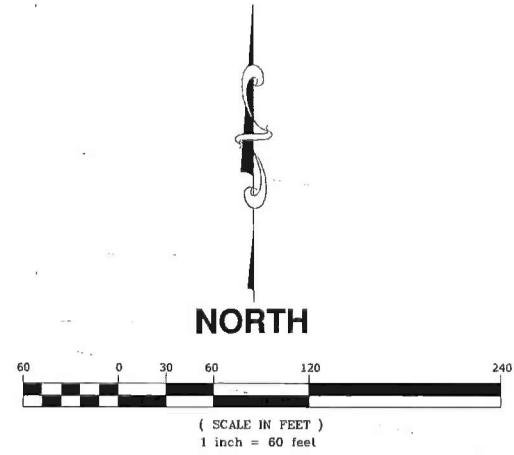
By _____, Deputy



PRELIMINARY COPY
UNRECORDED AS OF 08-27-24

SWEDISH CHAPEL ESTATES INSET A

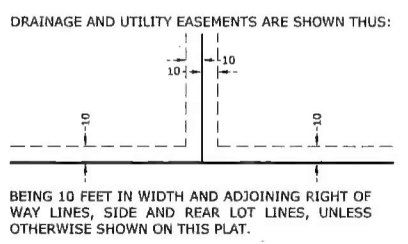
CITY OF HAM LAKE
COUNTY OF ANOKA
SEC. 4, T32N, R23W



LEGEND

- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
- DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
- △ DENOTES RIGHT OF ACCESS DEDICATED TO THE COUNTY OF ANOKA.
- DENOTES WETLAND EDGE AS DELINEATED BY KOHLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.



FOUND 1/2 INCH IRON PIPE RLS 12251

EAST LINE OF THE NE 1/4 OF SEC. 4, T32N, R23W ALSO KNOWN AS SECTION LINE RUNNING N-S BETWEEN SEC. 3 & 4 - T32N, R23W

ROAD EASEMENT PER DOCUMENT NO. 1021552

PRELIMINARY COPY
UNRECORDED AS OF 08-27-24

CITY OF HAM LAKE
COUNTY OF ANOKA
SEC. 4, T32N, R23W

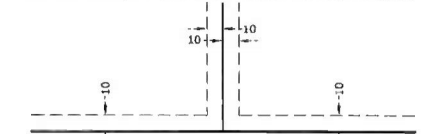
SWEDISH CHAPEL ESTATES INSET B

LEGEND

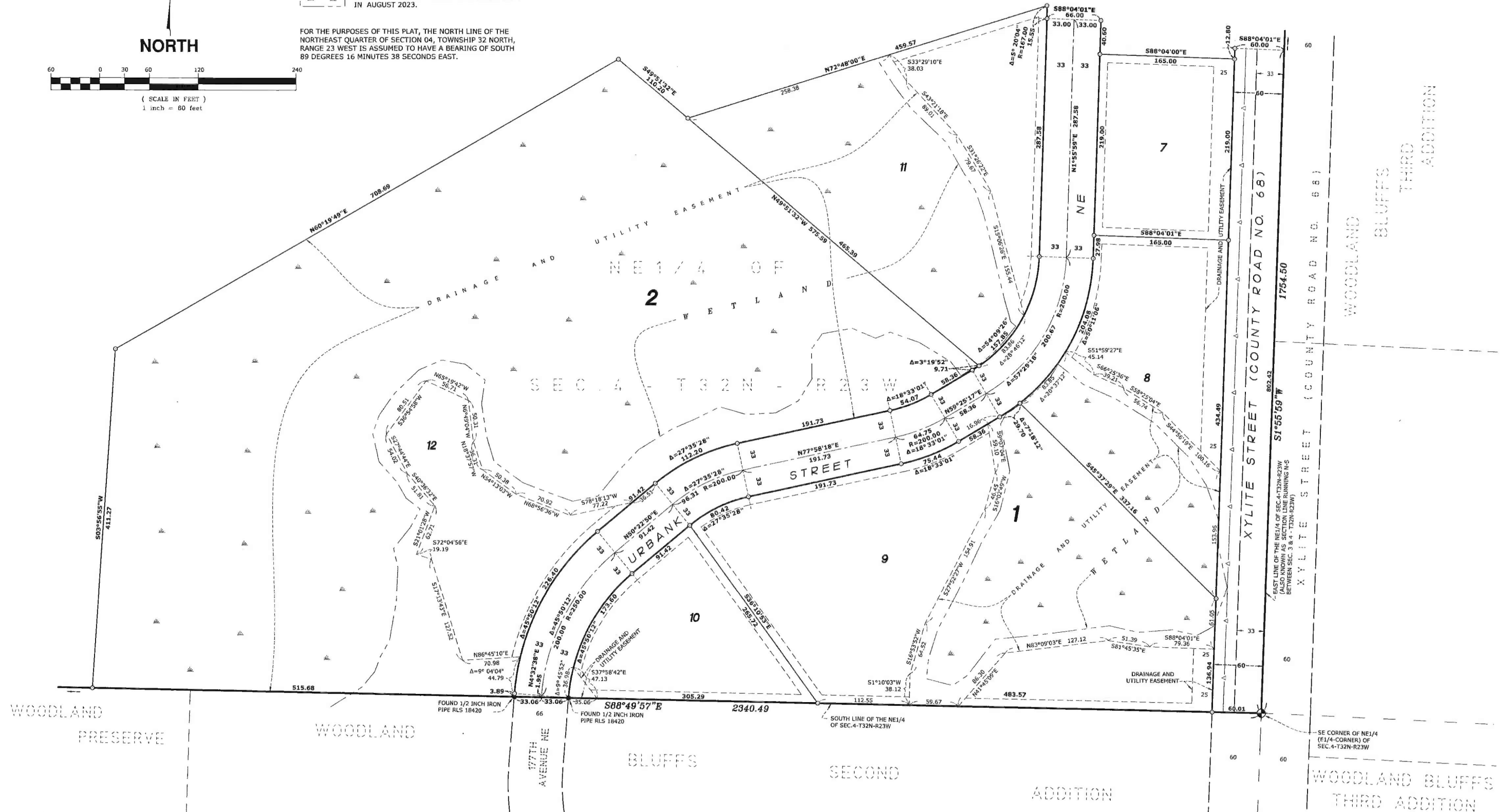
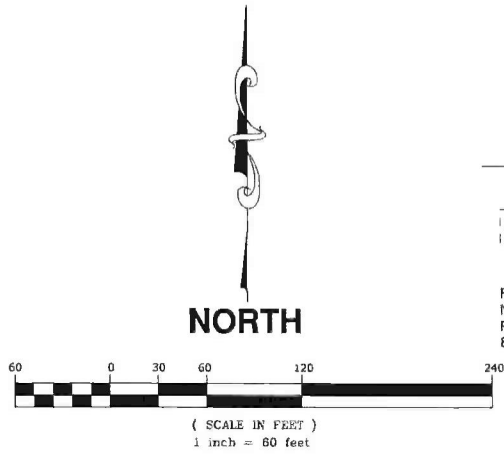
- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
- DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
- ⊕ DENOTES ANOKA COUNTY CAST IRON MONUMENT, UNLESS OTHERWISE SHOWN
- △ DENOTES RIGHT OF ACCESS DEDICATED TO THE COUNTY OF ANOKA.
- ▭ DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



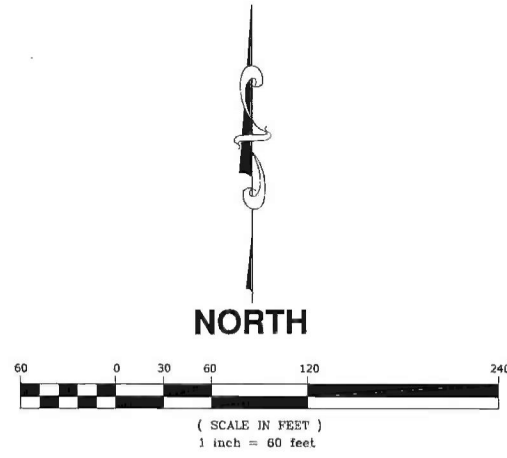
BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, SIDE AND REAR LOT LINES, UNLESS OTHERWISE SHOWN ON THIS PLAT.



SWEDISH CHAPEL ESTATES

INSET C

CITY OF HAM LAKE
COUNTY OF ANOKA
SEC. 4, T32N, R23W

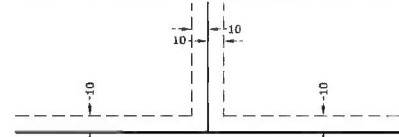


LEGEND

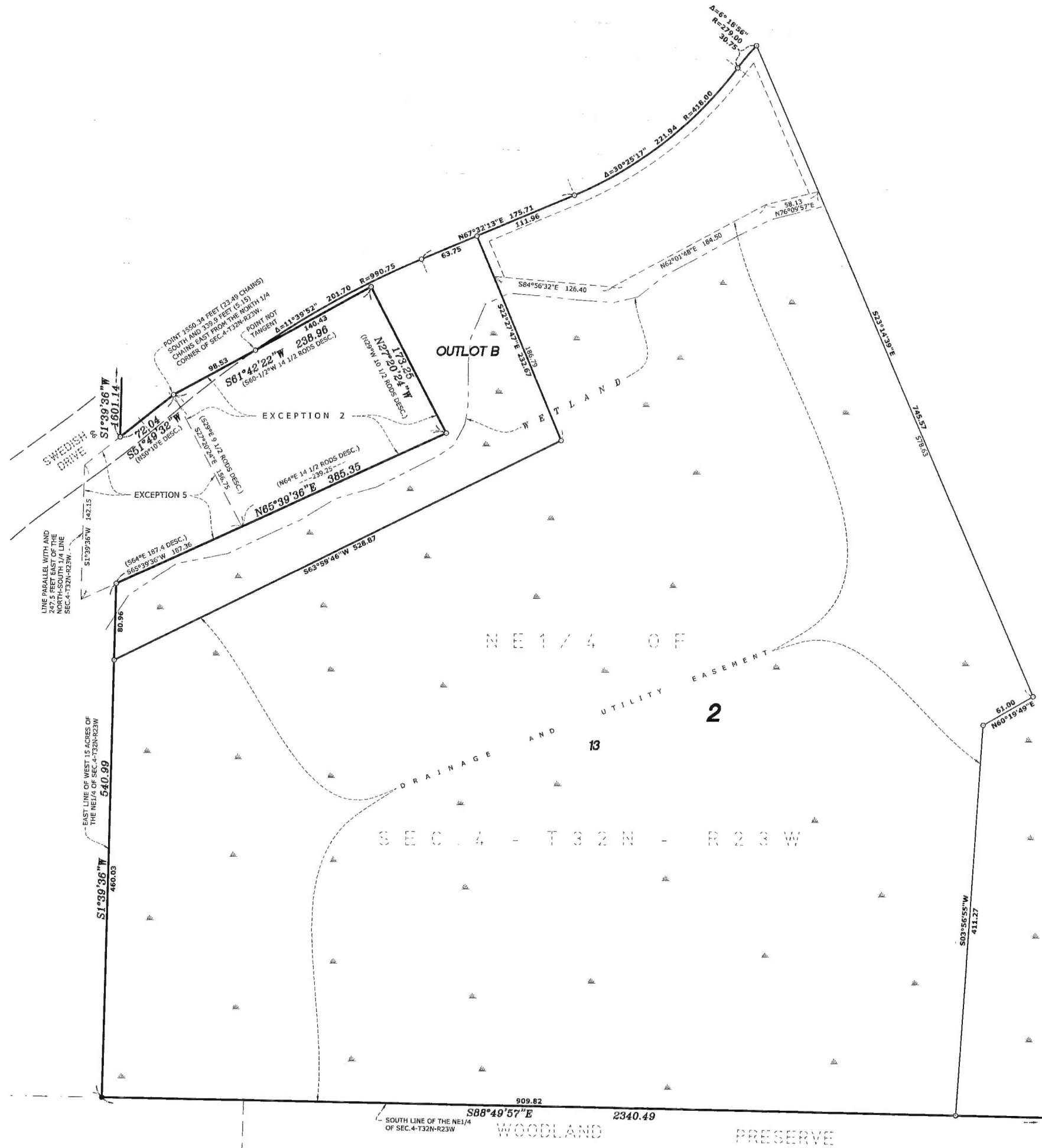
- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
- DENOTES 1/2 INCH BY 14 INCH IRON PIPE SET, MARKED RLS NO. 41578
- DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.

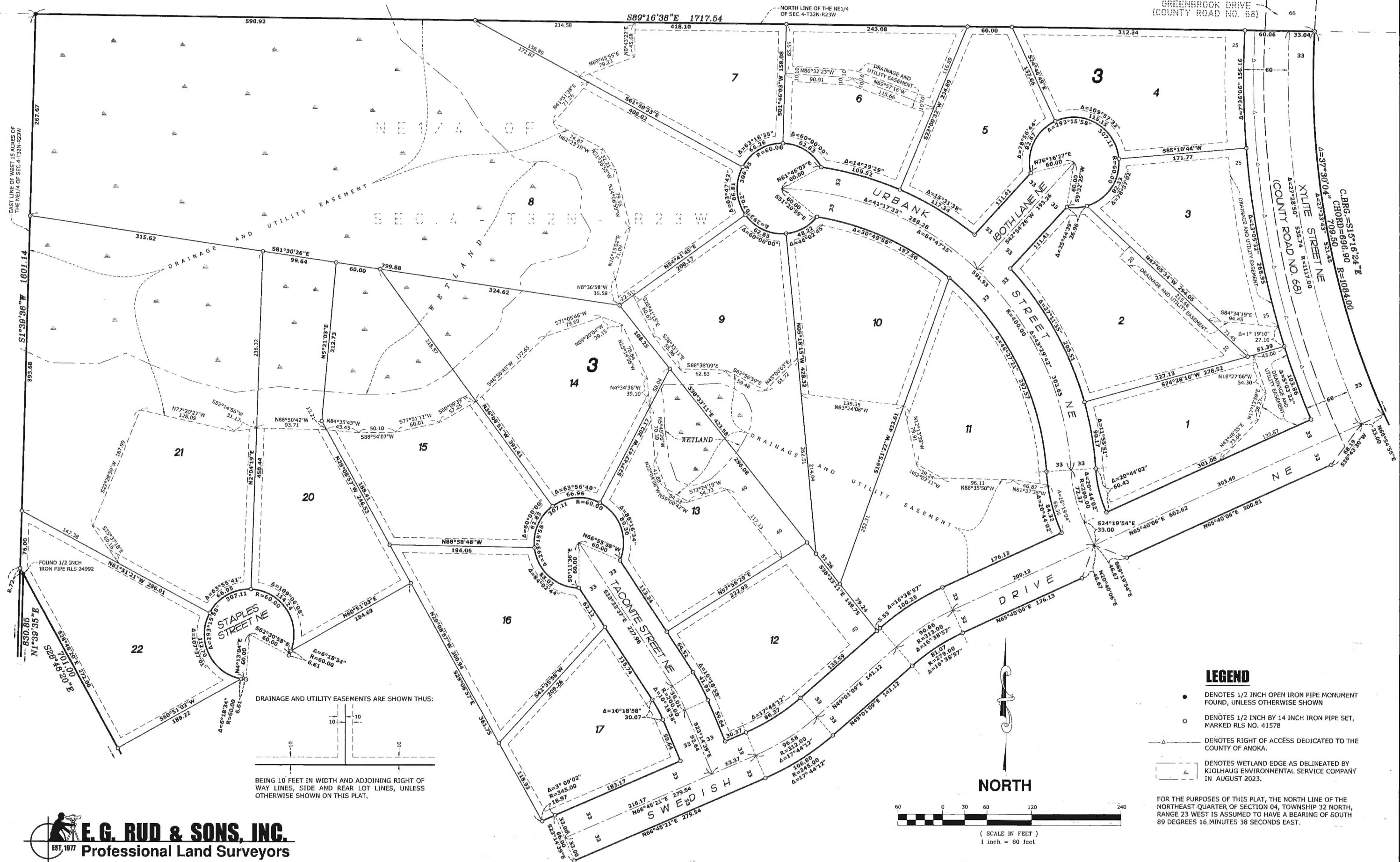
DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



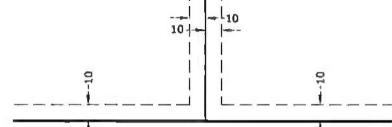
BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, SIDE AND REAR LOT LINES, UNLESS OTHERWISE SHOWN ON THIS PLAT.



SWEDISH CHAPEL ESTATES



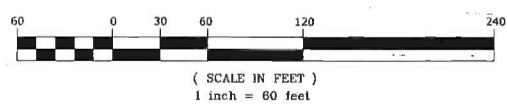
DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:



BEING 10 FEET IN WIDTH AND ADJOINING RIGHT OF WAY LINES, SIDE AND REAR LOT LINES, UNLESS OTHERWISE SHOWN ON THIS PLAT.

- LEGEND**
- DENOTES 1/2 INCH OPEN IRON PIPE MONUMENT FOUND, UNLESS OTHERWISE SHOWN
 - DENOTES 1/2 INCH BY 1/4 INCH IRON PIPE SET, MARKED RLS NO. 41578
 - △— DENOTES RIGHT OF ACCESS DEDICATED TO THE COUNTY OF ANOKA.
 - DENOTES WETLAND EDGE AS DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICE COMPANY IN AUGUST 2023.

FOR THE PURPOSES OF THIS PLAT, THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 04, TOWNSHIP 32 NORTH, RANGE 23 WEST IS ASSUMED TO HAVE A BEARING OF SOUTH 89 DEGREES 16 MINUTES 38 SECONDS EAST.



TITLE SHEET

~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

VICINITY MAP

PART OF SEC. 4, TWP. 32, RING. 23




ANOKA COUNTY, MINNESOTA
 (NO SCALE)

SHEET INDEX

- T1 TITLE SHEET
- 2-3 PRELIMINARY PLAT
- 4-7 GRADING PLAN
- 8-11 LIVABILITY PLAN
- 12-14 LIVABILITY CHART
- R REMOVALS PLAN
- C1.1 - C1.8 STREET AND UTILITY PLANS
- C2.1 - C2.2 STORMWATER POLLUTION PREVENTION PLAN
- C3.1 - C3.3 DETAILS
- C4.1 - C4.3 TURN LANE PLAN

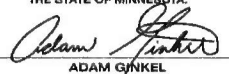
PONDING CALCULATIONS AND STORM SEWER DESIGN BY
 PLOWE ENGINEERING, INC.



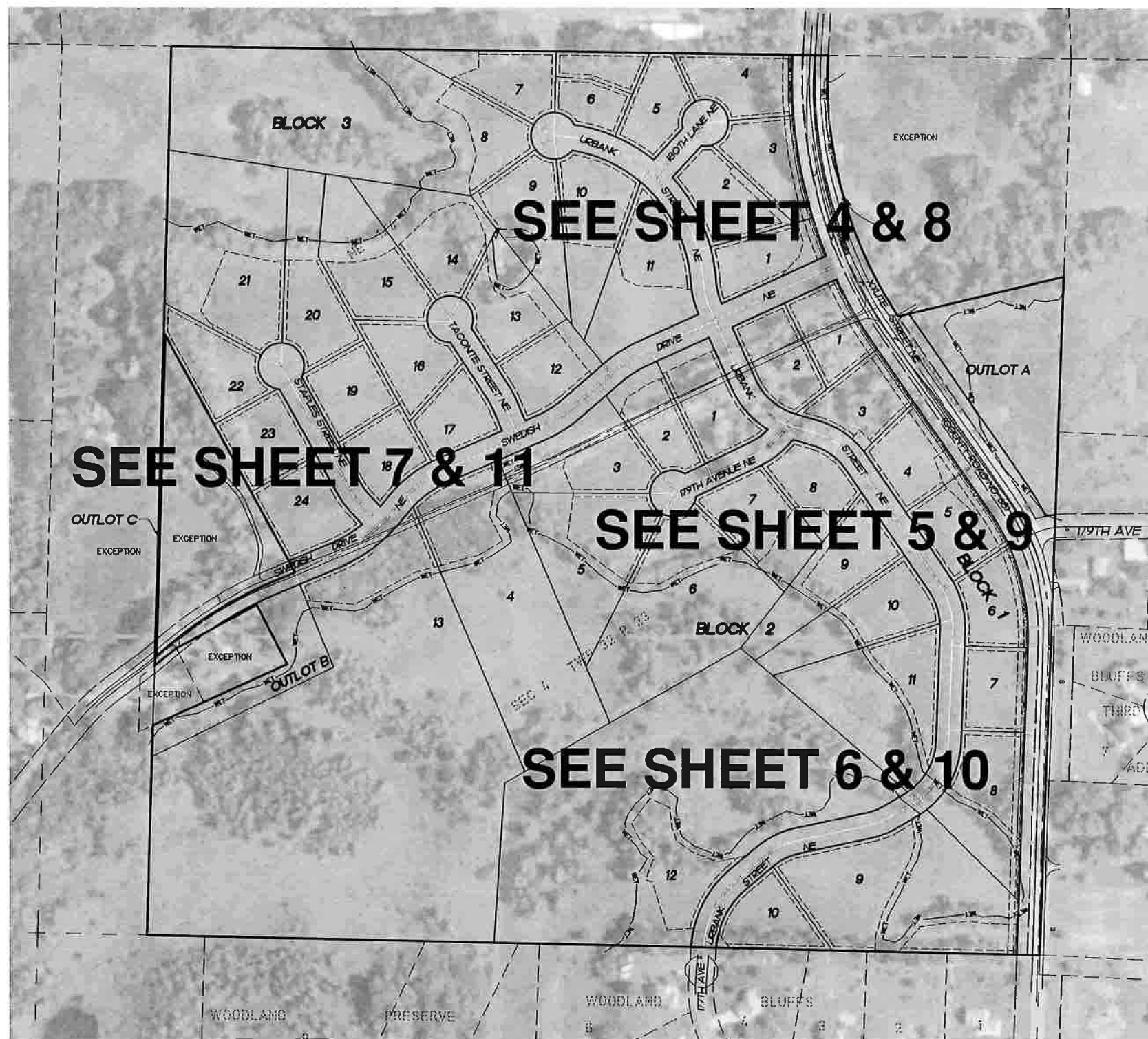
PLOWE
 ENGINEERING, INC.
 6776 LAKE DRIVE
 SUITE 110
 LINO LAKES, MN 55014

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

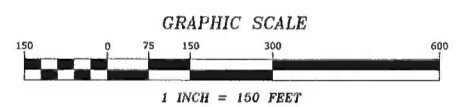
I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.



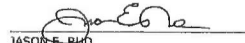
ADAM ORINKEL
 DATE: 07.29.2024 LIC. NO. 43963




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



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



JASON E. RUD
 Date: 07/29/2024 License No. 41578

NO.	DATE	DESCRIPTION	BY
1	04/08/24	VICINITY MAP	MMD
2	04/17/24	CITY COMMENTS	MMD
3	05/22/24	CITY COMMENTS	MMD
4	06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD
5	07/29/24	GEO. REPORT / FLOORS	MMD

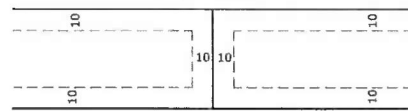
PRELIMINARY PLAT

~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

NORTH

TYPICAL EASEMENTS

(NOT TO SCALE)



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

NOTES

- Bearings shown are on Anoka County datum.
- Parcel ID Number: 04-32-23-14-0001
- Site Address: 2506 Swedish Drive NE
- OWNER: JOAN A DOSEDEL
- Legal description per title commitment prepared by Chicago Title Insurance dated 9/7/2023 Commitment No. 230943680.

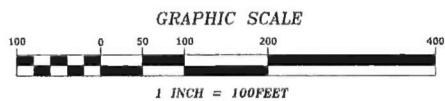
DEVELOPMENT DATA

- TOTAL SITE AREA = 111.42± ACRES
- OUTLOT AREA = 5.01± ACRES
- 47 PROPOSED SINGLE FAMILY LOTS
- AVERAGE LOT SIZE = 2.26 ACRES
- MINIMUM STREET FRONTAGE = 200 FEET
- MINIMUM LOT SIZE = 1.00 ACRES (INCLUDING HALF OF STREET ROW)
- PROPOSED ZONING = R-1
- BUILDING SETBACKS:
 - FRONT = 30 FEET
 - SIDE = 10 FEET
 - REAR = 50 FEET
 - COUNTY ROAD = 50 FEET

LEGEND

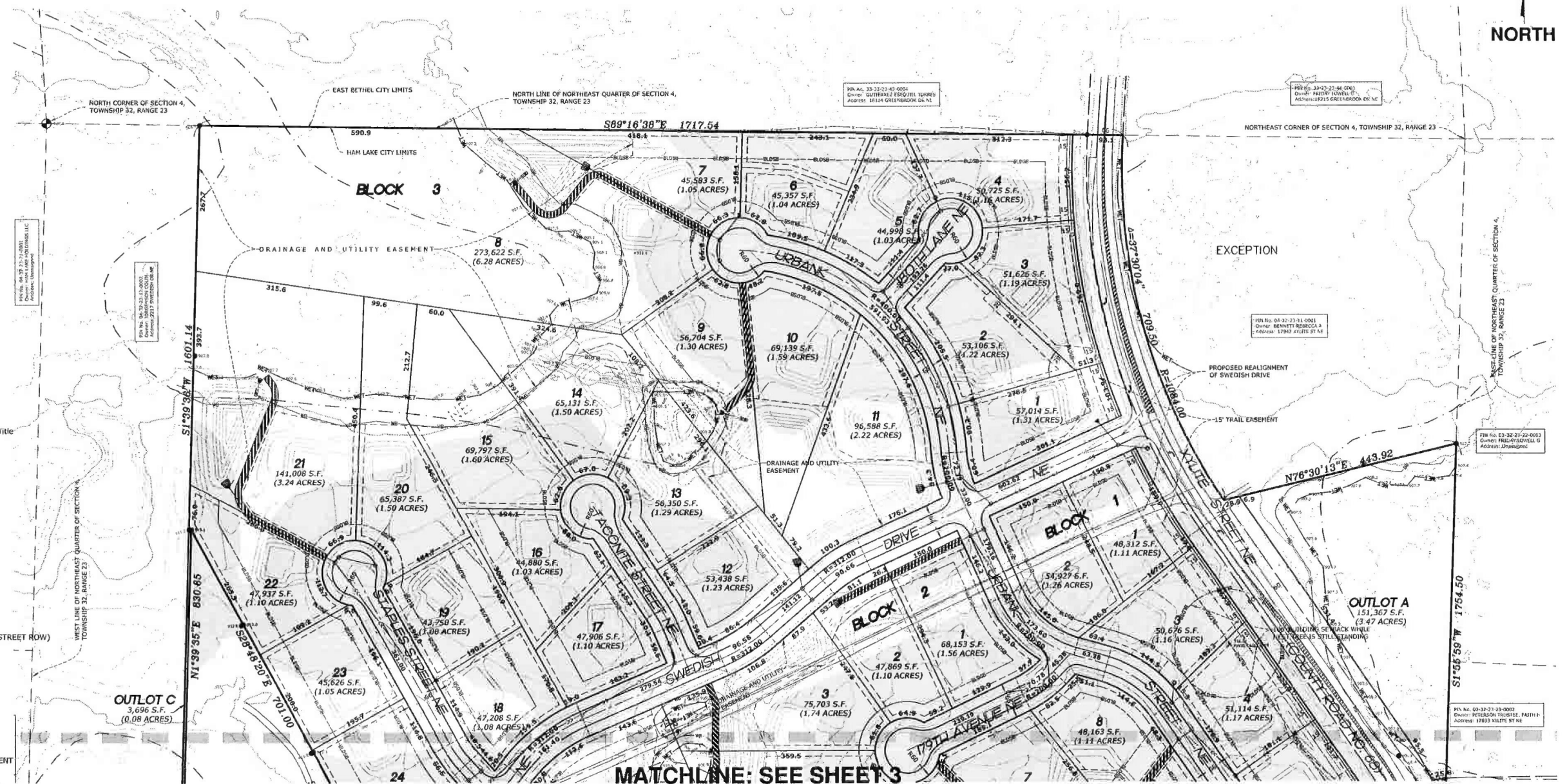
- DENOTES ANOKA COUNTY CAST IRON MONUMENT
- DENOTES IRON MONUMENT FOUND
- - - DENOTES EXISTING CONTOURS (2' INTERVAL)
- - - DENOTES DRAINAGE AND UTILITY EASEMENT
- - - DENOTES BUILDING SETBACK LINE
- △ DENOTES RESTRICTED ACCESS
- WET DENOTES WETLAND LINE DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES INC.
- WB DENOTES WETLAND BUFFER LINE
- - - DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 27003C0215E PANEL NO. 0215 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- DENOTES WETLAND FILL
- DENOTES EXISTING AREA 1' ABOVE MOTTILING
- DENOTES ADJACENT PARCEL OWNER INFORMATION (PER ANOKA COUNTY TAX INFORMATION)

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



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

JASON E. RUD
 Date: 07/29/2024 License No. 41578



MATCHLINE: SEE SHEET 3

PROPERTY DESCRIPTION

The Northeast Quarter of Section 4, Township 32, Range 23, excepting the following described tracts of land:

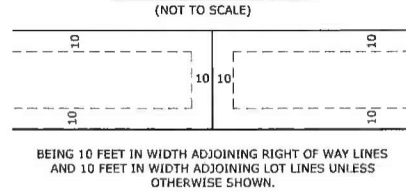
- The West 15 acres of the said Northeast Quarter of Section 4, Township 32, Range 23, heretofore sold and deeded to the Swedish Lutheran Society.
- A plot of ground, commencing at a point 23.49 chains South and 5.15 chains East (Variation 8 degrees 51 minutes in 1887) of Quarter corner on North side of Section 4, Township 32, Range 23; thence South 29 degrees East (Variation 8 degrees 51 minutes in 1887) 9 1/2 rods, to a tamarac stake; thence North 64 degrees East, 14 1/2 rods; thence North 29 degrees West, 10 1/2 rods; thence South 60 1/2 degrees West, 14 1/2 rods to point of commencement, containing 1 acre, more or less, being a part of the Southwest Quarter of Northeast Quarter of Section 4, Township 32, Range 23.
- Commencing at the Northeast corner of Section 4, Township 32, Range 23 and running thence West on and along town line between Towns of Bethel and Ham Lake a distance of 37 1/2 rods to East boundary line of Bethel and Minneapolis Road so called; thence in a Southerly direction on and along East road limit of said Bethel and Minneapolis Road as now located a distance of about 43 rods; thence in an Easterly direction a distance of about 24 1/2 rods to intersect the Section line running North and South between Sections 3 and 4 in said Township 32 and Range 23 at a point on said Section line a distance South from said Northeast corner of said Section 4, 34 rods; thence North on and along said Section line to place of commencement being a part of the Northeast Quarter of Northeast Quarter of Section 4, Township 32, Range 23, containing about 7 acres.
- That part of the Northeast Quarter of Section 4, Township 32, Range 23, described as follows: Commencing at a point 289 feet East and 732 feet North of the Southwest corner of said Northeast Quarter; thence Northeasterly along the center of the road 424 feet; thence Northwesterly 701 feet to the point, which is 289 feet East of the West line of the said Northeast Quarter; thence South to the point of beginning.
- Commencing at a point 1550.34 feet (23.49 chains) South and 339.9 feet (5.15 chains) East of the Quarter corner on the North side of Section 4; thence South 29 degrees East for 156.75 feet; thence South 64 degrees West for 187.4 feet; thence North, parallel with and 247.5 feet East of the Quarter Section line for 142.15 feet to the Southerly line of a public road; thence North 50 degrees 10 minutes East along said Southerly road line to the point of beginning, also all right of title in said adjacent public road to the center line thereof, Anoka County, Minnesota.

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	HMD
2	05/22/24	CITY COMMENTS	HMD
3	06/25/24	TRAIL EASEMENT / XYLITE LOTS	HMD
4	07/29/24	GEO. REPORT / FLOORS	HMD

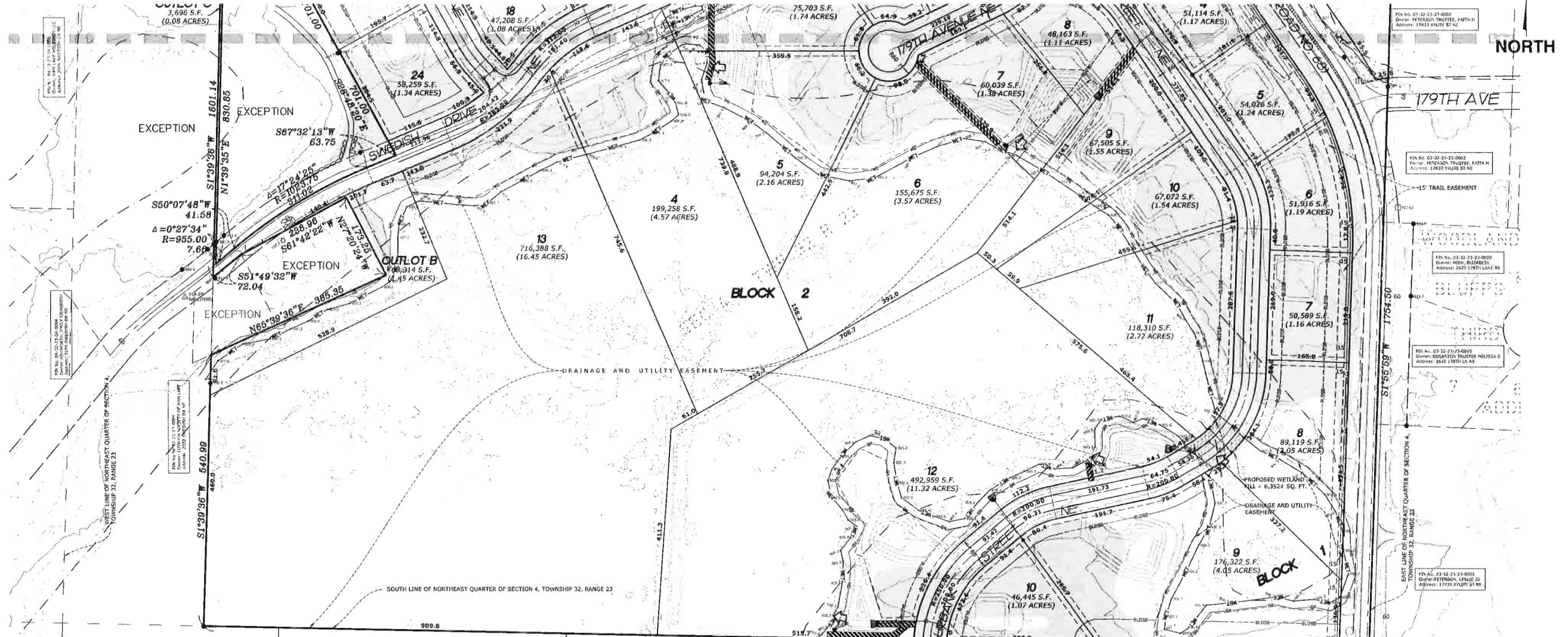
PRELIMINARY PLAT

~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

TYPICAL EASEMENTS

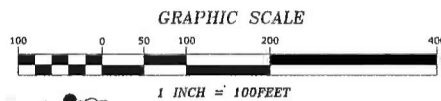


MATCHLINE: SEE SHEET 2



DEVELOPMENT DATA

- TOTAL SITE AREA = 111.42± ACRES
- OUTLOT AREA = 5.01± ACRES
- 47 PROPOSED SINGLE FAMILY LOTS
- AVERAGE LOT SIZE = 2.26 ACRES
- MINIMUM STREET FRONTAGE = 200 FEET
- MINIMUM LOT SIZE = 1.00 ACRES (INCLUDING HALF OF STREET ROW)
- PROPOSED ZONING = R-1
- BUILDING SETBACKS: FRONT = 30 FEET, SIDE = 10 FEET, REAR = 50 FEET, COUNTY ROAD = 50 FEET



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

LEGEND

- CAST IRON MONUMENT DENOTES ANOKA COUNTY CAST IRON MONUMENT
- IRON MONUMENT FOUND DENOTES IRON MONUMENT FOUND
- EXISTING CONTOURS (2' INTERVAL) DENOTES EXISTING CONTOURS (2' INTERVAL)
- DRAINAGE AND UTILITY EASEMENT DENOTES DRAINAGE AND UTILITY EASEMENT
- BUILDING SETBACK LINE DENOTES BUILDING SETBACK LINE
- RESTRICTED ACCESS DENOTES RESTRICTED ACCESS
- WETLAND LINE DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES INC. DENOTES WETLAND LINE DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES INC.
- WETLAND BUFFER LINE DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 27003C0215E PANEL NO. 0215 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- WETLAND FILL DENOTES WETLAND FILL
- EXISTING AREA 1' ABOVE MOTTLING DENOTES EXISTING AREA 1' ABOVE MOTTLING
- ADJACENT PARCEL OWNER INFORMATION (PER ANOKA COUNTY TAX INFORMATION) DENOTES ADJACENT PARCEL OWNER INFORMATION (PER ANOKA COUNTY TAX INFORMATION)

NOTES

- Bearings shown are on Anoka County datum.
- Parcel ID Number: 04-32-23-14-0001
- Site Address: 2506 Swedish Drive NE
- OWNER: JOAN A DOSEDEL
- Legal description per title commitment prepared by Chicago Title Insurance dated 9/7/2023 Commitment No. 230943680.

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

JASON E. RUD
 Date: 07/29/2024 License No. 41578

PROPERTY DESCRIPTION

The Northeast Quarter of Section 4, Township 32, Range 23, excepting the following described tracts of land:

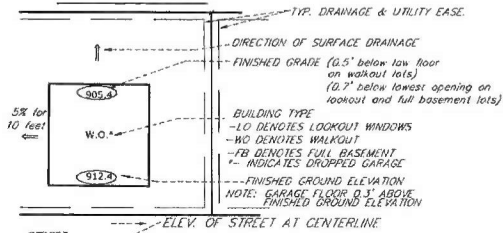
- The West 15 acres of the said Northeast Quarter of Section 4, Township 32, Range 23, heretofore sold and deeded to the Swedish Lutheran Society.
- A plot of ground, commencing at a point 23.49 chains South and 5.15 chains East (Variation 8 degrees 51 minutes in 1887) of Quarter corner on North side of Section 4, Township 32, Range 23; thence South 29 degrees East (Variation 8 degrees 51 minutes in 1887) 9 1/2 rods, to a tamarac stake; thence North 64 degrees East, 14 1/2 rods; thence North 29 degrees West, 10 1/2 rods; thence South 60 1/2 degrees West, 14 1/2 rods to point of commencement, containing 1 acre, more or less, being a part of the Southwest Quarter of Northeast Quarter of Section 4, Township 32, Range 23.
- Commencing at the Northeast corner of Section 4, Township 32, Range 23 and running thence West on and along town line between Towns of Bethel and Hain Lake a distance of 37 1/2 rods to East boundary line of Bethel and Minneapolis Road so called; thence in a Southerly direction on and along East road limit of said Bethel and Minneapolis Road as now located a distance of about 43 rods; thence in an Easterly direction a distance of about 24 1/2 rods to intersect the Section line running North and South between Sections 3 and 4 in said Township 32 and Range 23 at a point on said Section line a distance South from said Northeast corner of said Section 4, 34 rods; thence North on and along said Section line to place of commencement being a part of the Northeast Quarter of Northeast Quarter of Section 4, Township 32, Range 23, containing about 7 acres.
- That part of the Northeast Quarter of Section 4, Township 32, Range 23, described as follows: Commencing at a point 289 feet East and 732 feet North of the Southwest corner of said Northeast Quarter; thence Northwesterly along the center of the road 424 feet; thence Northwesterly 701 feet to the point, which is 289 feet East of the West line of the said Northeast Quarter; thence South to the point of beginning.
- Commencing at a point 1550.34 feet (23.49 chains) South and 339.9 feet (5.15 chains) East of the Quarter corner on the North side of Section 4; thence South 29 degrees East for 156.75 feet; thence South 64 degrees West for 187.4 feet; thence North, parallel with and 247.5 feet East of the Quarter Section line for 142.15 feet to the Southerly line of a public road; thence North 50 degrees 10 minutes East along said Southerly road line to the point of beginning, also all right of title in said adjacent public road to the center line thereof, Anoka County, Minnesota.

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	HMD
2	05/22/24	CITY COMMENTS	HMD
3	05/25/24	TRAIL EASEMENT / XYLTITE LOTS	HMD
4	07/29/24	GEO. REPORT / FLOORS	HMD

GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

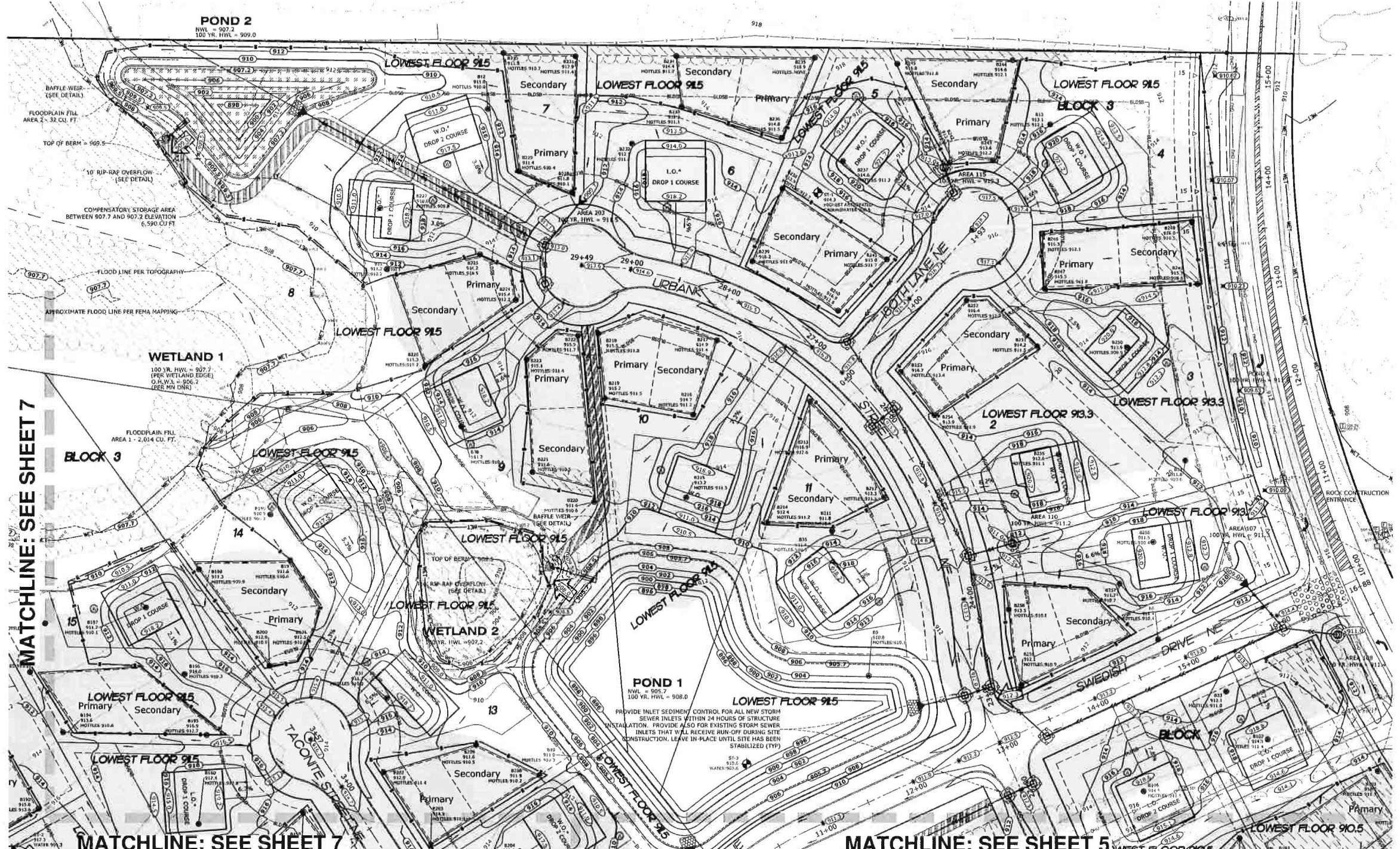
~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

TYPICAL LOT



LEGEND

- ⊙ DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- ⊙ DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTEREC, INC.
- ⊙ DENOTES EMERGENCY OVERFLOW ELEVATION
- ⊙ DENOTES EXISTING SPOT ELEVATION
- WET DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIO ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- ⊙ DENOTES PROPOSED SPOT ELEVATION
- ⊙ DENOTES PROPOSED CENTERLINE ELEVATION
- ⊙ DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE MOTTLES
- DENOTES WETLAND / VEGETATIVE BUFFER
- DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER INLET PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 270603035E PANEL NO. 0355 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- DENOTES FLOOD ZONE LINE PER TOPOGRAPHY
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES WETLAND FILL
- DENOTES FLOODPLAIN FILL
- DENOTES COMPENSATORY STORAGE AREA



MATCHLINE: SEE SHEET 7

MATCHLINE: SEE SHEET 7

MATCHLINE: SEE SHEET 5

LOT GRADING NOTES

- PAD CONTOURS SHOWN ARE FOR DEMONSTRATION PURPOSES.
- HOUSE TYPES AND GRADING THAT VARY FROM WHAT IS PROPOSED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF HAM LAKE.
- SILT FENCE TO BE INSTALLED BY BUILDER PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN 15TS AREAS

FLOODPLAIN FILL NOTES

- FLOODPLAIN FILL WETLAND 1 BASIN = 2,046 CU/FT
- COMPENSATORY STORAGE = 6,590 CU/FT (COMPENSATORY STORAGE PROVIDED IN POND 2 BETWEEN 907.7 AND 907.2 ELEVATION)

WETLAND FILL NOTES

WETLAND FILL AREA = 6,3524 SQ. FT.

NOTES

- BEARINGS SHOWN ARE ON ANOKIA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER HINGED LEAD DISTRIBUTION AND FIELD VERIFICATION
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
- BRAUN INTEREC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PIEZOMETERS, ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE APRONS UNDER 48" PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX PRODOT 23-261.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COWD 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS.
- CONTRACTORS MUST BE PROVIDED WITH DNR FILERS/ FACT SHEETS ON BLANDING'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED

TREE PROTECTION NOTES

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

EROSION CONTROL / REVEGETATION SPECS.

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

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

JASON E. RUD
 DATE: 07/29/2024 License No. 41578

NORTH

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	MMD
2	05/22/24	CITY COMMENTS	MMD
3	05/28/24	CITY COMMENTS	MMD
4	06/25/24	TRAIL EASEMENT / XLTILE LOTS	MMD
5	07/02/24	CITY COMMENTS	MMD
6	07/29/24	GEO. REPORT / FLOORS	MMD
NO.	DATE	DESCRIPTION	BY

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

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

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

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

Adam Ginkel
 ADAM GINKEL
 DATE: 07.29.2024 LIC. NO. 43963

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

E. G. RUD & SONS, INC.
 181, 1977 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110 Lino Lakes, MN 55014
 Tel. (651) 361-8200 Fax (651) 361-8701

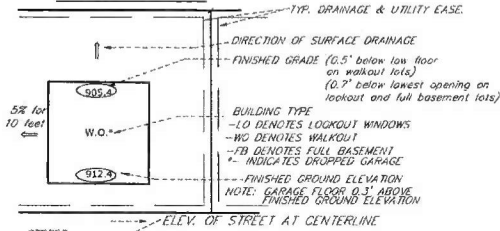
www.egrud.com

GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

MATCHLINE: SEE SHEET 4

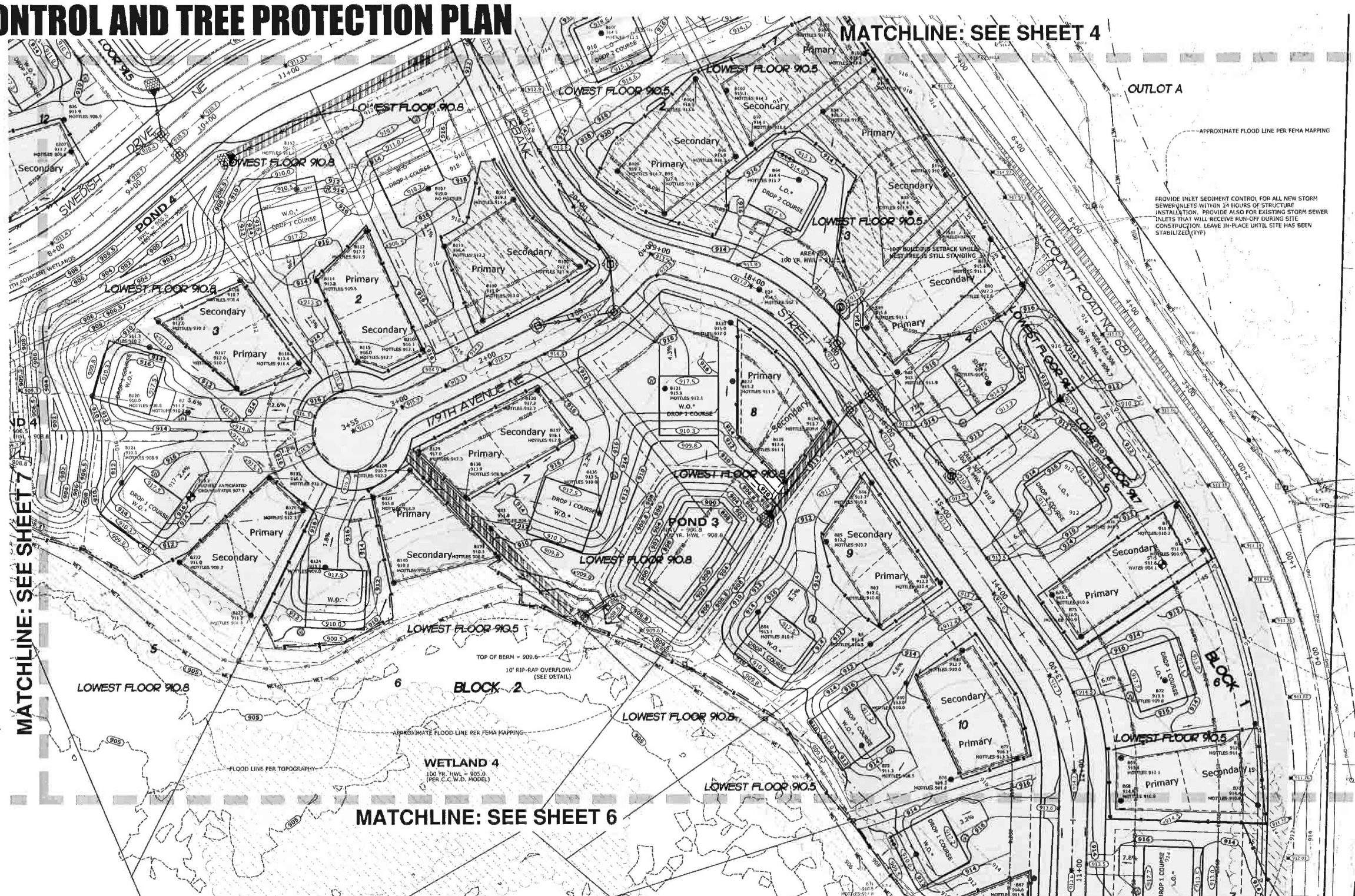
~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

TYPICAL LOT



LEGEND

- ⊙ DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- ⊙ DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- ⊙ DENOTES EMERGENCY OVERFLOW ELEVATION
- ⊙ DENOTES EXISTING SPOT ELEVATION
- ⊙ DENOTES WET LAND
- ⊙ DENOTES EXISTING 2 FOOT CONTOUR
- ⊙ DENOTES PROPOSED 2 FOOT CONTOURS
- ⊙ DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- ⊙ DENOTES EASEMENT LINE
- ⊙ DENOTES SETBACK LINE
- ⊙ DENOTES PROPOSED STORM SEWER
- ⊙ DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- ⊙ DENOTES BIO ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- ⊙ DENOTES DIRECTION OF DRAINAGE
- ⊙ DENOTES PROPOSED SPOT ELEVATION
- ⊙ DENOTES PROPOSED CENTERLINE ELEVATION
- ⊙ DENOTES PROPOSED WELL LOCATION
- ⊙ DENOTES AREA 1' ABOVE HOTELS
- ⊙ DENOTES WETLAND / VEGETATIVE BUFFER
- ⊙ DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- ⊙ DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- ⊙ DENOTES PROPOSED STORM SEWER INLET PROTECTION
- ⊙ DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 27002C032E PANEL NO. 0355 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- ⊙ DENOTES FLOOD ZONE LINE PER TOPOGRAPHY
- ⊙ DENOTES TREE PRESERVATION AREA
- ⊙ DENOTES 12' POND ACCESS
- ⊙ DENOTES FLOODPLAIN FILL
- ⊙ DENOTES WETLAND FILL
- ⊙ DENOTES COMPENSATORY STORAGE AREA



OUTLOT A

APPROXIMATE FLOOD LINE PER FEMA MAPPING

PROVIDE INLET SEDIMENT CONTROL FOR ALL NEW STORM SEWER INLETS WITHIN 24 HOURS OF STRUCTURE INSTALLATION. PROVIDE ALSO FOR EXISTING STORM SEWER INLETS THAT WILL RECEIVE RUN-OFF DURING SITE CONSTRUCTION. LEAVE IN-PLACE UNTIL SITE HAS BEEN STABILIZED (TYP)

MATCHLINE: SEE SHEET 7

MATCHLINE: SEE SHEET 6

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

PLOWE ENGINEERING, INC.
 8776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014

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

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

Adam Ginkel
 ADAM GINKEL
 DATE: 07/29/2024 LIC. NO. 43983

LOT GRADING NOTES

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

EROSION CONTROL / REVEGETATION SPECS.

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

FLOODPLAIN FILL NOTES

- (FLOODPLAIN FILL)
- FLOODPLAIN FILL WETLAND 1 BASIN=2,046 CUFT
 - COMPENSATORY STORAGE = 6,530 CUFT
 - (COMPENSATORY STORAGE PROVIDED IN POND 2 BETWEEN 907.7 AND 907.2 ELEVATION)

TREE PROTECTION NOTES

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

WETLAND FILL NOTES

- WETLAND FILL AREA = 6,352± SQ. FT.

NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MNGED LIDAR DISTRIBUTION AND FIELD VERIFICATION
- ALL HATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
- BRAUN INTERTEC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PIEZOMETERS, ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE ARCHES UNDER 48" PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MNDOT 33-261.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND BLINDING TO CCVD 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS
- CONTRACTORS MUST BE PROVIDED WITH DNR FLYERS/ FACT SHEETS ON LANDINGS'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED

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

JASON E. RUD
 JASON E. RUD
 DATE: 07/29/2024 License No. 41578

NORTH

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	HMD
2	05/22/24	CITY COMMENTS	HMD
3	06/25/24	TRAIL EASEMENT / XLYTE LOTS	HMD
4	07/02/24	CITY COMMENTS	HMD
5	07/29/24	GEO. REPORT / FLOORS	HMD

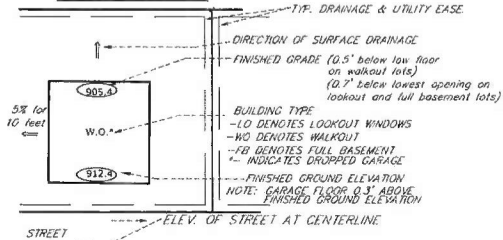
E. G. RUD & SONS, INC.
 EST. 1977 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110 Lino Lakes, MN 55014
 Tel. (651) 361-8200 Fax (651) 361-8701

GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

MATCHLINE: SEE SHEET 5

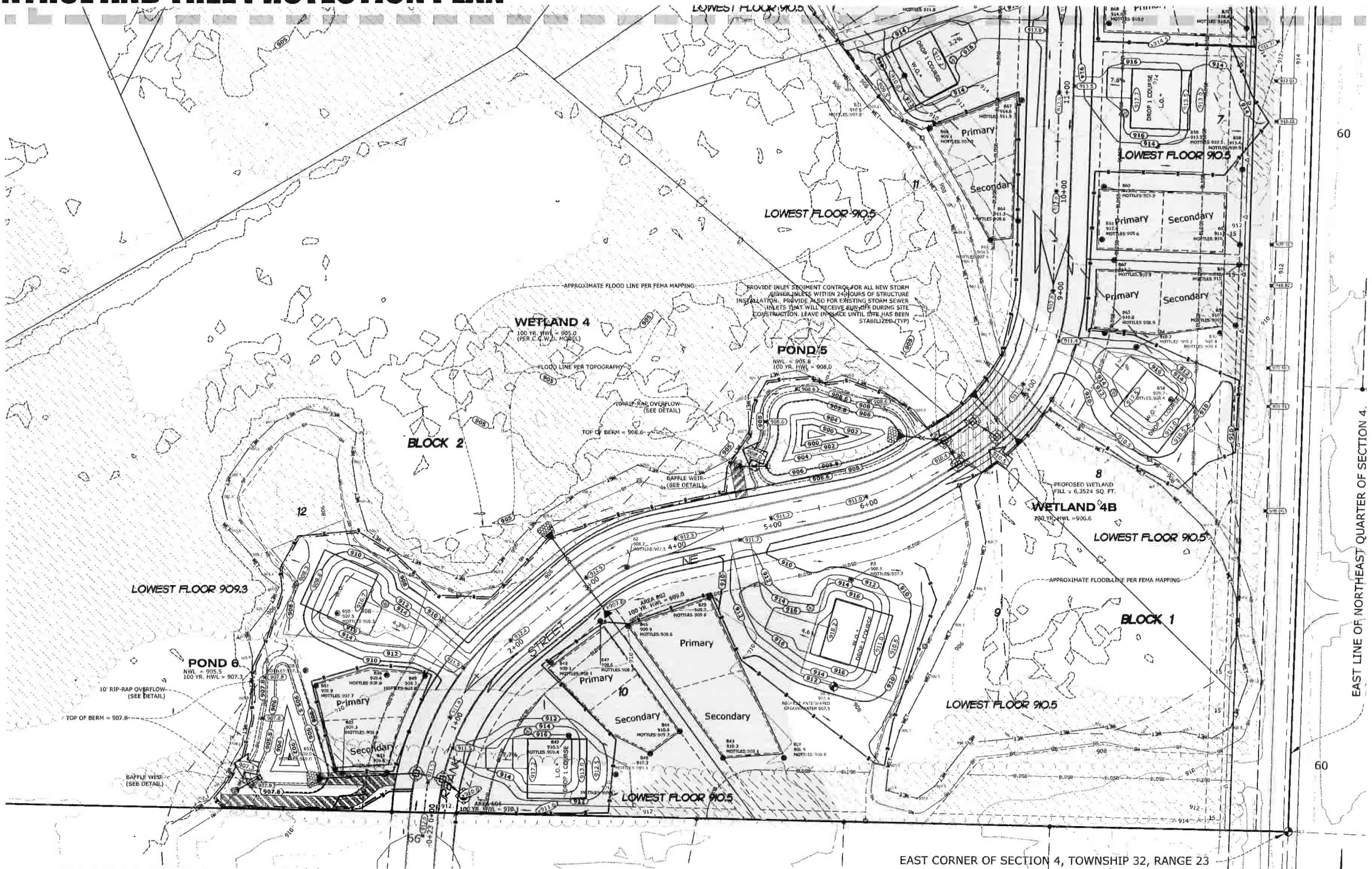
~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

TYPICAL LOT



LEGEND

- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTEREC, INC.
- DENOTES EMERGENCY OVERFLOW ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- WET DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIG ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTERLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE HOTTLES
- DENOTES WETLAND / VEGETATIVE BUFFER
- DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER INLET PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 270803033E PANEL NO. 0355 SUFFIX E, EFFECTIVE DATE DECEMBER 16TH, 2015.
- DENOTES FLOOD ZONE LINE PER TOPOGRAPHY
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES WETLAND FILL
- DENOTES FLOODPLAIN FILL
- DENOTES COMPENSATORY STORAGE AREA



PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014
 SITE PLANNING & ENGINEERING PHONE: (651) 361-8210 FAX: (651) 361-8701
 I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 ADAM GINKEL
 DATE: 07.29.2024 LIC. NO. 43863

LOT GRADING NOTES

- PAD CONTOURS SHOWN ARE FOR DEMONSTRATION PURPOSES.
- HOUSE TYPES AND GRADING THAT VARY FROM WHAT IS PROPOSED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF HAM LAKE.
- SILT FENCE TO BE INSTALLED BY BUILDER PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN 1555 AREAS.

EROSION CONTROL / REVEGETATION SPECS.

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

FLOODPLAIN FILL NOTES

(FLOODPLAIN FILL)
 FLOODPLAIN FILL WETLAND 1 BASIN=2,046 CU/FT
 COMPENSATORY STORAGE = 6,590 CU/FT
 (COMPENSATORY STORAGE PROVIDED IN POND 2 BETWEEN 907.7 AND 907.2 ELEVATION)

TREE PROTECTION NOTES

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

WETLAND FILL NOTES

- WETLAND FILL AREA = 6,3524 SQ. FT.

NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER HINGEO LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
- BRAUN INTEREC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PIEZOMETERS, ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE APRONS UNDER 48" PROVIDED WITH TRASH GUARDS.
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MND033-261.
- IF Dewatering is required, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CWD 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS.
- CONTRACTORS MUST BE PROVIDED WITH DNR FILTERS/ FACT SHEETS ON BANDING'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED.

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

JASON E. RUD
 Date: 07/29/2024 License No. 41578

NORTH

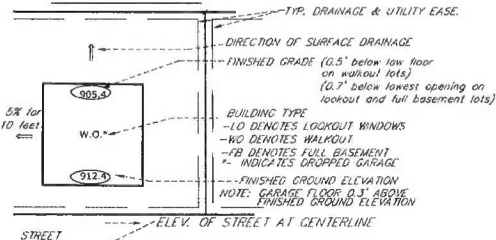
DRAWN BY: HMD	JOB NO: 230743	DATE: 03/20/24	
CHECK BY: JER	FIELD CREW: DT/CT		
1	04/17/24	CITY COMMENTS	HMD
2	05/22/24	CITY COMMENTS	HMD
3	05/25/24	TRAIL EASEMENT / XYLITE LOTS	HMD
4	07/02/24	CITY COMMENTS	HMD
5	07/29/24	GEO. REPORT / FLOORS	HMD
NO.	DATE	DESCRIPTION	BY

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

GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

TYPICAL LOT



LEGEND

- ⊙ DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- ⊙ DENOTES PNEUMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- ⊙ DENOTES EMERGENCY OVERFLOW ELEVATION
- 895.0 DENOTES EXISTING SPOT ELEVATION
- W.O. DENOTES WET LAND
- 2' DENOTES EXISTING 2 FOOT CONTOUR
- 2' DENOTES PROPOSED 2 FOOT CONTOURS
- WET DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- BL-050 DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BIO ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- 895.0 DENOTES PROPOSED SPOT ELEVATION
- 895.0 DENOTES PROPOSED CENTERLINE ELEVATION
- ⊙ DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE MOTTLES
- W DENOTES WETLAND / VEGETATIVE BUFFER
- W DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- ⊙ DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- ⊙ DENOTES PROPOSED STORM SEWER INLET PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE FROM FEMA FLOOD INSURANCE RATE MAP NO. 23020335E PANEL NO. 0355 SUFFIX E, EFFECTIVE DATE: DECEMBER 16TH, 2015.
- DENOTES FLOOD ZONE LINE PER TOPOGRAPHY
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES WETLAND FILL
- DENOTES FLOODPLAIN FILL
- DENOTES COMPENSATORY STORAGE AREA



EROSION CONTROL / REVEGETATION SPECS.

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

LOT GRADING NOTES

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

WETLAND FILL NOTES

- WETLAND FILL AREA = 6,352± SQ. FT.

NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (HWD 89)
- CONTOURS SHOWN ARE PER MNGED LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEEDDED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
- BRAUN INTERTEC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PNEUMETERS. ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE APRONS UNDER 48" PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MNDOT 33-201.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CCWD 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS.
- CONTRACTORS MUST BE PROVIDED WITH DNR FLYERS/ FACT SHEETS ON BLANDING'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED

FLOODPLAIN FILL NOTES

- (FLOODPLAIN FILL)
- FLOODPLAIN FILL WETLAND 1 BASIN=2,046 CU/FT
- COMPENSATORY STORAGE = 6,590 CU/FT
- (COMPENSATORY STORAGE PROVIDED IN POND 2 BETWEEN 907.7 AND 907.2 ELEVATION)

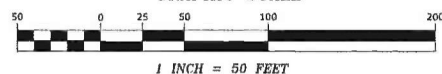
TREE PROTECTION NOTES

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

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

JASON E. RUD
 Date: 07/29/2024 License No. 41578

PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 56014
 PHONE: (612) 361-8210 FAX: (612) 361-8701
 I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 ADAM GINKEL
 DATE: 07/29/2024 LIC. NO. 43963

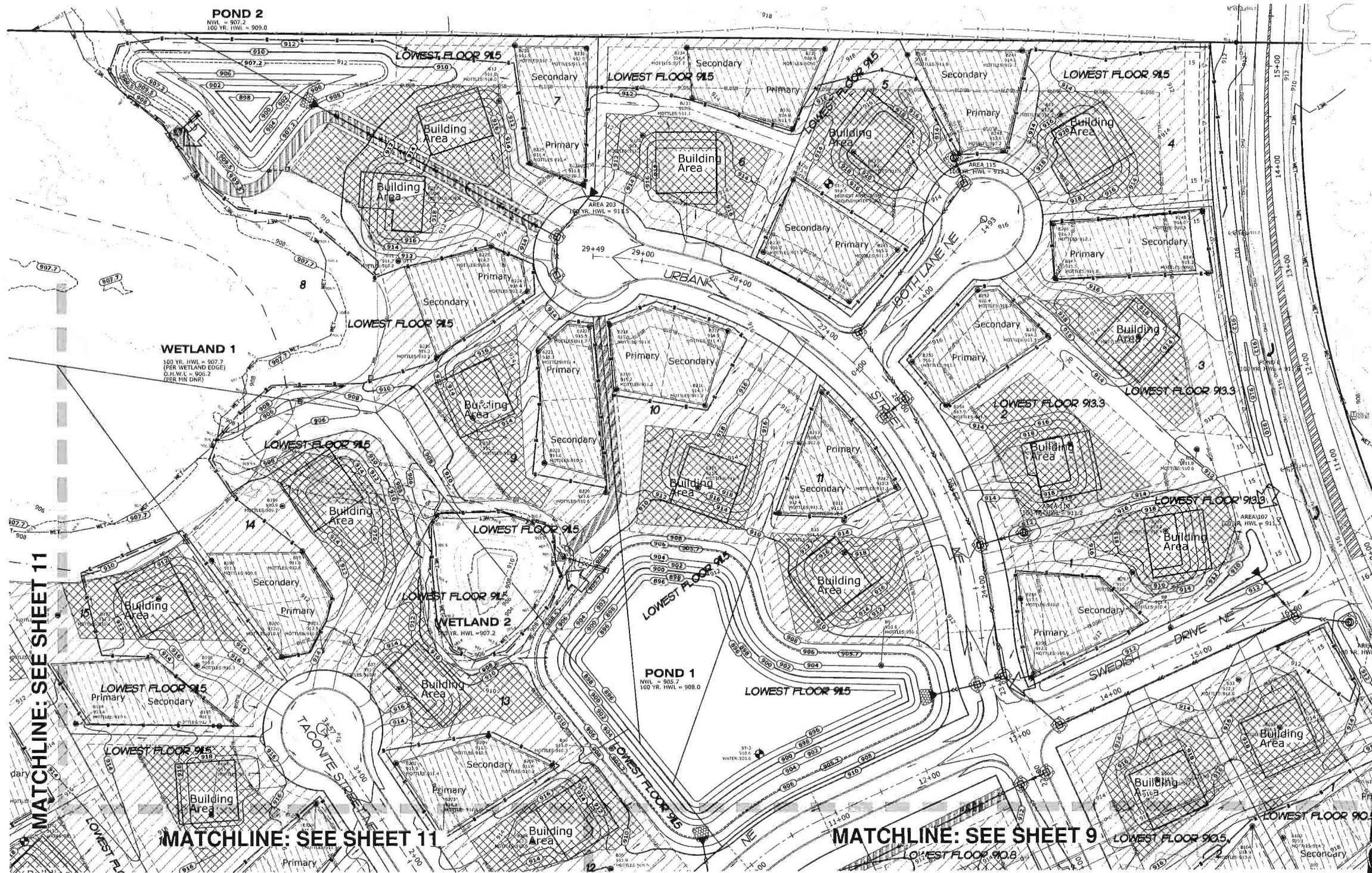


E. G. RUD & SONS, INC.
 EST. 1977
 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110
 Lino Lakes, MN 55014
 Tel. (651) 361-8200 Fax (651) 361-8701

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	MMD
2	05/22/24	CITY COMMENTS	MMD
3	06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD
4	07/02/24	CITY COMMENTS	MMD
5	07/29/24	GEO. REPORT / FLOORS	MMD

LIVABILITY PLAN

~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471



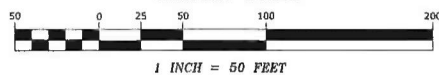
LEGEND

- ⊙ DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- ⊕ DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- x 952.3 DENOTES EXISTING SPOT ELEVATION
- WET DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- - - DENOTES PROPOSED 2 FOOT CONTOURS
- WET DENOTES WETLAND DELINEATED BY KJOLHALL ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES DIRECTION OF DRAINAGE
- ⊙ DENOTES PROPOSED WELL LOCATION
- DENOTES WETLAND / VEGETATIVE BUFFER
- DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- DENOTES PROPOSED BUILDING PAD AREA
- DENOTES PROPOSED YARD AREA
- DENOTES PROPOSED SEPTIC AREA
- DENOTES 12' POND ACCESS

PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014
 SITE PLANNING PHONE: (651) 361-8210 & ENGINEERING FAX: (651) 361-8701
 I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

 ADAM GINKEL
 DATE: 07.29.2024 LIC. NO. 43963

GRAPHIC SCALE



NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MINGO LIDAR DISTRIBUTION AND FIELD VERIFICATION
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEEDED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
- BRAUN INTERTEC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PIEZOMETERS, ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE APRONS UNDER 48" PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MNDOT 33-261.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CCWD 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS.
- CONTRACTORS MUST BE PROVIDED WITH DNR FLYERS / FACT SHEETS ON BLANDING'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED

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

JASON E. BLUD
 Date: 07/29/2024 License No. 41578

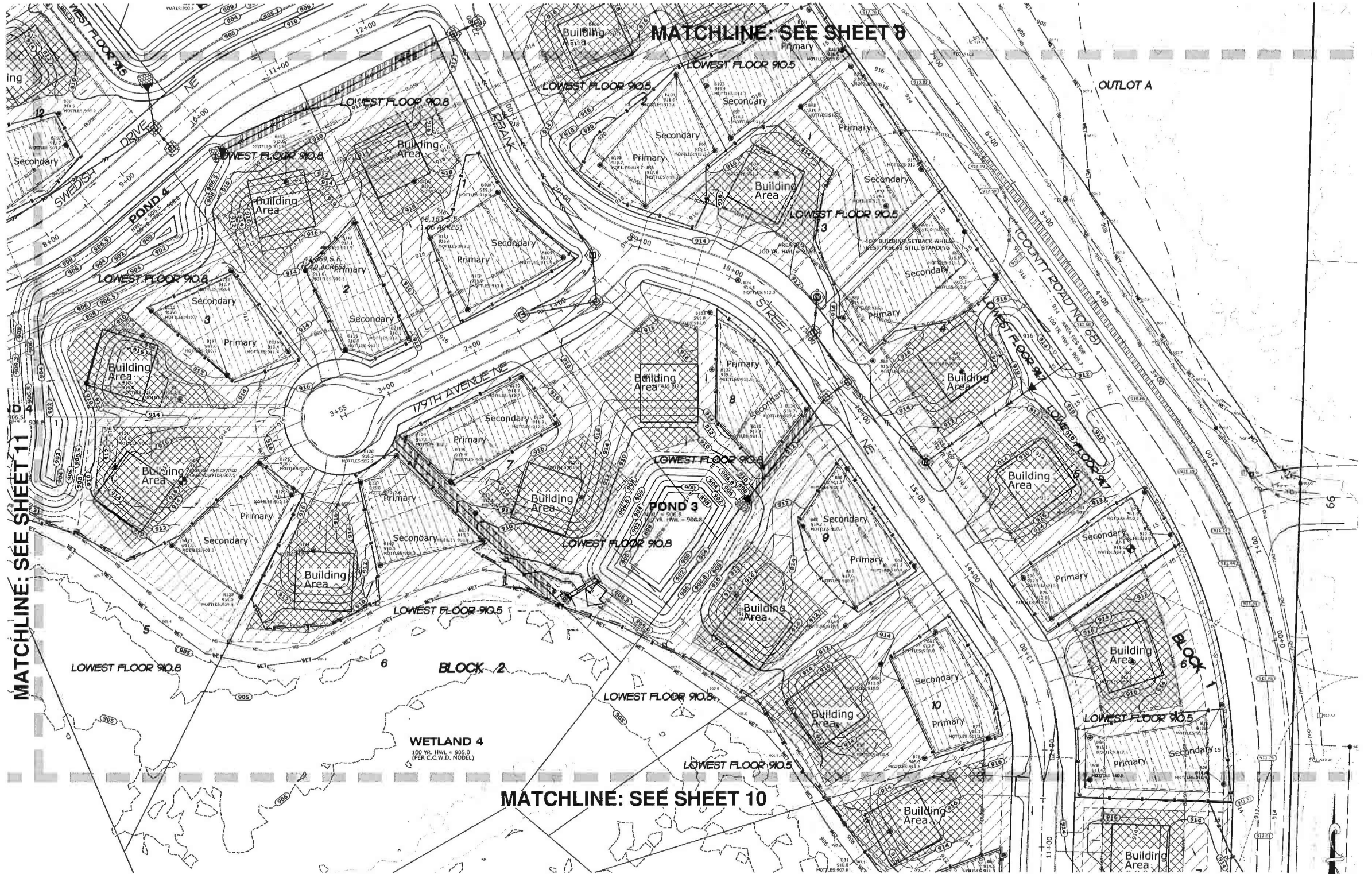
NORTH

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	MMD
2	05/22/24	CITY COMMENTS	MMD
3	05/28/24	CITY COMMENTS	MMD
4	06/25/24	TRAIL EASEMENT / XYLITE LOTS	MMD
5	07/02/24	CITY COMMENTS	MMD
6	07/29/24	GEO. REPORT / FLOORS	MMD

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

LIVABILITY PLAN

~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471



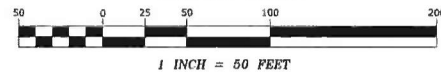
LEGEND

- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED WELL LOCATION
- DENOTES WETLAND / VEGETATIVE BUFFER
- DENOTES WETLAND / VEGETATIVE BUFFER SIGN
- DENOTES PROPOSED BUILDING PAD AREA
- DENOTES PROPOSED YARD AREA
- DENOTES PROPOSED SEPTIC AREA
- DENOTES 12' POND ACCESS

PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014
 PHONE: (651) 361-8210 FAX: (651) 361-8701
 I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

 ADAM GUNKEL
 DATE: 07.29.2024 LIC. NO. 43963

GRAPHIC SCALE



NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MNGEO LOGAR DISTRIBUTION AND FIELD VERIFICATION
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEEDED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
- BRAUN INTERTEC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PIEZOMETERS, ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE APPROX UNDER 48" PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MNDOT 33-261.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CDDV 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS.
- CONTRACTORS MUST BE PROVIDED WITH OUR FLYERS / FACT SHEETS ON BLANDING'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED.

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

JASON E. RUD
 Date: 07/29/2024 License No. 41578

DRAWN BY:	MMD	JOB NO:	230743	DATE:	03/20/24
CHECK BY:	JER	FIELD CREW:	DT/CT		
NO.	DATE	DESCRIPTION	BY		
1	04/17/24	CITY COMMENTS	MMD		
2	05/22/24	CITY COMMENTS	MMD		
3	06/25/24	TRAIL EASEMENT / XLYTE LOTS	MMD		
4	07/02/24	CITY COMMENTS	MMD		
5	07/29/24	GEO. REPORT / FLOODS	MMD		

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

NORTH

LIVABILITY PLAN

~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KJOLHAUG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED WELL LOCATION
- DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- DENOTES PROPOSED BUILDING PAD AREA
- DENOTES PROPOSED YARD AREA
- DENOTES PROPOSED SEPTIC AREA
- DENOTES 12' POND ACCESS

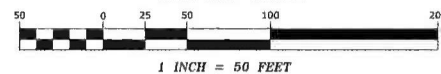
PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 6778 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014
 PHONE: (651) 361-8210 FAX: (651) 361-8701

SITE PLANNING & ENGINEERING

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

Adam Ginkel
ADAM GINKEL
 DATE: 07.29.2024 LIC. NO. 43963

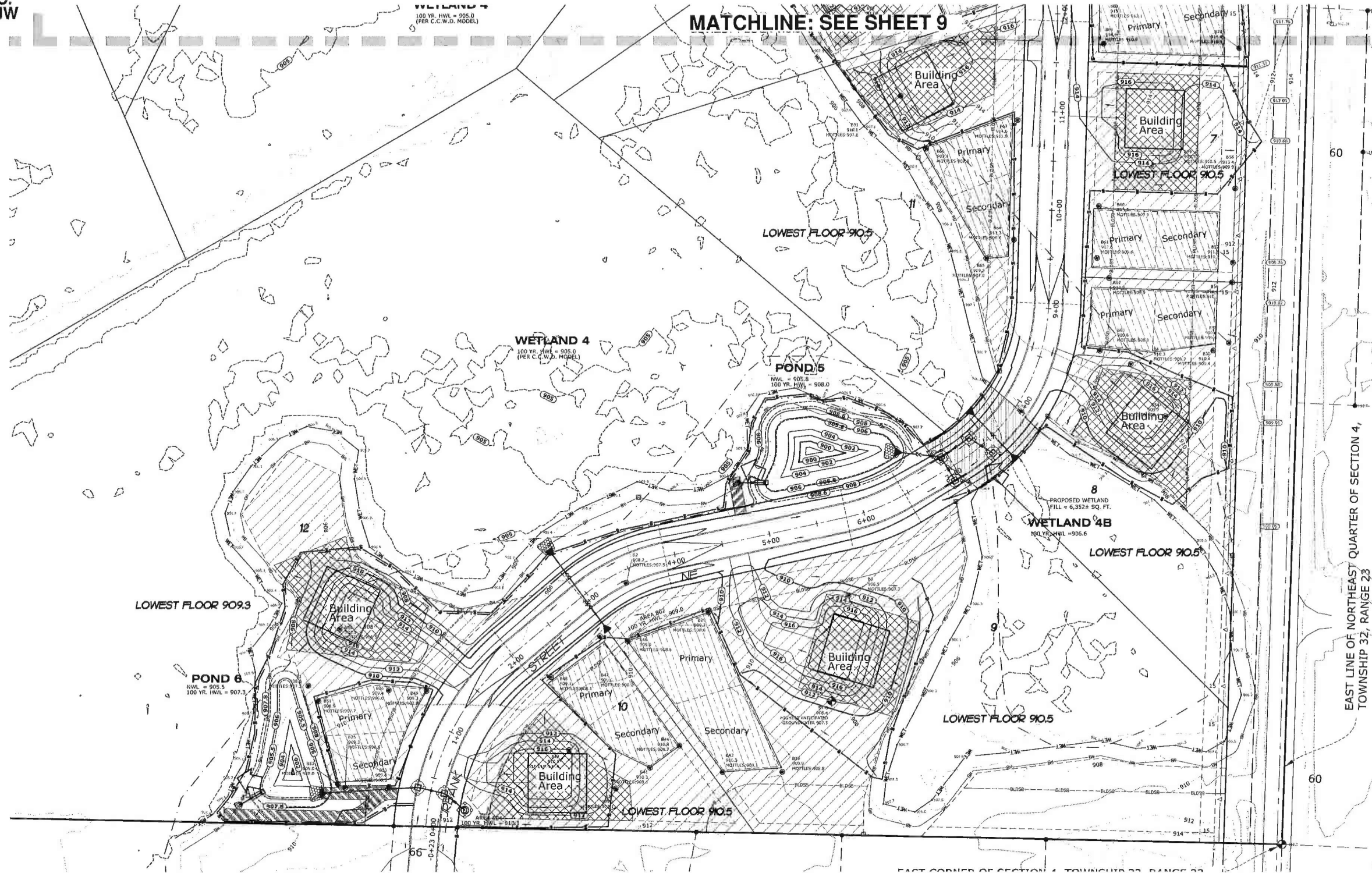
GRAPHIC SCALE



NOTES

- BEARINGS SHOWN ARE ON ANOKIA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MINGO LIDAR DISTRIBUTION AND FIELD VERIFICATION
- ALL HATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS.
- BRAUN INTERTEC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PIEZOMETERS, ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE APRONS UNDER 48" PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MNDOT 33-261.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CCWD 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS.
- CONTRACTORS MUST BE PROVIDED WITH DNR FLYERS/ FACT SHEETS ON BLANDING'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED

MATCHLINE: SEE SHEET 9



EAST LINE OF NORTHEAST QUARTER OF SECTION 4,
 TOWNSHIP 32, RANGE 23

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

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

Jason E. Rud
JASON E. RUD
 Date: 07/29/2024 License No. 41578

NO.	DATE	DESCRIPTION	BY
1	04/17/24	CITY COMMENTS	HMD
2	05/22/24	CITY COMMENTS	HMD
3	06/25/24	TRAIL EASEMENT / XYLITE LOTS	HMD
4	07/02/24	CITY COMMENTS	HMD
5	07/29/24	GEO. REPORT / FLOORS	HMD
NO.	DATE	DESCRIPTION	BY

NORTH

LIVABILITY PLAN

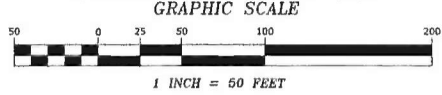
~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

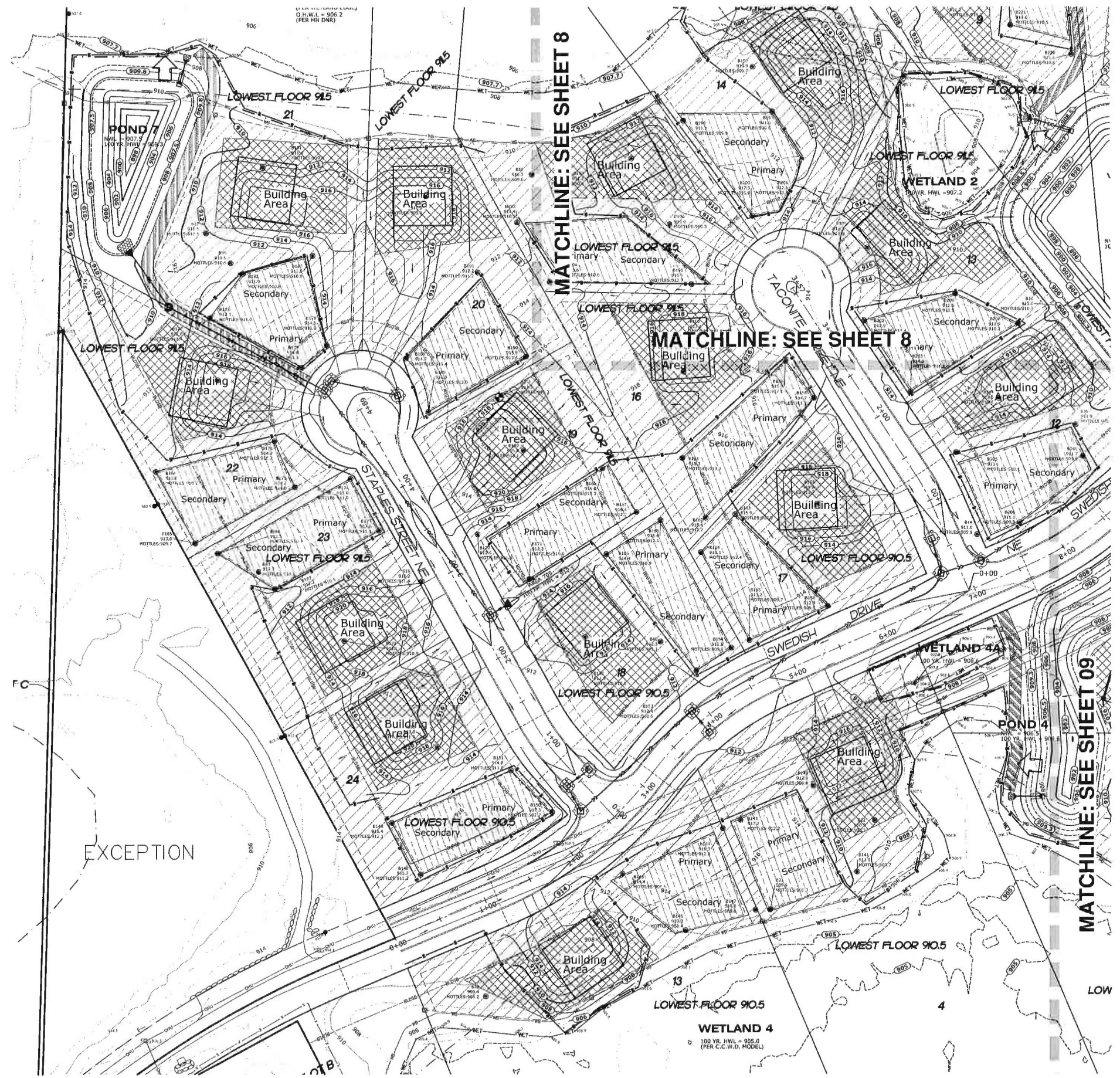
- DENOTES SOIL BORING BY TRADEWELL SOIL TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WETLAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KJOLHANG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED WELL LOCATION
- DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- DENOTES PROPOSED BUILDING PAD AREA
- DENOTES PROPOSED YARD AREA
- DENOTES PROPOSED SEPTIC AREA
- DENOTES 12' POND ACCESS

PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 6776 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014
 PHONE: (651) 361-8210 FAX: (651) 361-8701
 I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT AND DRAINAGE REPORT FOR THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

 ADAM GUNKEL
 DATE: 07.29.2024 LIC. NO. 43983



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



NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88)
- CONTOURS SHOWN ARE PER MNGEO LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- TURF AREA TO BE SEED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY PLAN / PROFILE SHEETS FOR STORM SEWER RIMS, INVERTS, AND SIZES.
- TRADEWELL SOIL TESTING COMPLETED SEPTIC SOIL BORINGS
- BRAUN INTERTEC IS MONITORING SITE GROUND WATER ELEVATIONS WITH PIEZOMETERS, ANTICIPATED GROUNDWATER ELEVATIONS ARE BASED ON PRELIMINARY INFORMATION AND ARE SUBJECT TO REVISION.
- ALL PIPE APRONS UNDER 48" PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 4" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX MNDOT 33-26.1.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DNR DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COWD 7 DAYS PRIOR TO ANY DEWATERING OPERATIONS.
- CONTRACTORS MUST BE PROVIDED WITH DNR FLYERS/ FACT SHEETS ON FLORIDA'S TURTLES.
- DISTURBED SOILS AND STOCKPILES WILL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 24 HOURS AFTER CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY OR PERMANENTLY CEASED

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

 JASON S. RUD
 Date: 07/29/2024 License No. 41578

DRAWN BY:	MMD	JOB NO:	230743	DATE:	03/20/24
CHECK BY:	JER	FIELD CREW:	DT/CT		
NO.	DATE	DESCRIPTION			BY
1	04/17/24	CITY COMMENTS			MMD
2	05/22/24	CITY COMMENTS			MMD
3	06/25/24	TRAIL EASEMENT / XYLITE LOTS			MMD
4	07/02/24	CITY COMMENTS			MMD
5	07/29/24	GEO. REPORT / FLOORS			MMD

LIVABILITY CHART

~of~ SWEDISH CHAPEL ESTATES
 ~for~ MN DEVELOPMENTS, LLC.
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

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

A. ISTS Area Each lot must contain at least 7,500 square feet of contiguous area which is reserved for both the ISTS originally constructed and a future ISTS. The ISTS Area need not be contiguous to the Eligible Building Area or the Yard Area, but the entire ISTS Area must exist at an elevation at least one foot above Unsuitable Soils, and must contain Undisturbed Soils or soils which meet the requirements of Rule 7060 of the Minnesota Pollution Control Agency for ISTS construction standards. The ISTS Area may be irregular in shape, provided they do not encroach into areas reserved by easement or otherwise for roadway, drainage or utility purposes, and provided that all of the area can be reasonably used for ISTS construction without the need for variances.

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

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

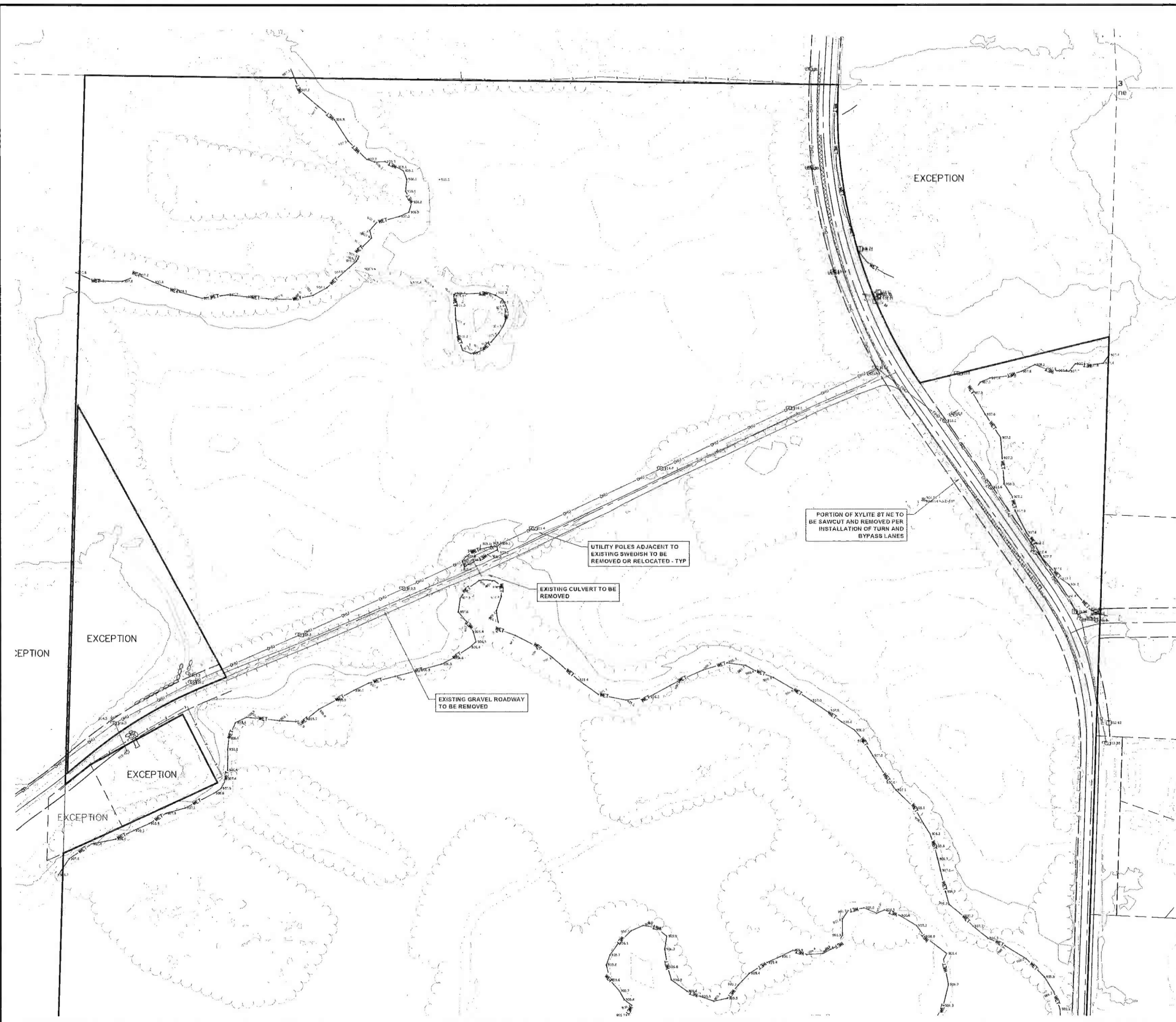
- i) Lies above the 100 year flood contour, and
 - ii) Lies at least one foot above soils unsuitable for the intended usage of the Yard Area, and
 - iii) Is contiguous to the Eligible Building Area for a distance of at least fifty percent of the linear perimeter of the Eligible Building Area.
- Yard Areas may encroach into the dedicated easement area which lies at a distance of ten feet from the perimeter of the lot, and may encroach into areas reserved by easement or otherwise for other public utility purposes, but may not encroach into any other area reserved by dedication or otherwise for road or drainage purposes, any may not encroach into any areas within the 100 year flood contour or into designated wetlands. Yard Areas may be irregular in shape except within thirty feet of the locations where the Yard Area is contiguous to the Eligible Building Area, at which locations the Yard Areas shall be a logical extension or expansion of the generally rectangular or oval shape of the Eligible Building Area. Fill may be used to create Yard Area.

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

E. Low Floor Elevations

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

Lot	Block	Total Lot Area (sq. ft.)	Yard Area (sq. ft.)	Septic Area (sq. ft.)	Building Pad Area (sq. ft.)	Proposed Building Pad 4' Above Unsuitable (sq. ft.)	Garage Floor Elevation	Proposed Low Floor Elev.	Proposed Low Opening	Lowest Floor Elevation	Highest Anticipated Groundwater Elevation	Low Floor Factor	Boring #	Boring Elevation	Moties Elevation	Building Type	Custom Graded
7	2	60,039	16,760	7,958	10,975	7,293	917.8	910.8	910.8	910.8	907.5	PER	23	911.8	908.1	W.O.*	NO
												POND 3	129	917.0	912.3	DROP	
												HWL	130	917.2	912.7	1 COURSE	
													136	913.5	910.0		
													137	916.1	912.9		
													138	913.9	908.9		
8	2	46,163	13,328	7,770	10,145	8,162	917.8	910.8	910.8	910.8	907.5	PER	131	915.9	912.1	W.O.*	NO
												POND 3	132	915.2	911.5	DROP	
												HWL	133	915.0	912.0	1 COURSE	
													134	913.7	909.4		
													135	912.4	911.1		
9	2	67,505	18,706	8,181	10,074	7,027	917.8	910.8	910.8	910.8	907.5	PER	5	911.8	910.5	W.O.*	NO
												POND 3	82	912.2	910.4	DROP	
												HWL	83	912.0	910.8	1 COURSE	
													84	913.1	910.4		
													85	912.2	910.7		
													86	911.7	910.2		
10	2	67,072	17,431	8,224	10,386	7,437	917.5	910.5	910.5	910.5	907.5	Anticipated Groundwater	77	916.1	913.3	W.O.*	NO
													78	915.3	911.8	DROP	
													79	911.3	908.5	1 COURSE	
													80	913.0	910.0		
													81	912.7	910.0		
11	2	118,310	13,457	7,972	10,001	6,179	917.5	910.5	910.5	910.5	907.5	Anticipated Groundwater	31	910.5	907.8	W.O.*	NO
													64	911.3	908.6	DROP	
													65	909.5	907.8	1 COURSE	
													66	909.1	907.5		
													67	914.6	911.9		
12	2	492,959	19,972	7,770	12,438	6,194	917.0	909.3	909.3	909.3	908.0	PER (MOTILES BORING 26)	1	908.0	907.3	W.O.	NO
												POND 6	25	909.3	908.0		
												HWL	26	909.4	908.0		
													49	909.3	907.8		
													50	907.5	906.5		
													51	908.9	907.7		
													52	909.0	908.0		
													53	909.8	908.5		
13	2	716,388	18,896	7,923	10,257	5,095	916.8	910.5	910.5	910.5	907.5	Anticipated Groundwater	20	909.4	908.2	W.O.*	NO
													144	916.9	912.1	DROP	
													145	914.4	908.6	2 COURSE	
													146	910.3	908.4		
													147	910.8	908.6		
OUTLOT B		63,314		NA	NA	NA	NA	NA	NA	NA	NA	NA					
1	3	57,014	12,073	7,874	10,057	10,075	920.3	913.3	913.3	913.3	907.5	PER	8	911.4	910.4	W.O.*	NO
												AREA 107	256	911.5	910.4	DROP	
												HWL	257	911.7	910.7	1 COURSE	
													258	913.5	910.8		
													259	912.1	910.8		
2	3	63,106	15,883	7,836	13,123	13,123	920.3	913.6	913.6	913.3	907.5	PER	251	914.2	911.5	W.O.*	NO
												AREA 107	252	916.4	912.7	DROP	
												HWL	253	916.7	913.4	1 COURSE	
													254	913.9	911.9		
													255	912.6	911.1		
3	3	51,626	15,201	7,888	10,161	10,161	920.3	913.3	913.3	913.3	907.5	PER	34	911.8	910.6	W.O.*	NO
												AREA 107	246	916.3	912.1	DROP	
												HWL	247	915.5	911.8	1 COURSE	
													248	916.0	910.5		
													249	915.3	909.5		
													250	913.9	909.9		
4	3	50,725	21,282	7,806	10,713	10,713	921.5	914.5	914.5	911.5	908.5	Anticipated Groundwater	13	913.1	912.1	W.O.*	NO
													242	913.4	912.2	DROP	
													243	913.6	912.2	1 COURSE	
													244	914.6	912.1		
													245	916.8	911.8		
5	3	44,988	14,913	6,202	10,155	10,115	922.0	915.0	915.0	911.5	908.5	Anticipated Groundwater	ST-1	914.3	904.9 (W)	W.O.*	NO
													237	914.6	911.3	DROP	
													238	913.9	912.7	1 COURSE	
													239	916.2	911.9		
													240	916.9	912.6		
													241	915.0	911.7		
6	3	45,357	15,719	7,865	11,390	11,390	918.5	911.5	914.7	911.5	908.5	Anticipated Groundwater	232	912.1	911.2	L.O.*	NO
													233	912.3	911.1	DROP	
													234	914.4	911.7	1 COURSE	
													235	918.9	NONE		
													236	914.8	911.5		
7	3	45,583	15,521	8,156	10,286	6,172	917.8	911.5	911.5	911.5	908.5	Anticipated Groundwater	12	911.0	910.0	W.O.*	NO
													228	911.8	910.1	DROP	
													229	911.4	910.4	2 COURSE	
													230	911.9	910.7		
													231	912.9	911.4		
8	3	273,622	14,729	7,844	10,006	5,505	918.5	911.5	911.5	911.5	908.5	Anticipated Groundwater	11	911.2	910.2	W.O.	NO
													224	915.4	912.2	DROP	
													225	914.2	910.5	1 COURSE	
													226	911.3	910.2		
													227	910.6	908.8		
9	3	56,704	15,308	7,777	10,005	8,795	916.5	911.5	911.5	911.5	908.5	Anticipated Groundwater	38	911.2			



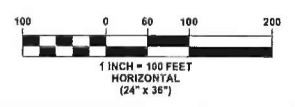
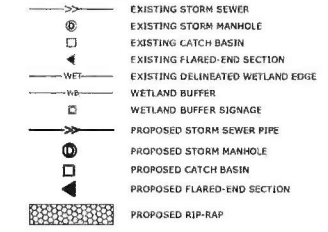
GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
4. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
5. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

STORM SEWER NOTES

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
 - (A) REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS
 - (B) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATERTIGHT CONNECTIONS. USE SAND/GRAVULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PPVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
6. THE LAST THREE SECTION OF CONCRETE PIPE, INCLUDING APPROX. FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

LEGEND



PLOWE ENGINEERING, INC.
 1100 W. WISCONSIN DRIVE
 SUITE 110
 HAM LAKE, MN 55014
 PHONE: (651) 361-8210
 FAX: (651) 361-8701



DESIGNED BY: JCS/UC
 DATE: 03-21-22
 CHECKED BY: MOA
 DATE: 03-27-22

DATE: 03-27-22

NO. 05 07 24 SHEET ADDED TO SET

NO. 05 08 24 SIGNED

NO. 07 10 24 PROPOSED STORM STRUCTURES REMOVED

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

NO. 07 10 24

SWEDISH CHAPEL ESTATES
 HAM LAKE, MN
REMOVALS PLAN
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
R

GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

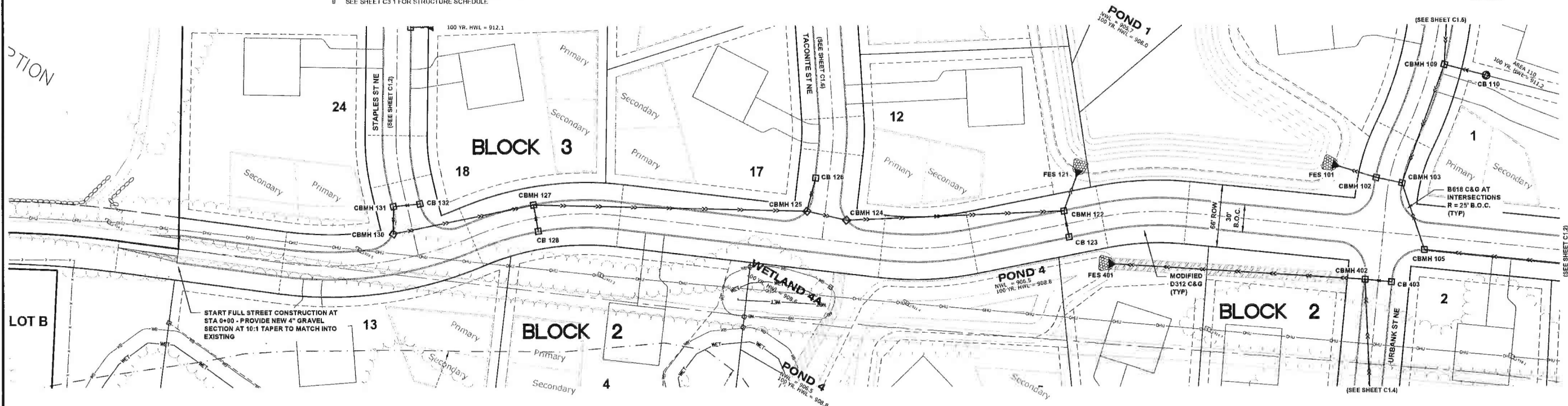
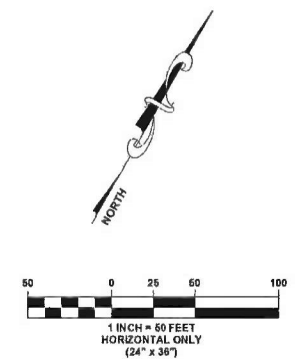
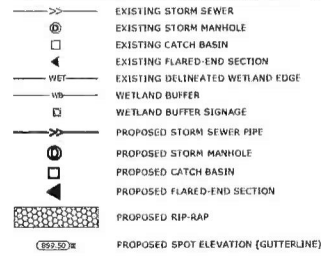
STORM SEWER NOTES

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
 - (a) REINFORCED CONCRETE PIPE (RCP) A151 C76 WITH R-4 GASSETS
 - (b) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATER-TIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
6. THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3 FOR STRUCTURE SCHEDULE.

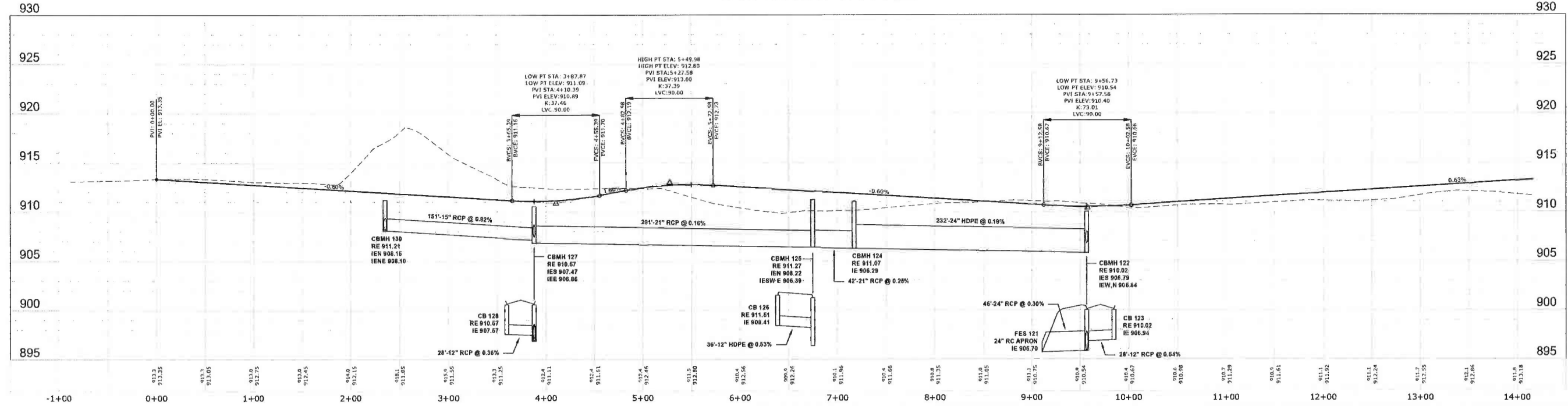
CURB & BITUMINOUS NOTES

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

LEGEND



SWEDISH DR NE



PLOWE ENGINEERING INC.
 1275 LAKE DRIVE
 SUITE 110
 LINDA LAKE, MN 55014
 PHONE (651) 961-9710
 FAX (651) 961-9701



DRAWN BY:	AG
CHECK BY:	MOA
DATE:	03/20/24

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.

ADAM WINKEL
 License No. 43963
 Date: 07/02/2024

SWEDISH CHAPEL ESTATES
 HAWK LAKE, MN
PLAN / PROFILE
SWEDISH DR NE
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C1.1

GENERAL NOTES

- THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
- CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
- THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
- INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
- STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
- NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

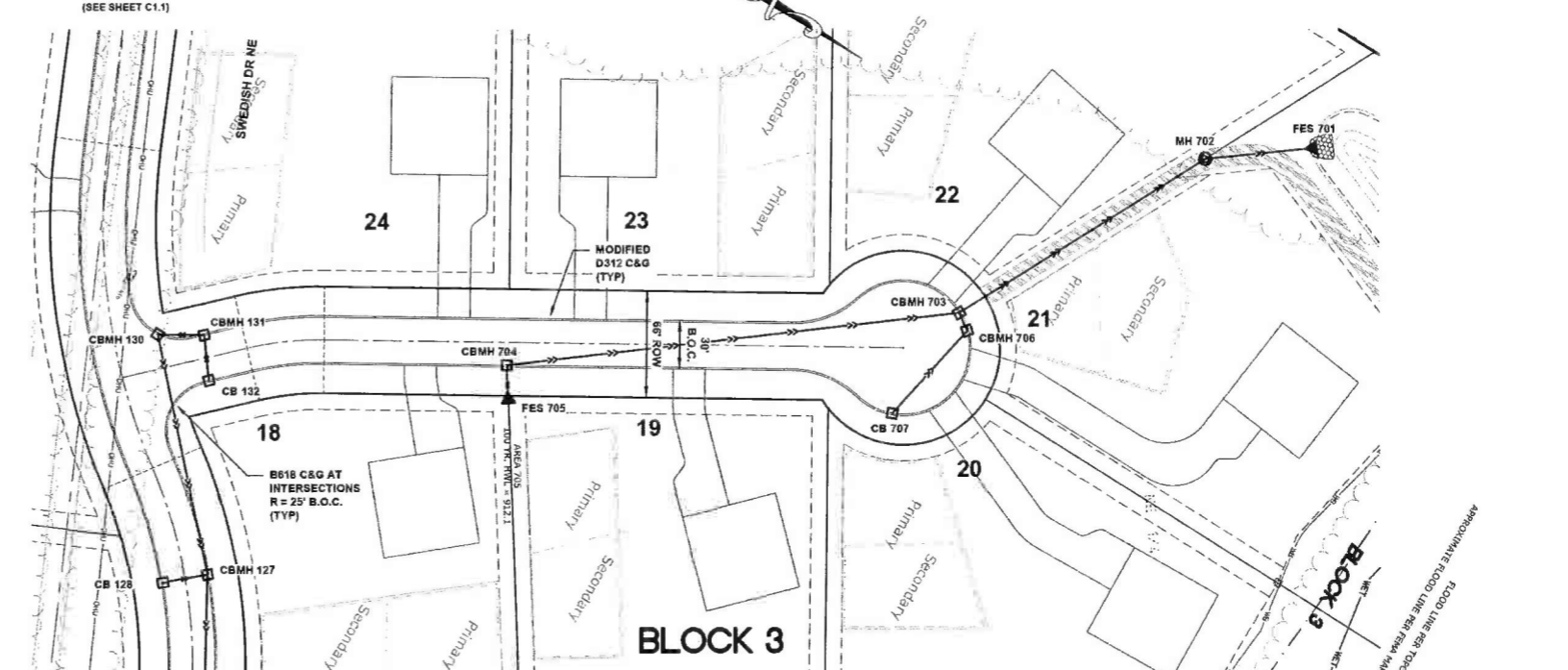
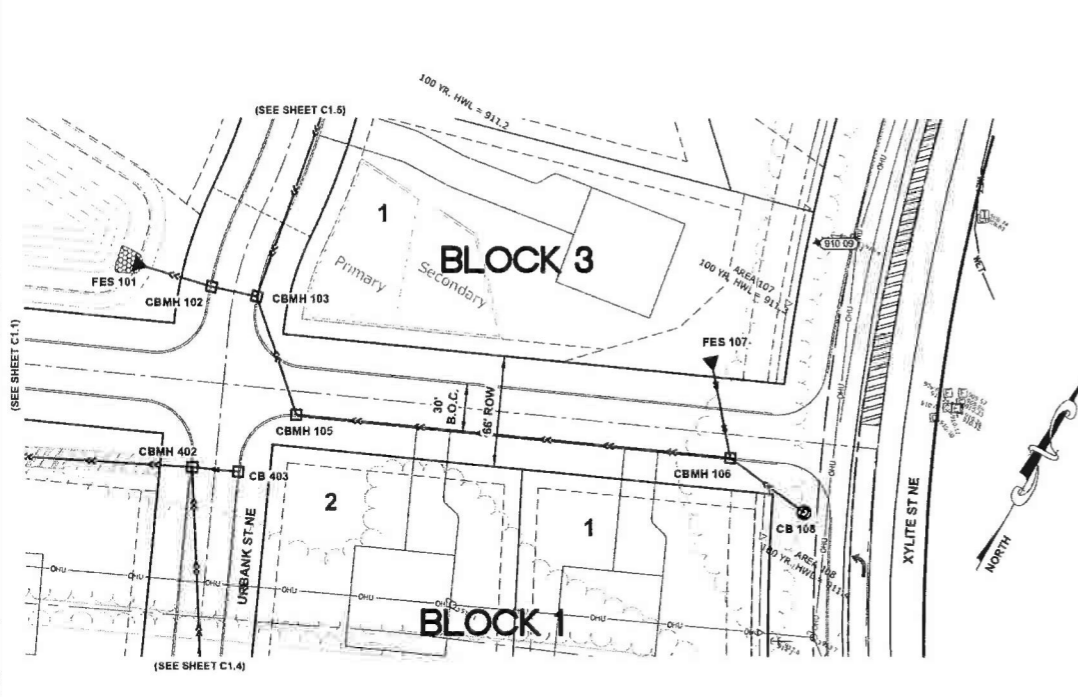
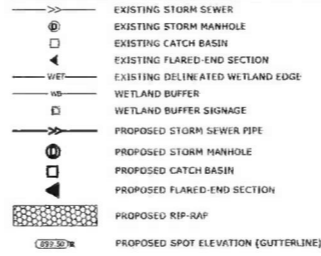
STORM SEWER NOTES

- FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
- STORM SEWER SHALL BE:
 - REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS
 - HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATER-TIGHT CONNECTIONS. USE SAND/GRAVEL MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
- DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
- TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
- PROVIDE CLASS III RIP-RAP W/FILTER FABRIC AT ALL PIPE OUTLETS.
- THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
- STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
- ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
- SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

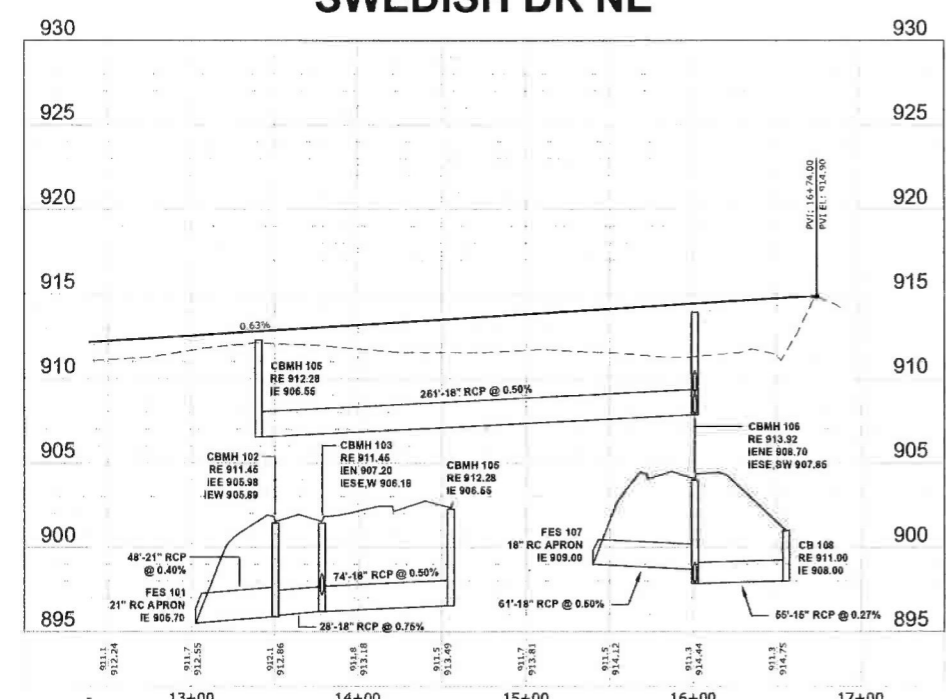
CURB & BITUMINOUS NOTES

- REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
- RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
- BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

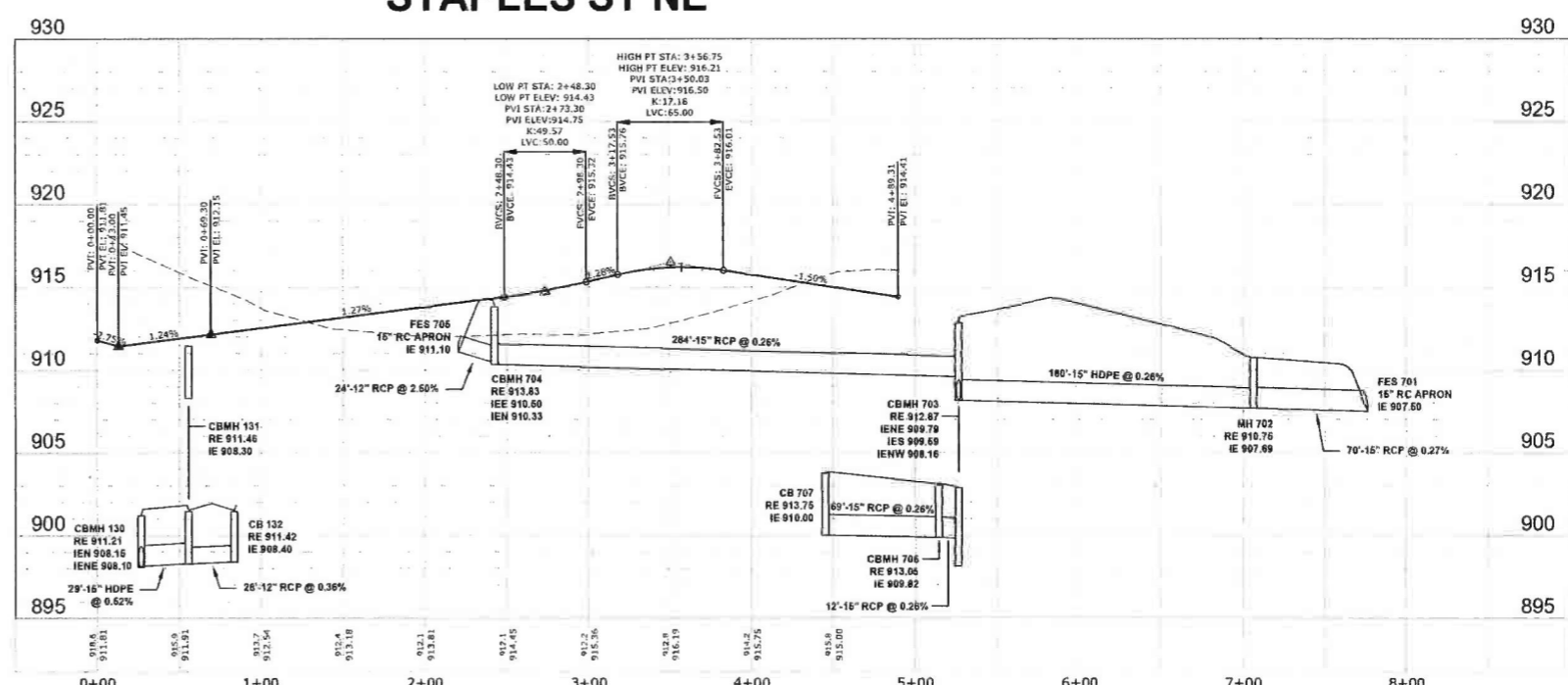
LEGEND



SWEDISH DR NE



STAPLES ST NE



PLOWE ENGINEERING, INC.
 1100 LAKESIDE DRIVE
 SUITE 110
 LINDEN, MN 55014
 PHONE: (651) 281-8710
 FAX: (651) 281-8701

DATE: 03/20/24

PROJECT: SWEDISH CHAPEL ESTATES
 PLAN / PROFILE
 SWEDISH DR NE & STAPLES ST NE

PREPARED FOR: MN DEVELOPMENTS, LLC

SWEDISH CHAPEL ESTATES
 HAM LAKE, MN

PLAN / PROFILE
SWEDISH DR NE & STAPLES ST NE

PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C1.2

DATE: 03/20/24 11:00 AM
 PLOT: 11/11/24 11:00 AM
 PLOT: 11/11/24 11:00 AM
 PLOT: 11/11/24 11:00 AM

GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

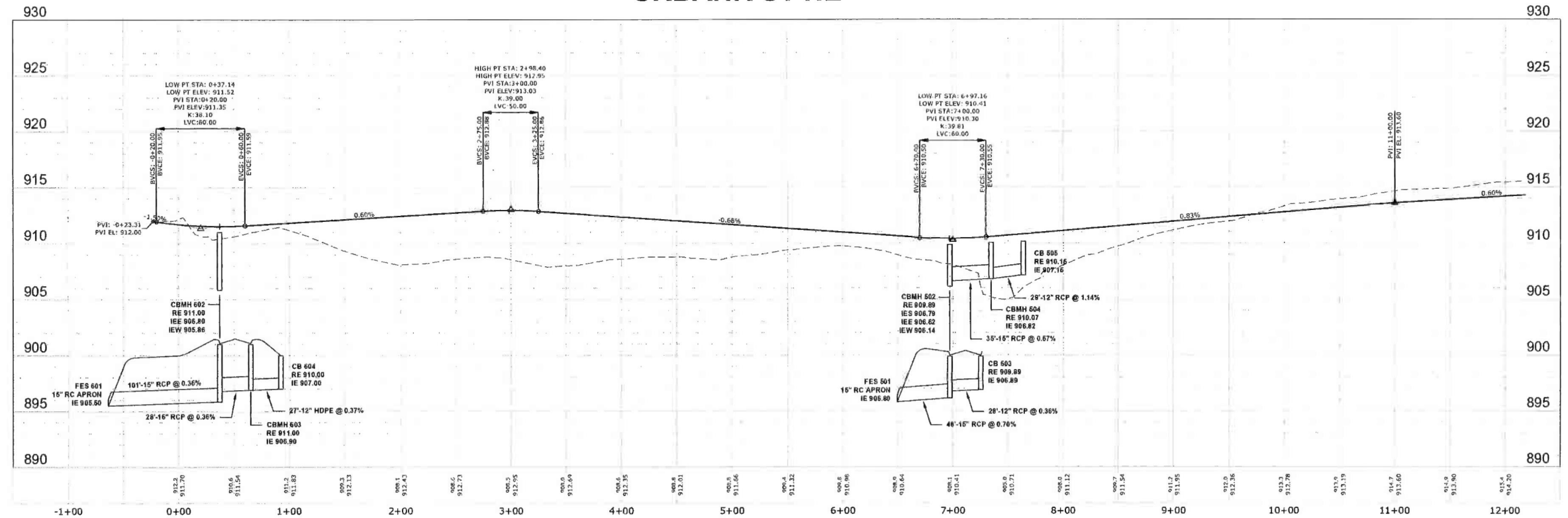
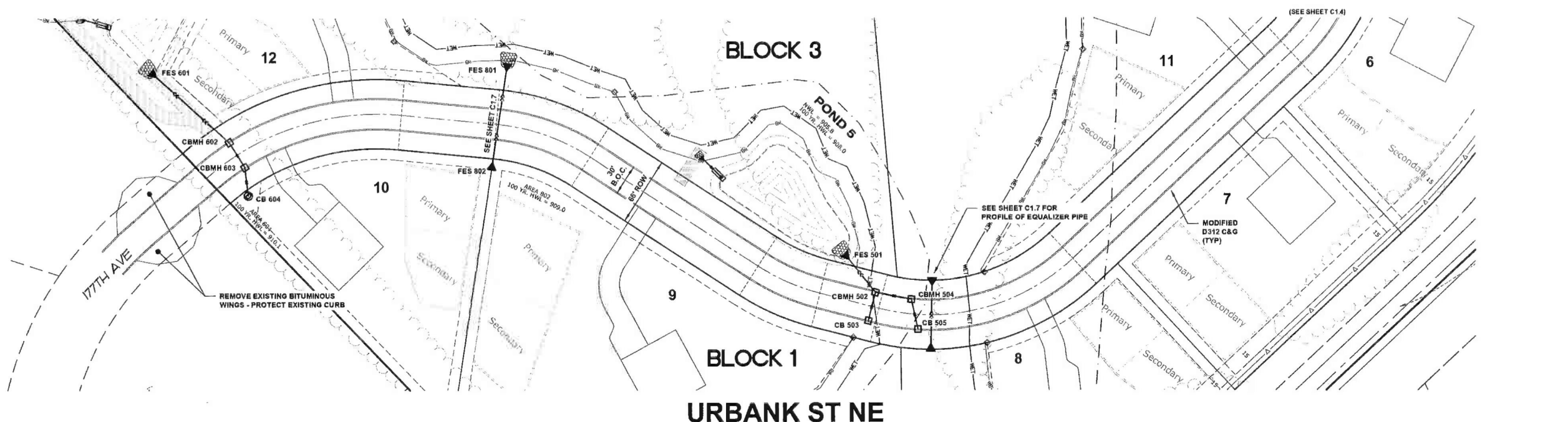
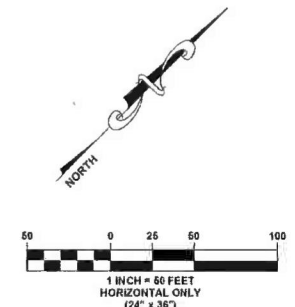
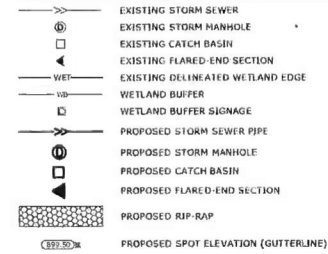
STORM SEWER NOTES

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
 - (a) REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS
 - (b) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M254, TYPE 5 WITH WATER TIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321
3. DO NOT BACKFILL CATCH BASINS WITH FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
6. THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

CURB & BITUMINOUS NOTES

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

LEGEND



SWEDISH CHAPEL ESTATES
HAM LAKE, MN
PLAN / PROFILE
URBANK ST NE
PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET C1.3

PLOWE ENGINEERING, INC.
8751 LAKE DRIVE
SUITE 110
LINO LAKE, MN 55014
PHONE: (951) 361-8210
FAX: (951) 361-8701

DATE: 03/20/24
DRAWN BY: JAC
CHECK BY: JAC
DATE: 03/20/24

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.
ADAM JENSEN
Date: 07/02/2024 License No. 43863

ENR\PROJECTS\2023\24\24-0001\PROJ\1514\URBANK ST NE\1514-URBANK ST NE\BASE & DWS
2024.07.02 10:10:10 AM

GENERAL NOTES

- 1 THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
- 2 CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
- 3 THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
- 4 INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
- 5 STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
- 6 NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 7 ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

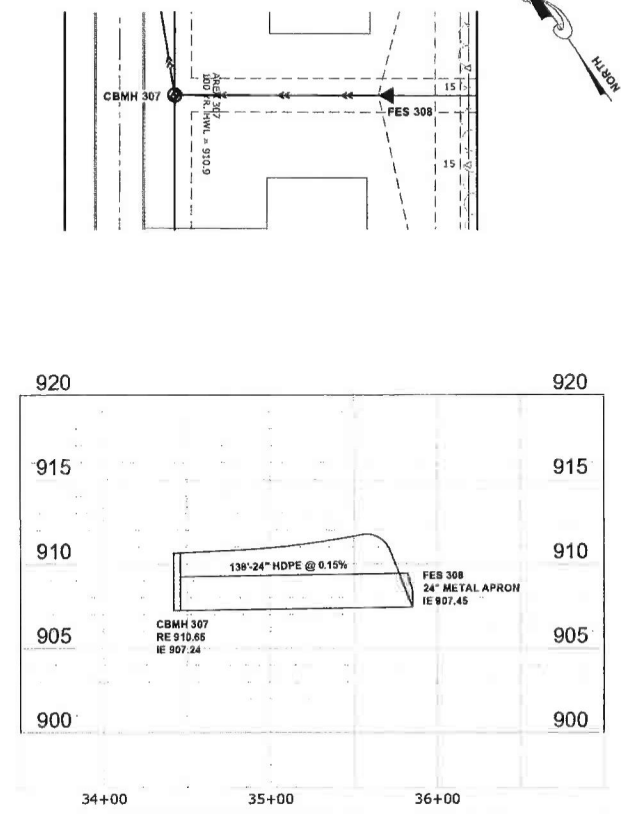
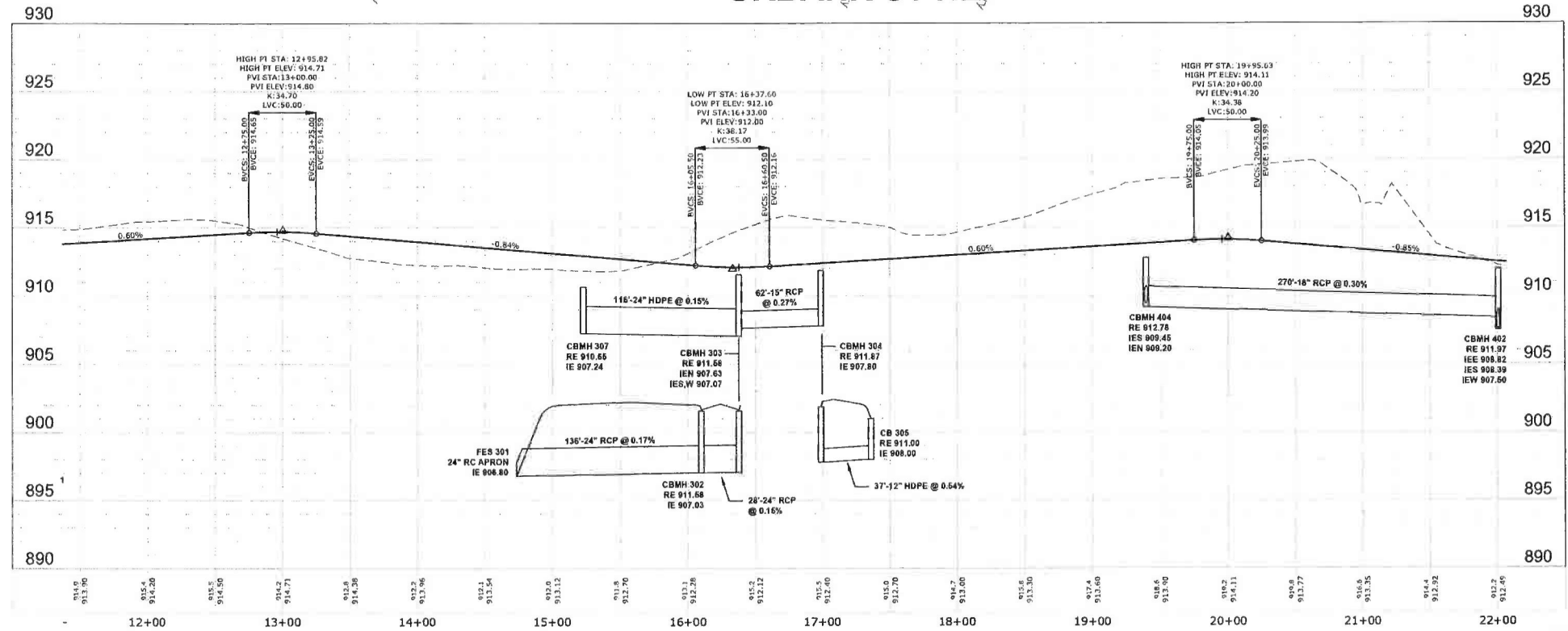
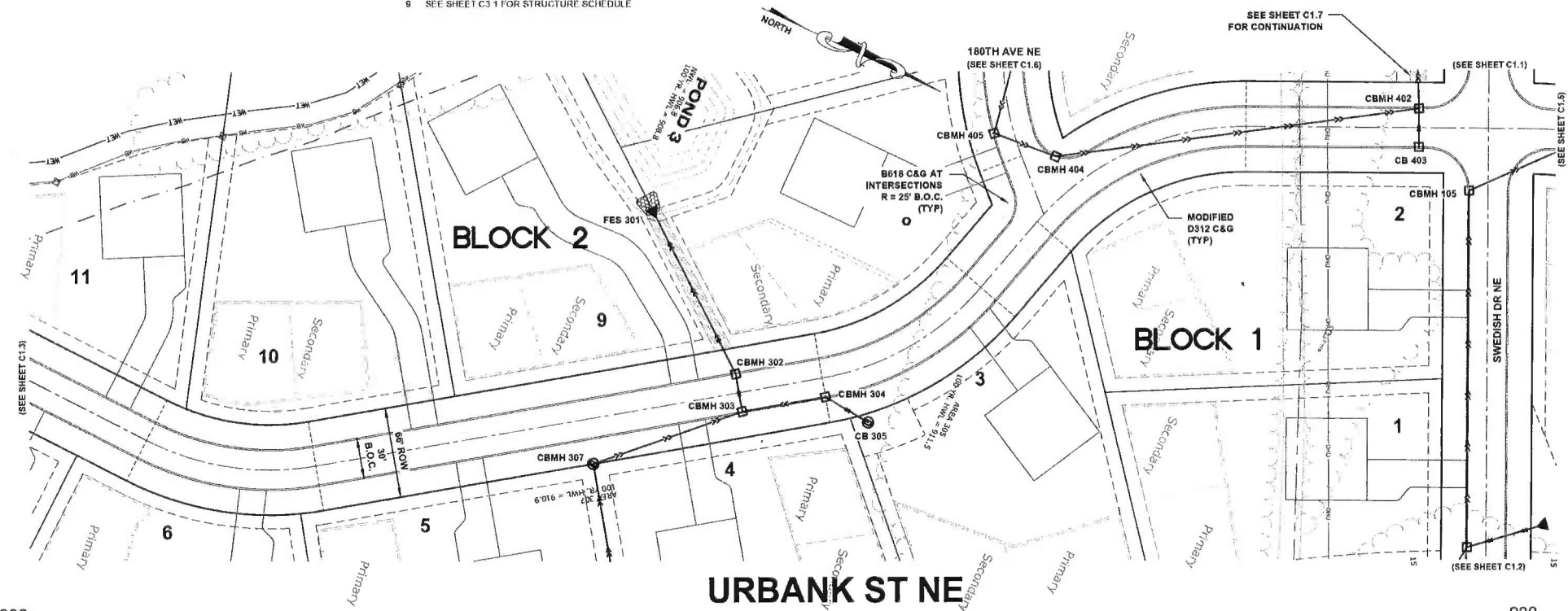
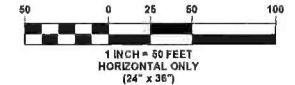
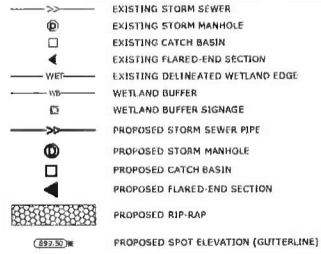
STORM SEWER NOTES

- 1 FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
- 2 STORM SEWER SHALL BE:
 - (a) REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS
 - (b) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M254, TYPE S WITH WATER-TIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PPVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321
- 3 DO NOT BACKFILL CATCH BASINS WITH FABRIC WRAP. INSPECTED BY CITY.
- 4 TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
- 5 PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
- 6 THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
- 7 STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
- 8 ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
- 9 SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

CURB & BITUMINOUS NOTES

- 1 REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
- 2 ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
- 3 RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
- 4 BACKFILLING OF CURBS IS INCIDENTAL TO CURB INSTALLATION.

LEGEND



DRAWN BY: AG
JOB NO.: 73-2122
CHECK BY: MDA
DATE: 05/20/24

NO.	DATE	DESCRIPTION
1	06-25-24	PLANS / PROFILES
2	07-02-24	STORM RAINS ADJ.
3		
4		
5		
6		
7		
8		

I hereby certify that the data was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.
ADAM PEREL
Date: 07-02-2024 License No. 43963

SWEDISH CHAPEL ESTATES
HAM LAKE, MN
PLAN / PROFILE
URBANK ST NE
PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C1.4

GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "111" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

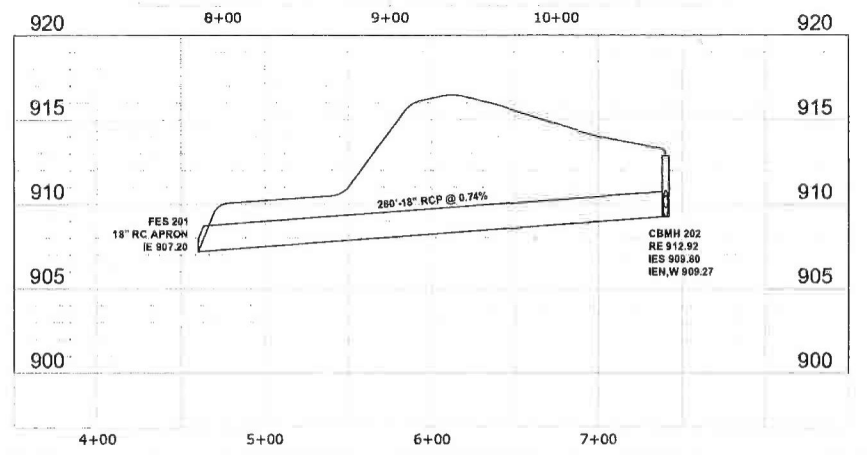
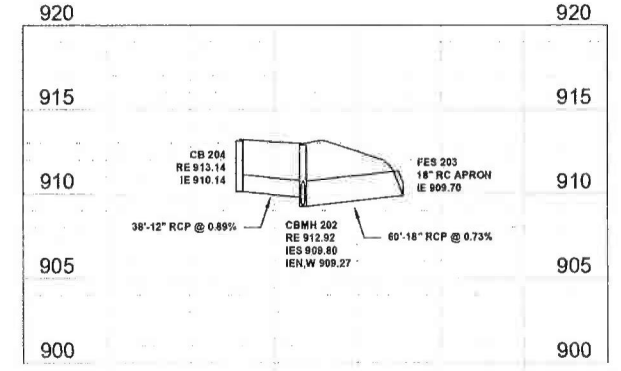
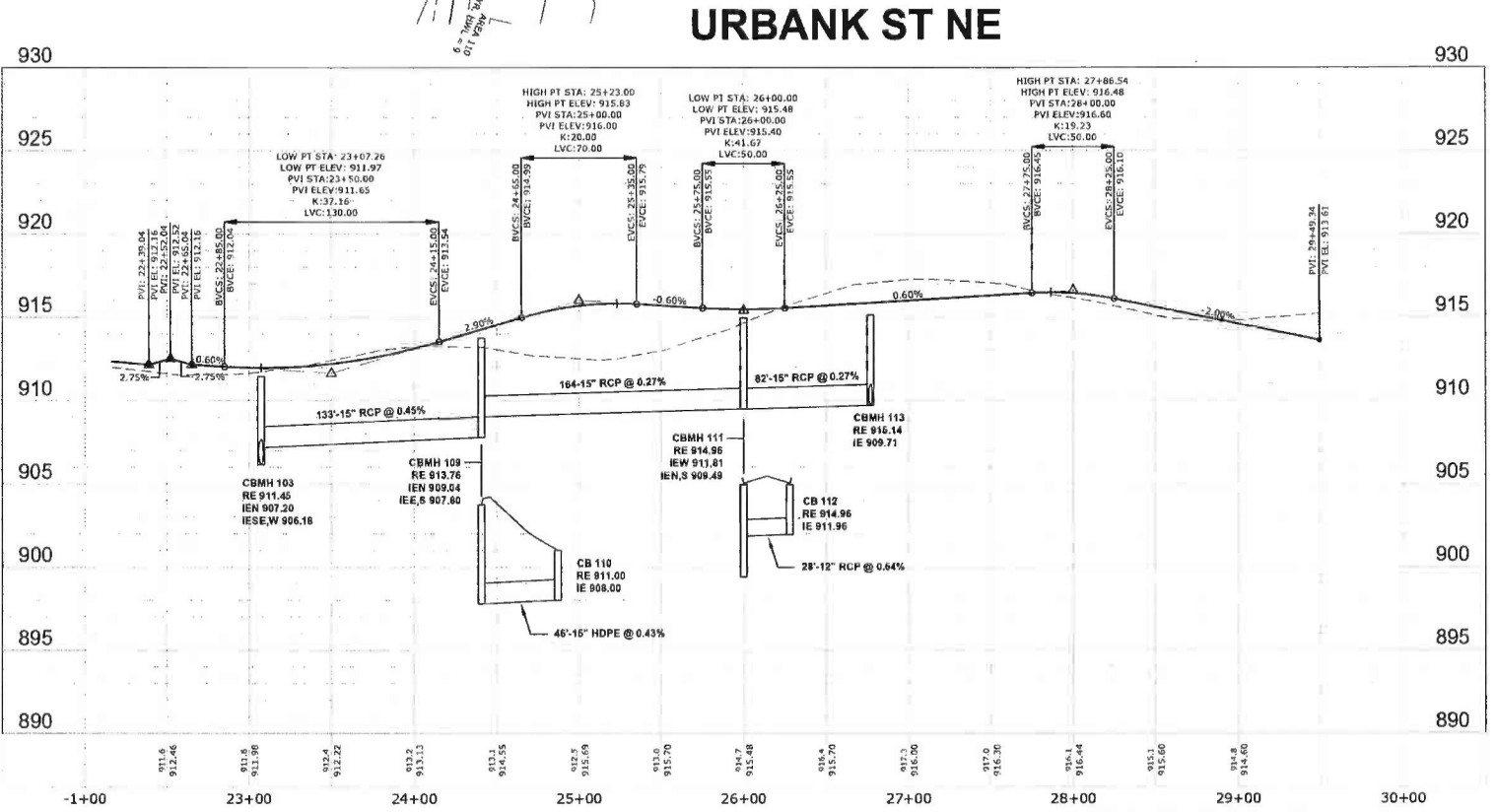
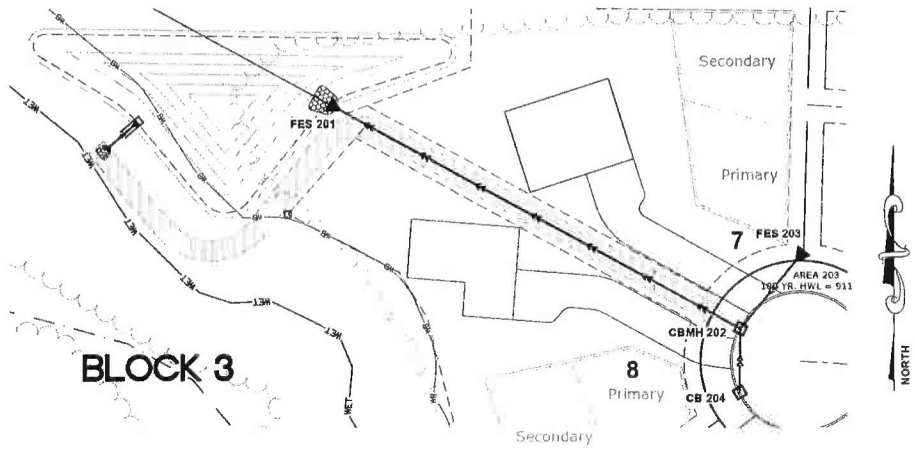
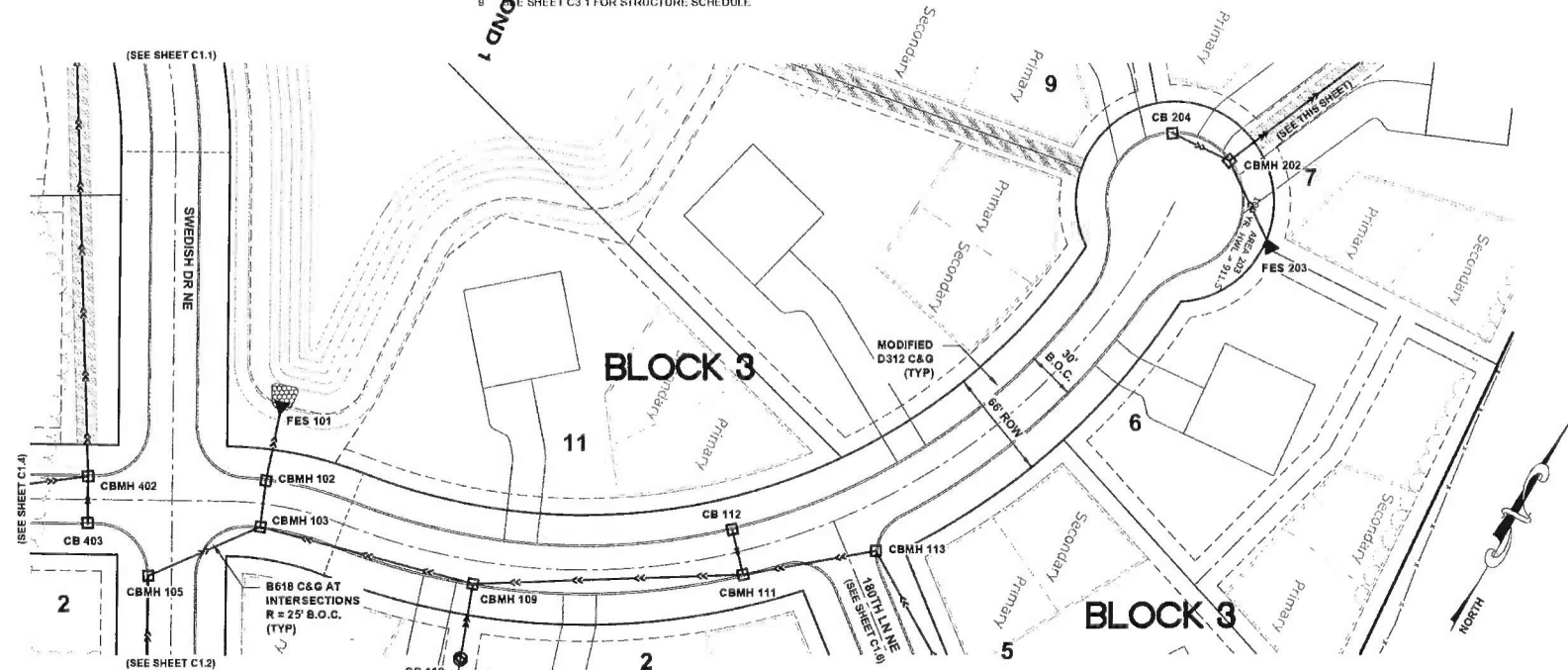
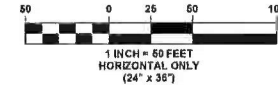
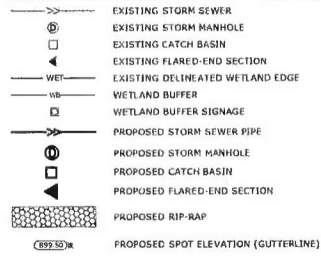
STORM SEWER NOTES

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
 - (a) REINFORCED CONCRETE PIPE (RCP) A151 C76 WITH R-4 GASSETS
 - (b) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATER-TIGHT CONNECTIONS. USE SAND/GRAVEL MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
6. TIE LAST THREE SECTION OF CONCRETE PIPE, INCLUDING APPROX. FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

CURB & BITUMINOUS NOTES

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

LEGEND



PLOWE ENGINEERING, INC.
 8775 LAKE DRIVE
 SUITE 110
 LINO LAKES, MN 55014
 PHONE: (651) 361-8210
 FAX: (651) 361-8701



NO.	DATE	DESCRIPTION
1	06/25/24	PLAN / PROFILES
2	07/02/24	STORM MAIN PLAN
3		
4		
5		
6		
7		
8		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.
 ADAM J. PATER
 License No. 43963
 Date: 07/02/2024

SWEDISH CHAPEL ESTATES
 HAM LAKE, MN
PLAN / PROFILE
URBANK ST NE
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C1.5

GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

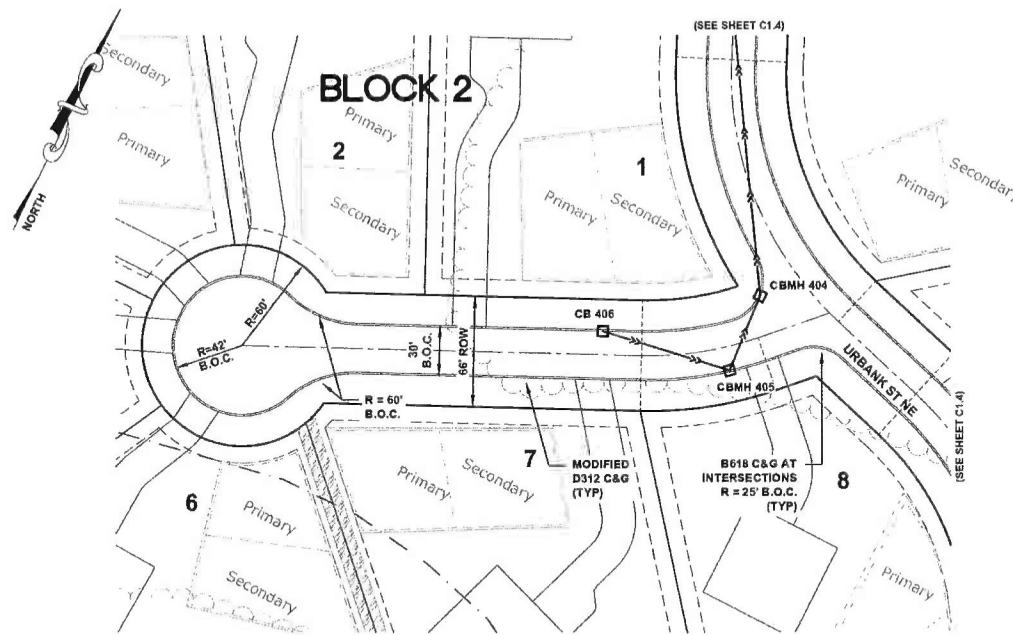
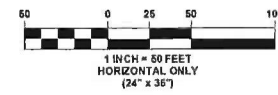
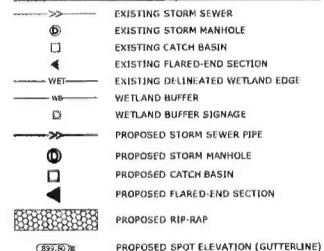
STORM SEWER NOTES

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
 - (a) REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS
 - (b) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATER-TIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/FILTER FABRIC AT ALL PIPE OUTLETS.
6. THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPE LESS THAN 48" IN DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

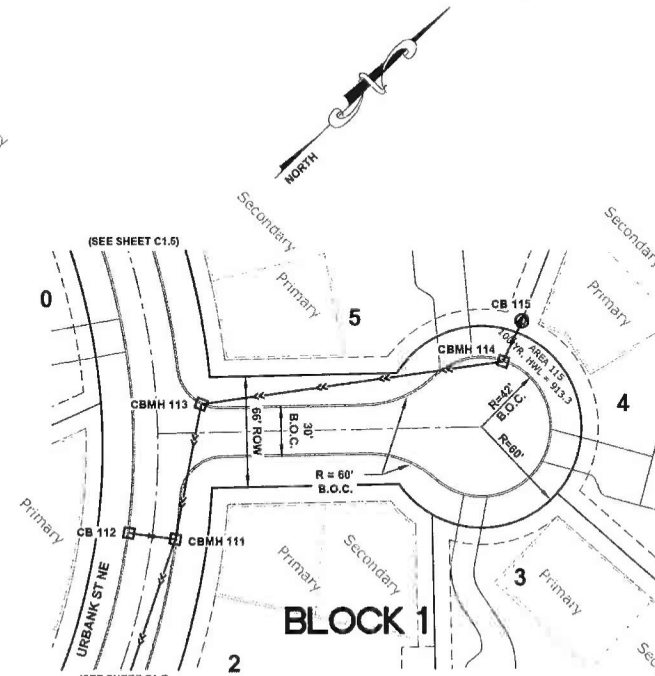
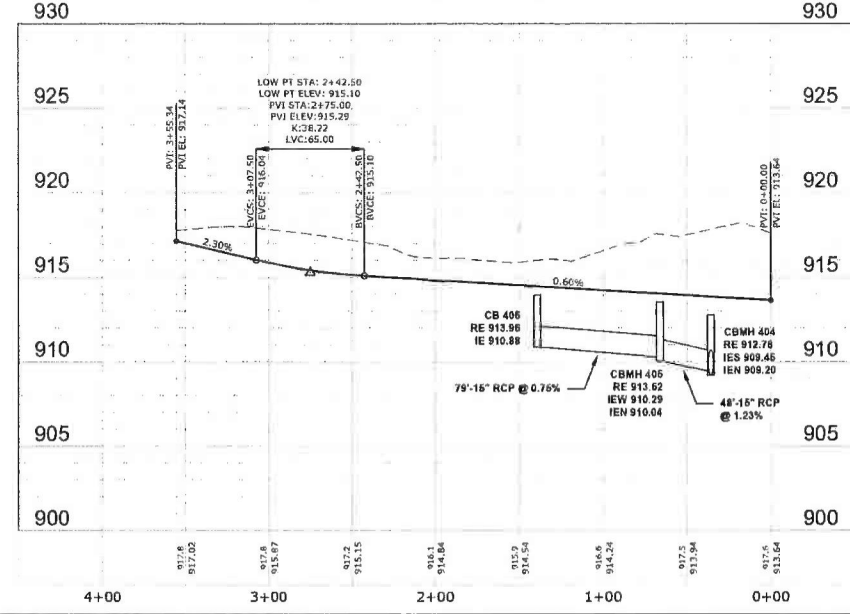
CURB & BITUMINOUS NOTES

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

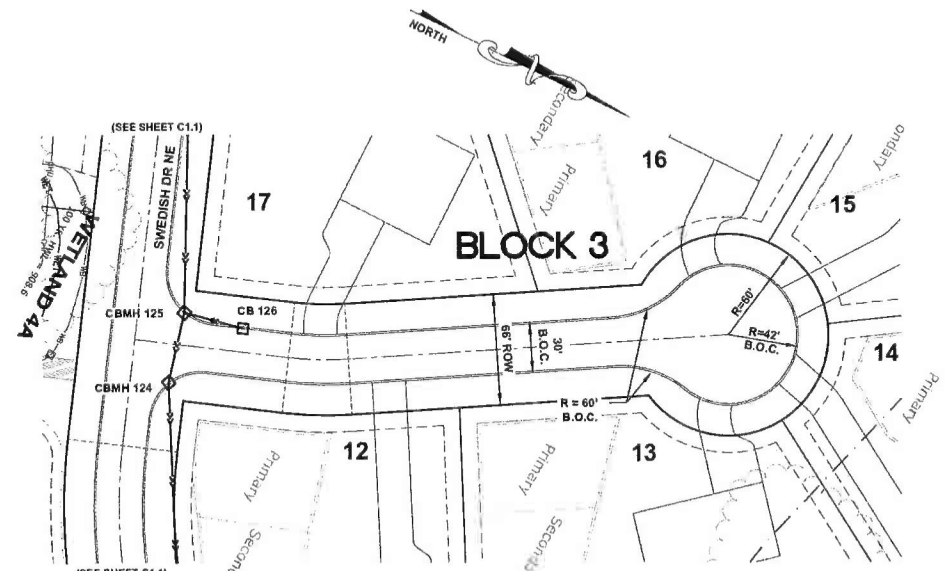
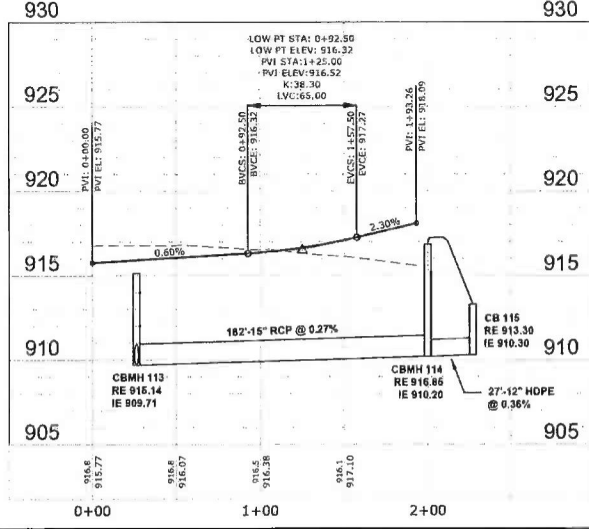
LEGEND



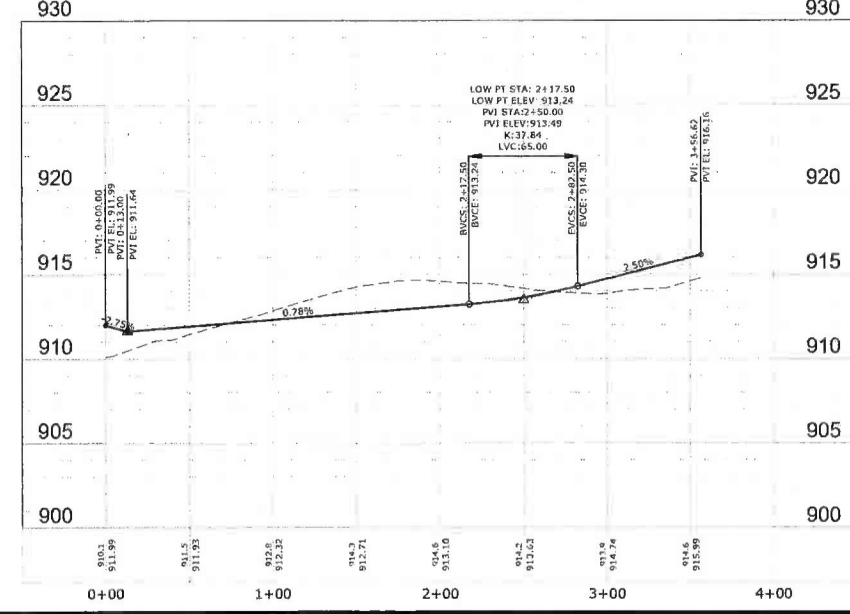
179TH AVE NE



180TH LN NE



TACONITE ST NE



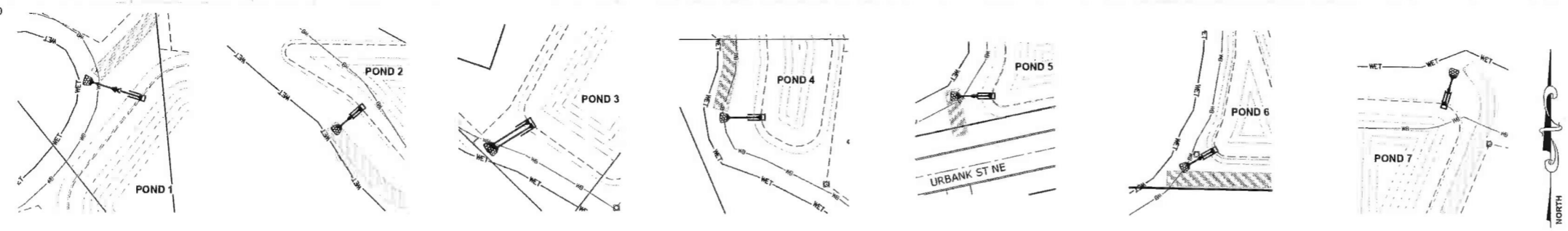
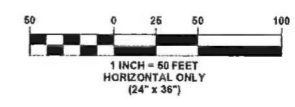
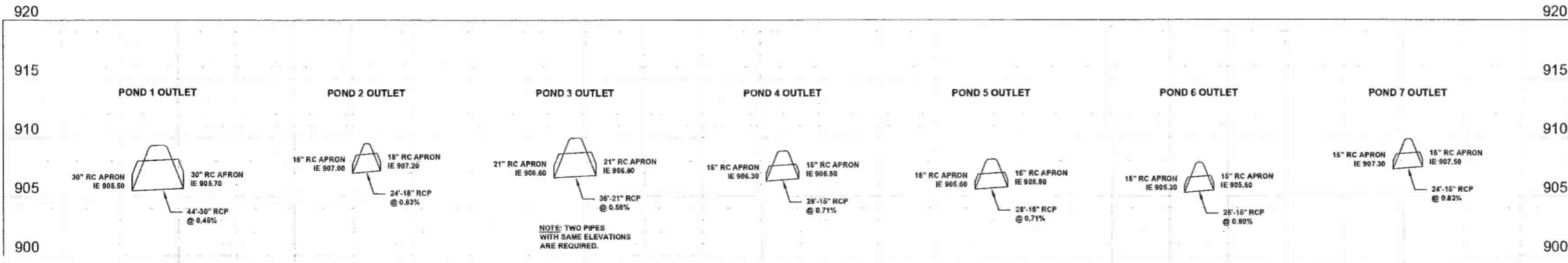
PLOWE ENGINEERING, INC.
 8778 LAKE DRIVE
 SUITE 110
 LINDA LAKE, MN 55114
 PHONE: (651) 381-9210
 FAX: (651) 381-9701



DRAWN BY	AG	DATE	02/20/24
CHECK BY	AG	DATE	02/20/24
DATE	02/20/24	NO.	0370704
DESCRIPTION	1. 06/25/24: PLANNING PROFILES 2. 07/02/24: STORM RIMS ADJ.		

SWEDISH CHAPEL ESTATES
 HAWAII, MN
PLAN / PROFILE
179TH AVE, 180TH AVE, TACONITE
 PREPARED FOR: MNI DEVELOPMENTS, LLC

SHEET
C1.6



GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY AND COOK CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

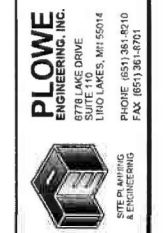
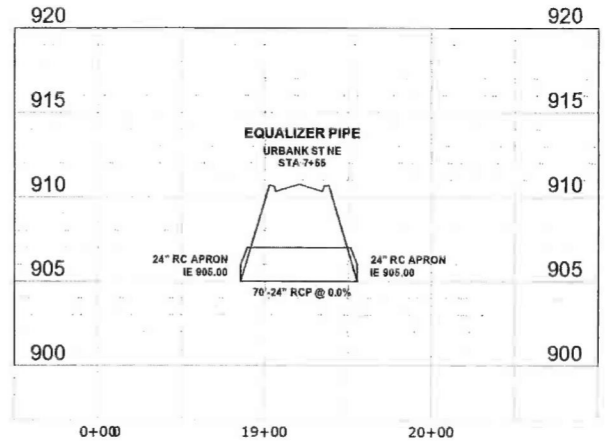
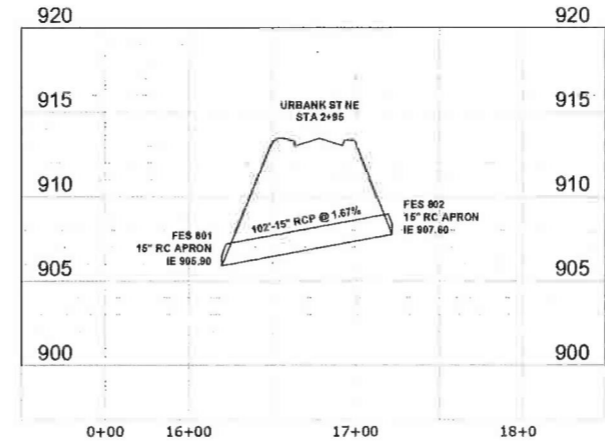
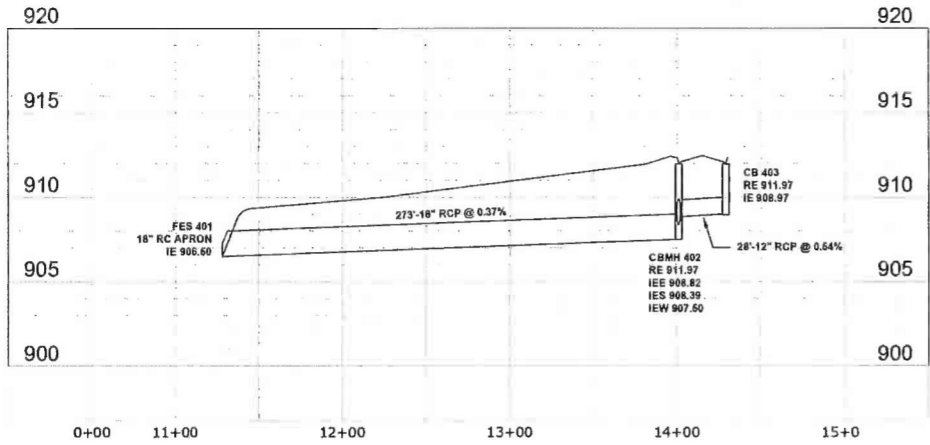
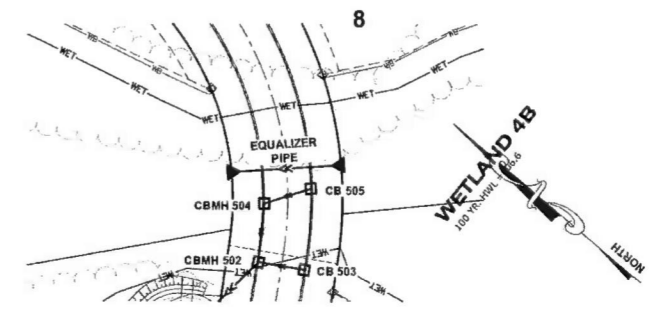
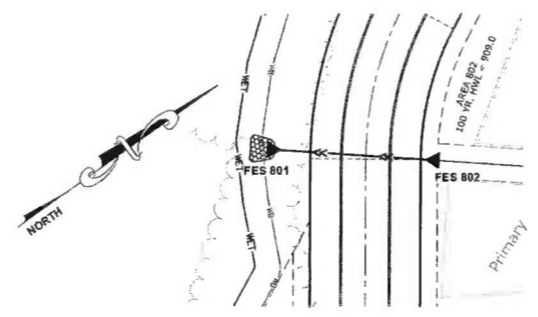
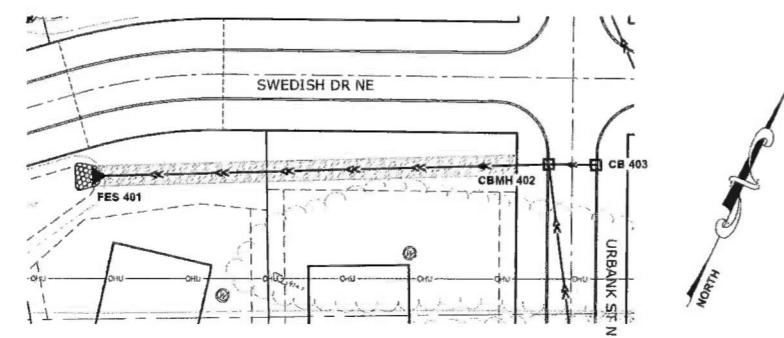
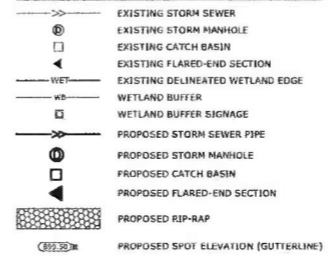
STORM SEWER NOTES

1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATIONS.
2. STORM SEWER SHALL BE:
 - (a) REINFORCED CONCRETE PIPE (RCP) ANSI C76 WITH R-4 GASKETS.
 - (b) HDPE PIPE SHALL MEET THE REQUIREMENTS OF AASHTO M294, TYPE S WITH WATER-TIGHT CONNECTIONS. USE SAND/GRANULAR MATERIAL FOR BACKFILLING AND COMPACTION OF HDPE/PVC PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM 2321.
3. DO NOT BACKFILL CATCH BASINS UNTIL FABRIC WRAP IS INSPECTED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED-END SECTIONS LESS THAN 48" IN DIAMETER.
5. PROVIDE CLASS III RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
6. THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPES LESS THAN 48" IN DIAMETER.
7. STORM SEWER LENGTHS INCLUDE THE LAYING LENGTH OF THE FLARED-END SECTION. LAYING LENGTH OF FLARED-END SECTION TO BE DEDUCTED FROM PAYMENT LENGTH OF PIPE.
8. ARCH PIPE JOINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT SEDIMENT FROM ENTERING PIPE.
9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

CURB & BITUMINOUS NOTES

1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH JOINTS AND PAVEMENT PATCHES TO BE SAW-CUT AT FULL DEPTH.
3. RESTORE DISTURBED STREET TO EXISTING OR BETTER SECTION.
4. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.

LEGEND



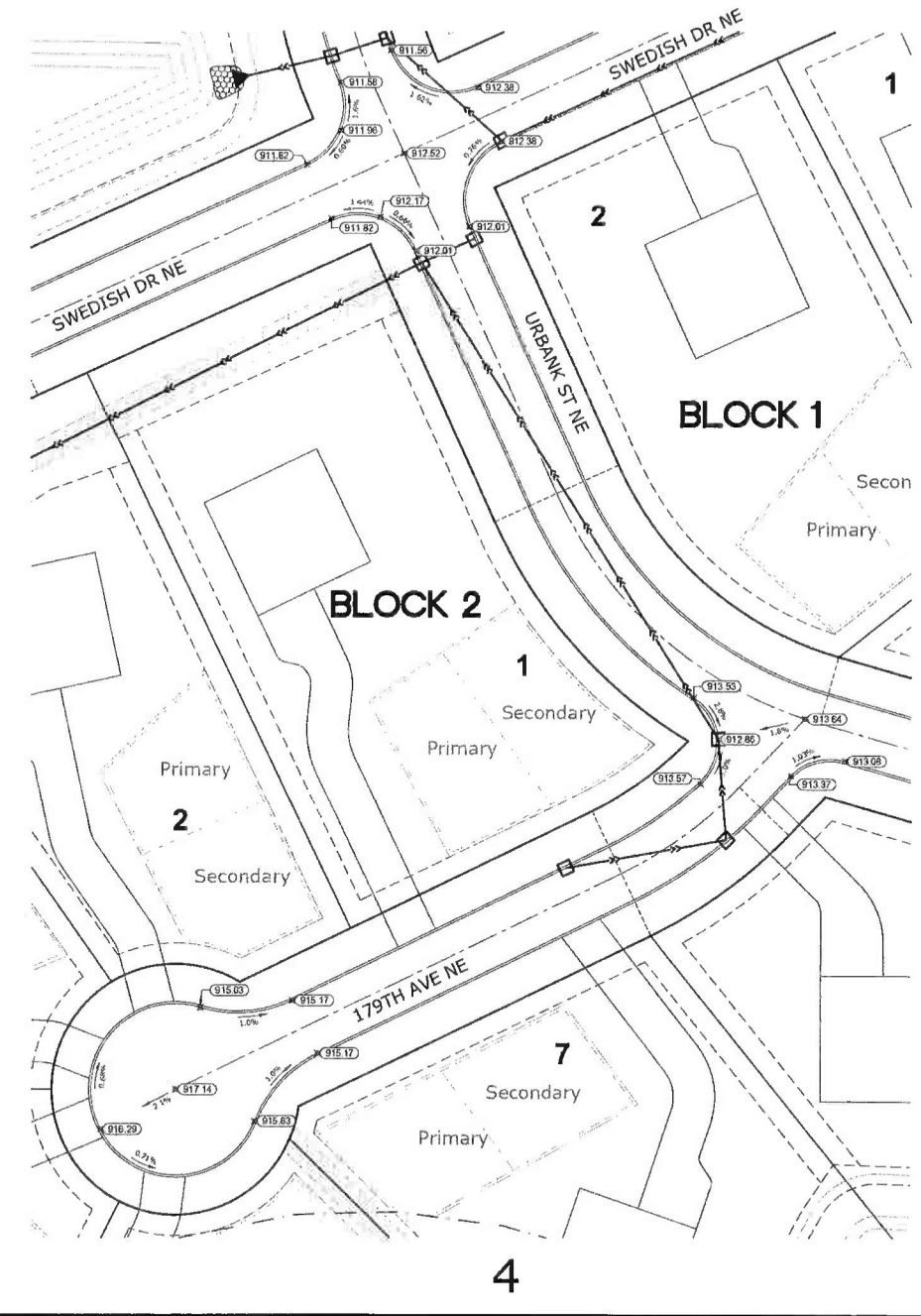
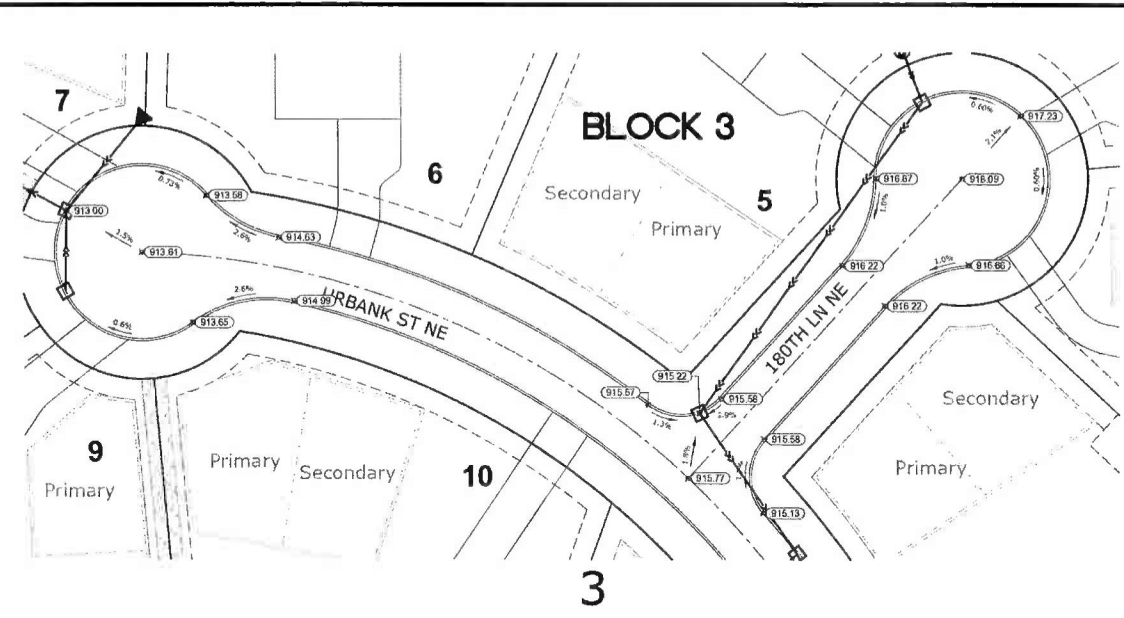
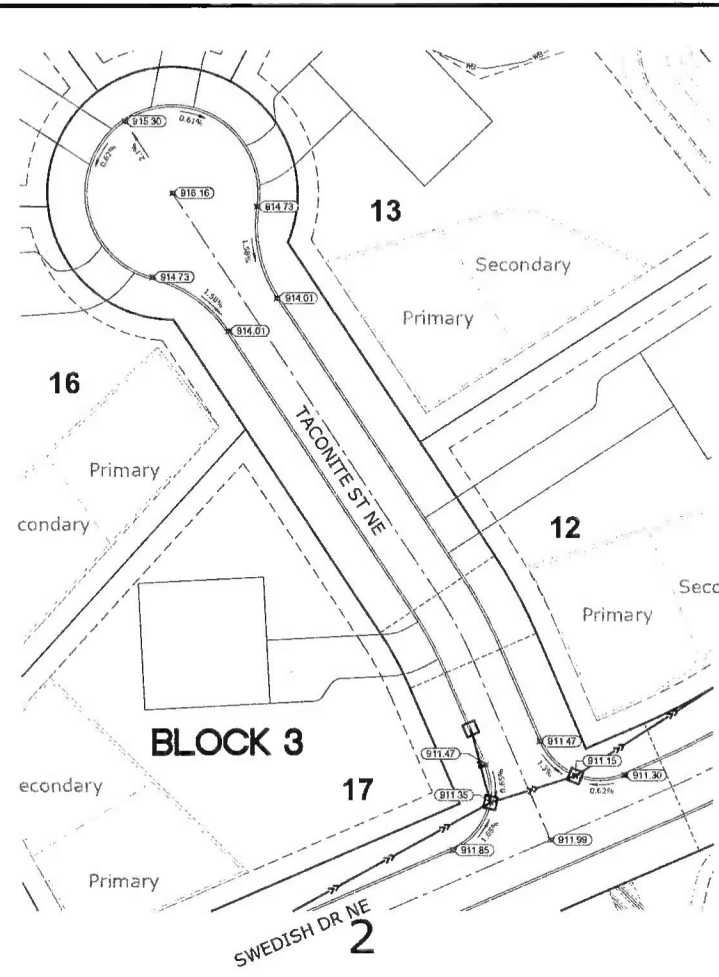
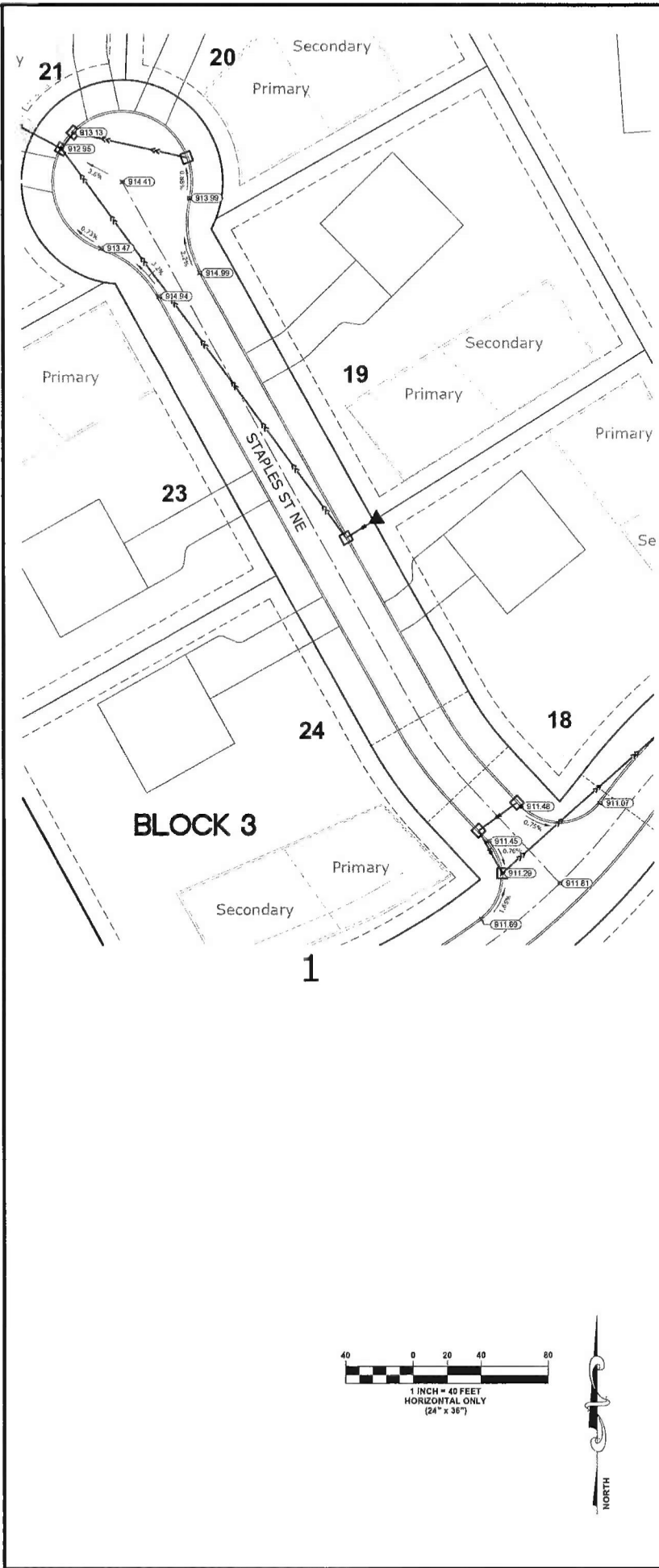
DRAWN BY: J. J. JONES
 JOB NO: 2024
 CHECK BY: MCK
 DATE: 02/20/24

NO.	DATE	DESCRIPTION
1	02/20/24	PLAN / PROFILES
2		
3		
4		
5		
6		
7		

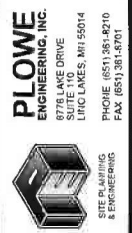
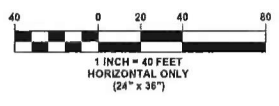
I hereby certify that this plan was prepared by me, or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.
 ADAM J. PANKEL
 License No. 43863
 Date: 07/02/2024

SWEDISH CHAPEL ESTATES
 HAM LAKE, MN
PLAN 1 PROFILE
MISC. STORM SEWER & POND OUTLETS
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C1.7



KEY - NOT TO SCALE



<p>PLOWE ENGINEERING, INC. 1715 LINDSEY DRIVE LITIC LAKES, MN 55014 PHONE: (851) 381-8710 FAX: (851) 381-8701</p>	<p>DATE: 03/20/24</p>
<p>PROJECT: SWEDISH CHAPEL ESTATES INTERSECTION & C-D-S DETAILS</p>	<p>DATE: 07/02/2024</p>
<p>DESIGNED BY: [Signature]</p>	<p>DATE: 07/02/2024</p>
<p>CHECKED BY: [Signature]</p>	<p>DATE: 07/02/2024</p>
<p>DATE: 07/02/2024</p>	<p>DATE: 07/02/2024</p>

SWEDISH CHAPEL ESTATES
 HAM LAKE, MN
INTERSECTION & C-D-S DETAILS
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C1.8

PROJECT TITLE
SWEDISH CHAPEL ESTATES

PROJECT LOCATION
2506 SWEDISH DR NE
HAM LAKE, MN 55304
ANOKA COUNTY

LATITUDE 45.29521
LONGITUDE 93.20770

DEVELOPER

MN DEVELOPMENTS, LLC
17401 WARD LAKE DR 1/W
ANDOVER, MN 55304

CONTACT NAME JEFF STALLBERGER
CONTACT PHONE (612) 778-1471
CONTACT E-MAIL stallj66@msn.com

GENERAL CONTRACTOR

TBD

NARRATIVE - PERMANENT STORMWATER TREATMENT SYSTEMS

PERMANENT STORMWATER MANAGEMENT FEATURES WILL INCLUDE SEVERAL NURP PONDS SEE "STORMWATER DRAINAGE REPORT" FOR FURTHER DISCUSSION

SITE IMPERVIOUS AREAS

Table with 3 columns: ANALYZED AREA, BEFORE CONSTRUCTION, AFTER CONSTRUCTION. Rows include TOTAL ESTIMATED IMPERVIOUS and TOTAL ESTIMATED PERVIOUS.

TOTAL DISTURBED AREA

-34.0 ACRES

SITE MAP WITH 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 SITE

RECEIVING WATERS WITHIN ONE MILE

Table with 4 columns: NAME OF WATER BODY, TYPE OF WATER BODY, SPECIAL WATER, IMPAIRED WATER. Rows include UH-IMPAIRED WETLANDS, COUNTY DITCH 58, COUNTY DITCH 28, DOON LAKE.

BUFFER TO SURFACE WATER

IF THE SITE DRAINS TO A SURFACE WATER, IS A 50-FT NATURAL BUFFER ADJACENT TO 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.

WHERE A 50-FT BUFFER CANNOT BE ACHIEVED, REDUNDANT SEDIMENT CONTROL MEASURES ARE PROVIDED.

TEMPORARY SEDIMENTATION BASINS

IF TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, IS A TEMPORARY SEDIMENT BASIN PROVIDED FOR TREATMENT OF THE RUNOFF BEFORE IT LEAVES THE CONSTRUCTION SITE OR ENTERS SURFACE WATERS?

BECAUSE THIS SITE IS WITHIN ONE MILE OF AN IMPAIRED WATER, THIS REQUIREMENT BECOMES FIVE (5) MILES. THE CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENT BASINS AS NEEDED.

INFILTRATION FEASIBILITY

ARE THERE ANY INFILTRATION RESTRICTIONS FOR THE SITE (SEE 16.14 THROUGH 16.21)?

THE SITE HAS SANDY SOILS WITH A RELATIVELY HIGH WATER TABLE AND IS UNSUITABLE FOR INFILTRATION BMPs.

ADDITIONAL STORMWATER MITIGATION MEASURES

ARE THERE ANY STORMWATER MITIGATION MEASURES PER ENVIRONMENTAL REVIEW DOCUMENT?

- 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, MINIMIZE, OR MITIGATE FOR IMPACTS RELATED TO EROSION PREVENTION, SEDIMENT CONTROL, THE PERMANENT STORMWATER TREATMENT SYSTEM, POLLUTION PREVENTION MEASURES AND DISCHARGES ASSOCIATED WITH THE PROJECT'S CONSTRUCTION ACTIVITY (MNH R. 7090)

DOCUMENTATION OF TRAINED INDIVIDUALS

A INDIVIDUAL WHO PREPARED THE SWPPP

ADAM GINKEL
PLOWE ENGINEERING, INC
8776 LAKE DRIVE
LINO LAKE, MN 55014
(651) 361-8234
adam@plowe.com

B INDIVIDUAL(S) OVERSEEING IMPLEMENTATION OF, REVISING AND/OR AMENDING THE SWPPP AND INDIVIDUAL(S) PERFORMING INSPECTIONS FOR THE PROJECT. ONE OF THESE INDIVIDUALS MUST BE AVAILABLE FOR AN ON-SITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE MPCA (MNH R. 7090)

CONTACT NAME _____
CONTACT PHONE _____
CONTACT E-MAIL _____

C INDIVIDUAL(S) PERFORMING OR SUPERVISING THE INSTALLATION, MAINTENANCE AND REPAIR OF BMPs (MNH R. 7090)

CONTACT NAME _____
CONTACT PHONE _____
CONTACT E-MAIL _____

LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORMWATER FACILITIES

THE PROPOSED STORMWATER MANAGEMENT FEATURE FOR THIS SITE IS AN INFILTRATION BASIN AND WILL BE PRIVATELY OWNED AND MAINTAINED

REVEGETATION SPECIFICATIONS

Table with 2 columns: ITEM, MNDOT SPECIFICATION/NOTES. Rows include SOIL, SEED, TURF ESTABLISHMENT, MULCH, HYDROMULCH, FERTILIZER, WOOD FIBER BLANKET.

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

SEEDING 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

Table with 4 columns: TYPE, QTY, UNIT. Rows include SILT FENCE, BIO-ROLLS, RIP-RAP W GEO-FABRIC, CATCH BASIN INLET PROTECTION, STABILIZED RIPRAP OVERFLOW, EROSION CONTROL BLANKET, SEED & MULCH (GENERAL), ROCK CONSTRUCTION ENTRANCE.

NARRATIVE - TIMING FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES

- 1 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND SWPPP MUST BE AVAILABLE ON THE PROJECT SITE AT ALL TIMES
2 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
2.3 SILT FENCE SHALL REMAIN IN PLACE UNTIL SITE HAS BEEN STABILIZED
3 CONTRACTOR SHALL INSTALL A ROCK CONSTRUCTION ENTRANCE AT ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTER/EXIT SITE
4 CONTRACTOR TO INSTALL TREE PROTECTION FENCING AS APPLICABLE
5 CONTRACTOR SHALL PERFORM SITE GRADING ON AN AREA-BY-AREA BASIS TO MINIMIZE UNSTABILIZED AREAS
5.1 CONTRACTOR MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS, AS DESCRIBED IN ITEM 8.4 OF THE PERMIT, AND COMPLETE THE STABILIZATION WITHIN 24 HOURS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES
5.2 CONTRACTOR TO PROVIDE TEMPORARY SEDIMENTATION BASINS AS REQUIRED IN SECTION 14.1 THROUGH 14.10
6 CONTRACTOR TO SHALL PAY SPECIAL ATTENTION TO ADJACENT PROPERTY LINES TO ENSURE THE EROSION CONTROL PRACTICES IN PLACE IN THOSE AREAS PREVENT MIGRATION OF SEDIMENT ONTO ADJACENT PROPERTIES
7 ALL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE PLANS OR IMPLEMENTED BY THE FIELD SHALL BE IN ACCORDANCE WITH THE CITY AND HPDES PHASE II PERMIT REQUIREMENTS
8 CONTRACTOR TO PROVIDE ADDITIONAL SILT FENCE, BIOROLLS, EROSION CONTROL BLANKET, OR OTHER APPROVED EQUAL FOR ANY SLOPES THAT APPEAR TO BE FAILING
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/LOWED ONTO ADJACENT STREETS OR AS DIRECTED BY CITY
12 COORDINATE SMALL UTILITIES INSTALLATIONS (GAS, PHONE, ELECTRIC, CABLE, FIBEROPTIC, ETC.) AFTER PAVEMENT INSTALLATION

"BEST MANAGEMENT PRACTICES (BMPs)" MEANS THE MOST EFFECTIVE AND PRACTICABLE MEANS OF EROSION PREVENTION AND SEDIMENT CONTROL AND WATER QUALITY MANAGEMENT PRACTICES THAT ARE THE MOST EFFECTIVE AND PRACTICABLE MEANS OF TO CONTROL, PREVENT, AND MINIMIZE DEGRADATION OF SURFACE WATER, INCLUDING AVOIDANCE OF IMPACTS, CONSTRUCTION PHASING, MINIMIZING THE LENGTH OF TIME SOIL AREAS ARE EXPOSED, PROHIBITING POLLUTION PREVENTION THROUGH GOOD HOUSEKEEPING, AND OTHER MANAGEMENT PRACTICES PUBLISHED BY STATE OR DESIGNATED AREA-WIDE PLANNING AGENCIES (MNH R. 7090)

"CONSTRUCTION ACTIVITY" MEANS ACTIVITIES INCLUDING CLEARING, GRADING, AND EXCAVATING, THAT RESULT IN LAID DISTURBANCE OF EQUAL TO OR GREATER THAN ONE ACRE, INCLUDING THE DISTURBANCE OF LESS THAN ONE ACRE OF TOTAL LAID AREA THAT IS PART OF A LARGER COMMON PLAN OF DEVELOPMENT OR SALE IF THE LARGER COMMON PLAN WILL ULTIMATELY DISTURB EQUAL TO OR GREATER THAN ONE ACRE. THIS INCLUDES A DISTURBANCE TO THE LAND THAT RESULTS IN A CHANGE IN THE TOPOGRAPHY, EXISTING SOIL COVER, BOTH VEGETATIVE AND NON-VEGETATIVE, OR THE EXISTING SOIL TOPOGRAPHY THAT MAY RESULT IN ACCELERATED 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 FIVE ACRES FOR THE PURPOSE OF ROUTINE MAINTENANCE PERFORMED TO MAINTAIN THE ORIGINAL LINE AND GRADE, HYDRAULIC CAPACITY, AND ORIGINAL PURPOSE OF THE FACILITY. ROUTINE MAINTENANCE DOES NOT INCLUDE ACTIVITIES SUCH AS REPAIRS, REPAIRMENT AND OTHER TYPES OF ROUTINE MAINTENANCE. PAVEMENT REHABILITATION THAT DOES NOT DISTURB THE UNDERLYING SOILS (E.G. MILL AND OVERLAY PROJECTS) IS NOT CONSTRUCTION ACTIVITY (MNH R. 7090)

"DEWATERING" MEANS THE REMOVAL OF SURFACE OR GROUND WATER TO DRY AND/OR SOLIDIFY A CONSTRUCTION SITE TO ENABLE CONSTRUCTION ACTIVITY. DEWATERING MAY REQUIRE A MINNESOTA DEPARTMENT OF NATURAL RESOURCES WATER APPROPRIATION PERMIT AND, IF DEWATERING WATER IS CONTAMINATED, DISCHARGE OF SUCH WATER MAY REQUIRE AN INDIVIDUAL MPCA HPDES/SDS PERMIT (MNH R. 7090)

"EROSION PREVENTION" MEANS MEASURES EMPLOYED TO PREVENT EROSION SUCH AS SOIL STABILIZATION PRACTICES, PERMANENT COVER OR CONSTRUCTION PHASING (MNH 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 OWNER. IN SOME CASES, THE OWNER IS THE GENERAL CONTRACTOR. IN THESE CASES, THE OWNER SIGNS THE PERMIT APPLICATION AS THE OPERATOR AND BECOMES THE SOLE PERMITTEE (MNH R. 7090)

"GROUNDWATER" MEANS THE WATER CONTAINED BELOW THE SURFACE OF THE EARTH IN THE SATURATED ZONE INCLUDING, WITHOUT LIMITATION, ALL WATERS WHETHER UNDER CONFINED, UNCONFINED, OR PERCHED CONDITIONS, IN NEAR SURFACE UNCONSOLIDATED SEDIMENT OR REGOLITH, OR IN ROCK FORMATIONS DEEPER UNDERGROUND (MNH R. 7090)

"HOMEOWNER FACT SHEET" MEANS AN MPCA FACT SHEET AVAILABLE ON THE MPCA CONSTRUCTION STORMWATER WEBSITE FOR PERMITTEES TO GIVE TO HOMEOWNERS AT THE TIME OF SALE (MNH R. 7090)

"INFEASIBLE" MEANS NOT TECHNOLOGICALLY POSSIBLE OR NOT ECONOMICALLY PRACTICABLE AND ACHIEVABLE IN LIGHT OF THE BEST INDUSTRY PRACTICES (MNH R. 7090)

"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 LAID-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 MORE ADDITIONAL CALENDAR DAYS OR 7 CALENDAR DAYS WHERE ITEM 23.9 APPLIES, PERMITTEES CAN INITIATE STABILIZATION BY:

- 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 OR A PORTION OF THE AREA TO BE STABILIZED, BUT NOT ON THE ENTIRE AREA, OR
E FINISHING ARRANGEMENTS TO HAVE STABILIZATION PRODUCT FULLY INSTALLED IN COMPLIANCE WITH THE APPLICABLE DEADLINE FOR COMPLETING STABILIZATION (MNH R. 7090)

"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 RATE OF FLOW THAN PRIOR TO DEVELOPMENT. EXAMPLES INCLUDE ROOF TOPS, SIDEWALKS, DRIVEWAYS, PARKING LOTS, AND CONCRETE, ASPHALT, OR GRAVEL ROADS. FLOODED OVER SURFACE WATERS ARE CONSIDERED IMPERVIOUS SURFACES (MNH R. 7090)

"NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)" MEANS THE PROGRAM FOR ISSUING, MODIFYING, REVOKING, REISSUING, TERMINATING, MODIFYING, AND ENFORCING PERMITS UNDER THE CLEAN WATER ACT, AS AMENDED (33 U.S.C. 1251 ET SEQ SECTION 1342.40-40 CFR PARTS 122, 123, 124 AND 450) (MNH 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 (MNH R. 7090)

"NOTICE OF TERMINATION (NOT)" MEANS THE FORM (ELECTRONIC OR PAPER) REQUIRED FOR TERMINATING COVERAGE UNDER THE CONSTRUCTION GENERAL PERMIT (MNH R. 7090)

"OPERATOR" MEANS THE PERSON (USUALLY THE GENERAL CONTRACTOR) FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY DESIGNATED BY THE OWNER WHO HAS DAY TO DAY OPERATIONAL CONTROL AND/OR 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 (MNH R. 7090)

"OWNER" 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 MINERAL RIGHTS LICENSE HOLDER, OR THE CONTRACTING GOVERNMENT AGENCY RESPONSIBLE FOR THE CONSTRUCTION ACTIVITY (MNH R. 7090)

"PERMANENT COVER" MEANS SURFACE TYPES THAT WILL PREVENT SOIL FROM UNDER EROSION CONDITIONS. EXAMPLES INCLUDE GRAVEL, CONCRETE, PERENNIAL COVER, OR OTHER LANDSCAPED MATERIAL THAT WILL PERMANENTLY ARREST SOIL EROSION. PERMITTEES MUST ESTABLISH A UNIFORM PERENNIAL VEGETATIVE COVER (I.E. EVENLY DISTRIBUTED, WITHOUT LARGE BARE AREAS) WITH A DENSITY OF 70 PERCENT OF THE NATIVE BACKGROUND VEGETATIVE COVER ON ALL AREAS NOT COVERED BY PERMANENT STRUCTURES, OR EQUIVALENT PERMANENT STABILIZATION MEASURES. PERMANENT COVER DOES NOT INCLUDE TEMPORARY BMPs SUCH AS WOOD FIBER BLANKET, MULCH, AND ROLLED EROSION CONTROL PRODUCTS (MNH R. 7090)

"PERMITTEES" MEANS THE PERSONS, FIRM, GOVERNMENTAL AGENCY, OR OTHER ENTITY IDENTIFIED AS THE OWNER AND OPERATOR ON THE APPLICATION SUBMITTED TO THE MPCA AND ARE RESPONSIBLE FOR COMPLIANCE WITH THE TERMS AND CONDITIONS OF THIS PERMIT (MNH 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 DOCUMENTS (MNH R. 7090)

"PUBLIC WATERS" MEANS ALL WATER BASINS AND WATERCOURSES DESCRIBED IN MNH STAT. SECT 1036.005 SUBP 15 (MNH 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) (MNH R. 7090)

"STABILIZE," "STABILIZED," "STABILIZATION" MEANS THE EXPOSED GROUND SURFACE HAS BEEN COVERED BY PERMANENT OR APPROPRIATE MATERIALS SUCH AS MULCH, STAKED SOIL, EROSION CONTROL BLANKET, 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 90 PERCENT GROUND COVER (TYPICALLY 2 TONS/ACRE) (MNH R. 7090)

"STORMWATER" MEANS PRECIPITATION RUNOFF, STORMWATER RUNOFF, SNOWMELT RUNOFF, AND ANY OTHER SURFACE RUNOFF AND DRAINAGE (MNH R. 7090)

"STEEP SLOPES" MEANS SLOPES THAT ARE 1.3 (N:H) (33 PERCENT) OR STEEPER IN GRADE (MNH R. 7090)

"STORM WATER 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 (MNH R. 7090)

"SURFACE WATER 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 22 AS SURFACE WATERS (MNH R. 7090)

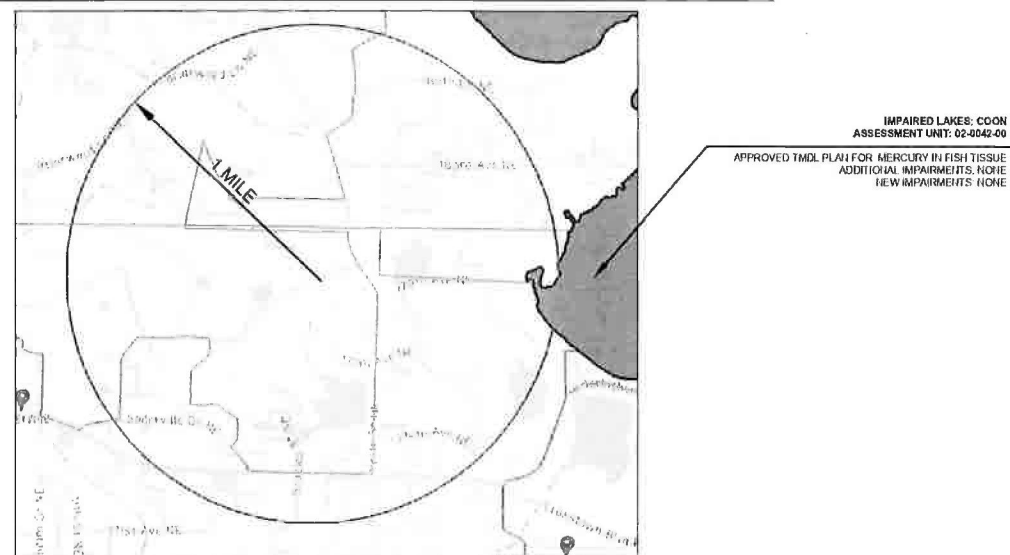
"WATERS OF THE STATE" AS DEFINED IN MNH STAT. SECT 115.01, SUBP 22) MEANS ALL STREAMS, LAKES, PONDS, MARSHES, WATERCOURSES, WATERWAYS, WELLS, SPRINGS, RESERVOIRS, AQUIFERS, IRRIGATION SYSTEMS, DRAINAGE SYSTEMS AND ALL OTHER BODIES OR ACCUMULATIONS OF WATER, SURFACE OR UNDERGROUND, NATURAL OR ARTIFICIAL, PUBLIC OR PRIVATE, WHICH ARE CONTAINED WITHIN FLOW THROUGH OR BORDER UPON THE STATE OR ANY PORTION THEREOF (MNH 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) (MNH R. 7090)

"WETLANDS" AS DEFINED IN MNH R. 7050.0166, SUBP 1A.B) MEANS THOSE AREAS THAT ARE INUNDATED OR SATURATED BY SURFACE WATER OR GROUNDWATER AT A FREQUENCY AND DURATION SUFFICIENT TO SUPPORT, AND UNDER NORMAL CIRCUMSTANCES DO SUPPORT, A PREVALENCE OF VEGETATION TYPICALLY ADAPTED FOR LIFE IN SATURATED SOIL CONDITIONS. WETLANDS GENERALLY INCLUDE SWAMPS, MARSHES, BOGS, 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
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, AND
3 UNDER NORMAL CIRCUMSTANCES SUPPORT A PREVALENCE OF SUCH VEGETATION (MNH R. 7050.0166, SUBP 1A.B)

MAP OF SURFACE WATERS



PLOWE ENGINEERING, INC.
8776 LAKE DRIVE
SUITE 110
LINO LAKE, MN 55014
PHONE: (651) 361-8234
FAX: (651) 361-8901

DRAWN BY: AG
JOB NO: 23-2122
CHECK BY: MCA
DATE: 03/20/24

1 05/29/24 SIGNED

2

3

4

5

6

7

8

NO DATE DESCRIPTION

1 I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota

ADAM GINKEL
Licens No. 43983

Date: 07/02/2024

PREPARED FOR: MN DEVELOPMENTS, LLC

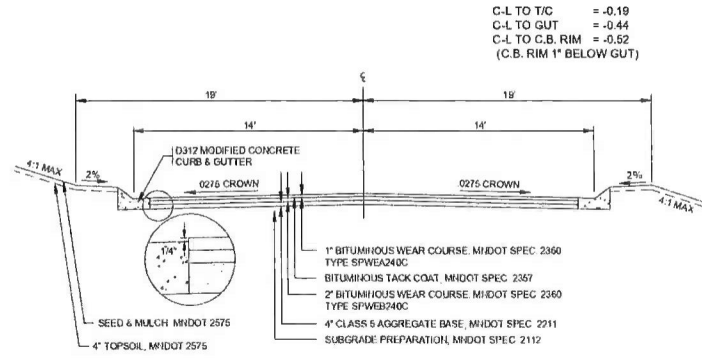
SWEDISH CHAPEL ESTATES
HAM LAKE, MN

SWPPP

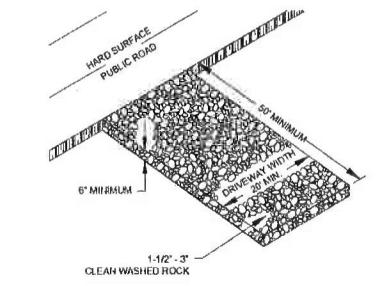
PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET

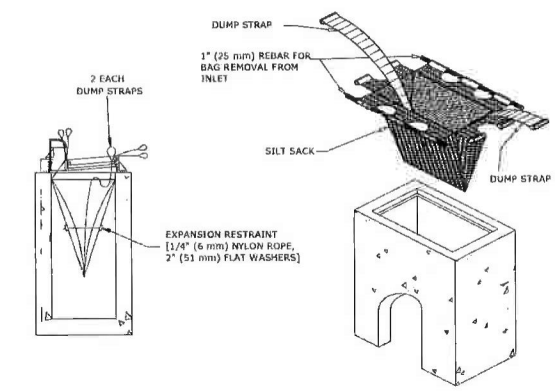
C2.1



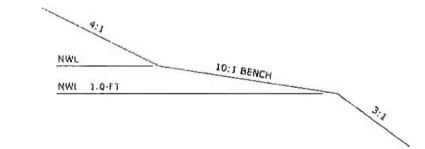
TYPICAL STREET SECTION (7-TON)
 N.T.S.



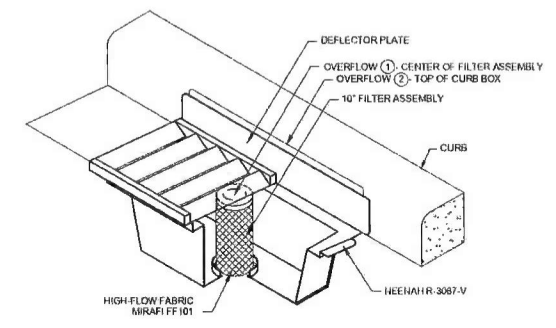
ROCK CONSTRUCTION EXIT
 N.T.S.



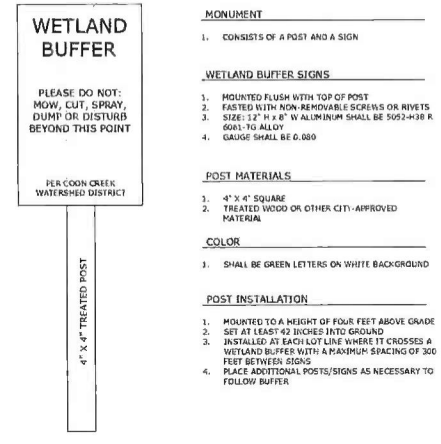
SILT SACK
 N.T.S.



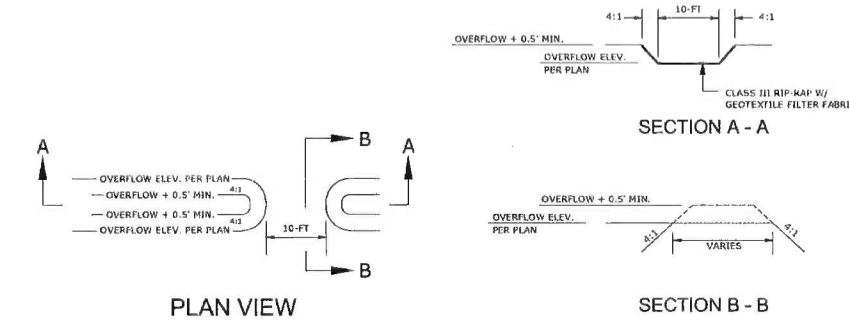
TYPICAL POND SECTION
 N.T.S.



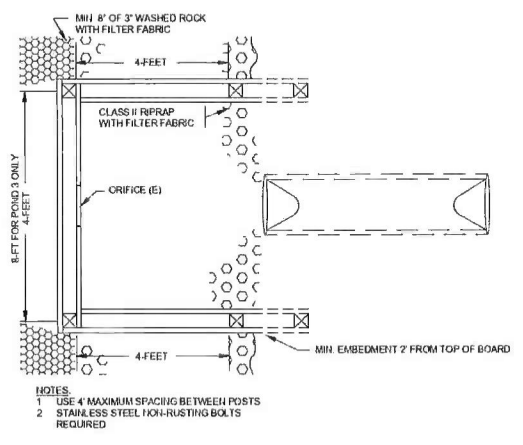
WIMCO INLET PROTECTION
 N.T.S.



WETLAND BUFFER SIGNAGE
 N.T.S.

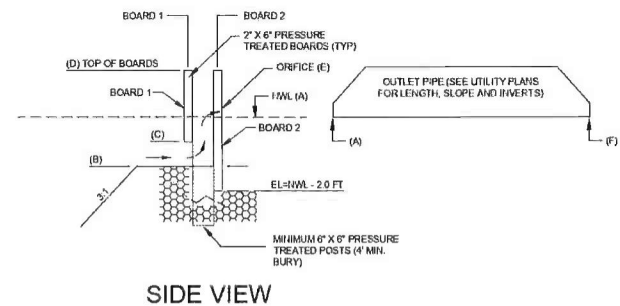


RIP-RAP OVERFLOWS
 N.T.S.



POND OUTLET BAFFLE WEIR
 N.T.S.

	POND NUMBER							
		1	2	3	4	5	6	7
NWL	A	905.7	907.2	906.8	906.5	905.8	905.5	907.5
TOP OF BOARDS	D	908.0	909.0	908.8	908.8	908.0	907.3	909.3
ORIFICE TYPE	E	RECT	RECT	RECT	CIRCLE	CIRCLE	CIRCLE	RECT
ORIFICE DIAMETER	E	n/a	n/a	n/a	8.2	7.3	8.3	n/a
ORIFICE WIDTH	E	27.0	12.0	28.3	n/a	n/a	n/a	8.0
ORIFICE HEIGHT	E	27.6	21.6	24.0	n/a	n/a	n/a	21.6
BOTTOM OF BOARD 1	C	905.2	906.7	906.3	906.0	905.3	905.0	907.0
BOTTOM OF OPENING	B	904.7	906.2	905.8	905.5	904.8	904.5	906.5
DOWNSTREAM INVERT	F	905.50	907.00	906.60	906.30	905.60	905.30	907.30



SIDE VIEW

#	SIZE	CASTING	#	SIZE	CASTING	#	SIZE	CASTING
102	48" DIA.	NEENAH R-3246-C	202	48" DIA.	NEENAH R-3246-C	502	48" DIA.	NEENAH R-3246-C
103	48" DIA.	NEENAH R-3246-C	204	2 x 3	NEENAH R-3246-C	503	2 x 3	NEENAH R-3246-C
105	48" DIA.	NEENAH R-3246-C				504	48" DIA.	NEENAH R-3246-C
106	48" DIA.	NEENAH R-3246-C	302	48" DIA.	NEENAH R-3246-C	505	2 x 3	NEENAH R-3246-C
108	MNDOT TYPE G	NEENAH R-2577	303	48" DIA.	NEENAH R-3246-C			
109	48" DIA.	NEENAH R-3246-C	304	48" DIA.	NEENAH R-3246-C	602	48" DIA.	NEENAH R-3246-C
110	48" DIA.	NEENAH R-3246-C	305	MNDOT TYPE G	NEENAH R-2577	603	48" DIA.	NEENAH R-3246-C
111	48" DIA.	NEENAH R-3246-C	307	48" DIA.	NEENAH R-2577	604	MNDOT TYPE G	NEENAH R-2577
112	2 x 3	NEENAH R-3246-C						
113	48" DIA.	NEENAH R-3246-C	402	48" DIA.	NEENAH R-3246-C	702	48" DIA.	NEENAH R-3246-C
114	48" DIA.	NEENAH R-3246-C	403	2 x 3	NEENAH R-3246-C	703	48" DIA.	NEENAH R-3246-C
115	48" DIA.	NEENAH R-3246-C	404	48" DIA.	NEENAH R-3246-C	704	48" DIA.	NEENAH R-3246-C
122	48" DIA.	NEENAH R-3246-C	405	48" DIA.	NEENAH R-3246-C	706	48" DIA.	NEENAH R-3246-C
123	2 x 3	NEENAH R-3246-C	406	2 x 3	NEENAH R-3246-C	707	2 x 3	NEENAH R-3246-C
124	48" DIA.	NEENAH R-3246-C						
125	48" DIA.	NEENAH R-3246-C						
126	2 x 3	NEENAH R-3246-C						
127	48" DIA.	NEENAH R-3246-C						
128	2 x 3	NEENAH R-3246-C						
130	48" DIA.	NEENAH R-3246-C						
131	48" DIA.	NEENAH R-3246-C						
132	2 x 3	NEENAH R-3246-C						



NO	DATE	DESCRIPTION
1	04.18.24	PRELIMINARY COMMENTS
2	05.22.24	PRELIMINARY REVIEW COMMENTS
3	05.28.24	PRELIMINARY REVIEW COMMENTS
4	08.28.24	STRUCTURE SCHEDULE ADJ
5		
6		
7		
8		
9		
10		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a licensed professional engineer under the laws of the State of Minnesota.

ADAM J. ANKEL
 License No. 43983
 Date: 07.02.2024

SWEDISH CHAPEL ESTATES
 HAIN LAKE, MN
 DETAILS
 PREPARED FOR: MN DEVELOPMENTS, LLC



DRAWN BY	AC	DATE	03/20/24
CHECKED BY	MOA	DATE	03/20/24
DATE	03/20/24	DESCRIPTION	
1	03/20/24	SUBMITTED	
2			
3			
4			
5			
6			
7			

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.

Adam J. Plowe
 ADAM PLOWE
 License No. 43983
 Date: 07/02/2004

SWEDISH CHAPEL ESTATES
 HAM LAKE, MN
DETAILS
 PREPARED FOR: MN DEVELOPMENTS, LLC

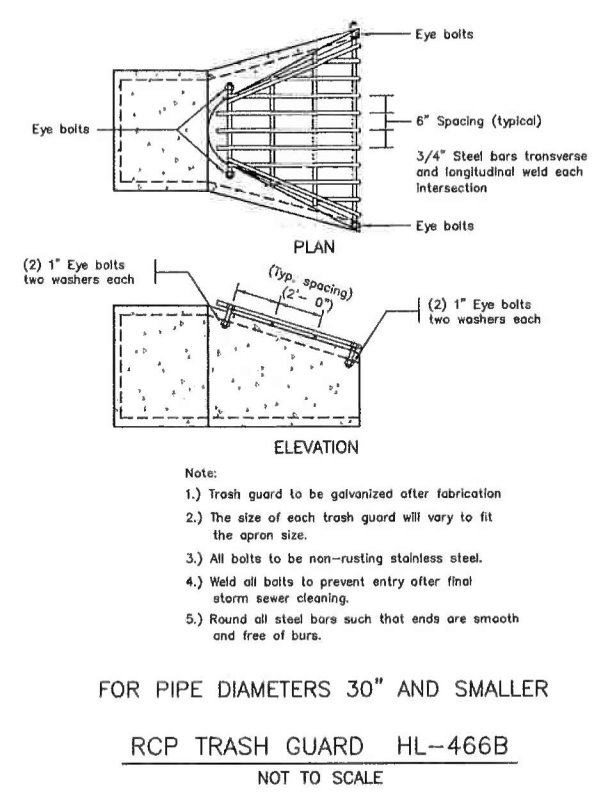
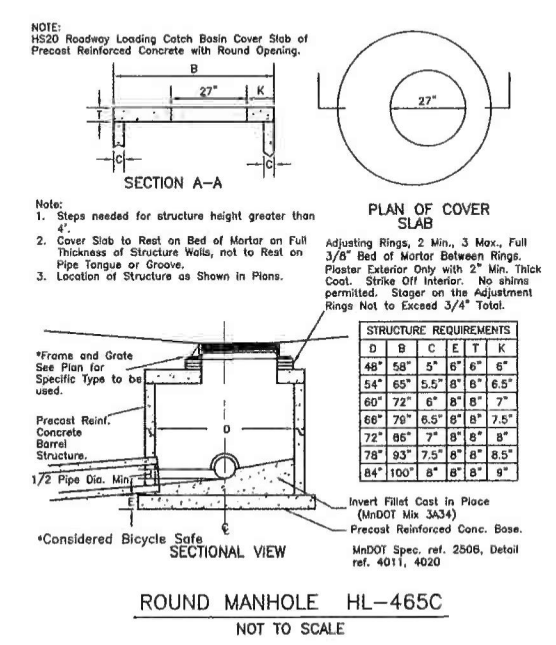
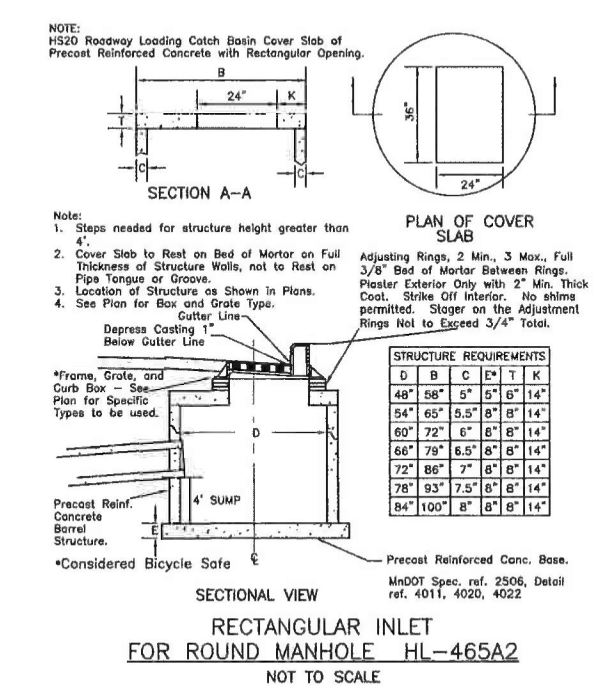
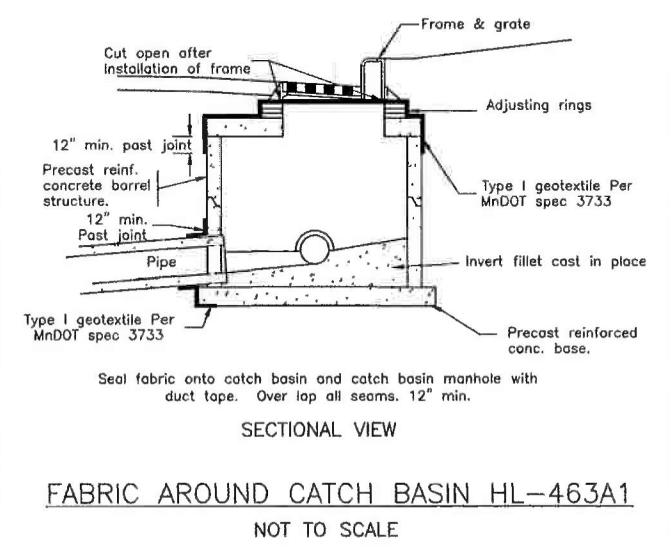
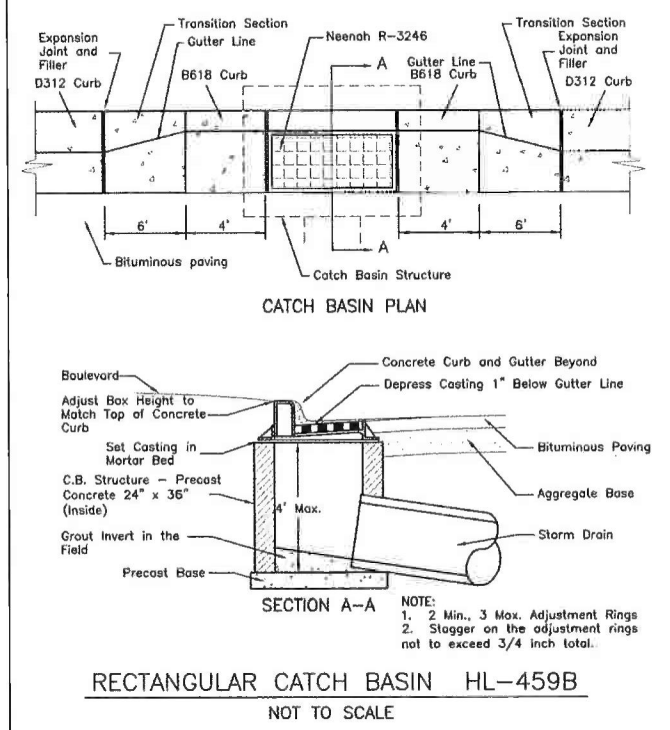
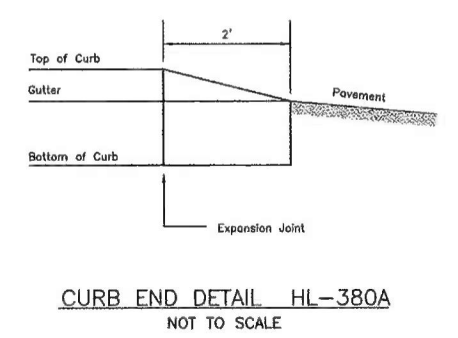
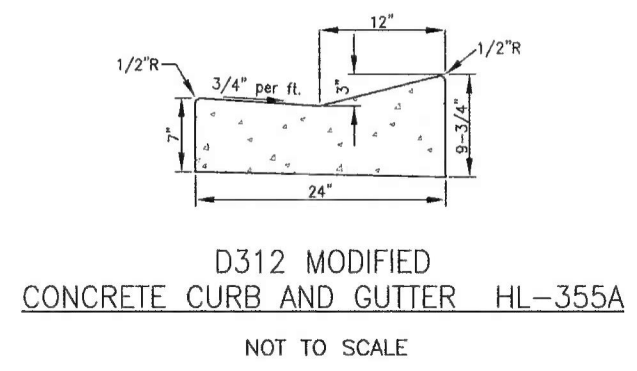
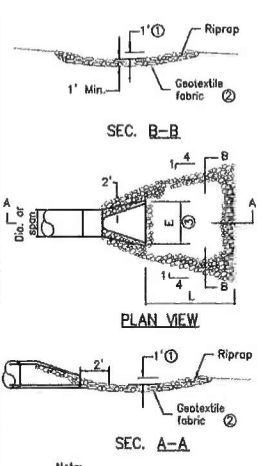


TABLE OF QUANTITIES
 Riprap at RCP Outlets

Dia. Pipe (In.)	L (ft.)	Class II	Class III	Class IV
		D ₅₀ = 6"	D ₅₀ = 9"	D ₅₀ = 12"
12	8	3.0	4.4	5.9
15	8	3.2	4.8	6.4
18	10	4.3	6.4	8.5
21	10	4.7	7.1	9.4
24	12	6.2	9.2	12.3
27	12	6.6	9.9	13.2
30	14	8.2	12.3	16.4
36	16	10.6	15.8	21.1
42	18	12.5	18.7	24.9
48	20	14.8	22.2	29.6

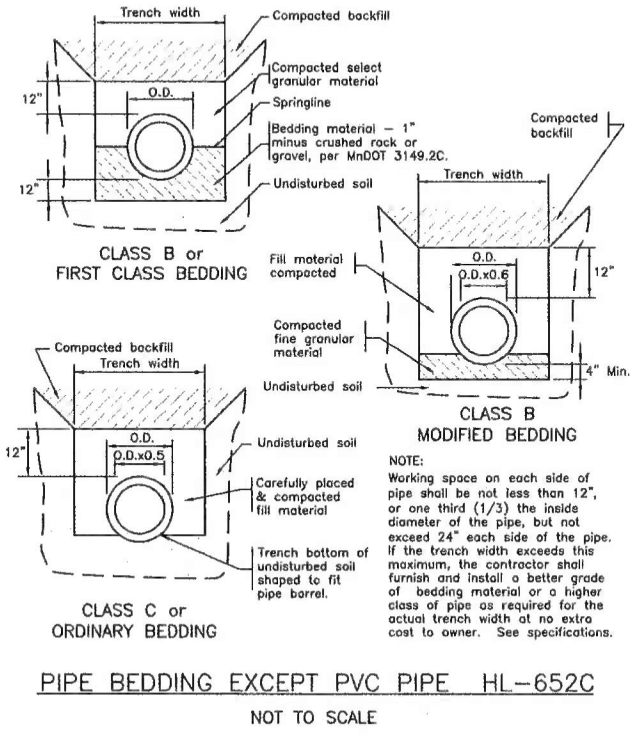
Riprap at RCPA Outlets

Span Pipe Arch (In.)	L (ft.)	Class II	Class III	Class IV
		D ₅₀ = 6"	D ₅₀ = 9"	D ₅₀ = 12"
22	10	4.1	6.1	8.1
28	12	5.7	8.5	11.3
36	14	7.5	11.2	14.9
43	16	9.5	14.3	19.0
51	18	11.3	16.9	22.5
58	20	13.2	19.8	26.4



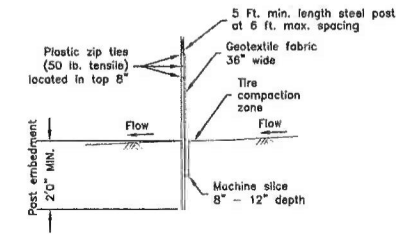
Note:
 1. For pipes greater than or equal to 30" use 1.5'
 2. Geotextile fabric, Spec. 3501. The fabric should cover the area of the riprap and extend under the culvert apron 3 feet.
 3. Requirements for riprap size is shown in the plans.

RIPRAP AT RCP OUTLETS HL-480A1
 NOT TO SCALE



NOTE:
Working space on each side of pipe shall be not less than 12", or one third (1/3) the inside diameter of the pipe, but not exceed 24" each side of the pipe. If the trench width exceeds this maximum, the contractor shall furnish and install a better grade of bedding material or a higher class of pipe as required for the actual trench width at no extra cost to owner. See specifications.

PIPE BEDDING EXCEPT PVC PIPE HL-652C
NOT TO SCALE



GENERAL SILT FENCE NOTES:

Refer to MnDOT specs. 2573 & 3586
Silt fence shall be installed along the contour (on a level horizontal plane)
Curve the end of the silt fence up-gradient so that it contains the muddy water.
Maximum contributing area shall be one acre.
No single fencing unit should exceed 330 feet.
Follow slope grade/length guidelines:

SLOPE GRADE	MAX. LENGTH
LESS THAN 2%	100 FT.
2 - 5%	75 FT.
5 - 10%	50 FT.
10 - 20%	25 FT.
GREATER THAN 20%	15 FT.

SILT FENCE: MACHINE SLICED HL-760A
NOT TO SCALE

PLOWE ENGINEERING, INC.
2750 LAKELAND DRIVE
SUITE 110
LUD LAKES, MN 55014
PHONE (851) 361-9710
FAX (851) 361-9701



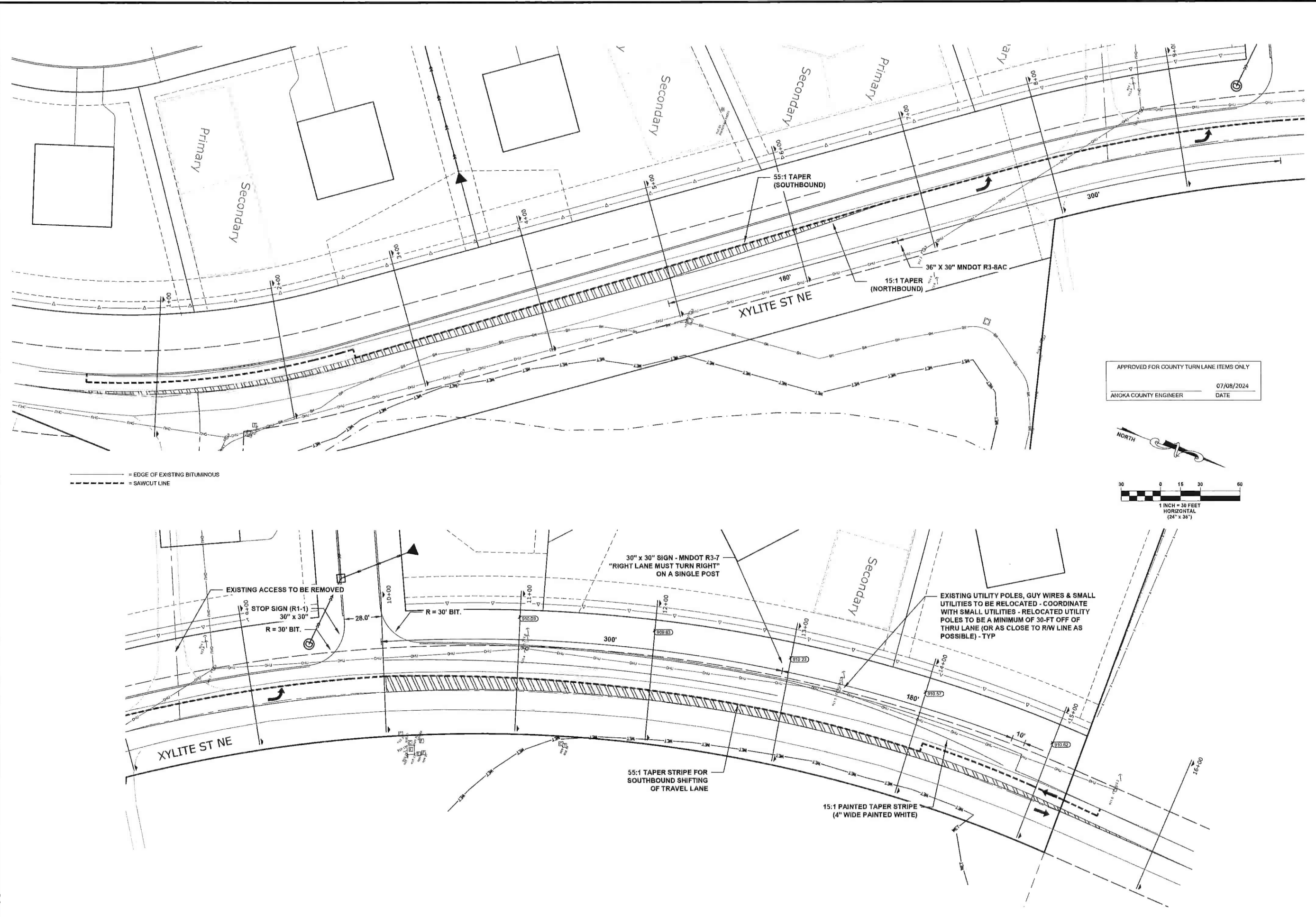
DRAWN BY: AG
JOB NO: 23-2122
CHECK BY: MOA
DATE: 03/29/24

NO	DATE	DESCRIPTION
1	04.10.24	REC. & CADD COMMENTS
2	05.28.24	SIGNED
3		
4		
5		
6		
7		
8		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.
Adam Winkel
ADAM WINKEL
Date: 07.07.2024 License No. 43983

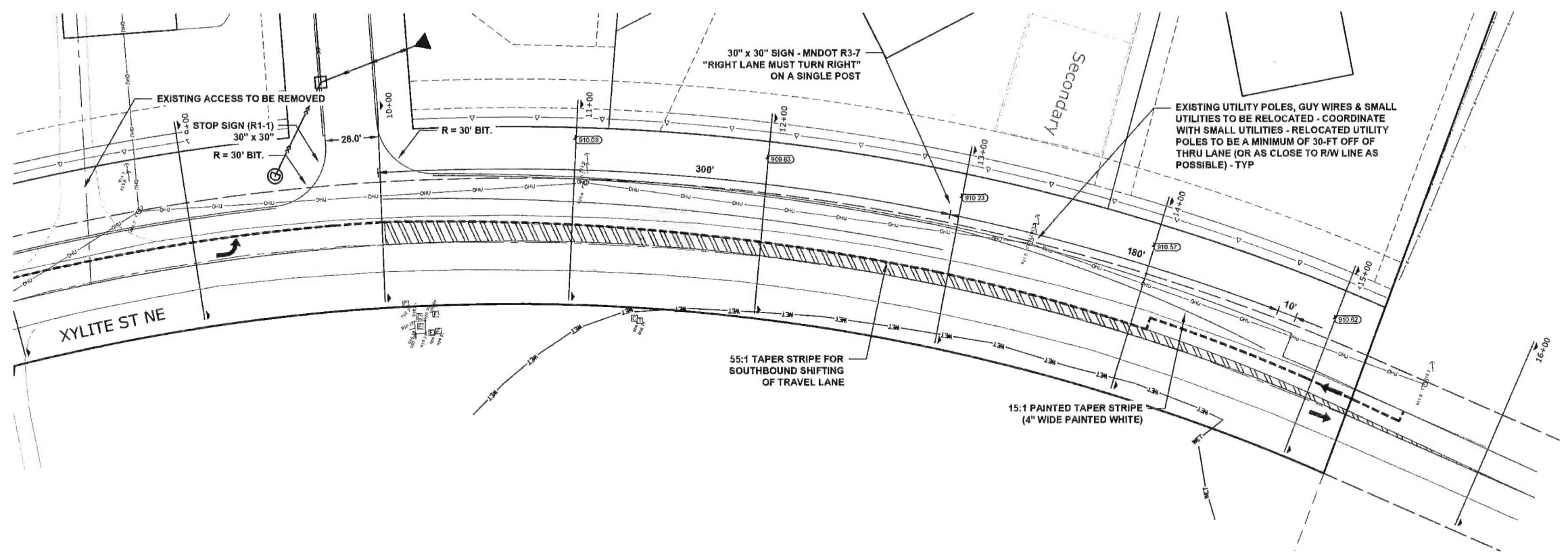
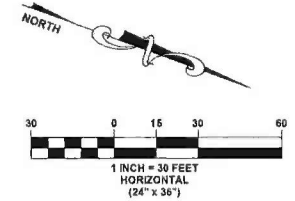
SWEDISH CHAPEL ESTATES
HAM LAKE, MN
DETAILS
PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C3.3



——— = EDGE OF EXISTING BITUMINOUS
 - - - - - = SAWCUT LINE

APPROVED FOR COUNTY TURN LANE ITEMS ONLY
 ANOKA COUNTY ENGINEER _____ DATE 07/08/2024



PLOWE
ENGINEERING, INC.
 8772 LAKE DRIVE
 SUITE 110
 LIND LAKES, MN 55014
 PHONE (851) 861-8270
 FAX (851) 861-8701



DRAWN BY AG
 JOB NO. 73.2127
 CHECK BY MGA
 DATE 03/20/24

NO.	DATE	DESCRIPTION
1	04.10.24	REF & CORR COMMENTS
2	04.17.24	ADDITIONAL TURN LANE DETAIL
3	05.28.24	SIGNS
4	06.25.24	ASCD COMMENTS
5	07.05.24	SIG RTI ARROW REMOVED
6		
7		
8		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.
 ADAM ANKEL
 License No. 43983
 Date 07/08/2024

SWEDISH CHAPEL ESTATES
 HAIN LAKE, MN
LEFT & RIGHT TURN LANE PLAN
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C4.1

GENERAL NOTES

1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATIONS.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR WITHIN PUBLIC RIGHT-OF-WAY.
6. NOTIFY CITY AND COON CREEK WATERSHED DISTRICT (CCWD) A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL ELECTRIC, TELEPHONE, AND GAS EXTENSIONS INCLUDING SERVICE LINES SHALL BE CONSTRUCTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

APPROVED FOR COUNTY TURN LANE ITEMS ONLY

 ANOKA COUNTY ENGINEER DATE

PLOWE
 ENGINEERING, INC.
 1100 W. WASHINGTON DRIVE
 LINDEN LAKES, MN 55014
 PHONE: (651) 381-8270
 FAX: (651) 381-8761



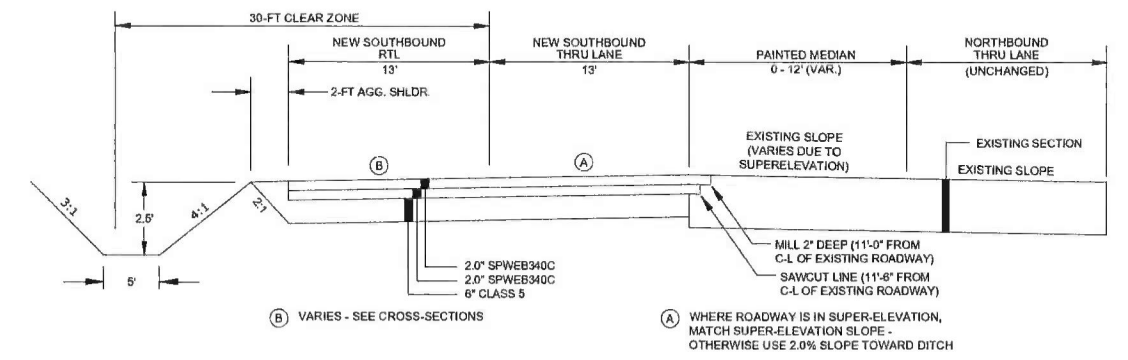
DRAWN BY: AC
 DATE: 03/27/24
 CHECK BY: JKA
 DATE: 03/27/24

NO.	DATE	DESCRIPTION
1	04.10.24	PER CCWD COMMENTS
2	04.17.24	ADDITIONAL TURN LANE DETAIL
3	05.28.24	SUBMITTED
4	06.05.24	SLOPE ADJ. FOR SR RIGHT TURN LANE
5		
6		
7		
8		

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly licensed professional engineer under the laws of the State of Minnesota.

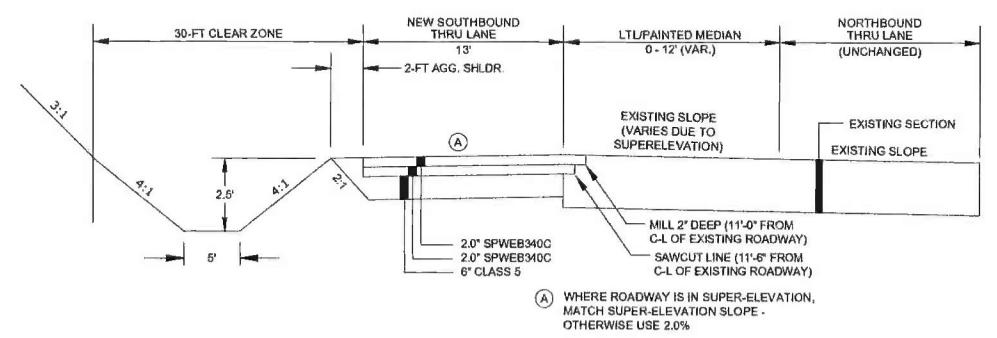
Adam Grindel
 ADAM GRINDEL
 License No. 43983
 Date: 07.05.2024

XYLITE ST NE
 SOUTHBOUND RIGHT TURN LANE



- NOTES**
1. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH MNDOT SPECIFICATIONS (LATEST EDITION)
 2. ALL DISTURBED SOIL WITHIN COUNTY RIGHT-OF-WAY MUST BE SEEDED (MNDOT 25-141) & MULCHED (TYPE 1, DISC ANCHORED)
 3. USE ALL STRAW FIBER BLANKET FOR DITCH SLOPES OF 3:1 OR GREATER
 4. PAVEMENT MARKINGS SHALL BE EPOXY
 5. CONTRACTOR TO CONTACT ANOKA COUNTY PERMITS SECTION AT (763) 324-3176 TO OBTAIN THE RIGHT-OF-WAY PERMIT.

XYLITE ST NE
 NORTHBOUND LEFT TURN LANE



- NOTES**
1. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH MNDOT SPECIFICATIONS (LATEST EDITION)
 2. ALL DISTURBED SOIL WITHIN COUNTY RIGHT-OF-WAY MUST BE SEEDED (MNDOT 25-141) & MULCHED (TYPE 1, DISC ANCHORED)
 3. USE ALL STRAW FIBER BLANKET FOR DITCH SLOPES OF 3:1 OR GREATER
 4. PAVEMENT MARKINGS SHALL BE EPOXY
 5. CONTRACTOR TO CONTACT ANOKA COUNTY PERMITS SECTION AT (763) 324-3176 TO OBTAIN THE RIGHT-OF-WAY PERMIT.

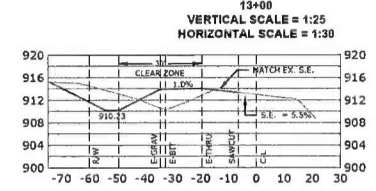
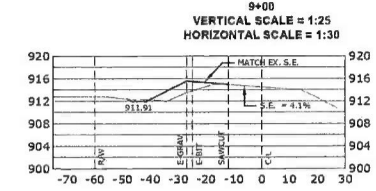
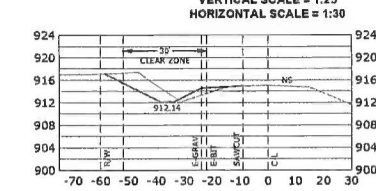
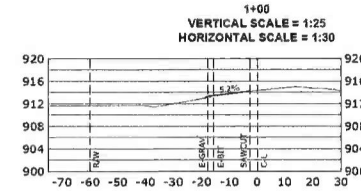
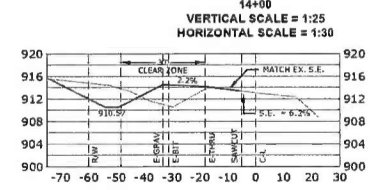
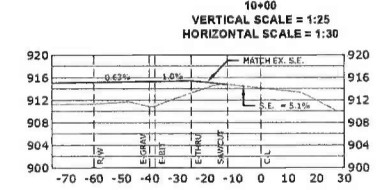
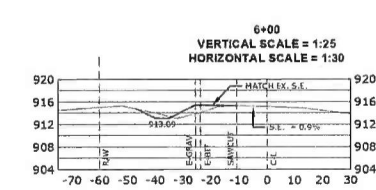
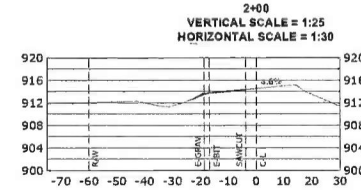
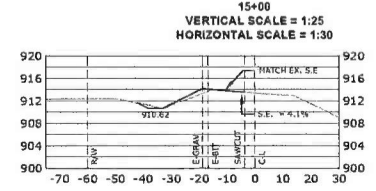
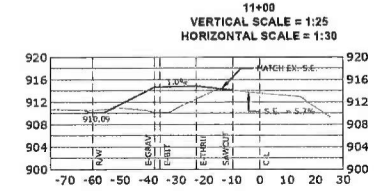
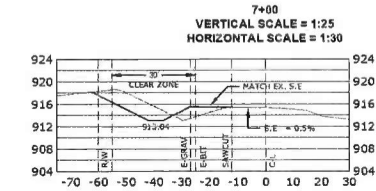
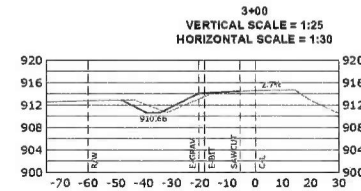
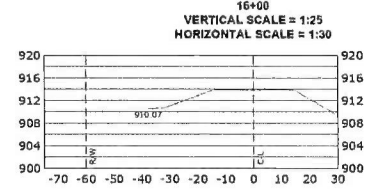
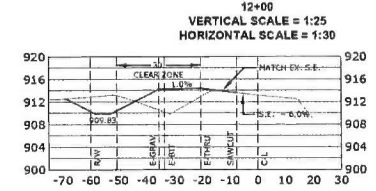
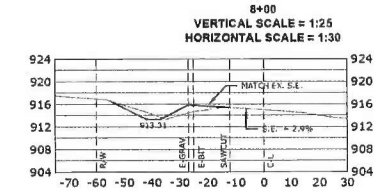
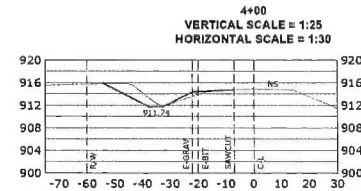
SWEDISH CHAPEL ESTATES
 HAM LAKE, MN
LEFT & RIGHT TURN LANE PLAN
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C4.2

APPROVED FOR COUNTY TURN LANE ITEMS ONLY
 ANOKA COUNTY ENGINEER _____ DATE _____



DRAWN BY: AC
 JOB NO.: 23-2122
 CHECK BY: MOA
 DATE: 03/20/24



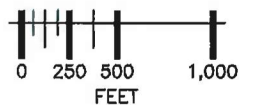
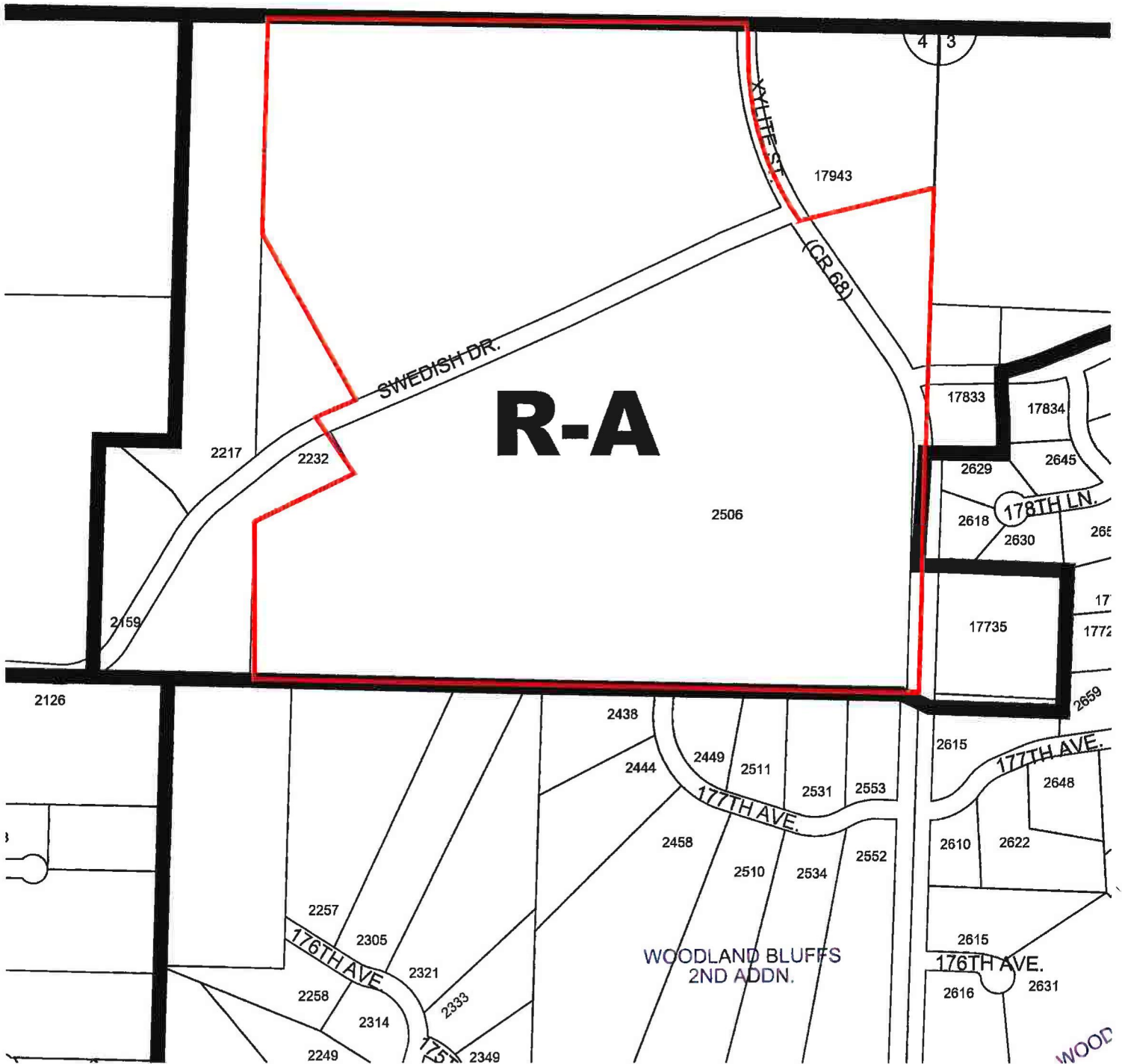
ALL GREEN AREA SLOPES ARE 4:1 UNLESS OTHERWISE NOTED
 S.E. = SUPER-ELEVATION
 NS = NOT SUPER-ELEVATED

NO.	DATE	DESCRIPTION
1	04.17.24	SHEET ADDED TO SET
2	05.14.24	CROSS SECTIONS AND
3	05.22.24	SPR REVIEW COMMENTS
4	05.28.24	SIGNED
5	06.06.24	SI (MP) ATTL FOR SR RIGHT TURN LANE
6	08.25.24	ADCH COMMENTS
7		
8		

I hereby certify that this plan was prepared by me or by a duly licensed professional engineer under the laws of the State of Minnesota.
 ADAM WINNEL
 License No. 43983
 Date: 05.24.2024

SWEDISH CHAPEL ESTATES
 HAM LAKE, MN
LEFT & RIGHT TURN LANE PLAN
 PREPARED FOR: MN DEVELOPMENTS, LLC

SHEET
C4.3





Anoka County

TRANSPORTATION DIVISION

Highway

Joseph J. MacPherson, PE
County Engineer

July 8, 2024

Adam Ginkel
Plowe Engineering, Inc.
6776 Lake Dr, Suite 110
Lino Lakes, MN 55014

**RE: Swedish Chapel Estates
Anoka County Approval**

Dear Mr. Ginkel,

Anoka County has reviewed the Swedish Chapel Estates plan and has no further comments. Your contractor can contact our permits section at 763-324-3176 or HighwayPermits@anokacountymn.gov to obtain the right of way permit.

Sincerely,

Brandon T. Ulvenes
Design Engineer

cc: File (Ham Lake)
Joe MacPherson, ACHD
Jerry Auge, ACHD
Sue Burgmeier, ACHD
I:\Eng\Plan Reviews\Ham Lake\2023\Swedish Chapel Estates (Stalberger)\ACHD Approval (07-08-24).docx

Our Passion Is Your Safe Way Home

1440 Bunker Lake Boulevard N.W. ▲ Andover, MN 55304-4005
Office: 763-324-3100 ▲ Fax: 763-324-3020 ▲ www.anokacounty.us/highway

Affirmative Action / Equal Opportunity Employer

PERMIT AMENDMENT
COON CREEK WATERSHED DISTRICT
13632 Van Buren St NE
Ham Lake, MN 55304

Project: Swedish Chapel Estates

Issued To: MN Developments, LLC
Attn: Jeff Stalberger
17404 Ward Lake Dr NW
Andover, MN 55304

Location: 2506 Swedish Dr NE, Ham Lake MN

Permit Application #: P24-014

Purpose: Construction of a single family home residential development and associated stormwater treatment features.

This letter is in response to the 7/29/2024 submittal from Plowe Engineering Inc., providing updated construction plans for the work of the below referenced project.

BACKGROUND:

CCWD authorized, as part of CCWD permit #2378 issued 7/11/2024, the construction of a single family home residential development and associated stormwater treatment features.

On July 11, 2024, updated construction plans and geotechnical report were submitted for review and approval.

FINDINGS

1. The updated construction plans and geotechnical report received 7/29/24 and dated 7/29/24 and 7/25/24 have been reviewed and meet the CCWD standards.


CONCLUSIONS

Coon Creek Watershed Permit #2378 is hereby amended and expires 7/11/2025 with the following conditions and stipulations:

1. Adherence to all general permit conditions of permit #2378.

If you have questions, please call me at 763-755-0975.

Sincerely,



Tim Kelly
District Administrator

Cc: File P24-014
Eileen Weigel, Stantec
Tom Collins, City of Ham Lake

David Krugler

From: Emanuel, Mary E <mary_emanuel@fws.gov>
Sent: Wednesday, June 12, 2024 7:53 AM
To: David Krugler
Subject: Re: [EXTERNAL] RE: Eagle's Nest - 2506 Swedish Drive- Ham Lake MN

Hi David,

Try not to think about it in super ridged terms, as long as you're more than 100' away for this project, I think take is very unlikely to occur. If the nest becomes active during the next breeding season, we can revisit things and see if a permit would be recommended. Sometimes it is possible to do the work closest to the nest sooner while it is inactive so that, if it is occupied in the next breeding season, work is at 200' away and moving out rather than at 200' and moving closer.

The disturbance I described as resulting in "parents abandoning a nest" is just one example. Regulations further define "disturb" as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior".

The penalty for violating the Bald and Golden Eagle Protection Act can result in a fine of \$100,000 (\$200,000 for organizations), imprisonment for one year, or both, for a first offense. Penalties increase substantially for additional offenses, and a second violation of this Act is a felony. So it can be quite significant.

Currently, the nest you described to me sounds like it was not used this year. The 100' minimum buffer is recommended to protect the nest tree just as much as the eagles. No, the disturbance permits are not mandatory, we recommend them when it is possible that a project could result in take. Very close distances like the ones involved here, mean we would always recommend a permit (i.e. closer than 100'). Nests are generally assumed to be inactive for the year if not occupied by April 15th but if an eagle pair shows up on April 17th and decides to try and raise chicks, that nest will be active for the year, even if it doesn't end up being successful.

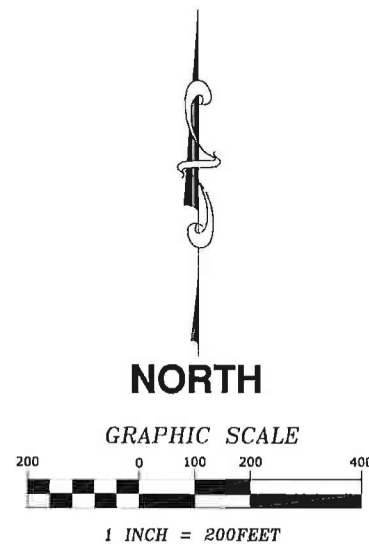
10 days after the last eagle chick leaves the nest, the brood is considered to have fledged. The status of the nest doesn't really change once the chicks fledge, we would say it is active in the current breeding season. Active vs inactive can get a little nitpicky depending on what the question is. A nest might be currently inactive for this breeding season but if it has been used in the last few years it could also be thought of as being generally active. It's a little splitting hairs at that point. Our General Permits are coming on line very soon. They should be available to apply for starting July 8th (possibly sooner), and will have an effective date of 9/1 and be valid for one year through 8/31. Let me know if you have any further questions.

Thank you,

Mary Emanuel
Wildlife Biologist, Permitting
USFWS, Region 3, Migratory Birds Permit Office
5600 American Blvd. W, Suite 990
Bloomington, MN 55437
(612) 713-5441
Mary_Emanuel@fws.gov

SKETCH AND DESCRIPTION

~for~ SWEDISH CHAPEL ESTATES
 ~of~ SWEDISH DRIVE NE VACATION



LEGEND
 SWEDISH DRIVE NE VACATION

NOTES

- The width of Swedish Drive's right-of-way shading is approximate.
- The vacation proposed is a blanket vacation over the entire property.

SWEDISH DRIVE NE VACATION DESCRIPTION

That part of Swedish Drive NE, within the Northeast Quarter of Section 4, Township 32 North, Range 23 West, Anoka County, Minnesota, which lies easterly of the west 15 acres thereof and which lies westerly of the westerly right of way line of Xylite Street NE (also know as County Road No 68). Except for those portions of Swedish Drive NE which fall within the following described tracts of land:

1. A plot of ground, commencing at a point 23.49 chains South and 5.15 chains East (Variation 8 degrees 51 minutes in 1887) of Quarter corner on North side of Section 4, Township 32, Range 23; thence South 29 degrees East (Variation 8 degrees 51 minutes in 1887) 9 1/2 rods, to a tamarac stake; thence North 64 degrees East, 14 1/2 rods; thence North 29 degrees West, 10 1/2 rods; thence South 60 1/2 degrees West, 14 1/2 rods to point of commencement, containing 1 acres, more or less, being a part of the Southwest Quarter of Northeast Quarter of Section 4, Township 32, Range 23.
2. That part of the Northeast Quarter of Section 4, Township 32, Range 23, described as follows: Commencing at a point 289 feet East and 732 feet North of the Southwest corner of said Northeast Quarter; thence Northeasterly along the center of the road 424 feet; thence Northwesterly 701 feet to the point, which is 289 feet East of the West line of the said Northeast Quarter; thence South to the point of beginning.
3. Commencing at a point 1550.34 feet (23.49 chains) South and 339.9 feet (5.15 chains) East of the Quarter corner on the North side of Section 4; thence South 29 degrees East for 156.75 feet; thence South 64 degrees West for 187.4 feet; thence North, parallel with and 247.5 feet East of the Quarter Section line for 142.15 feet to the Southerly line of a public road; thence North 50 degrees 10 minutes East along said Southerly road line to the point of beginning, also all right of title in said adjacent public road to the center line thereof, Anoka County, Minnesota.

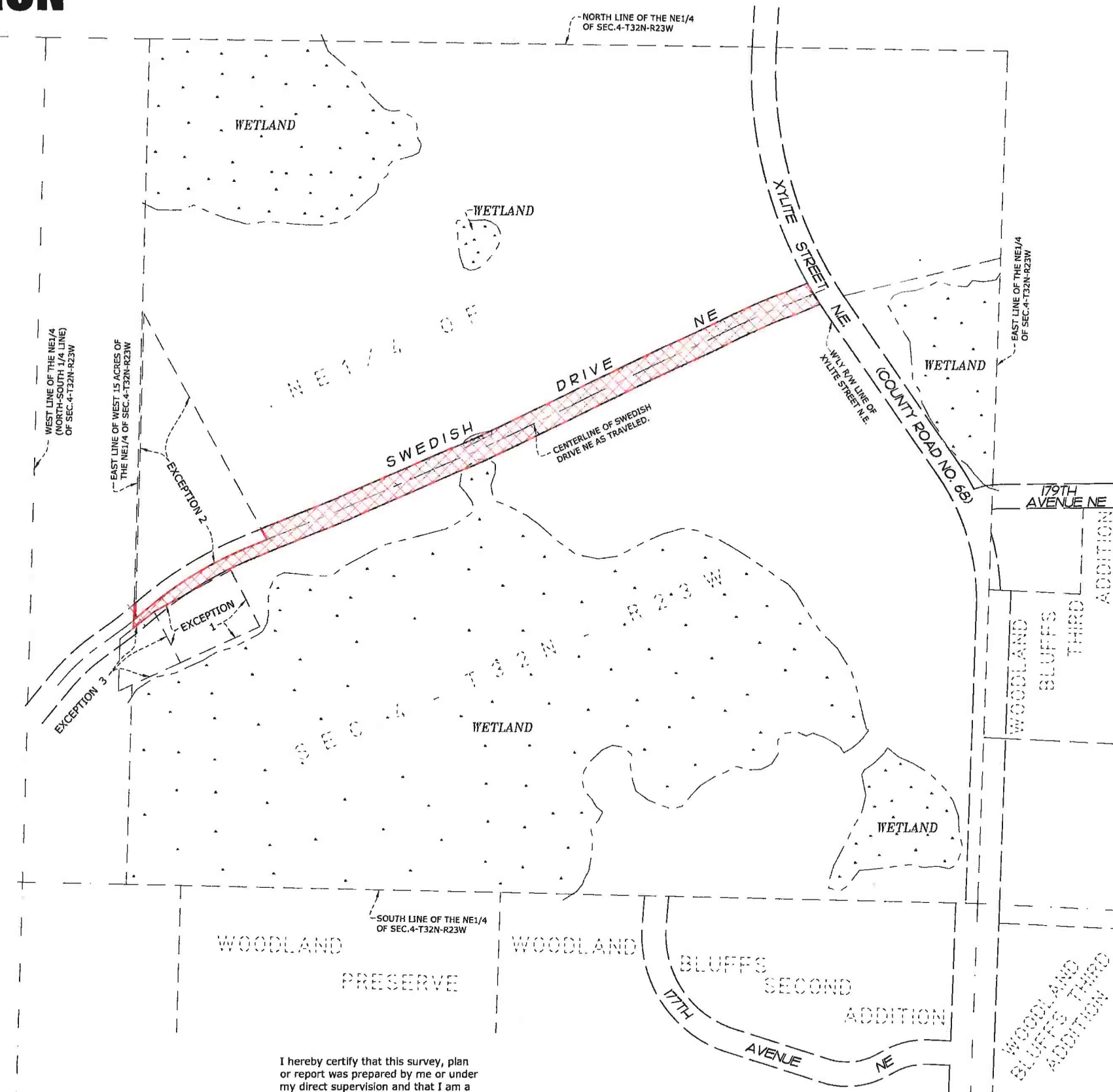
 **E. G. RUD & SONS, INC.**
 EST. 1977 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110
 Lino Lakes, MN 55014
 Tel. (651) 361-8200 Fax (651) 361-8701

www.egrud.com

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

JASON E. RUD

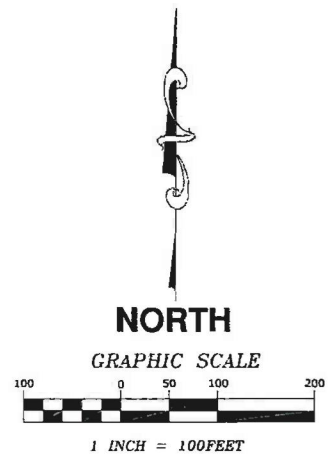
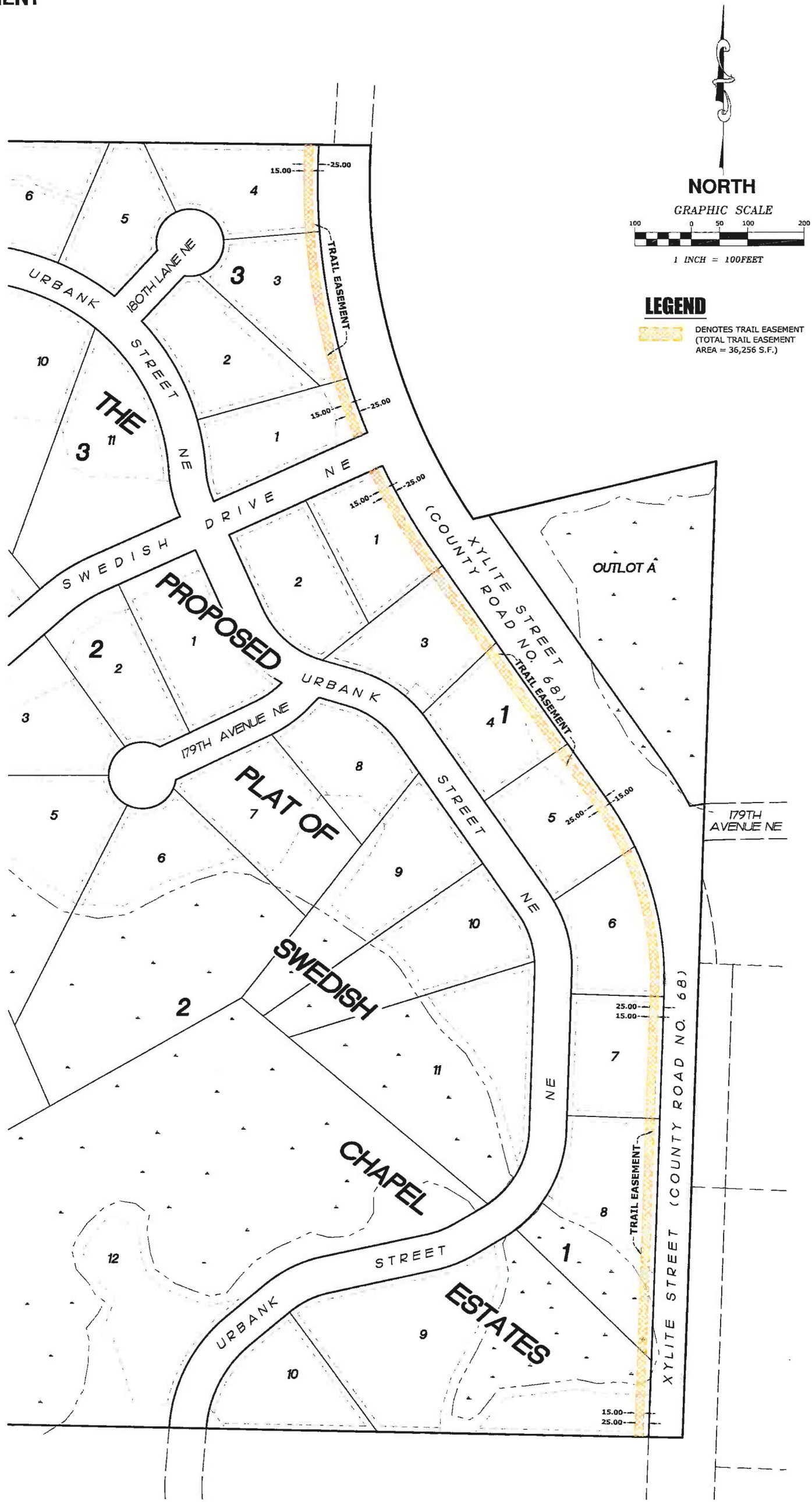
Date: 08-27-24 License No. 41578



DRAWN BY:	JEN	JOB NO:	23.0743	DATE:	08/14/24
CHECK BY:	JER	FIELD CREW:	DT-CT		
1	08/27/24	ADD NOTES PER CITY COMMENTS		JEN	
2					
3					
NO.	DATE	DESCRIPTION		BY	

SKETCH AND DESCRIPTION

~for~ SWEDISH CHAPEL ESTATES
~of~ TRAIL EASEMENT



LEGEND
 DENOTES TRAIL EASEMENT
 (TOTAL TRAIL EASEMENT AREA = 36,256 S.F.)

NOTES

- The plat of SWEDISH CHAPEL ESTATES is not of record at this time.

TRAIL EASEMENT DESCRIPTION

A perpetual easement for trail purposes over and across the southwesterly 15.00 feet of the northeasterly 25.00 feet of Lots 1, 3, 4, 5 and 6, Block 1; the westerly 15.00 feet of the easterly 25.00 feet of Lots 7 through 9, Block 1; and the westerly 15.00 feet of the easterly 25.00 feet of Lots 1, 3 and 4, Block 3, all in SWEDISH CHAPEL ESTATES, Anoka 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.

JASON E. RUD
 Date: 8-27-2024 License No. 41578

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

DRAWN BY:	JEN	JOB NO:	230743PP	DATE:	08/05/24
CHECK BY:	JER	FIELD CREW:	DT-CT		
1	08/27/24	REV. DESC. AND TYPO		JEN	
2					
3					
NO.	DATE	DESCRIPTION		BY	