

CITY OF HAM LAKE

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

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CITY OF HAM LAKE

CITY COUNCIL AND ECONOMIC DEVELOPMENT AUTHORITY AGENDA MONDAY, MAY 3, 2021

- 1.0 CALL TO ORDER - 6:00 P.M. – Pledge of Allegiance**
- 2.0 PUBLIC COMMENT**
- 3.0 SPECIAL APPEARANCES/PUBLIC HEARINGS**

4.0 CONSENT AGENDA

These items are considered to be routine and will be enacted in one motion. There will be no separate discussion of these items unless a Councilmember or citizen so requests, in which event the item will be removed from the Consent Agenda and considered in normal sequence. (All items listed on the Consent Agenda are recommended for approval.)

- 4.1 Approval of minutes of April 19, 2021
- 4.2 Approval of claims
- 4.3 Approval of a Resolution accepting a \$5,000 donation from the Ham Lake Chamber of Commerce
- 4.4 Approval of accepting the resignation of Fire Chief/Emergency Management Director Kyle Bode
- 4.5 Approval of appointing Mike Raczkowski as Fire Chief/Emergency Management Director
- 4.6 Approval of hiring summer seasonal employees in Public Works
- 4.7 Approval of the plans and specifications for the reconstruction of the streets in Lund's Lakeview Forest

5.0 PLANNING COMMISSION RECOMMENDATIONS

- 5.1 Jeff Stalberger, Crosstown Development, LLC, requesting Preliminary Plat approval and Rezoning for Crosstown Rolling Acres 3rd Addition (49 Single Family Residential lots) in Section 6 (*this is considered the 1st Reading of a rezoning Ordinance*)
- 5.2 Jim Malvin and Tim Lang, Timber Valley Development, requesting Preliminary Plat approval and Rezoning for Evergreen Estates (36 Single Family Residential lots) in Section 21 (*this is considered the 1st Reading of a rezoning Ordinance*)
- 5.3 Classic Construction, Inc. requesting Commercial Site Plan approval to construct a 10,572 square foot daycare center at 13644 Radisson Road NE (PIN# 33-32-23-31-0006, Lot 9, Block 2, Bunker Meadows)

6.0 ECONOMIC DEVELOPMENT AUTHORITY – None

7.0 APPEARANCES

- 7.1 Finance Director Andrea Worcester – 1st Quarter Financial Report for 2021
- 7.2 Finance Director Andrea Worcester – Transfer from the General Fund to the Revolving Street Fund

8.0 CITY ATTORNEY

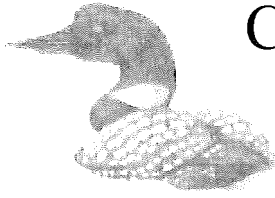
9.0 CITY ENGINEER

- 9.1 Discussion of feasibility study for the construction of the east frontage road south of Crosstown Boulevard NE

10.0 CITY ADMINISTRATOR

11.0 COUNCIL BUSINESS

- 11.1 Committee Reports
- 11.2 Consideration of a Resolution accepting a petition and ordering a feasibility study to improve Tippecanoe Street NE from proposed 162nd Lane NE south to the cul-de-sac
- 11.3 Announcements and future agenda items



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CITY OF HAM LAKE CITY COUNCIL AND ECONOMIC DEVELOPMENT AUTHORITY MINUTES MONDAY, APRIL 19, 2021

The Ham Lake City Council and Economic Development Authority met for its regular meeting on Monday, April 19, 2021 at 6:00 p.m. in the Council Chambers at the Ham Lake City Hall located at 15544 Central Avenue NE in Ham Lake, Minnesota.

MEMBERS PRESENT: Mayor Mike Van Kirk and Councilmembers Jim Doyle, Gary Kirkeide, Brian Kirkham and Jesse Wilken

MEMBERS ABSENT: None

OTHERS PRESENT: City Attorney, Joe Murphy; City Engineer, Tom Collins; City Administrator, Denise Webster; and Deputy City Clerk, Dawnette Shimek

1.0 CALL TO ORDER - 6:00 P.M. – Pledge of Allegiance

Mayor Van Kirk called the meeting to order and the Pledge of Allegiance was recited by all in attendance.

2.0 PUBLIC COMMENT – None

3.0 SPECIAL APPEARANCES/PUBLIC HEARINGS

3.1 Lt. Schuldt, Anoka County Sheriff's Office Monthly Report

Lt. Schuldt gave the summary of the Sheriff's Report for the month of March, 2021.

3.2 Andrew Grice, BerganKDV – Presentation of 2020 Audit

Andrew Grice was before the City Council to present the 2020 Annual Financial Audit and Single Audit Findings. Mr. Grice stated the Independent Auditor's Report gave the City an "unmodified" or "clean" opinion for both audits. Mr. Grice noted there is a deficiency in internal control with lack of segregation of the accounting duties, which is common with a small staff and recommends segregation or independent review be implemented whenever practical and cost effective. Mr. Grice summarized the financial analysis for the General Fund Performance. Revenues increased \$191,869 with this being due to the tax levy and an increase in building permits. Expenditures decreased overall by \$429,136 this was due to a decrease in severance pay needing to be paid out in 2020 as well as a portion of the Sheriff's Contract being paid with CARES Funding. The increase in revenue and decrease in expenditures for 2020 are the driving forces as to why there was \$588,609 added to the fund balance for 2020. Mr. Grice stated that the City's financial health is strong with a 66.6% fund balance. Mr. Grice also presented an analysis of the City's historical total tax capacity amounts, tax levy amounts and tax rate for the years 2016 – 2020. He explained the tax capacity for the City continues to increase faster than relative flat tax levy amount, which helps explain why the tax rate for the City has decreased year over year. The tax rate for 2020 was 21.92%. The Council thanked Mr. Grice for his presentation.

3.3 6:01 P.M. – PUBLIC HEARING – To vacate a portion of the drainage and utility easement on Lot 1, Block 1, Hidden Forest West 2nd Addition (3011 137th Avenue NE) and adoption of Resolution No. 21-13

Mayor Van Kirk opened the public hearing at 6:19 p.m. and asked for public comment and with there being none he closed the public hearing.

Motion by Van Kirk, seconded by Doyle, to adopt Resolution No. 21-13 vacating a portion of the drainage and utility easement on Lot 1, Block 1, Hidden Forest West 2nd Addition (3011 137th Avenue NE). All in favor, motion carried.

4.0 CONSENT AGENDA

These items are considered to be routine and will be enacted in one motion. There will be no separate discussion of these items unless a Councilmember or citizen so requests, in which event the item will be removed from the Consent Agenda and considered in normal sequence. (All items listed on the Consent Agenda are recommended for approval.)

- 4.1 Approval of minutes of April 5, 2021
- 4.2 Approval of claims in the amount of \$493,999.04
- 4.3 Approval of Ordinance No. 21-04 rezoning Radisson Sunset Estates
- 4.4 Approval of Resolution No. 21-14 supporting the termination of the Northstar Commuter Rail Line
- 4.5 Approval of a Large Assembly License for the Ham Lake Chamber of Commerce at Lion's Park (1220 157th Avenue NE) on July 3, 2021
- 4.6 Approval of engagement letter with BerganKDV, Ltd. for the 2021-2023 audits
- 4.7 Approval of the Ham Lake Member City Grant Agreement with Twin Cities Gateway

Motion by Kirkeide, seconded by Doyle, to approve the March 15, 2021 Consent Agenda with the omission of Item 4.4. All in favor, motion carried.

Councilmember Kirkeide stated that he would like to share Resolution No. 21-14 supporting the termination of the Northstar Commuter Rail Line along with the Resolution No. 03-12 adopted by the City Council in 2003 opposing the establishment of the Northstar Commuter Rail Line with Anoka County Officials. **Motion by Kirkeide, seconded by Doyle, to approve Item 4.4 on the consent agenda. All in favor, motion carried.**

5.0 PLANNING COMMISSION RECOMMENDATIONS

- 5.1 Alexander Hattstrom requesting a Special Home Occupation Permit to operate Tactical Finishes, LLC at 14350 Ural Street NE

Motion by Kirkham, seconded by Doyle, to concur with the recommendation of the Planning Commission and approve a Special Home Occupation Permit as requested by Alexander Hattstrom to operate Tactical Finishes, LLC at 14350 Ural Street NE, subject to meeting the guidelines for Special Home Occupation Permits per Article 9-350.3, completing the hard surface driveway between the existing driveway and accessory building, installation of a proper exhaust system meeting Minnesota Mechanical Code requirements, obtaining a permit for the garage heater, maintaining Safety Data Sheets (SDS) on-site for chemicals and paint products used, disposing of products used in an environmentally sound manner, no coating or selling of automotive parts or accessories, no discharging of firearms on-site, no on-street parking, generating no noise that is audible to neighboring properties, no outdoor storage, operating hours of 8:00 a.m. to 3:30 p.m. seven days a week, obtaining a Federal Firearms License and providing a copy of the license to the City before

assembling or coating any firearms, completion of required actions by June 1, 2021 and meeting all City, State and County requirements. All in favor, motion carried.

5.2 Benjamin Cedarberg of Cedar Hill Group, LLC, requesting a Conditional Use Permit to operate Everwood Friends at 4453 Crosstown Boulevard NE

Motion by Wilken, seconded by Doyle, to concur with the recommendation of the Planning Commission and approve a Conditional Use Permit as requested by Benjamin Cedarberg to operate Everwood Friends at 4453 Crosstown Boulevard NE, subject to meeting the guidelines outlined in Article 9, Section 9-210.32.vii related to generating no noise which would violate the standards for residential uses found in the Minnesota Pollution Control Agency regulations, generating no odors, fumes, vibrations or light beyond the property lines, no on-site retail sales, any construction or building modifications meeting all chapters of the Minnesota State Building Code, no accumulation of sawdust, or wood shaving or trimmings on-site, business hours of 8:00 a.m. to 6:00 p.m. Monday through Saturday, and meeting all City, State and County requirements. All in favor, motion carried.

5.3 Anton Vovk requesting a Conditional Use Permit to operate A & A Companies, an auto repair shop, at 13408 Highway 65 NE, Suite 109

Motion by Wilken, seconded by Kirkeide, to concur with the recommendation of the Planning Commission and approve the application by Anton Vovk, requesting a Conditional Use Permit to operate A & A Companies at 13408 Highway 65 NE, Suite 109, subject to the following conditions: (1) No motor vehicle sales (2) Allocating a total of thirteen parking spaces; three in front of the suite the business is renting (#109) for employee parking during business hours only and ten in the fenced area as presented on the site plan (3) All parking to be on hard surface in designated areas as shown on the site plan (4) A maximum of three employees (5) No outside storage of liquids, tires, parts, etc. (6) All repairs to be done inside the building (repairs include general auto maintenance and mechanical work such as replacing brakes, headlights and bulbs; all fluids to be contained and disposed of according to County and State requirements (7) No painting at this location (8) Hours of operation to be 9:00 a.m. to 6:00 p.m., Monday through Saturday (9) Security Lighting required (10) Maintain an open fire lane on the north side of the building (11) Meeting all City, State and County requirements. All in favor, motion carried.

5.4 William Dwyer requesting a Conditional Use Permit to operate Gunner Insulation at 14665 Buchanan Street NE, Units 1 & 2

Motion by Kirkeide, seconded by Wilken, to concur with the recommendation of the Planning Commission and approve the application by William Dwyer, requesting a Conditional Use Permit to operate Gunner Insulation at 14665 Buchanan Street NE, Units 1 & 2, subject to the following conditions: operating hours of 6:30 a.m. to 7:30 p.m. Monday through Friday with occasional Saturdays, no outside storage of materials, parking per site plan for passenger vehicles in front of the building and company trucks in the back of the building, and meeting all City, State and County requirements. All in favor, motion carried.

5.5 Harlan Worsham requesting a Conditional Use Permit to operate Solid Rock Construction at 14665 Buchanan Street NE, Unit 4

Motion by Kirkeide, seconded by Doyle, to concur with the recommendation of the Planning Commission and approve the application by Harlan Worsham, requesting a Conditional Use Permit

to operate Solid Rock Construction at 14665 Buchanan Street NE, Unit 4, subject to the following conditions: operating hours of 7:00 a.m. to 7:00 p.m. Monday through Friday with occasional Saturdays, no outside storage of materials, parking per site plan for passenger vehicles in front of the building and company trucks in the back of the building, and meeting all City, State and County requirements. All in favor, motion carried.

5.6 Andrew Berg requesting a Certificate of Occupancy to operate Latitude Studios Co. at 14665 Buchanan Street NE, Unit 3

Motion by Kirkeide, seconded by Doyle, to concur with the recommendation of the Planning Commission and approve the Certificate of Occupancy requested by Andrew Berg to operate Latitude Studios Co. at 14665 Buchanan Street NE, Unit 3, subject to the following conditions: operating hours of 7:00 a.m. to 7:30 p.m. Monday through Saturday, no outside storage, deliveries occurring between the hours of 7:30 a.m. to 7:30 p.m. Monday through Saturday, and meeting all City, State and County requirements. All in favor, motion carried.

5.7 Holiday Stationstores LLC requesting Sketch Plan approval for a Minor Plat in Section 5

Motion by Kirkham, seconded by Kirkeide, to concur with the recommendation of the Planning Commission and approve the Sketch Plan as presented by Holiday Stationstores LLC for a minor plat in Section 5 subject to meeting the recommendations of the City Engineer and meeting all City, State and County requirements. All in favor, motion carried.

6.0 ECONOMIC DEVELOPMENT AUTHORITY – None

7.0 APPEARANCES - None

8.0 CITY ATTORNEY – None

9.0 CITY ENGINEER – None

10.0 CITY ADMINISTRATOR – None

11.0 COUNCIL BUSINESS

11.1 Committee Reports

Councilmember Kirkeide stated he had a meeting with Connexus and would like to invite them to make a presentation to the City Council at a future meeting. Councilmember Kirkeide stated they discussed running 3-Phase Power along the Lexington Avenue NE corridor to allow for commercial development and Connexus stated that would not be a problem.

11.2 Discussion of reduced School Zone Speed Limit signage at Davinci Academy, 532 Bunker Lake Boulevard NE

Engineer Collins stated that Anoka County has agreed to enter into a Joint Powers Agreement (JPA) to operate the timing of the light. Engineer Collins stated that the Public Works Department can make the signs. Engineer Collins stated that the County requires a sign layout, a JPA would need to be drafted along with other potential agreements would need to be drafted by the City Attorney, along with determining the costs for the operation and construction of the sign. The City Council agreed to construct the sign with solar power with battery back-up if feasible. Engineer Collins will contact the school to inquire if they can share maintenance costs for the sign. It was agreed that the sign should be in operation by the 2021 fall school year.

11.3 Discussion of Article 9-220 of the City Code

Councilmember Wilken stated that some of the Conditional Use Permits that were approved earlier in the meeting are for properties located in CD-2 Zoning (Commercial Development Tier 2) and are to operate office/warehouse businesses; Commissioner Wilken feels that an office/warehouse business should be a permitted use in CD-2 Zoning. Councilmember Wilken stated the City Code should be reviewed and one of the changes should be to allow an office/warehouse as a permitted use in CD-2 Zoning. Councilmember Kirkeide agreed with Councilmember Wilken. **It was the consensus of the City Council to refer the review of Article 9-220 of the Ham Lake City Code to the Planning Commission for review.**

11.4 Announcements and future agenda items

Councilmember Kirkham stated after the signage was approved for properties with Home Occupation Permits, he was notified by the Home Occupation Permit holder that sells honey, that within an hour after placement of the sign someone stopped to buy honey.

Motion by Kirkeide, seconded by Kirkham, to adjourn the meeting at 6:47 p.m. All in favor, motion carried.

Dawnette Shimek, Deputy City Clerk

**CITY OF HAM LAKE
CLAIMS SUBMITTED TO COUNCIL
May 3, 2021**

CITY OF HAM LAKE

EFTS, CHECKS, AND BANK DRAFTS	04/22/21 - 05/05/21	
EFT	# 1434 - 1440	\$ 2,992.31
CHECKS	# 62837 - 62873	\$ 92,808.02
BANK DRAFTS	DFT0002204 - DFT0002207	\$ 23,960.69
TOTAL EFTS, CHECKS, AND BANK DRAFTS		<u>\$ 119,761.02</u>
PAYROLL CHECKS		
04/23/21		\$ 43,583.88
		\$ -
TOTAL PAYROLL CHECKS		<u>\$ 43,583.88</u>
TRUST CHECKS	#5647	\$ 2,500.00
TOTAL OF ALL PAYMENTS		<u>\$ 165,844.90</u>

VOID CHECKS
EFT
CHECKS
TRUST CHECKS

APPROVED BY THE HAM LAKE CITY COUNCIL THIS 3RD DAY OF MAY 2021

MAYOR

COUNCILMEMBER

COUNCILMEMBER

COUNCILMEMBER

COUNCILMEMBER



Payment Dates 4/22/2021 - 5/5/2021

Payment Number	Vendor Name	Description (Item)	Account Name	Account Number	Amount
1434	OPTUM BANK - 6011	Health Savings Account-6011	Flexible spending	100-21705	54.17
1435	WELLS FARGO - 6003	Health Savings Account-6003	Flexible spending	100-21705	125.00
1436	ARAMARK UNIFORM & CAREE	PW UNIFORMS	Clothing & personal protectiv	100-43101-2210	73.26
1436	ARAMARK UNIFORM & CAREE	FIRST AID CABINET	Safety supplies	100-43101-2240	12.00
1436	ARAMARK UNIFORM & CAREE	PW UNIFORMS	Clothing & personal protectiv	100-43101-2210	73.26
1436	ARAMARK UNIFORM & CAREE	FIRST AID CABINET	Safety supplies	100-43101-2240	12.00
1436	ARAMARK UNIFORM & CAREE	PW UNIFORMS	Clothing & personal protectiv	100-43101-2210	75.59
1436	ARAMARK UNIFORM & CAREE	FIRST AID CABINET	Safety supplies	100-43101-2240	12.00
1436	ARAMARK UNIFORM & CAREE	PW UNIFORMS	Clothing & personal protectiv	100-43101-2210	103.13
1436	ARAMARK UNIFORM & CAREE	FIRST AID CABINET	Safety supplies	100-43101-2240	12.00
1437	DELTA DENTAL PLAN OF MINN	MAY DK COBRA	COBRA receivable	100-11502	42.00
1437	DELTA DENTAL PLAN OF MINN	MAY DENTAL	Flexible spending	100-21705	915.90
1438	O'REILLY AUTOMOTIVE STORE	#48 CORE RETURN	Vehicle parts & supplies	100-43101-2340	-18.00
1438	O'REILLY AUTOMOTIVE STORE	BRAKE CLEANER	Vehicle parts & supplies	100-43101-2340	23.88
1438	O'REILLY AUTOMOTIVE STORE	#51 BATTERY	Vehicle parts & supplies	100-43101-2340	125.76
1439	STAR TRIBUNE MEDIA COMPA	ORD 21-02 SUBDIVISIONS	Legal notices/publications/bid	100-41102-3950	132.31
1439	STAR TRIBUNE MEDIA COMPA	RICHLAND REFRIGERATION	Legal notices/publications/bid	890-90001-3950	48.47
1440	WICK COMMUNICATIONS	MAY HAM LAKER INSERT PRIN	Printing	211-41704-3970	470.00
1440	WICK COMMUNICATIONS	MAY HAM LAKER INSERT PLA	Printing	211-41704-3970	124.58
1440	WICK COMMUNICATIONS	MAY HAM LAKER	Printing	211-41704-3970	575.00
62837	US BANK CORPORATE PAYME	INNOVATIVE-FRAMES-JB	Office supplies	100-41701-2110	74.00
62837	US BANK CORPORATE PAYME	ZOOM-VIDEO CONFERENCE-D	Covid 19	100-41701-4153	12.84
62837	US BANK CORPORATE PAYME	FEDEX-EXCHANGE AED MACH	Operating supplies	100-42201-2290	19.29
62837	US BANK CORPORATE PAYME	FEDEX-EXCHANGE AED MACH	Operating supplies	100-42201-2290	19.98
62837	US BANK CORPORATE PAYME	FEDEX-EXCHANGE AED MACH	Operating supplies	100-42201-2290	20.31
62837	US BANK CORPORATE PAYME	FIRE PROTECTION-TRAINING	Training supplies	100-42201-3530	194.40
62837	US BANK CORPORATE PAYME	HOME DEPOT-LIGHTBULBS-KB	Building repair & maintenanc	100-42202-2310	18.26
62837	US BANK CORPORATE PAYME	HOME DEPOT-IMPACT WREN	Small tools	100-43101-2410	159.62
62837	US BANK CORPORATE PAYME	AMAZON-DUGOUT PARTS - LI	Controllable assets	100-44101-5120	85.48
62837	US BANK CORPORATE PAYME	AMAZON-DUGOUT PARTS - LI	Controllable assets	100-44101-5120	42.74
62837	US BANK CORPORATE PAYME	MN DVS-#84 LICENSES-JW	Capital assets	428-42401-5110	59.25
62837	US BANK CORPORATE PAYME	MN DVS-#84 LICENSES-JW	Capital assets	428-42401-5110	1.45
62838	2ND WIND EXERCISE EQUIPM	WEIGHTS	Equipment parts & supplies	100-42201-2320	209.75
62839	AIR MECHANICAL	SHERIFF'S OFFICE	Capital assets	412-41702-5110	3,940.00
62840	ALL CITY ELEVATOR INC	ELEVATOR PHONE REPAIR	Building repair & maintenanc	100-41702-3420	596.00
62841	ANDY SCHOWALTER	MAILBOX REPLACEMENT - BL	Operating supplies	100-42401-2290	85.69
62842	ANOKA COUNTY TREASURY D	MAY BROADBAND FIRE #2	Internet & website	100-41301-3220	75.00
62842	ANOKA COUNTY TREASURY D	MAY BROADBAND	Internet & website	100-41301-3220	37.50
62843	ARCHITECT MECHANICAL INC	MAINT - CITY HALL	Building repair & maintenanc	100-41702-3420	668.10
62843	ARCHITECT MECHANICAL INC	MAINT - FIRE #2	Building repair & maintenanc	100-42202-3420	245.63
62843	ARCHITECT MECHANICAL INC	MAINT - FIRE #1	Building repair & maintenanc	100-42202-3420	363.52
62843	ARCHITECT MECHANICAL INC	MAINT - PUBLIC WORKS	Building repair & maintenanc	100-43104-3420	510.90
62843	ARCHITECT MECHANICAL INC	MAINT - PARK BUILD	Building repair & maintenanc	100-44102-3420	176.85
62844	CITY OF ST PAUL	5 TN ASPHALT MIX	Street repair & maintenance s	100-43101-2330	384.65
62845	DCF MANUFACTURING INC	#122 SANDBLAST & PAINT RI	Equipment repair & maintena	100-43101-3440	140.00
62846	DEARBORN LIFE INS CO	MAY LIFE	Other payroll deductions	100-21706	51.20
62846	DEARBORN LIFE INS CO	MAY VOL LIFE	Other payroll deductions	100-21706	147.00
62847	DEHN OIL CO	275 GAL DIESEL	Fuel	100-43101-2230	651.75
62847	DEHN OIL CO	100 GAL GASOLINE	Fuel	100-43101-2230	247.50
62848	DODGE OF BURNSVILLE INC	C-1 '21 DODGE DURANGO	Capital assets	420-42201-5110	32,047.00
62849	DONALD KOEHLER	06/26/21 HAM LAKE PARK RE	Sales tax	100-21801	12.47
62849	DONALD KOEHLER	06/26/21 HAM LAKE PARK RE	Park/pavilion rentals	100-34702	175.00
62850	DRIVER AND VEHICLE SERVICE	FIRE PLATES	Vehicle parts & supplies	100-42201-2340	24.00
62851	ECM PUBLISHERS INC	BUILDING INSPECTOR HELP W	Advertising for employment	100-42401-3910	195.80

Payment Number	Vendor Name	Description (Item)	Account Name	Account Number	Amount
62851	ECM PUBLISHERS INC	BUILDING INSPECTOR HELP W	Advertising for employment	100-42401-3910	175.80
62852	FLEETPRIDE	#81 FILTER	Vehicle parts & supplies	100-43101-2340	34.90
62852	FLEETPRIDE	#91 HI-TEMP GOVENORS	Vehicle parts & supplies	100-43101-2340	45.48
62852	FLEETPRIDE	#81 GOVERNOR	Vehicle parts & supplies	100-43101-2340	42.80
62852	FLEETPRIDE	#81 CLAMPS	Vehicle parts & supplies	100-43101-2340	34.88
62852	FLEETPRIDE	#81 PURGE VALVE KIT	Vehicle parts & supplies	100-43101-2340	79.37
62852	FLEETPRIDE	#81 AIR DRYER CORE	Vehicle parts & supplies	100-43101-2340	320.00
62852	FLEETPRIDE	#81 AIR DRYER	Vehicle parts & supplies	100-43101-2340	371.03
62852	FLEETPRIDE	#81 PURGE VALVE KIT	Vehicle parts & supplies	100-43101-2340	-79.37
62852	FLEETPRIDE	#81 AIR DRYER CORE	Vehicle parts & supplies	100-43101-2340	-320.00
62852	FLEETPRIDE	#81 GOVERNOR	Vehicle parts & supplies	100-43101-2340	-45.48
62852	FLEETPRIDE	#81 FITTINGS	Vehicle parts & supplies	100-43101-2340	113.29
62852	FLEETPRIDE	FILTERS	Operating supplies	100-43101-2290	85.68
62853	HAM LAKE HARDWARE INC	PIPE	Operating supplies	100-43101-2290	7.00
62854	LEAGUE OF MINNESOTA CITIE	STORMWATER COALITION	Dues & subscriptions	100-41101-3920	780.00
62855	LUBE-TECH & PARTNERS LLC	GREASE	Operating supplies	100-43101-2290	153.22
62855	LUBE-TECH & PARTNERS LLC	BULK OIL	Operating supplies	100-43101-2290	967.47
62855	LUBE-TECH & PARTNERS LLC	RETURN DRUM DEPOSIT	Operating supplies	100-43101-2290	-20.00
62855	LUBE-TECH & PARTNERS LLC	ATF	Operating supplies	100-43101-2290	471.24
62856	MACQUEEN EQUIPMENT/MA	G1 FACEPIECES	Clothing & personal protectiv	100-42201-2210	658.89
62857	MARK KOLLMANN	FIRE #2 ICE MACHINE HOOKU	Building repair & maintenanc	100-42202-2310	54.64
62858	MENARDS-BLAINE	DUGOUT COVERS	Controllable assets	100-44101-5120	206.61
62858	MENARDS-BLAINE	SHERIFF'S OFFICE	Capital assets	412-41702-5110	-170.98
62858	MENARDS-BLAINE	DUGOUT COVERS	Controllable assets	100-44101-5120	2,639.95
62858	MENARDS-BLAINE	GATE REPAIR SUPPLIES	Building repair & maintenanc	100-43104-2310	77.50
62858	MENARDS-BLAINE	GATE REPAIR SUPPLIES	Building repair & maintenanc	100-43104-2310	14.22
62858	MENARDS-BLAINE	CITY HALL LIGHT BULBS	Building repair & maintenanc	100-41702-2310	23.88
62858	MENARDS-BLAINE	DUG OUT COVERS	Controllable assets	100-44101-5120	405.39
62858	MENARDS-BLAINE	DUG OUT COVERS	Controllable assets	100-44101-5120	412.17
62859	MIDWAY FORD	#84 '21 FORD F150	Capital assets	428-42401-5110	31,553.92
62860	MINNEAPOLIS OXYGEN COMP	CUTTING TIP	Operating supplies	100-43101-2290	25.50
62861	MINNESOTA EQUIPMENT	PRESSURE S	Operating supplies	100-43101-2290	35.33
62862	MINNESOTA PIPE LINE COMP	ROW PERMIT ESCROW BALAN	ROW permit escrows	100-22805	1,110.00
62863	MN METRO NORTH TOURISM	FEB LODGING TAX	Convention bureau	263-46101-4120	1,277.91
62863	MN METRO NORTH TOURISM	MAR LODGING TAX	Convention bureau	263-46101-4120	1,904.46
62864	NCPERS GROUP LIFE INSURAN	MAY LIFE	Other payroll deductions	100-21706	96.00
62865	NEW BRIGHTON FORD	OLD #84 W/TECH	Vehicle parts & supplies	100-43101-2340	117.47
62865	NEW BRIGHTON FORD	#54 DUST SHIELD	Vehicle parts & supplies	100-43101-2340	177.62
62865	NEW BRIGHTON FORD	#54 BRACE, NUT	Vehicle parts & supplies	100-43101-2340	110.29
62865	NEW BRIGHTON FORD	#81 VALVE ASY	Vehicle parts & supplies	100-43101-2340	69.25
62866	NORTH METRO MAINTENANC	CLEANING-SHERIFF	Cleaning service	100-41702-3430	20.00
62866	NORTH METRO MAINTENANC	CLEANING	Cleaning service	100-41702-3430	625.00
62866	NORTH METRO MAINTENANC	CLEANING-FIRE #1	Cleaning service	100-42202-3430	130.00
62866	NORTH METRO MAINTENANC	CLEANING-FIRE #2	Cleaning service	100-42202-3430	115.00
62866	NORTH METRO MAINTENANC	CLEANING	Cleaning service	100-43104-3430	100.00
62866	NORTH METRO MAINTENANC	CLEANING	Cleaning service	100-44202-3430	230.00
62867	PEARSON BROTHERS INC	STREET SWEEPING	Street sweeping	100-43101-2610	3,743.60
62868	S & S INDUSTRIAL SUPPLY INC	DOT FITTINGS	Operating supplies	100-43101-2290	32.33
62869	STATE CHEMICAL SOLUTIONS	SPECIAL PURPOSE WAX	Operating supplies	100-43101-2290	180.41
62870	TASC	JUNE COBRA ADMINISTRATIO	Other professional services	100-41701-3190	15.00
62871	UNLIMITED SUPPLIES INC	NUTS, BOLTS, REMOVER SET	Operating supplies	100-43101-2290	234.08
62872	US POSTMASTER	POSTAGE 6184 x .164	Postage	211-41704-2120	1,014.18
62873	VERIZON WIRELESS	KB, DK	Phones/radios/pagers	100-42201-3210	83.02
62873	VERIZON WIRELESS	TD, MJ, EXTRA & 2 LAPTOPS	Phones/radios/pagers	100-42401-3210	204.55
62873	VERIZON WIRELESS	JK, JW,CH, CS, EH, & 2 LAPTOP	Phones/radios/pagers	100-43101-3210	287.57
62873	VERIZON WIRELESS	DH, AC	Phones/radios/pagers	100-44101-3210	83.02
DFT0002204	EMPOWER	Deferred Compensation	Deferred compensation	100-21704	1,285.00
DFT0002204	EMPOWER	Roth IRA	Deferred compensation	100-21704	50.00
DFT0002205	IRS-Payroll Tax	Federal Withholding	Federal WH/FICA/MC	100-21701	4,523.70
DFT0002205	IRS-Payroll Tax	Medicare Payable	Federal WH/FICA/MC	100-21701	1,737.06

Council Approval List

Payment Dates: 4/22/2021 - 5/5/2021

Payment Number	Vendor Name	Description (Item)	Account Name	Account Number	Amount
DFT0002205	IRS-Payroll Tax	Social Security Payable	Federal WH/FICA/MC	100-21701	6,884.04
DFT0002206	MN STATE DEPT OF REVENUE-	MN State Withholding	State W/H	100-21702	2,228.02
DFT0002207	PERA	Retirement-Coordinated	PERA	100-21703	6,040.18
DFT0002207	PERA	Retirement-Elected Officials	PERA	100-21703	40.84
DFT0002207	PERA	Retirement-Police & Fire	PERA	100-21703	1,171.85

Grand Total: 119,761.02

Report Summary

Fund Summary

Fund	Payment Amount
100 - GENERAL	46,915.78
211 - HAM LAKER	2,183.76
263 - LODGING TAX	3,182.37
412 - BUILDING	3,769.02
420 - FIRE EQUIPMENT	32,047.00
428 - BUILDING INSPECTION EQUIPMENT FUND	31,614.62
890 - TRUST FUND	48.47
Grand Total:	119,761.02

Account Summary

Account Number	Account Name	Payment Amount
100-11502	COBRA receivable	42.00
100-21701	Federal WH/FICA/MC	13,144.80
100-21702	State W/H	2,228.02
100-21703	PERA	7,252.87
100-21704	Deferred compensation	1,335.00
100-21705	Flexible spending	1,095.07
100-21706	Other payroll deductions	294.20
100-21801	Sales tax	12.47
100-22805	ROW permit escrows	1,110.00
100-34702	Park/pavilion rentals	175.00
100-41101-3920	Dues & subscriptions	780.00
100-41102-3950	Legal notices/publicatio	132.31
100-41301-3220	Internet & website	112.50
100-41701-2110	Office supplies	74.00
100-41701-3190	Other professional servi	15.00
100-41701-4153	Covid 19	12.84
100-41702-2310	Building repair & mainte	23.88
100-41702-3420	Building repair & mainte	1,264.10
100-41702-3430	Cleaning service	645.00
100-42201-2210	Clothing & personal prot	658.89
100-42201-2290	Operating supplies	59.58
100-42201-2320	Equipment parts & suppl	209.75
100-42201-2340	Vehicle parts & supplies	24.00
100-42201-3210	Phones/radios/pagers	83.02
100-42201-3530	Training supplies	194.40
100-42202-2310	Building repair & mainte	72.90
100-42202-3420	Building repair & mainte	609.15
100-42202-3430	Cleaning service	245.00
100-42401-2290	Operating supplies	85.69
100-42401-3210	Phones/radios/pagers	204.55
100-42401-3910	Advertising for employm	371.60
100-43101-2210	Clothing & personal prot	325.24
100-43101-2230	Fuel	899.25
100-43101-2240	Safety supplies	48.00
100-43101-2290	Operating supplies	2,172.26
100-43101-2330	Street repair & mainten	384.65
100-43101-2340	Vehicle parts & supplies	1,203.17
100-43101-2410	Small tools	159.62
100-43101-2610	Street sweeping	3,743.60
100-43101-3210	Phones/radios/pagers	287.57
100-43101-3440	Equipment repair & mai	140.00
100-43104-2310	Building repair & mainte	91.72
100-43104-3420	Building repair & mainte	510.90
100-43104-3430	Cleaning service	100.00
100-44101-3210	Phones/radios/pagers	83.02
100-44101-5120	Controllable assets	3,792.34

Account Summary

Account Number	Account Name	Payment Amount
100-44102-3420	Building repair & mainte	176.85
100-44202-3430	Cleaning service	230.00
211-41704-2120	Postage	1,014.18
211-41704-3970	Printing	1,169.58
263-46101-4120	Convention bureau	3,182.37
412-41702-5110	Capital assets	3,769.02
420-42201-5110	Capital assets	32,047.00
428-42401-5110	Capital assets	31,614.62
890-90001-3950	Legal notices/publicatio	48.47
	Grand Total:	119,761.02

Project Account Summary

Project Account Key	Payment Amount
None	119,712.55
Trust-200	48.47
	Grand Total:
	119,761.02



City of Ham Lake, MN

EFT Payroll Check Register

Report Summary

Pay Period: 4/4/2021-4/17/2021

Packet: PYPKT01149 - PPE 4/17/21 PAID 4/23/21

Payroll Set: City of Ham Lake - 01

Type	Count	Amount
Regular Checks	0	0.00
Manual Checks	0	0.00
Reversals	0	0.00
Voided Checks	0	0.00
Direct Deposits	66	43,583.88
Total	66	43,583.88

2:45 PM

04/28/21

Accrual Basis

CITY OF HAM LAKE-TRUST MONTHLY CHECK REGISTER

April 15 - 28, 2021

Type	Date	Num	Name Contact	Memo	Amount
Apr 15 - 28, 21					
Check	04/27/2021	5647	JONATHAN HOMES OF MN LLC	TURF ESCROW 14439 PACKARD STREET	-2,500.00
Apr 15 - 28, 21					<u>-2,500.00</u>

RESOLUTION NO. 21-XX
RESOLUTION APPROVING CONTRIBUTIONS

WHEREAS, the City of Ham Lake is generally authorized to accept contributions of real and personal property pursuant to Minnesota Statutes Sections 412.21 and 465.03 for the benefit of its citizens, and

WHEREAS, the following persons and entities have offered to contribute the cash sums set forth below to the City:

<u>Name of Donor</u>	<u>Amount</u>
Ham Lake Chamber of Commerce (Fire Works – Freedom Festival)	\$5,000.00

WHEREAS, all such sums have been contributed to assist the City in the establishment and operation of programs within the City’s corporate limits either alone or in cooperation with others, as allowed by law; and

WHEREAS, the City Council hereby finds that it is appropriate to accept the contributions offered.

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

1. The contributions described above are hereby accepted by the City of Ham Lake and shall be used to establish and operate programs within the City’s corporate limits either alone or in cooperation with others, as allowed by law.
2. That the City Clerk is hereby directed to issue receipts to each donor acknowledging the City’s receipt of the donor’s contribution.

Adopted by the City Council of the City of Ham Lake this 3rd day of May, 2021.

Michael G. Van Kirk, Mayor

Denise Webster, City Clerk

LG555 Government Approval or Acknowledgment for Use of Gambling Funds

Keep this completed form attached to the LG100C in your organization's records. You do not need to submit this form to the Gambling Control Board or the Department of Revenue.

ORGANIZATION AND EXPENDITURE INFORMATION (attach additional sheets if necessary)

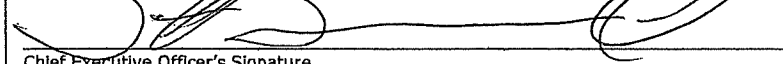
Organization Name: Ham Lake Chamber of Commerce	License Number: 02948
Address: 15544 Central Ave. NE	City/State/Zip: Ham Lake, MN 55304

- Amount of proposed lawful purpose expenditure: \$5,000.00
- Check one expenditure category:
 - A. **Contribution to a unit of government**—United States, state of Minnesota, or any of its subdivisions, agencies, or instrumentalities.
 - B. **Wildlife management project or activity** that benefits the public at large, with approval by the Minnesota Department of Natural Resources (DNR).
 - C. **Grooming and maintaining snowmobile or all-terrain vehicle trails** established under Minnesota Statutes, Sections 84.83 and 84.927, including purchase or lease of equipment, with approval by the DNR. All trails must be open to public use.
 - D. **Supplies and materials for safety training and educational programs** coordinated by the DNR, including the Enforcement Division.
 - E. **Citizen monitoring of surface water quality testing** for public waters by individuals or nongovernmental organizations, with Minnesota Pollution Control Agency (MPCA) guidance on monitoring procedures, quality assurance protocols, and data management, providing that data is submitted to the MPCA.

3. Describe the proposed expenditure, including vendors:

Freedom Festival

- **NO FINANCIAL OR OTHER BENEFIT:** I affirm that the contribution or expenditure does not result in any monetary, economic, financial, or material benefit to our organization, in compliance with Minn. Rule 7861.0320, subp. 17, para. C.
- **FOR DNR-RELATED PROJECTS:** I affirm that when lawful gambling funds are used for grooming and maintaining snowmobile or all-terrain vehicle trails or for any wildlife management project for which reimbursement is received from a unit of government, the reimbursement funds must be deposited in our lawful gambling account and recorded on form LG100C.
- **FOR SURFACE WATER QUALITY TESTING:** I affirm that the MPCA has been consulted in developing the monitoring plan and that the data collected will be submitted to the MPCA. Send form for signature to: Manager, Water Monitoring Section, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, MN 55155. Website: www.pca.state.mn.us

	<u>4/6/2021</u>
Chief Executive Officer's Signature	Date
<u>Scott Summerbell</u>	<u>612-414-3116</u>
Print Name	Daytime Phone

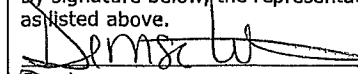
GOVERNMENT APPROVAL/ACKNOWLEDGMENT

Contribution amount: \$5,000.00. Government use of contribution (check one):

- Wildlife**—DNR approves the wildlife management project or activity.
- Trails**—DNR approves the grooming/maintaining of snowmobile and/or all-terrain vehicle trails.
- Safety training**—DNR approves the supplies/materials for DNR safety training and educational programs.
- Water quality testing**—MPCA approves the surface water quality testing project.
- Donation to other unit of government** (city, county, state, federal, or any of their subdivisions) provided the funds will not be used for a pension or retirement fund.

Unit of Government: City of Ham Lake	Phone: 763-434-9555
Address: 15544 Central Ave. NE	City/State/Zip: Ham Lake, MN 55304

By signature below, the representative of the unit of government acknowledges and approves the contribution amount for the use as listed above.

	<u>4/22/21</u>
Signature	Date
<u>Denise Webster</u>	<u>City Administrator</u>
Print Name	Title

Questions? Contact the Minnesota Gambling Control Board at 651-539-1900. This form will be made available in alternative format (i.e. large print, braille) upon request. The information requested on this form will become public information, when requested by the Board, and will be used to determine your compliance with Minnesota statutes and rules governing lawful gambling activities.

Dear Mrs. Denise Webster,

Please accept this letter as formal notification that I am resigning from my position as Fire Chief for the City of Ham Lake. My last day will be Friday, April 30th, 2021.

Thank you so much for the opportunity to work in this position. I greatly appreciate the experience that this has given me, and it will follow me throughout the rest of my career in the fire service.

I'll do everything possible to wrap up my duties over the next two weeks. Please let me know if there's anything else I can do to help during this transition.

I wish the City continued success, and I hope to stay in touch in the future.

Sincerely,

Kyle Bode

Meeting Date: May 3, 2021



**CITY OF HAM LAKE
STAFF REPORT**

To: Mayor and Councilmembers

From: Denise Webster, on behalf of the Personnel Committee

Item/Title/Subject: Hiring a Full-Time Fire Chief/Emergency Management Director

Introduction/Discussion: The current Fire Chief, Kyle Bode has resigned, effective April 30, 2021. During the interviewing process last winter for the Fire Chief position, Mike Raczkowski was interviewed. Mike has been a member of the Ham Lake Fire Department for 21 years and is well qualified for the position.

The Personnel Committee would like to appoint Mike Raczkowski as the full-time Fire Chief/Emergency Management Director. The position has a comp worth rating of 308 and with his knowledge of the Fire Department, will be starting at the two year pay scale of \$7,751/per month and year 5-6 of the PTO schedule effective May 24, 2021. Mike is also requesting to remain an active member of the Ham Lake Fire Relief Association. In order for that to happen, the Ham Lake Fire Relief Association By-Laws will need to be changed and approved to reflect the change. Once approved, Mike will earn his service credits outside of City Hall hours.

Recommendation: The Personnel Committee recommends appointing Mike Raczkowski as the Full-time Fire Chief/Emergency Management Director effective May 24, 2021.

Meeting Date: May 3, 2021

CITY OF HAM LAKE
STAFF REPORT

To: Mayor and Councilmembers

From: John Witkowski, Public Works Superintendent

Item/Title/Subject: Hiring Seasonal Maintenance Workers

Discussion: We received six applications for the 2021 Seasonal Maintenance Worker positions. After interviewing the six applicants I found four that would be a good fit for public works. Joseph Mathes, Michael Harris, Matthew Schommer and Konner Stumo. We have one applicant, Konnor Stumo, who will be returning this summer.

Wages for summer help is \$15.00 dollars per hour with an additional \$1.00 for every returning year up to \$17.00 per hour. They will be scheduled for 40 hours a week but that may change due to weather and workload needs.

Recommendation: I recommend the hiring of returning employee Konner Stumo and hiring 3 additional seasonal employees Joseph Mathes, Michael Harris and Matthew Schommer.

Memorandum

Date: April 29, 2021
To: Mayor and Councilmembers
From: Tom Collins, City Engineer *TPC*
Subject: Lund's Lakeview Forest street reconstruction

Introduction:

The Plans for the reconstruction of streets within the Lund's Lakeview Forest residential subdivision are attached. Plans were directed to be prepared at the August 17, 2020 City Council meeting.

Discussion:

The Lund's Lakeview Forest subdivision was constructed in 1976 and a bituminous overlay was placed in 1996 and seal coat was applied in 2008 and is experiencing poor drainage. The street will be upgraded from bituminous curb to surmountable concrete curb and gutter and storm catch basins. The streets were constructed with a paczyme base, which requires that the bituminous be removed rather than being reclaimed with an aggregate base. The construction cost estimate for the reconstruction is \$1,274,035.68.

The cost estimate when plans were ordered to be prepared was \$707,823. The increase in cost from the original per linear foot estimate was a result of several factors. The entire subdivision utilized surface drainage to convey water from the north portion to the south portion of the subdivision. There was insufficient separation of the roadway on the north segment to meet proper storm sewer cover which required water to be piped to the southwest wetland. The subdivision is the last in Ham Lake to be constructed with paczyme base, which required that the existing bituminous be removed rather than being salvaged thru reclamation and utilized as the aggregate base. The subdivision also includes a significant amount of concrete driveways.

Recommendation:

Approve the Plans and authorize the advertisement for bids for the reconstruction of the streets within Lund's Lakeview Forest.

CONSTRUCTION COST ESTIMATE
Lund's Lakeview Forest Street Reconstruction
4/29/2021

ITEM NUMBER	ITEM DESCRIPTION	UNIT	EST QTY	UNIT PRICE	TOTAL
2021.501	MOBILIZATION	LUMP SUM	1	\$71,000.00	\$71,000.00
2104.502	REMOVE SIGN	EACH	12	\$50.00	\$600.00
2104.502	REMOVE MAIL BOX SUPPORT	EACH	34	\$65.00	\$2,210.00
2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH) - DRIVEWAYS	LIN FT	145	\$5.00	\$725.00
2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH) - DRIVEWAYS	LIN FT	405	\$4.00	\$1,620.00
2104.503	REMOVE METAL CULVERT	LIN FT	159	\$16.00	\$2,544.00
2104.503	REMOVE CHAIN LINK FENCE	LIN FT	132	\$6.40	\$844.80
2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	411	\$11.00	\$4,521.00
2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	735	\$7.00	\$5,145.00
2104.504	REMOVE BITUMINOUS PAVEMENT - ROADWAYS	SQ YD	11,896	\$3.00	\$35,688.00
2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	231	\$3.00	\$693.00
2104.618	SALVAGE BRICK PAVERS	SQ FT	388	\$5.00	\$1,940.00
2105.501	COMMON EXCAVATION	CU YD	3,316	\$16.00	\$53,056.00
2105.521	GRANULAR BORROW (CV)	CU YD	729	\$17.00	\$12,393.00
2211.501	AGGREGATE BASE, CLASS 5 AND/OR 7	TON	2,850	\$18.00	\$51,300.00
2211.604	AGGREGATE BASE (CV) CLASS 5 4.0" THICK - BIT DRIVEWAY	SQ YD	757	\$10.00	\$7,570.00
2360.504	TYPE SP 9.5 WEARING COURSE MIXTURE (3;C) 2.0" THICK - DRIVEWAYS	SQ YD	757	\$25.00	\$18,925.00
2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2;C)	TON	747	\$85.00	\$63,495.00
2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2;C)	TON	1,493	\$73.00	\$108,989.00
2501.502	24" GS PIPE APRON	EACH	1	\$800.00	\$800.00
2501.502	36" GS PIPE APRON	EACH	1	\$1,000.00	\$1,000.00
2501.502	12" RC PIPE APRON	EACH	4	\$1,080.00	\$4,320.00
2501.502	15" RC PIPE APRON	EACH	1	\$1,160.00	\$1,160.00
2501.602	TRASH GUARD FOR 15" PIPE APRON	EACH	2	\$500.00	\$1,000.00
2501.602	TRASH GUARD FOR 36" PIPE APRON	EACH	1	\$2,200.00	\$2,200.00
2503.511	15" CP PIPE SEWER (SMOOTH)	LIN FT	27	\$40.00	\$1,080.00
2503.511	24" CP PIPE SEWER (SMOOTH)	LIN FT	28	\$55.00	\$1,540.00
2503.511	36" CP PIPE SEWER (SMOOTH)	LIN FT	38	\$85.00	\$3,230.00
2503.541	12" RC PIPE SEWER DESIGN 3006 CLASS IV	LIN FT	77	\$57.00	\$4,389.00
2503.541	15" RC PIPE SEWER DESIGN 3006 CLASS IV	LIN FT	807	\$57.00	\$45,999.00
2503.541	18" RC PIPE SEWER DESIGN 3006 CLASS IV	LIN FT	20	\$60.00	\$1,200.00
2503.541	21" RC PIPE SEWER DESIGN 3006 CLASS IV	LIN FT	841	\$65.00	\$54,665.00
2503.541	24" RC PIPE SEWER DESIGN 3006 CLASS IV	LIN FT	28	\$70.00	\$1,960.00
2503.541	30" RC PIPE SEWER DESIGN 3006 CLASS IV	LIN FT	555	\$80.00	\$44,400.00
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL	EACH	4	\$2,700.00	\$10,800.00
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 1	EACH	5	\$3,400.00	\$17,000.00
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 2	EACH	9	\$3,400.00	\$30,600.00
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 3	EACH	4	\$5,500.00	\$22,000.00
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 4	EACH	3	\$6,000.00	\$18,000.00
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 5	EACH	1	\$10,000.00	\$10,000.00
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 6	EACH	2	\$10,000.00	\$20,000.00
2506.502	RAIN GUARDIAN	EACH	3	\$3,000.00	\$9,000.00
2511.504	GEOTEXTILE FILTER TYPE 4	SQ YD	93	\$6.00	\$558.00
2511.507	RANDOM RIPRAP CLASS III	CU YD	19	\$150.00	\$2,850.00
2531.501	CONCRETE CURB & GUTTER DESIGN D312 (MODIFIED)	LIN FT	8,200	\$13.00	\$106,600.00
2531.507	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	384	\$87.00	\$33,408.00
2540.602	MAIL BOX SUPPORT - SWING TYPE	EACH	34	\$120.00	\$4,080.00
2540.618	INSTALL BRICK PAVERS	SQ FT	327	\$10.00	\$3,270.00
2563.601	TRAFFIC CONTROL	LUMP SUM	1	\$10,000.00	\$10,000.00
2564.518	SIGN PANELS TYPE C	SQ FT	98	\$55.00	\$5,390.00
2573.501	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1	\$3,800.00	\$3,800.00
2573.502	SILT FENCE, TYPE MACHINE SLICED	LIN FT	5,078	\$2.00	\$10,156.00
2573.502	STORM DRAIN INLET PROTECTION	EACH	35	\$160.00	\$5,600.00
2573.502	CULVERT END CONTROLS	EACH	7	\$190.00	\$1,330.00
2573.503	SEDIMENT CONTROL LOG TYPE STRAW	LIN FT	263	\$3.25	\$854.75
2575.504	EROSION CONTROL BLANKETS CATEGORY 0	SQ YD	424	\$5.00	\$2,120.00
2575.605	TURF ESTABLISHMENT	ACRE	2.5	\$5,900.00	\$14,750.00
TOTAL ESTIMATED CONSTRUCTION COST					\$954,368.55
TREE REMOVAL (HUGO TREE)					\$64,860.00
SUBTOTAL					\$1,019,228.55
PROJECT DEVELOPMENT COSTS (17%)					\$173,268.85
CONSTRUCTION ENGINEERING & INSPECTION COSTS (8%)					\$81,538.28
TOTAL PROJECT COST					\$1,274,035.68

Anticipated Schedule
Lund's Lakeview Forest street reconstruction
April 29, 2021

	2021							2021					
	May	June	July	August	September	October	November	April	May	June	July	August	September
City Council Approval	3												
Advertisement	5	2											
Bid Opening		2											
Project Award		7											
Project Start		21											17

MINNESOTA DEPARTMENT OF TRANSPORTATION

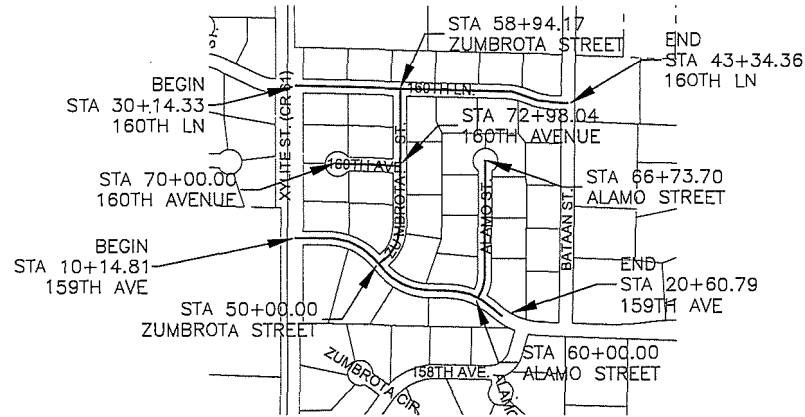
City of Ham Lake, Minnesota

CONSTRUCTION PLAN FOR GRADING, AGGREGATE BASE, PLANT MIXED BITUMINOUS SURFACE, STORM DRAINS, AND CONCRETE CURB

LOCATED ON 159TH AVENUE FROM XYLITE STREET TO BATAAN STREET, ZUMBROTA STREET FROM 159TH AVENUE TO 160TH LANE, 160TH AVENUE FROM ZUMBROTA STREET TO CDS, ALAMO STREET FROM 159TH AVENUE TO CDS, AND 160TH LANE FROM XYLITE STREET TO BATAAN STREET.

HAM LAKE PROJECT NO. 1907

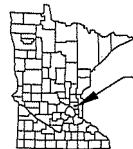
GROSS LENGTH 4,231.92 FEET 0.80 MILES
 BRIDGES LENGTH 0 FEET 0 MILES
 EXCEPTIONS LENGTH 0 FEET 0 MILES
 NET LENGTH 4,231.92 FEET 0.80 MILES



ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE MN MUTCD, INCLUDING FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THIS COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA"

THE UTILITIES SHOWN ARE BASED UPON THE BEST INFORMATION AVAILABLE AND MAY NOT REFLECT THE ACTUAL EFFECTS ON THE UTILITIES BY CONSTRUCTION. ACTUAL DETERMINATIONS WILL BE MADE IN THE FIELD DURING CONSTRUCTION.

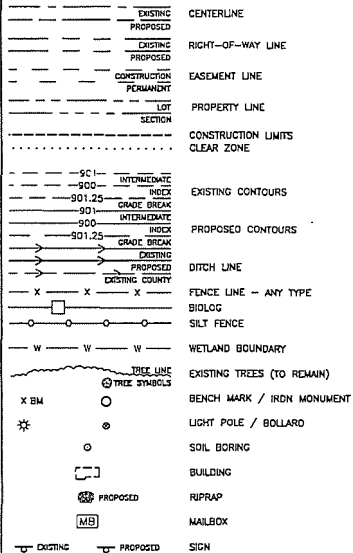


PROJECT LOCATION

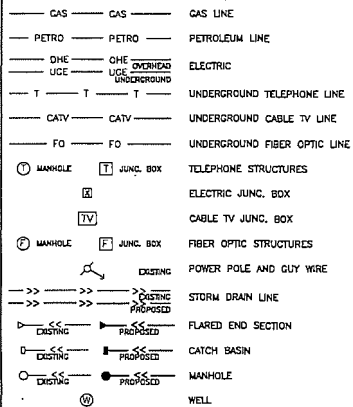
ANGKA COUNTY METRO DISTRICT

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

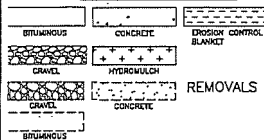
PLAN SYMBOLS



UTILITY SYMBOLS



HATCH LEGEND



GOVERNING SPECIFICATIONS

THE 2018 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

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ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

THIS PLAN CONTAINS 44 SHEETS

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.

SIGNED:
David A. Krugler

DATE: REG. NO.: 48768

APPROVED: DATE:
CITY ENGINEER - HAM LAKE

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNED:
DATE: REG. NO.:

RFC ENGINEERING, INC. Consulting Engineers

13635 Johnson Street NE Telephone 763-862-8000
Ham Lake, MN 55304 Fax 763-862-8042

JOB NO. 1907 SHEET NO. 1 OF 44 SHEETS
FILE: 35-1-130

STATEMENT OF ESTIMATED QUANTITIES

TAB	SHEET	NOTES	ITEM NO.	ITEM	UNIT	ENTIRE PROJECT ESTIMATED QUANTITIES
			2021.501	MOBILIZATION	LUMP SUM	1
AA	3	6	2104.502	REMOVE SIGN	EACH	12
AD	3	10	2104.502	REMOVE MAIL BOX SUPPORT	EACH	34
BA	4		2104.503	SAWING CONCRETE PAVEMENT (FULL DEPTH) - DRIVEWAYS	LN FT	145
BA	4		2104.503	SAWING BITUMINOUS PAVEMENT (FULL DEPTH) - DRIVEWAYS	LN FT	405
AB	3		2104.503	REMOVE METAL CULVERT	LN FT	159
AH	3		2104.503	REMOVE CHAIN LINK FENCE	LN FT	132
BA	4		2104.504	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	411
BA	4		2104.504	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	735
AC	3		2104.504	REMOVE BITUMINOUS PAVEMENT - ROADWAYS	SQ YD	11686
AE	3		2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LN FT	231
AF	3		2104.618	SALVAGE BRICK PAVERS	SQ FT	388
AI	3	4	2105.501	COMMON EXCAVATION	CU YD	3316
AI	3		2105.521	GRANULAR BORROW (CV)	CU YD	729
BB	4		2211.501	AGGREGATE BASE, CLASS 5 AND/OR 7	TON	2850
BA	4		2211.604	AGGREGATE BASE (CV) CLASS 5 4.0" THICK - BIT DRIVEWAY	SQ YD	757
BA	4	8	2360.504	TYPE SP 9.5 WEARING COURSE MIXTURE (3:C) 2.0" THICK - DRIVEWAYS	SQ YD	757
BC	4	9	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (2:C)	TON	747
BD	4		2360.509	TYPE SP 12.5 WEARING COURSE MIXTURE (2:C)	TON	1493
	23-25		2501.502	24" CS PIPE APRON	EACH	1
	23-25		2501.502	36" CS PIPE APRON	EACH	1
	23-25		2501.502	12" RC PIPE APRON	EACH	4
	23-25		2501.502	15" RC PIPE APRON	EACH	1
	23-25		2501.602	TRASH GUARD FOR 15" PIPE APRON	EACH	2
	23-25		2501.602	TRASH GUARD FOR 36" PIPE APRON	EACH	1
	23-25	1	2503.511	15" CP PIPE SEWER (SMOOTH)	LN FT	27
	23-25	1	2503.511	24" CP PIPE SEWER (SMOOTH)	LN FT	28
	23-25	1	2503.511	36" CP PIPE SEWER (SMOOTH)	LN FT	38
	23-25	1	2503.541	12" RC PIPE SEWER DESIGN 3006 CLASS IV	LN FT	77
	23-25	1	2503.541	15" RC PIPE SEWER DESIGN 3006 CLASS IV	LN FT	807
	23-25	1	2503.541	18" RC PIPE SEWER DESIGN 3006 CLASS IV	LN FT	20
	23-25	1	2503.541	21" RC PIPE SEWER DESIGN 3006 CLASS IV	LN FT	841
	23-25	1	2503.541	24" RC PIPE SEWER DESIGN 3006 CLASS IV	LN FT	28
	23-25	1	2503.541	30" RC PIPE SEWER DESIGN 3006 CLASS IV	LN FT	555
	23-25	2	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL	EACH	4
	23-25	2	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 1	EACH	5
	23-25	2	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 2	EACH	9
	23-25	2	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 3	EACH	4
	23-25	2	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 4	EACH	3
	23-25	2	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 5	EACH	1
	23-25	2	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 6	EACH	2
	23-25	2	2506.502	RAIN GUARDIAN	EACH	3
BN	4		2511.504	GEOTEXTILE FILTER TYPE 4	SQ YD	93
BL	4		2511.507	RANDOM RIPRAP CLASS III	CU YD	19
BE	4		2531.501	CONCRETE CURB & GUTTER DESIGN D312 (MODIFIED)	LN FT	8200
BA	4	8	2531.507	6" CONCRETE DRIVEWAY PAVEMENT	SQ YD	384
BF	4	10	2540.602	MAIL BOX SUPPORT - SWING TYPE	EACH	34
AG	3		2540.618	INSTALL BRICK PAVERS	SQ FT	327
			2563.601	TRAFFIC CONTROL	LUMP SUM	1
BH	4	6	2564.518	SIGN PANELS TYPE C	SQ FT	98
	28	7	2573.501	STABILIZED CONSTRUCTION EXIT	LN FT	1
BI		7	2573.502	SILT FENCE, TYPE MACHINE SLICED	LN FT	5078
BJ		7	2573.502	STORM DRAIN INLET PROTECTION	EACH	35
BK		7	2573.502	CULVERT END CONTROLS	EACH	7
BC		7	2573.503	SEDIMENT CONTROL LOG TYPE STRAW	LN FT	263
BM		7	2575.504	EROSION CONTROL BLANKETS CATEGORY 0	SQ YD	424
BW	26-28	3	2575.605	TURF ESTABLISHMENT	ACRE	2.5

NOTES:

1. SELECT GRANULAR BORROW, STRUCTURAL EXCAVATION, AND GRANULAR BACKFILL FOR STORM PIPES ARE INCIDENTAL.
2. FILTER FABRIC AND FABRIC WRAP FOR MANHOLES ARE INCIDENTAL.
3. ALL DISTURBED AREAS DETERMINED NOT TO BE PAVED, AGGREGATE SURFACE, CONCRETE SURFACE OR RIPRAP SHALL HAVE 4 INCHES OF TOPSOIL, FERTILIZER TYPE 2, MULCH MATERIAL, AND SEED MIXTURES NO. 34-181, MULCH TYPE 3 (WEED FREE MULCH) WITH NO FERTILIZER AND 25-151 PER MNDOT STANDARD SPECIFICATION 3876, APPLY TYPE 1 MULCH AT THE RATE OF 2 (TWO) TONS PER ACRE (TO ACHIEVE A 60% UNIFORM GROUND COVERAGE). SEED MIXTURE, WATER, TYPE 2 FERTILIZER, MULCH, AND DISK ANCHORING ARE INCIDENTAL. SOIL TESTING TO DETERMINE FERTILIZER MIXTURE RATIO AND RATE OF APPLICATION IS INCIDENTAL.
4. MATERIAL FOUND IN THE SUBCUTS THAT IS UNSUITABLE FOR FILL IN THE ROADBED SHALL BE REMOVED OFF-SITE.
5. THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE CONSTRUCTION LIMITS.
6. SIGNS INCLUDE POSTS.
7. INSTALLATION AND MAINTENANCE ARE INCIDENTAL.
8. QUANTITY SHOWN USED FOR DRIVEWAY CONSTRUCTION. SEE DETAIL RFC-363A3.
9. BITUMINOUS MATERIAL FOR TACK COAT SHALL BE INCIDENTAL.
10. REMOVE SUPPORTS AND SALVAGE MAIL BOXES. SALVAGE MAIL BOXES ARE INCIDENTAL.

SEED MIX 25-151: RESIDENTIAL TURF
MULCH TYPE 1
PLANT APRIL 1ST - JUNE 1ST FOR SPRING PLANTING OR JULY 20TH - SEPTEMBER 20TH FOR FALL PLANTING

SEED MIX 34-181: EMERGENT WETLAND
MULCH TYPE 3
PLANT APR 15TH - JUL 20TH FOR SPRING PLANTING OR SEPT 20TH - OCT 20TH FOR FALL PLANTING

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY

PLATE NO.	STANDARD PLATES - RFC ENGINEERING (IN THE PLANS)
RFC-355A	CONCRETE CURB AND CUTTER
RFC-363A3	PRIVATE DRIVEWAY/FIELD ENTRANCE
RFC-366E3	TYPICAL STREET SECTION
RFC-368E15	TYPICAL STREET SECTION
RFC-367A	RESIDENTIAL CUL-DE-SAC
RFC-459B	RECTANGULAR CATCH BASIN
RFC-463	FABRIC AROUND CATCH BASIN
RFC-465A1	RECTANGULAR INLET FOR ROUND MANHOLE
RFC-465A2	RECTANGULAR INLET FOR ROUND MANHOLE - 4' SUMP
RFC-465B3	RECTANGULAR INLET FOR ROUND MANHOLE - VARIABLE SUMP HEIGHT
RFC-465C1	ROUND INLET FOR ROUND MANHOLE
RFC-466B	RCP TRASH GUARD
RFC-466C	CPP TRASH GUARD
RFC-654	STORM DRAIN BEDDING FOR RIGID AND FLEXIBLE PIPE *MNDOT DETAIL
RFC-857	SILT FENCE AT FES

PLATE NO.	MNDOT STANDARD PLATES
3000L	REINFORCED CONCRETE PIPE (5 SHEETS)
3006G	GASKET JOINT FOR R.C. PIPE (2 SHEETS)
3100G	CONCRETE APRON FOR R.C. PIPE
3129A	METAL APRON FOR CORRUGATED POLYETHYLENE PIPE
3133D	RIPRAP AT R.C. PIPE OUTLETS
3134D	RIPRAP AT CSP OUTLET
3145G	CONCRETE PIPE TIES
7100H	CONCRETE CURB & GUTTER
8000J	CHANNELIZERS (3 SHEETS)
9350A	MAILBOX SUPPORT (SWING-AWAY TYPE)

BASIS FOR ESTIMATED QUANTITIES

AGGREGATE BASE	105 LBS./S.Y./INCH
BITUMINOUS MIXTURE	110 LBS./S.Y./INCH
TACK COAT	0.05 GAL./S.Y.
TYPE 1 MULCH	2 TONS/ACRE



UTILITIES: CENTURULINK (763) 712-5017
CENTERSHIP ENERGY (763) 323-2760
COMCAST (952) 607-4078
CONCRETE ENERGY (763) 333-4866
XCEL ENERGY (612) 528-4500

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.
DATE: _____ REC. NO. _____

RFC ENGINEERING, INC.
Consulting Engineers

13635 Johnson Street
Ham Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS

STATEMENT OF ESTIMATED QUANTITIES

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC

DWG: 1907 QTY 1
DATE: 04/29/21
JOB NUMBER: 1907
SHEET: 2 OF 44
FILE: 35-1-131

REMOVE SIGN					AA
STATION	LOCATION	SIGN NO.	POST	CODE NO.	PANEL LEGEND
10+30	159TH AVE. - LT	C-20	SINGLE		STREET
10+36	159TH AVE. - LT	C-21	SINGLE	R1-1	STOP
14+49	159TH AVE. - LT	C-20	SINGLE		STREET
14+73	159TH AVE. - RT	C-22	SINGLE	W1-7	DOUBLE ARROW
19+74	159TH AVE. - LT	C-20	SINGLE		STREET
30+31	160TH LN. - LT	C-21	SINGLE	R1-1	STOP
30+35	160TH LN. - RT	C-20	SINGLE		STREET
31+23	160TH LN. - RT	C-23	SINGLE	R2-1-30	SPEED LIMIT
43+18	160TH LN. - RT	C-20	SINGLE		STREET
58+54	ZUMBROTA ST. - RT	C-20	SINGLE		STREET
72+59	160TH AVE. - LT	C-24	SINGLE	W14-1	DEAD END
72+73	160TH AVE. - RT	C-20	SINGLE		STREET
	TOTAL		12		

REMOVE CULVERTS				AB
STATION	SIZE	LOCATION	LENGTH (LIN FT)	
10+29	12" CMP	159TH AVE. - ACROSS	50	
12+77	18" CMP	159TH AVE. - ACROSS	59	
30+28	12" CMP	160TH LN. - ACROSS	50	
	TOTAL		159	

REMOVE BITUMINOUS PAVEMENT			AC
STATION	LOCATION	SO YD	
10+14.81 TO 20+60.79	159TH AVENUE - ROADWAY	2,629.5	
60+00.00 TO 66+73.70	ALAMO STREET - ROADWAY	2,265.5	
50+00.00 TO 58+94.17	ZUMBROTA STREET - ROADWAY	2,204.6	
70+00.00 TO 72.88.04	160TH AVENUE - ROADWAY	1,407.4	
30+14.33 TO 43+34.39	160TH LANE - ROADWAY	3,389.1	
	TOTAL	11,896.2	

REMOVE MAILBOX SUPPORT			AD
STATION	LOCATION	TYPE	
11+24	159TH AVE. - LT	SINGLE	
11+69	159TH AVE. - LT	SINGLE	
11+83	159TH AVE. - LT	SINGLE	
15+33	159TH AVE. - LT	SINGLE	
16+56	159TH AVE. - LT	SINGLE	
17+42	159TH AVE. - LT	SINGLE	
31+03	160TH LN. - RT	SINGLE	
32+15	160TH LN. - RT	SINGLE	
33+43	160TH LN. - RT	SINGLE	
34+40	160TH LN. - RT	SINGLE	
36+47	160TH LN. - LT	DOUBLE	
37+61	160TH LN. - RT	SINGLE	
38+50	160TH LN. - RT	SINGLE	
39+61	160TH LN. - RT	SINGLE	
39+67	160TH LN. - LT	SINGLE	
41+44	160TH LN. - RT	SINGLE	
41+52	160TH LN. - LT	SINGLE	
51+66	ZUMBROTA ST. - LT	SINGLE	
52+95	ZUMBROTA ST. - LT	SINGLE	
53+20	ZUMBROTA ST. - LT	SINGLE	
53+73	ZUMBROTA ST. - LT	SINGLE	
55+43	ZUMBROTA ST. - LT	SINGLE	
57+03	ZUMBROTA ST. - LT	SINGLE	
61+83	ALAMO ST. - LT	SINGLE	
63+21	ALAMO ST. - LT	SINGLE	
63+79	ALAMO ST. - LT	DOUBLE	
64+42	ALAMO ST. - LT	SINGLE	
65+31	ALAMO ST. - LT	SINGLE	
66+03	ALAMO ST. - RT	SINGLE	
66+06	ALAMO ST. - LT	SINGLE	
76+52	160TH AVE. - RT	DOUBLE	
	TOTAL	34	

SAWCUT BITUMINOUS PAVEMENT			AE
STATION	LOCATION	LIN FT	
10+14.81	159TH AVE. - ROADWAY	66.6	
20+60.79	159TH AVE. - ROADWAY	26.2	
30+14.39	160TH LN. - ROADWAY	66.5	
43+34.13	160TH LN. - ROADWAY	71.5	
	TOTAL	230.8	

SALVAGE BRICK PAVERS			AF
STATION	LOCATION	SO. FT.	
53+39	ZUMBROTA SL DRIVEWAY - LT	388	
	TOTAL	388	

REINSTALL BRICK PAVERS			AG
STATION	LOCATION	SO. FT.	
53+39	ZUMBROTA SL DRIVEWAY - LT	327	
	TOTAL	327	

REMOVE CHAIN LINK FENCE			AH
STATION	LOCATION	LIN FT	
70+92 TO 72+24	160TH AVE. - RT	132	
	TOTAL	132	

NOTES

- TOP OF GRADING SUBGRADE IS DEFINED AS THE BOTTOM OF THE CLASS 5 AGGREGATE BASE.
- BITUMINOUS AND CONCRETE DISTURBED BY CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH MNDOT SPEC. 2104.3C3.
- COMPACTION OF ALL GRADING AND BASE ITEMS SHALL BE BY THE "QUALITY COMPACTION METHOD".
- USE TACK COAT BETWEEN ALL BITUMINOUS LAYERS AND BETWEEN BITUMINOUS AND CONCRETE CURB AND GUTTER.
- STRIP ALL TOPSOIL AREAS TO BE DISTURBED BY CONSTRUCTION AND REUSE TOPSOIL OR USE AS FILL OUTSIDE OF ROAD CORE.
- WHENEVER THE WORD "INCIDENTAL" IS USED IN THIS PLAN, IT SHALL MEAN THIS WORK SHALL BE INCIDENTAL FOR WHICH NO DIRECT COMPENSATION WILL BE MADE.
- STATIONING FOR LOCATION OF EXISTING AND NEW SIGNS IS APPROXIMATE.
- EXCESS MATERIAL TO BE HAULED AWAY TO CITY OF HAM LAKE PUBLIC WORKS.

EARTHWORK SUMMARY				AI
EXCAVATION (CU YD)		EMBANKMENT (CU YD)		
TOPSOIL 1,034 CU YD (EV)] 3,315 CU YD (EV) ⊕	TOPSOIL 1,034 CU YD (EV)/1.1 =	940 CU YD (CV)] 940 CU YD (CV) TOPSOIL
COMMON 2,282 CU YD (EV)		COMMON EX 2,282 CU YD (EV)/1.3 =	1,755 CU YD (CV)	
		GRANULAR FILL	729. CY YD (CV)	
<p>NOTES:</p> <p>⊕ TOTAL EXCAVATION (EV) REQUIRED FOR PROJECT.</p> <p>⊙ TOTAL EMBANKMENT (CV) REQUIRED FOR PROJECT.</p>				

**GOPHER STATE
DNE & CALL**
800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 712-5017
CENTERPOINT ENERGY (763) 323-2760
COMCAST (652) 607-4078
CONDEXUS ENERGY (763) 323-4268
XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

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DATE: _____ REG. NO. _____

RFC ENGINEERING, INC.
Consulting Engineers

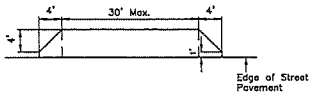
13635 Johnson Street
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HAM LAKE IMPROVEMENT PROJECT 1907
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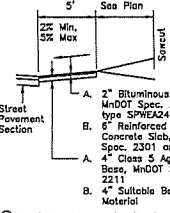
EARTHWORK SUMMARY AND TABULATIONS

DWG: 1907 TAB 1
DATE: 04/29/21
JOB NUMBER: 1907
SHEET: 3 OF 44
FILE: 35-1-132

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



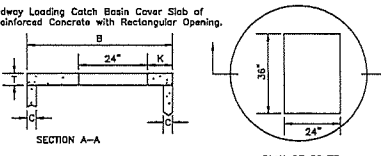
- Note:
- Match existing driveway width and elevation at matchline unless otherwise directed by engineer (See Plans).
 - If existing driveway is concrete, apron and driveway shall be constructed of 6" concrete with 1" x 1" - 6/16 welded wire fabric per MnDOT Spec. 3303 in flat sheels, not rolls. Epoxy coated dowel bars conforming to MnDOT Spec. 3302 shall be placed in the existing driveway pavement along the sawcut line. Dowel bars shall be properly coated with a MnDOT approved lubricant. Dowel bars shall be size #4 and placed at 24" OC. All work shall conform to MnDOT Spec. 2301 and 2531. Concrete shall be ready-mix 3,500 PSI at 28 days, with air content of 5% to 7%, coarse aggregate shall be 1" max. class A and per MnDOT Spec. 3137. Joint sealers shall be hot-poured, low modulus, mastic type per MnDOT Spec. 3725. Membrane curing compound shall be per MnDOT Spec. 3754 and 2301.3M.
 - If existing driveway is gravel, apron and driveway within R/W shall be constructed per existing bituminous driveways. Gravel driveway matching beyond R/W shall be 6" Class 5.



- If existing driveway is bituminous, apron and driveway behind apron shall be bituminous per A. above. All bituminous work shall conform to MnDOT Specifications 2112, 2211, 2357 and 2360. Tack coat is to be applied between concrete and bituminous surfaces.
- driveways in fill sections to slope up from 1" curb lip to end of apron (5' from back of curb) at min of 2% then slope to matchline. See Plan for slope.

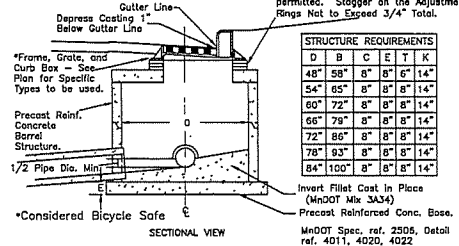
PRIVATE DRIVEWAY/FIELD ENTRANCE RFC-363A3
NOT TO SCALE

NOTE:
HS20 Roadway Loading Catch Basin Cover Slab of Precast Reinforced Concrete with Rectangular Opening.

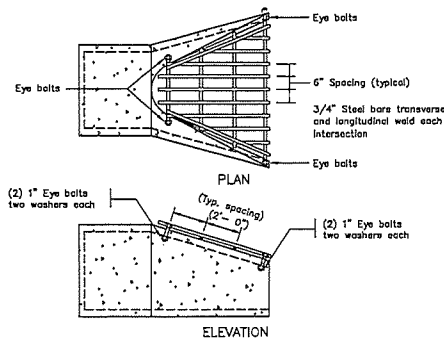


- Note:
- Slabs needed for structure height greater than 4'.
 - Cover Slab to Rest on Bed of Mortar on Full Thickness of Structure Walls, not to Rest on Pipe Tongue or Groove.
 - Location of Structure as Shown in Plans.
 - See Plan for Box and Grate Type.

Adjusting Rings, 2 Min., 3 Max., Full 3/8" Bed of Mortar Between Rings. Reister Exterior Only with 2" Min. Thick Coat. Strike Off Interior. No shims permitted. Stagger on the Adjustment Rings Not to Exceed 3/4" Total.

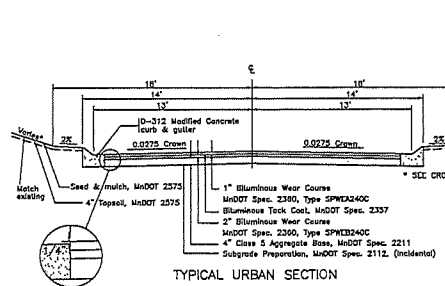
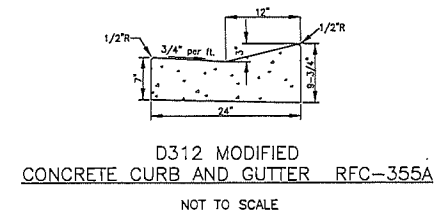


RECTANGULAR INLET FOR ROUND MANHOLE RFC-465A1
NOT TO SCALE
SPECIAL 2, 3, 4

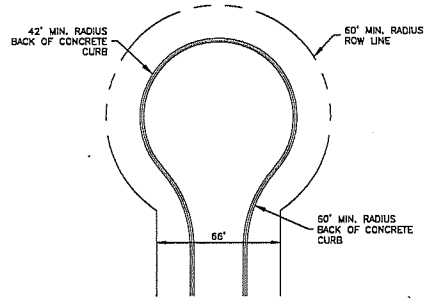


- Note:
- Trash guard to be galvanized after fabrication
 - The size of each trash guard will vary to fit the apron size.
 - All bolts to be non-rusting stainless steel.
 - Weld all bolts to prevent entry after final storm sewer cleaning.
 - Round all steel bars such that ends are smooth and free of burrs.

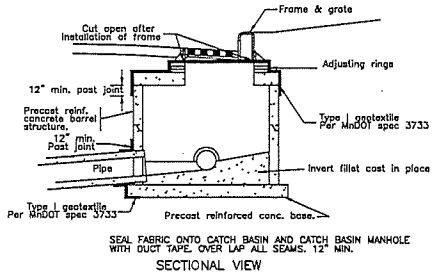
FOR PIPE DIAMETERS 30" AND SMALLER
RCP TRASH GUARD RFC-466B
NOT TO SCALE



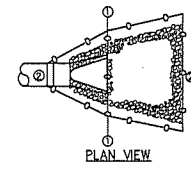
TYPICAL STREET SECTION RFC-366E3
NOT TO SCALE



TYPICAL RESIDENTIAL CUL-DE-SAC RFC-367A
NOT TO SCALE

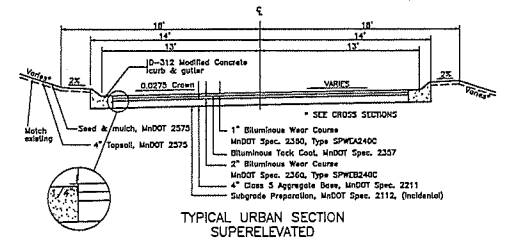


FABRIC AROUND CATCH BASIN RFC-463
NOT TO SCALE



- SEQUENCING:
- Place silt fence along construction limits, the portion of silt fence in front of the pipe shall be removed during flared and section placement.
 - Once the flared and section is placed, silt fence shall be furnished and installed around the top of the flared and section and surrounding the flaps.
 - Any additional outlet protection shall be added as required.
 - Contractor may substitute silt fence for bio-rill or rock log to act as weir for flow into culvert.

SILT FENCE AT FES RFC-857
NOT TO SCALE



TYPICAL STREET SECTION RFC-366E15
NOT TO SCALE

160TH AVENUE FROM 69+70 TO 72+DD EAST BOUND LANE SUPER-ELEVATED
ALAMO STREET FROM 65+30 TO 67+10 NORTH BOUND LANE SUPER-ELEVATED

800-252-1166 651-454-0082

UTILITIES: CENTURYLINK (763) 712-5017
CENTERPOINT ENERGY (763) 323-2760
CONCAST (952) 607-4078
CONARCUS ENERGY (763) 323-4268
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DATE	REVISION HISTORY

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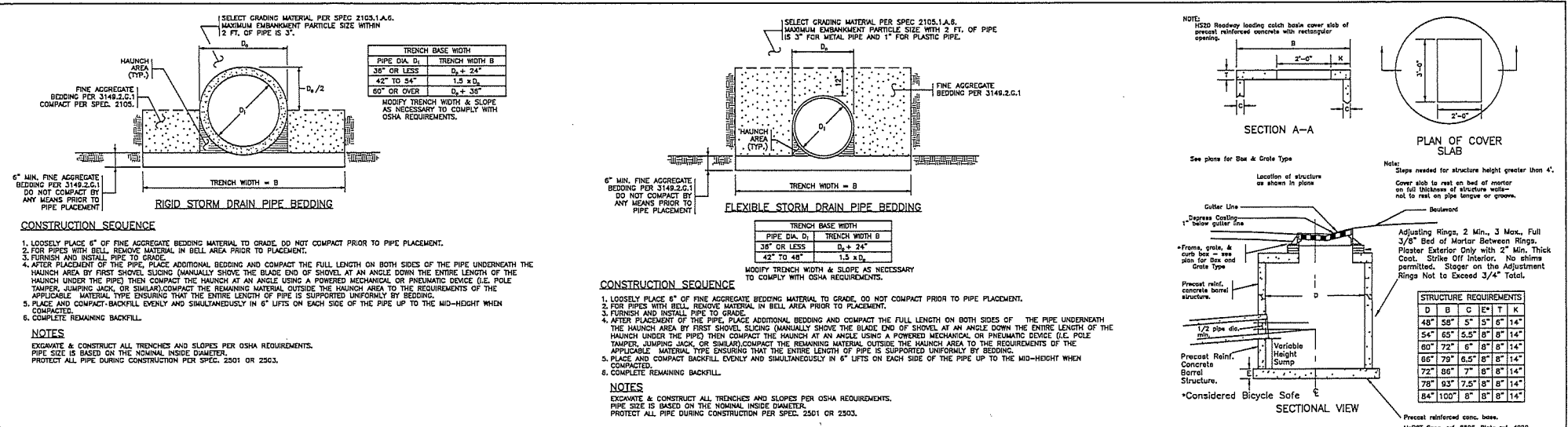
RFC ENGINEERING, INC.
Consulting Engineers

13635 Johnson Street
Ham Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

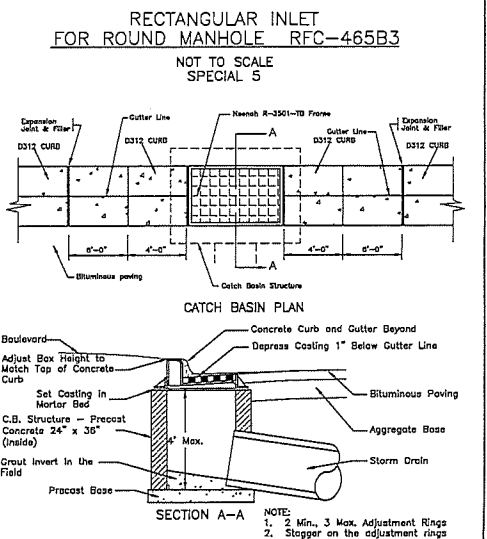
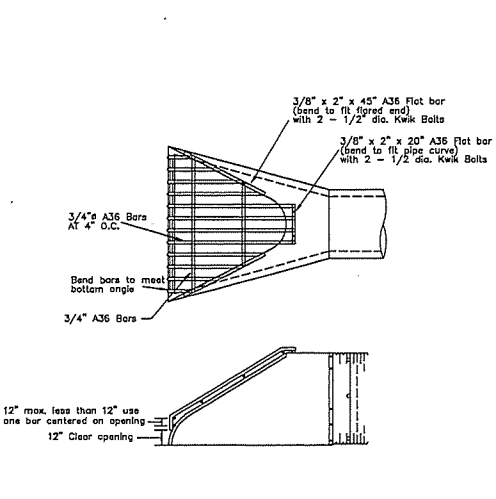
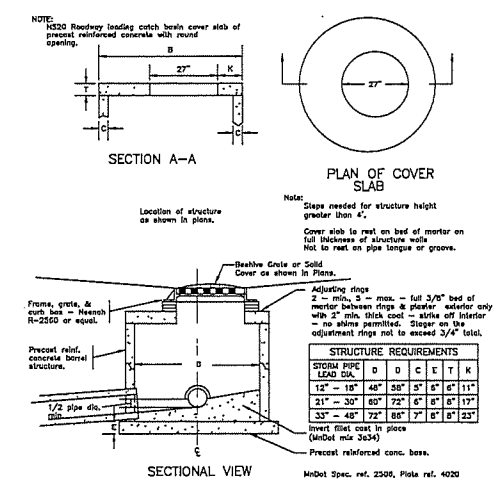
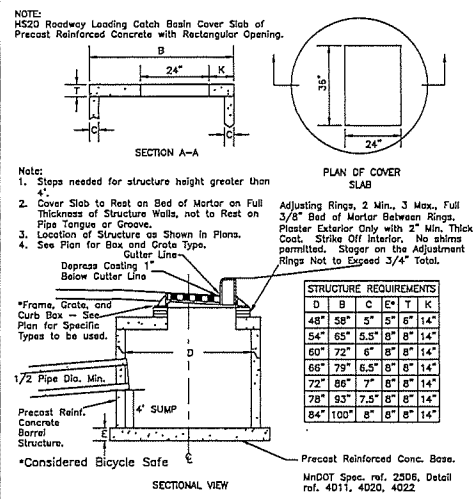
HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS
DETAILS

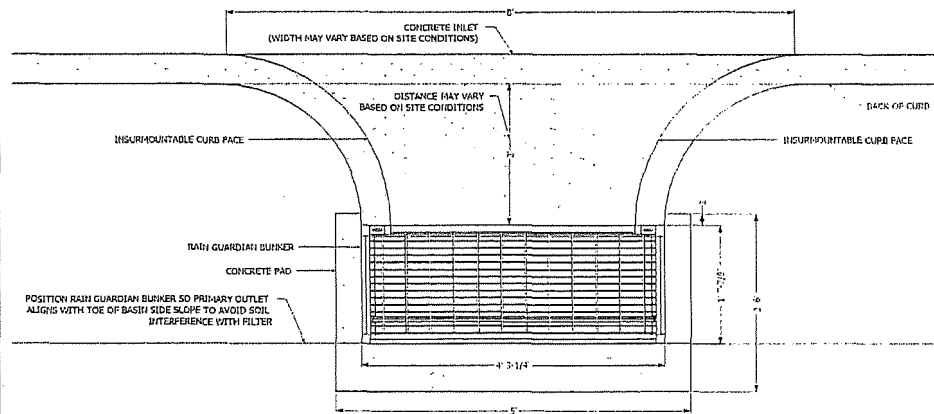
DWS: 1907 DETAIL 1
DATE: 04/29/21
JOB NUMBER: 1907
SHEET: 5 OF 44
FILE: 35-1-134

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



STORM DRAIN BEDDING FOR RIGID AND FLEXIBLE PIPE RFC-654
NOT TO SCALE

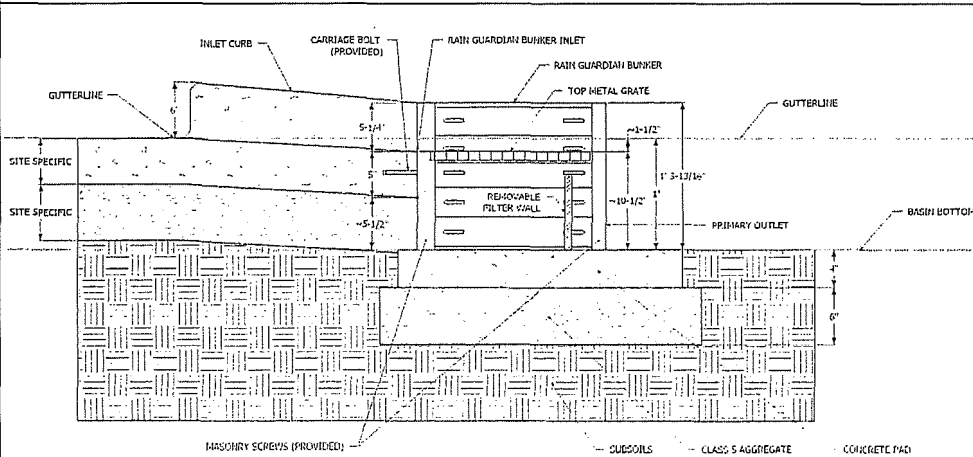
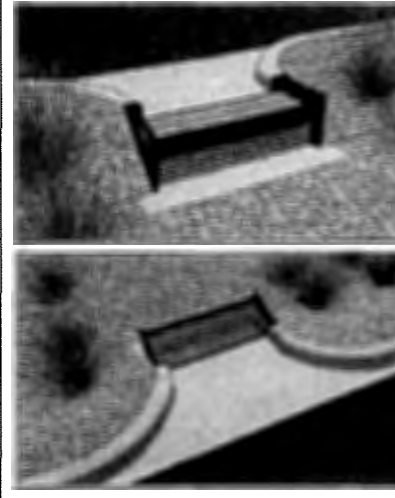




PLAN VIEW NOTES

1. INLET WIDTH AND DISTANCE BETWEEN BACK OF CURB AND RAIN GUARDIAN BUNKER MAY VARY WITH SITE CONDITIONS. INSTALLATION FLUSH WITH THE BACK OF THE CURB CAN ALSO BE COMPLETED WITH THE RAIN GUARDIAN BUNKER.
2. CONCRETE PAD EXTENDS BEYOND THE FILTER WALL OF THE RAIN GUARDIAN BUNKER TO SERVE AS A SPLASH DISSIPATOR.

INSTALLED VIEWS



CROSS-SECTION VIEW NOTES

1. THE TOP OF THE CLASS 5 BASE (COMPACTED TO 95% STANDARD PROCTOR) IS PRECISELY 1'4\"/>
- 2. THE TOP OF THE CONCRETE PAD IS PRECISELY 1' BELOW THE GUTTERLINE.

INSTALLATION NOTES

1. INSTALL THE CONCRETE PAD WITH A 1' 10\"/>
- 2. EXCAVATE 1' 10\"/>
- 3. THE RAIN GUARDIAN BUNKER SHOULD BE POSITIONED 2\"/>
- 4. USING THE PILOT HOLE IN EACH OF THE FOUR CORNER POSTS, PREDRILL 5/32\"/>
- 5. SECURE RAIN GUARDIAN BUNKER TO CONCRETE PAD WITH FOUR 3/16\"/>
- 6. INSTALL FRAMING FOR INLET BETWEEN RAIN GUARDIAN BUNKER AND BACK OF CURB. TOP ELEVATIONS OF THE FRAMING SHOULD MATCH THE TOP OF THE CURB ON THE STREET SIDE AND THE TOP OF THE RAIN GUARDIAN BUNKER ON THE BIORETENTION SIDE.
- 7. WHEN POURING THE CONCRETE INLET, ENSURE THE CARRIAGE BOLTS ON THE RAIN GUARDIAN BUNKER ARE SURROUNDED BY AT LEAST 2\"/>
- 8. SIDE CURBS OF THE POURED INLET MUST HAVE AN INSURMOUNTABLE PROFILE TO PREVENT WATER FLOW FROM OVERTOPPING THE DOWNSTREAM SIDE OF THE INLET.
- 9. WRAP CABLE THROUGH TOP METAL GRATE AND SECURE WITH PROVIDED CLAMP. ENSURE SUFFICIENT SLACK EXISTS IN CABLE TO ALLOW FOR GRATE REMOVAL AND PLACEMENT IN CONCRETE INLET DURING CLEANING. REMOVABLE FILTER WALL SHOULD BE INSTALLED WITH FILTER FABRIC FACING THE RAIN GUARDIAN BUNKER INLET.



PRETREATMENT FOR BIORETENTION

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www.RainGuardian.biz

**RAIN GUARDIAN BUNKER
PRETREATMENT CHAMBER
BIORETENTION PONDING DEPTH: 1'
TYPICAL DETAIL**

REVISION HISTORY			
REV	BY	DATE	DESCRIPTION
A	MDH	12/1/15	BUNKER-1'
SCALE		VARIABLE	
U.S. PATENT		8,501,016	



Anoka Conservation District
1318 McKay Dr. NE, Suite 300
Ham Lake, MN 55304
763-434-2030

800-252-1166 651-454-0002

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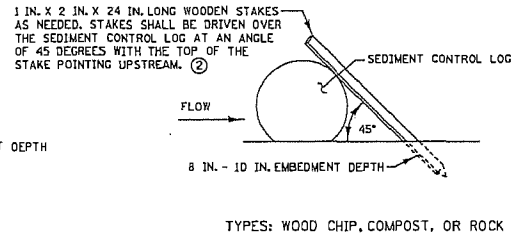
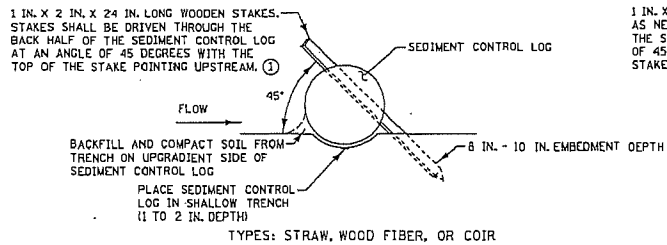
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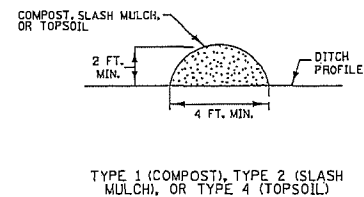
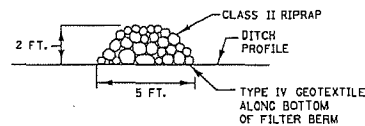
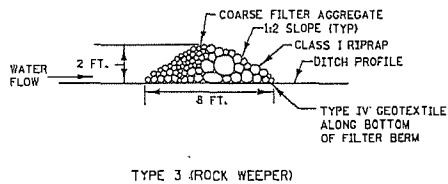
HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS

DWG: 1907 DETAIL 3
DATE: 04/28/21
JOB NUMBER: 1907
SHEET: 7 OF 44
FILE: 35-1-136

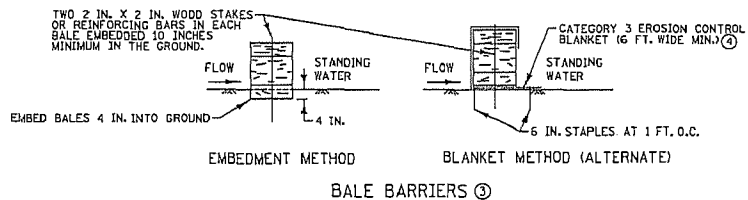
DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



SEDIMENT CONTROL LOGS



FILTER BERMS



NOTES:

SEE SPECS. 2573, 3149, 3874, 3882, 3886, & 3897.

- ① SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1 FOOT FOR DITCH CHECKS OR 2 FEET FOR OTHER APPLICATIONS.
- ② PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.
- ③ TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS (6 INCH MAX. DEPTH). BALES SHALL CONSIST OF TYPE 1 MULCH OF APPROXIMATELY 14 IN. X 18 IN. X 36 IN. LONG. BALES SHALL BE PLACED ON EDGE AND BUTTED TIGHT TO ADJACENT BALES.
- ④ INSTEAD OF TRENCHING, PLACE BALE ON THE BLANKET AND WRAP BLANKET AROUND THE BALE. PLACE STAKE THROUGH BALE AND BLANKET.

REVISION:

APPROVED: 2-28-2017

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CHIEF ENVIRONMENTAL OFFICER

S.A.P. 197-124-004 SP. 0208-143 (TH 65)

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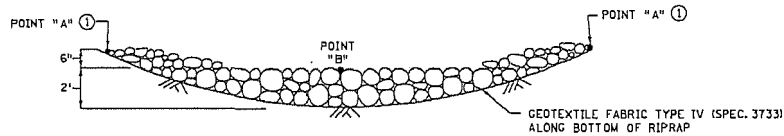
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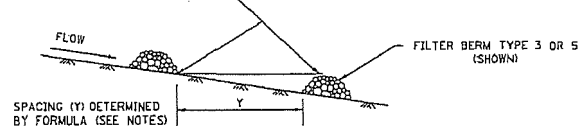
TEMPORARY SEDIMENT CONTROL 2 OF 8
FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS

STANDARD PLAN 5-297.405 8 OF 44

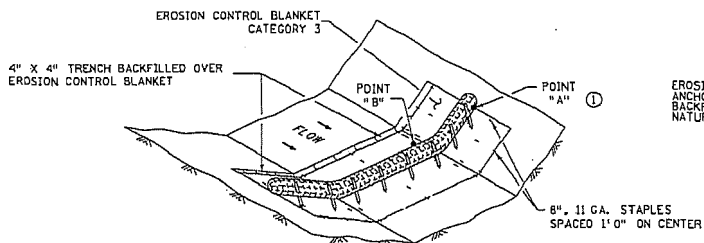


ROCK DITCH CHECKS
 FILTER BERMS TYPE 3 (ROCK WEEPER) OR FILTER TYPE 5 (ROCK) ②③
 (FOR USE ON ROUGH GRADED AREAS)

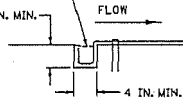
BOTTOM OF UPPER CHECK SHOULD BE SAME ELEVATION AS THE TOP OF THE LOWER CHECK TO PROVIDE FOR POOLING.



DITCH CHECK SPACING
 (FOR ALL FILTER BERM TYPES)



EROSION CONTROL BLANKET ANCHOR TRENCH, BACKFILL WITH TAMPED NATURAL SOIL.

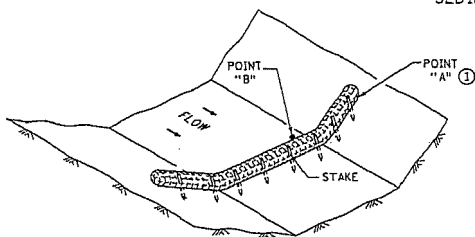


1 IN. X 2 IN. X 24 IN. LONG WOODEN STAKES AT 1 FT. MAXIMUM SPACING. STAKES SHALL BE DRIVEN THROUGH THE BACK HALF OF THE SEDIMENT CONTROL LOG AT AN ANGLE OF 45 DEGREES WITH THE TOP OF THE STAKE POINTING UPSTREAM.

SEDIMENT CONTROL LOG TYPE WOOD FIBER
 EROSION CONTROL BLANKET CATEGORY 3 (8 FT. MIN. WIDTH)

STAPLE BLANKET IN ROWS WITH 6 IN. STAPLES AT 18 IN. MAX. SPACING WITHIN ROWS AND 2 FT. MAX. SPACING BETWEEN ROWS. LEADING AND TRAILING EDGE SHALL BE STAPLED APPROX. 6 IN. FROM EDGE (TYP.)

SEDIMENT CONTROL LOG TYPE BLANKET SYSTEM ④



SEDIMENT CONTROL LOG TYPE WOOD FIBER, OR TYPE COMPOST ⑤
 (FOR USE ON ROUGH GRADED AREAS)

NOTES:

SEE SPECS. 2573, 3601, 3733, 3805, 3886 & 3889.

FOR DITCH CHECKS, PLACE SEDIMENT CONTROL LOG PERPENDICULAR TO FLOW AND IN A CRESCENT SHAPE WITH THE ENDS FACING UPSTREAM.

APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM THE FOLLOWING SPACING FORMULA:

$$\text{APPROXIMATE SPACING OF DITCH CHECKS (FT.)} = Y = \frac{\text{DITCH CHECK HEIGHT (FT.)}}{\% \text{ CHANNEL SLOPE}} \times 100$$

① POINT "A" MUST BE A MINIMUM OF 6 INCHES HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.

② PERMANENT ROCK DITCH CHECKS PLACED WITHIN THE CLEAR ZONE ARE TO BE 18" OR LESS IN HEIGHT. A 1:6 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.

③ DITCH GRADE 3% - 5%, MAX. FLOW VELOCITY 12 FT./SEC.

④ DITCH GRADE 1.5% - 3%, MAX. FLOW VELOCITY 4.5 FT./SEC.

⑤ DITCH GRADE 1.5% - 3%, MAX. FLOW VELOCITY 1.5 FT./SEC.

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 APPROVED: 2-28-2017
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 CHIEF ENVIRONMENTAL OFFICER

S.A.P. 197-124-004 S.P. 0208-143 (TH 65)

m
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 OF
 TRANSPORTATION

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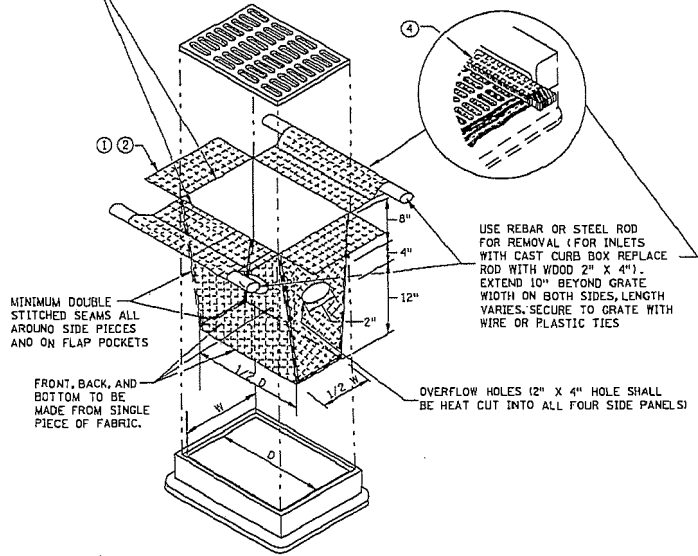
2-28-2017

TEMPORARY SEDIMENT CONTROL 3 OF 8
 DITCH CHECK

STANDARD PLAN 5-297.405

9 OF 44

INLET SPECIFICATIONS AS PER THE PLAN DIMENSION LENGTH AND WIDTH TO MATCH FLAP POCKET



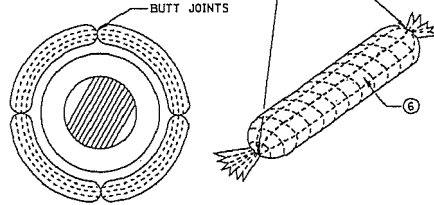
USE REBAR OR STEEL ROD FOR REMOVAL (FOR INLETS WITH CAST CURB BOX REPLACE ROD WITH WOOD 2" X 4"). EXTEND 10" BEYOND GRATE WIDTH ON BOTH SIDES, LENGTH VARIES; SECURE TO GRATE WITH WIRE OR PLASTIC TIES

MINIMUM DOUBLE STITCHED SEAMS ALL AROUND SIDE PIECES AND ON FLAP POCKETS

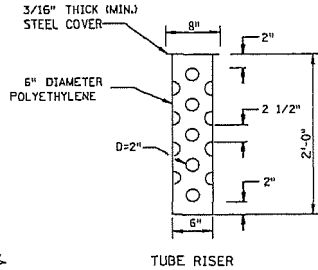
FRONT, BACK, AND BOTTOM TO BE MADE FROM SINGLE PIECE OF FABRIC.

OVERFLOW HOLES (2" X 4" HOLE SHALL BE HEAT CUT INTO ALL FOUR SIDE PANELS)

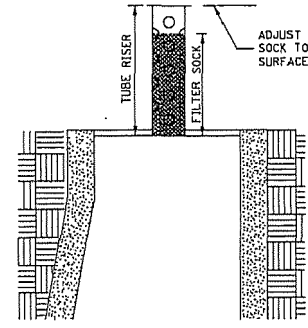
ENDS SECURELY CLOSED TO PREVENT LOSS OF OPEN GRADED AGGREGATE FILL. SECURED WITH 50 PSI. ZIP TIE.



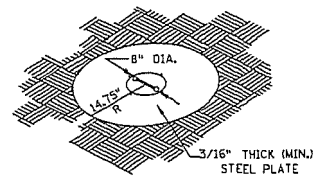
ROCK LOG/COMPOST LOG



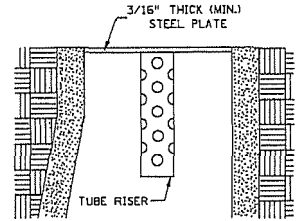
TUBE RISER



SECTION (UP POSITION)



PERSPECTIVE VIEW

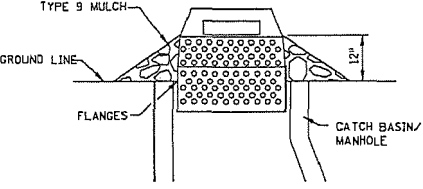


SECTION (DOWN POSITION)

POP-UP HEAD

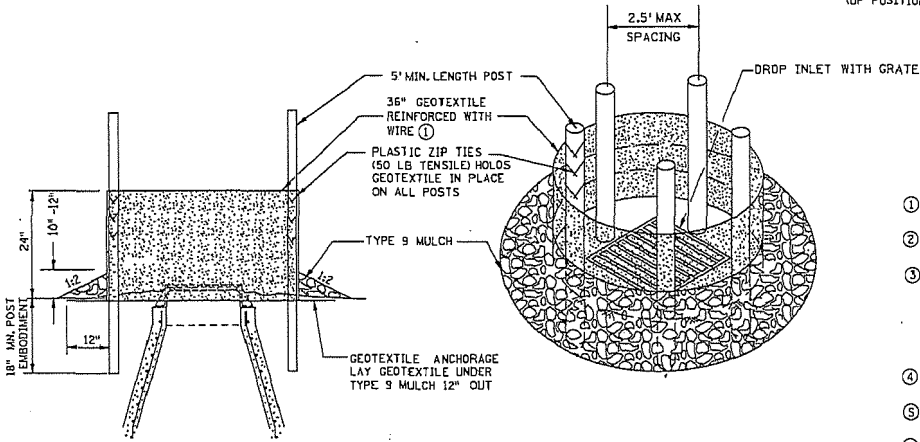
FILTER BAG INSERT ③

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX)



SEDIMENT CONTROL INLET HAT

NOTE: THE SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING, FLANGES AND A LID/COVER.



SILT FENCE RING AND ROCK FILTER BERM
USE WHERE INLET DRAINS IN AN AREA WITH SLOPES AT 1:3 OR LESS

NOTES:

- SEE SPECS. 2573, 3137, & 3086.
- DEVICES MUST BE ADJUSTED ACCORDINGLY AS TO NOT CAUSE FLOODING ON ROADWAY THAT WOULD IMPEDE TRAFFIC FLOW.
- ① ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886.
- ② FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ③ INSTALLATION NOTES:
DO NOT PLACE FILTER BAG INSERT IN INLETS SHALLOWER THAN 30 INCHES, MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. THE PLACED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE OF 3 INCHES BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES. WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3 INCH SIDE CLEARANCE.
- ④ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 INCH X 4 INCH OR USE A ROCK SOCK OR SAND BAGS IN PLACE OF THE FLAP POCKETS.
- ⑤ SOCK HEIGHT MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY.
- ⑥ GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER. SEAM TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A HEAT BONDED SEAM (OR APPROVED EQUIVALENT). FILL ROCK LOG WITH OPEN GRADED AGGREGATE CONSISTING OF SOUND DURABLE PARTICLES OF COARSE AGGREGATE CONFORMING TO SPEC. 3137 TABLE 3137-1; CA-3 GRADATION.

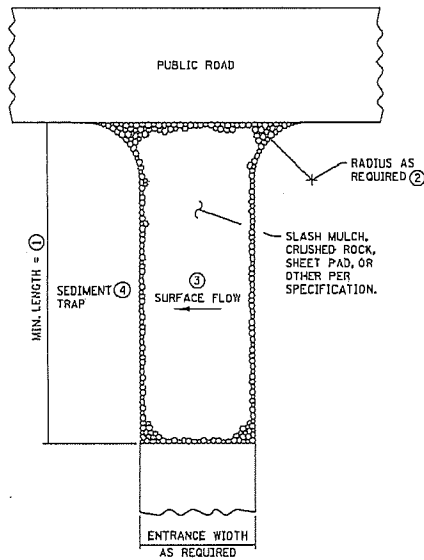
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APPROVED: 2-28-2017
S.P. 197-124-004

S.P. 197-124-004 S.P. 0208-143 (TH 65)

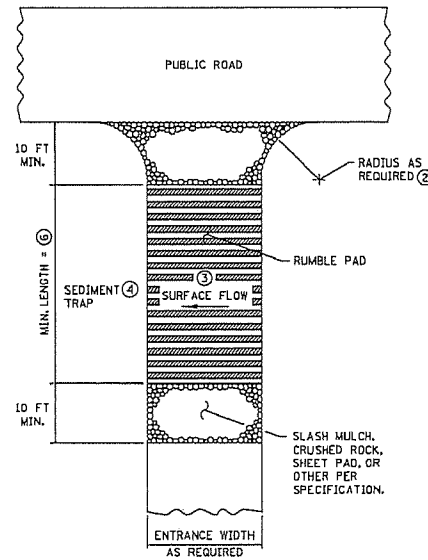
MINNESOTA DEPARTMENT OF TRANSPORTATION
STAT. DESIGN ENGINEER

REVISOR:
APPROVED: 2-28-2017

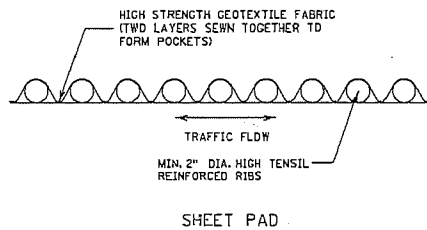
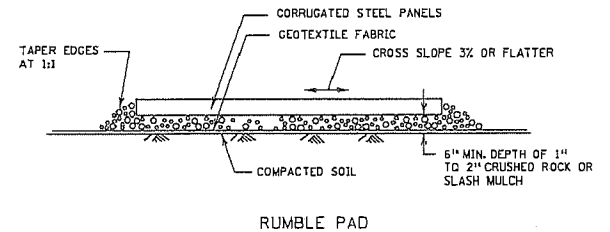
TEMPORARY SEDIMENT CONTROL 4 OF 8
STORM DRAIN INLET PROTECTION
STANDARD PLAN 5-297.405 10 OF 44



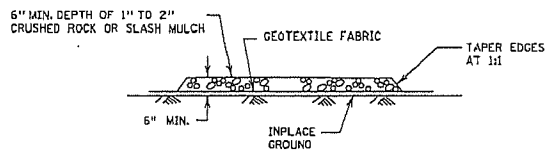
SLASH MULCH, CRUSHED ROCK, OR SHEET PAD CONSTRUCTION EXIT ⑤⑦



RUMBLE PAD CONSTRUCTION EXIT ⑤⑦



SHEET PAD



SLASH MULCH OR CRUSHED ROCK

NOTES:

SEE SPECS. 2573 & 3882.

- ① MINIMUM LENGTH SHALL BE THE GREATER OF 50 FEET OR A LENGTH SUFFICIENT TO ALLOW A MINIMUM OF 5 TIRE ROTATIONS ON THE PROVIDED PAD. MINIMUM LENGTH SHALL BE CALCULATED USING THE LARGEST TIRE WHICH WILL BE USED IN TYPICAL OPERATIONS.
- ② PROVIDE RADIUS OR WIDEN PAD SUFFICIENTLY TO PREVENT VEHICLE TIRES FROM TRACKING OFF OF PAD WHEN LEAVING SITE.
- ③ IF RUNOFF FROM DISTURBED AREAS FLOWS TOWARD CONSTRUCTION EXITS, PREVENT RUNOFF FROM DRAINING DIRECTLY TO PUBLIC ROAD OVER CONSTRUCTION EXIT BY CROWNING THE EXIT OR SLOPING TO ONE SIDE. IF SURFACE GRADING IS INSUFFICIENT, PROVIDE OTHER MEANS OF INTERCEPTING RUNOFF.
- ④ IF RUNOFF FROM CONSTRUCTION EXITS WILL DRAIN OFF OF PROJECT SITE, PROVIDE SEDIMENT TRAP WITH STABILIZED OVERFLOW.
- ⑤ IF A TIRE WASH OFF IS REQUIRED THE CONSTRUCTION EXITS SHALL BE GRADED TO DRAIN THE WASH WATER TO A SEDIMENT TRAP.
- ⑥ MINIMUM LENGTH OF RUMBLE PAD SHALL BE 20 FEET, OR AS REQUIRED TO REMOVE SEDIMENT FROM TIRES. IF SIGNIFICANT SEDIMENT IS TRACKED FROM THE SITE, THE RUMBLE PAD SHALL BE LENGTHENED OR THE DESIGN MODIFIED TO PROVIDE ADDITIONAL VIBRATION. WASH-OFF LENGTH SHALL BE AS REQUIRED TO EFFECTIVELY REMOVE CONSTRUCTION SEDIMENT FROM VEHICLE TIRES.
- ⑦ MAINTENANCE OF CONSTRUCTION EXITS SHALL OCCUR WHEN THE EFFECTIVENESS OF SEDIMENT REMOVAL HAS BEEN REDUCED. MAINTENANCE SHALL CONSIST OF REMOVING SEDIMENT AND CLEANING THE MATERIALS OR PLACING ADDITIONAL MATERIAL (SLASH MULCH OR CRUSHED ROCK) OVER SEDIMENT FILLED MATERIAL TO RESTORE EFFECTIVENESS.

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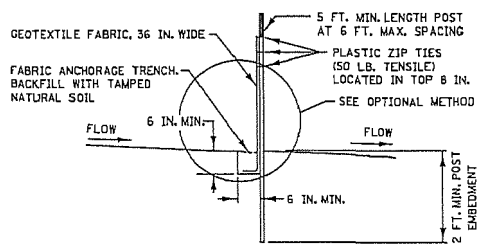
S.A.P. 197-124-004 S.P. 0208-143 (TH 65)



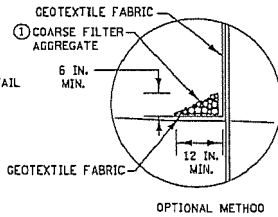
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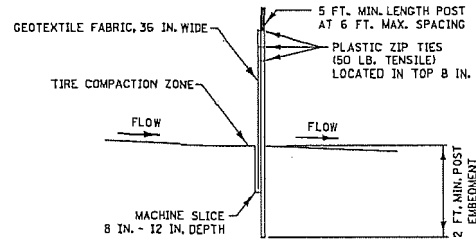
TEMPORARY SEDIMENT CONTROL 5 OF 8
 STABILIZED CONSTRUCTION EXIT
 STANDARD PLAN 5-297.405 11 OF 44



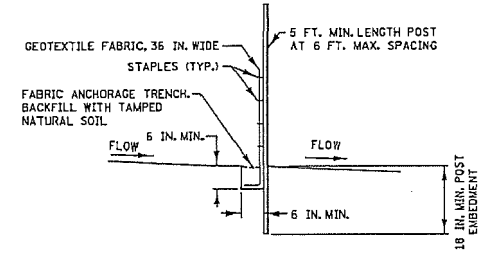
SILT FENCE TYPE HI ②
(HAND INSTALLED)



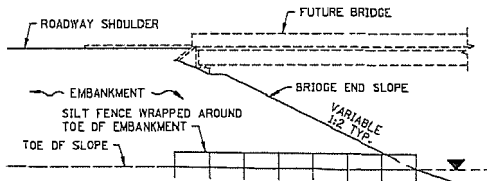
OPTIONAL METHOD



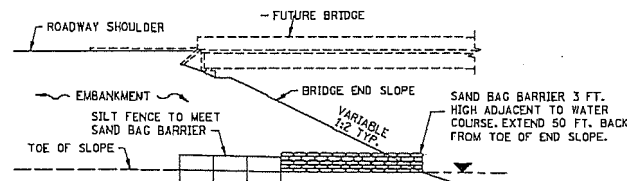
SILT FENCE TYPE MS ②
(MACHINE SLICED)



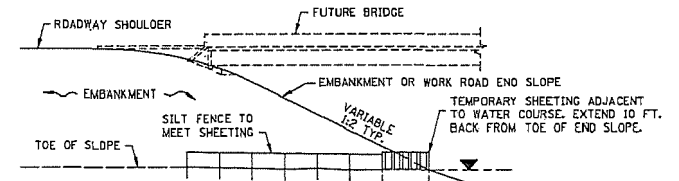
SILT FENCE TYPE PA ③
(PREASSEMBLED)



SILT FENCE ONLY ④

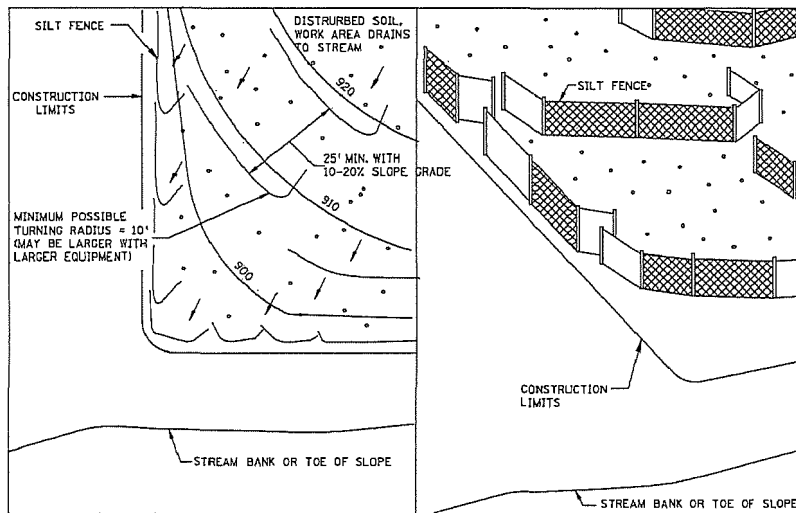


SILT FENCE WITH SAND BAGS ⑤



SILT FENCE WITH SHEETING ⑥

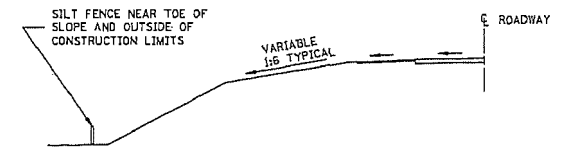
INSTALLATION AT BRIDGE EMBANKMENT ADJACENT TO WATER



PLAN VIEW

PERSPECTIVE VIEW

J-HOOK INSTALLATION



LOCATION AT TOE OF ROADWAY EMBANKMENT

NOTES:

SEE SPECS. 2573, 3149 & 3886.

- ① COARSE FILTER AGGREGATE (SPEC. 3149) SHALL BE INCIDENTAL.
- ② TO PROTECT AREAS FROM SHEET FLOW, MAXIMUM CONTRIBUTING AREA: 1 ACRE.
- ③ TO PROTECT AREAS FROM SHEET FLOW, MAXIMUM CONTRIBUTING AREA: 0.25 ACRE.
- ④ WATER COURSE FLOW VELOCITY: STANDING. CONTRIBUTING SLOPE AREA: 1/2 ACRE.
- ⑤ WATER COURSE FLOW VELOCITY: 1 TO 7 FT./SEC. CONTRIBUTING SLOPE AREA: 1 ACRE.
- ⑥ WATER COURSE FLOW VELOCITY: 8 TO 15 FT./SEC. CONTRIBUTING SLOPE AREA: 3 ACRES.

REVISION:
APPROVED: 2-28-2017
[Signature]
CHIEF ENVIRONMENTAL OFFICER

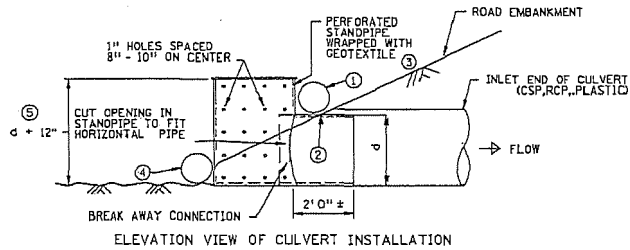
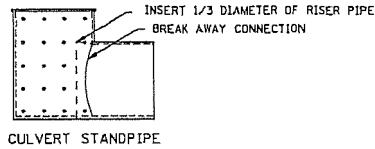
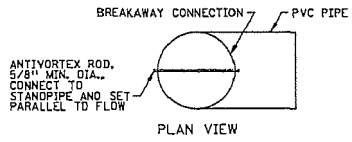
S.A.P. 197-124-004 S.P. 0208-143 (TH 65)

m
MINNESOTA
DEPARTMENT
TRANSPORTATION

[Signature]
STATE DESIGN ENGINEER

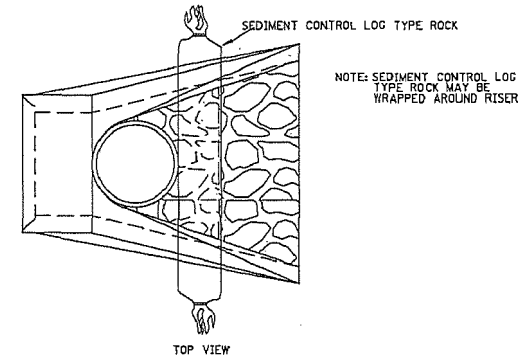
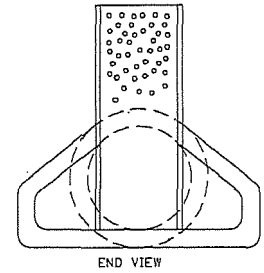
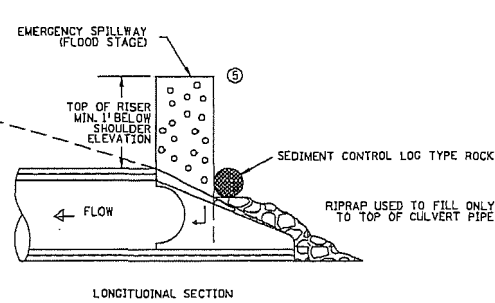
REVISED:
APPROVED:
2-28-2017

TEMPORARY SEDIMENT CONTROL 6 OF 8
SILT FENCE
STANDARD PLAN 5-297.405 12 OF 44

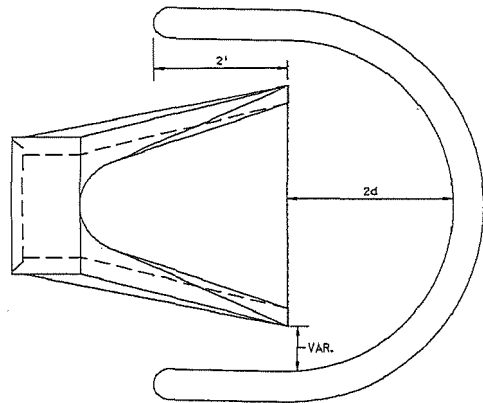


CULVERT STANDPIPE INSERT (D-RISER)

d = CULVERT SIZE: 12" - 36"

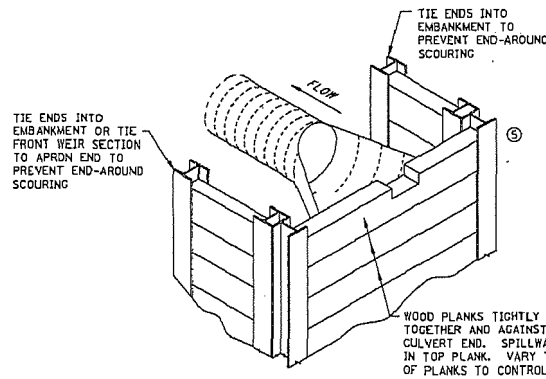


CULVERT STANDPIPE INSERT (D-RISER)



SEDIMENT CONTROL LOG WEIR (COMPOST, WOOD CHIP, OR ROCK)

d = CULVERT SIZE: 12" - 36"



WOOD PLANK WEIR

NOTES:

- SEE SPECS. 2573, 389J & 3893.
- FOR USE WHEN TEMPORARY PONDING IS NEEDED IN DITCH SECTIONS FOR SEDIMENT CONTROL.
- MANUFACTURED ALTERNATIVES LISTED ON MNDOT'S APPROVED PRODUCTS LIST MAY BE SUBSTITUTED AT NO ADDITIONAL COST.
- ① ROCK LOG OR SANOBAG TO HOLD STANDPIPE AND ACT AS A SEAL BETWEEN RISER PIPE AND CULVERT.
- ② PLACE CULVERT APRON AND SLIDE TEMPORARY STANDPIPE INTO CSP OR RCP CULVERT.
- ③ ALL GEOTEXTILE USED FOR CULVERT PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886 FOR MACHINE SLICED.
- ④ ROCK LOG OR RIP RAP TO HOLD STANDPIPE AND ACT AS A FILTER BETWEEN RISER PIPE AND CULVERT.
- ⑤ HEIGHT OVERFLOW NOT TO CAUSE FLOODING OF ROAD OR ADJACENT PROPERTIES.

REVISION:
APPROVED: 2-28-2017
[Signature]
CHIEF ENVIRONMENTAL OFFICER

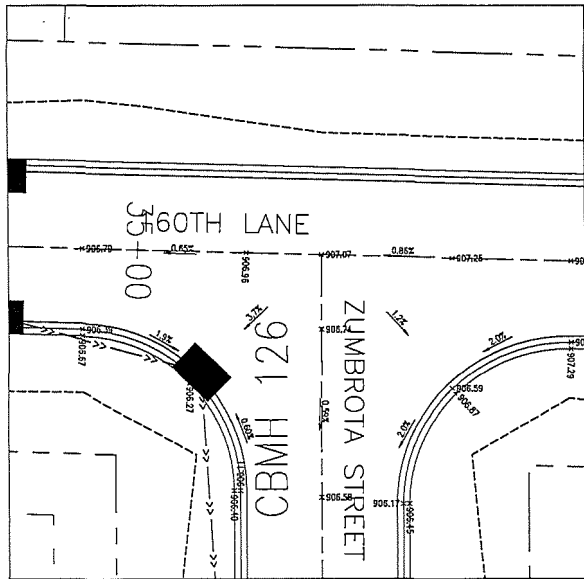
S.A.P. 197-124-004 S.P. 0208-143 (TH 65)

m
MINNESOTA
DEPARTMENT
OF
TRANSPORTATION

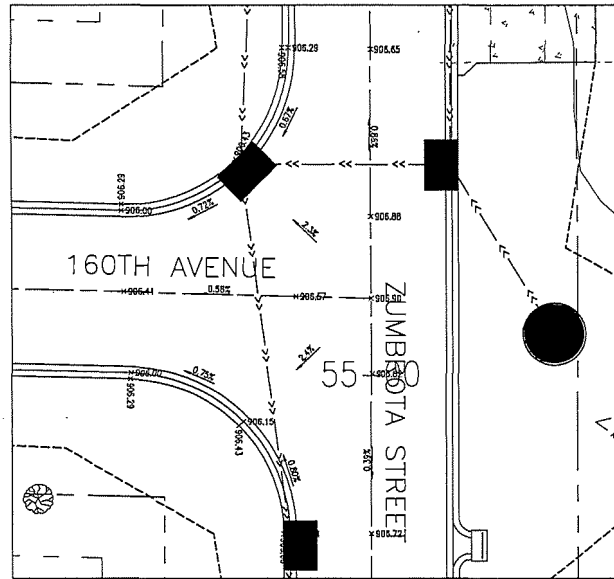
REVISOR:
[Signature]
APPROVED:
2-28-2017
STATE DESIGN ENGINEER

TEMPORARY SEDIMENT CONTROL 8 OF 8
CULVERT END CONTROLS

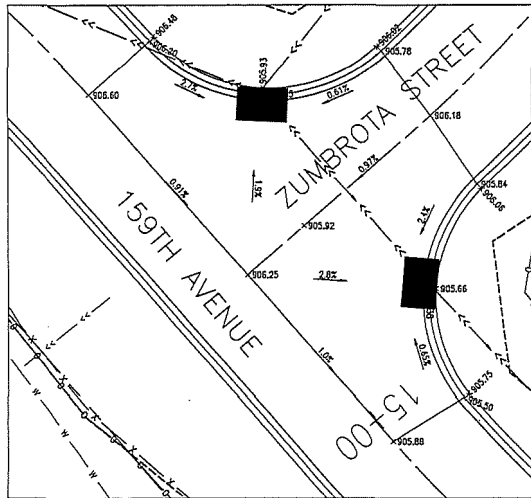
STANDARD PLAN 5-297.405 13 OF 44



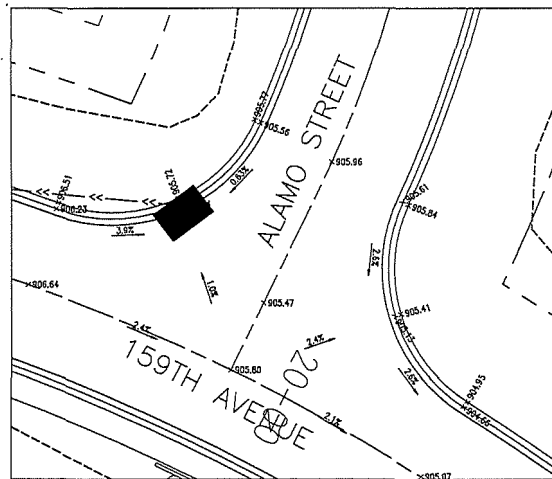
160TH LANE AND ZUMBROTA STREET



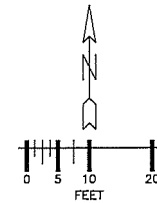
160TH AVENUE AND ZUMBROTA STREET



159TH AVENUE AND ZUMBROTA STREET



159TH AVENUE AND ALAMO STREET



GOVERNOR STATE ONE CALL
800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 712-5017
 CENTERPOINT ENERGY (763) 323-2769
 COMCAST (652) 607-4078
 CONROUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4308

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: _____ REC. NO.: _____

RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

DESIGN BY: GJM

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

INTERSECTION DETAILS
 INTERSECTION DETAILS

DRAWN BY: GJM

CHECKED BY: TPC

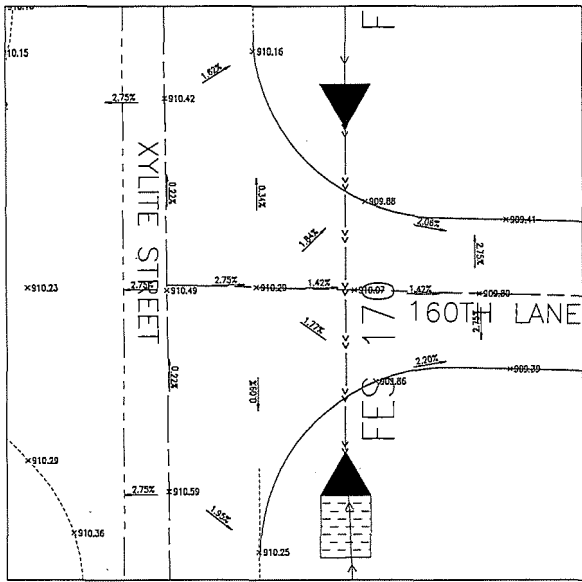
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DATE: 04/29/21

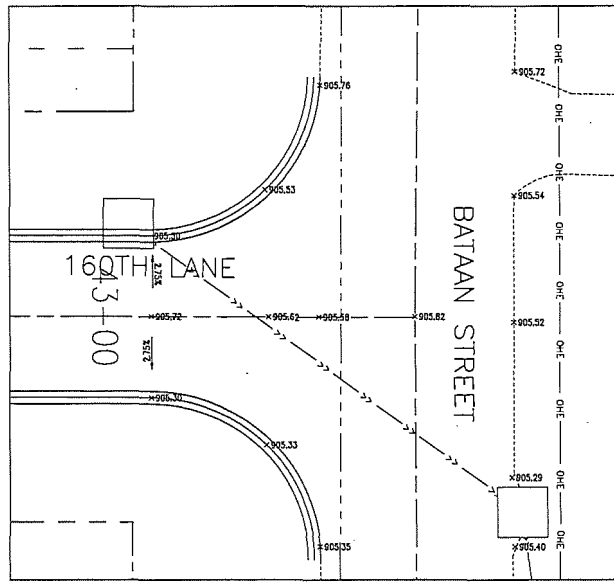
JOB NUMBER: 1907

SHEET: 14 OF 44

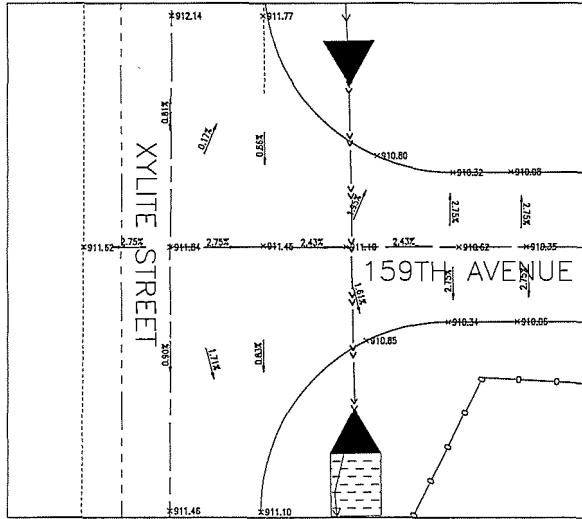
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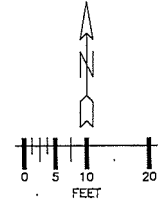
160TH LANE AND XYLITE STREET



160TH LANE AND BATAAN STREET



159TH AVENUE AND XYLITE STREET



SOPHER STATE ONE CALL
800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 712-3017
 CENTERPOINT ENERGY (763) 323-2760
 COMCAST (952) 807-4076
 CONNEXUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4308

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

PURPOSE: _____

DATE: _____ REC. NO. _____

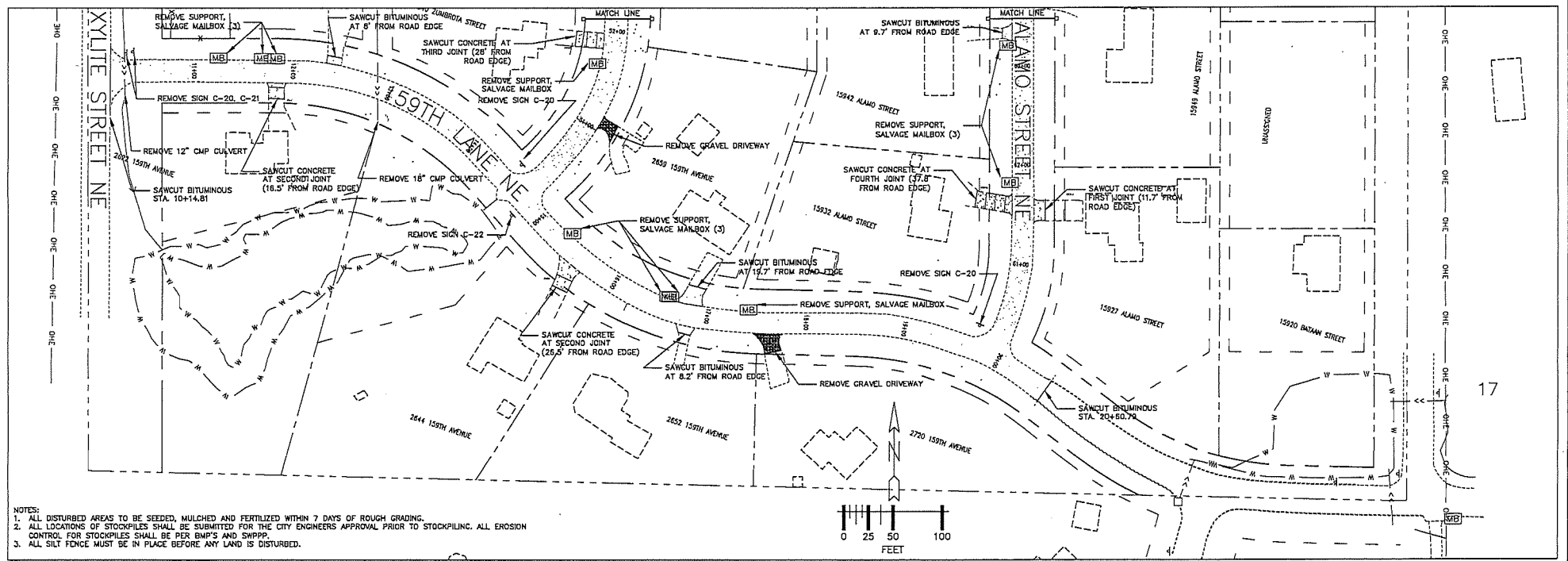
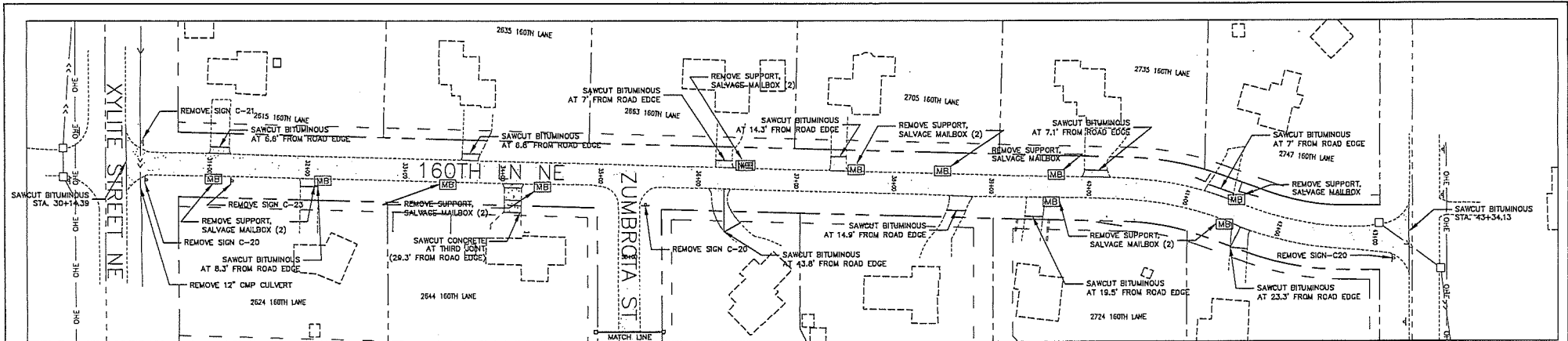
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

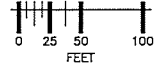
HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

DWG: 1907 INT 2
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 14 OF 44
 FILE: 35-1-XX

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC INTERSECTION DETAILS



- NOTES:
1. ALL DISTURBED AREAS TO BE SEED, MULCHED AND FERTILIZED WITHIN 7 DAYS OF ROUGH GRADING.
 2. ALL LOCATIONS OF STOCKPILES SHALL BE SUBMITTED FOR THE CITY ENGINEERS APPROVAL PRIOR TO STOCKPILING. ALL EROSION CONTROL FOR STOCKPILES SHALL BE PER BMP'S AND SWPPP.
 3. ALL SILT FENCE MUST BE IN PLACE BEFORE ANY LAND IS DISTURBED.



GOVERNOR'S STATE ONE CALL
800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 712-5017
CENTERPOINT ENERGY (763) 323-2760
CONQUEST (952) 607-4976
CONQUIS ENERGY (763) 323-4288
XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PURPOSE: _____
DATE: _____ REC. NO. _____

RFC ENGINEERING, INC.
Consulting Engineers

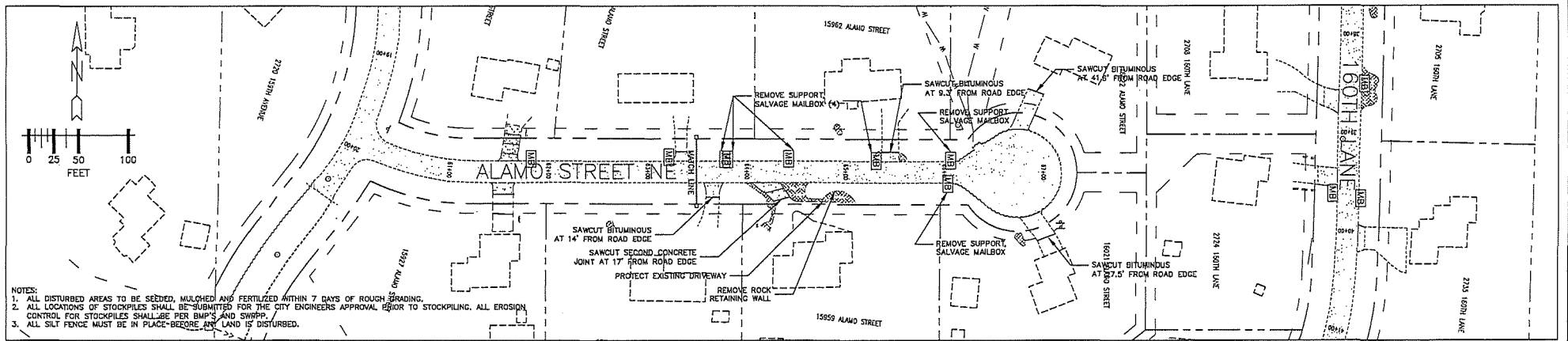
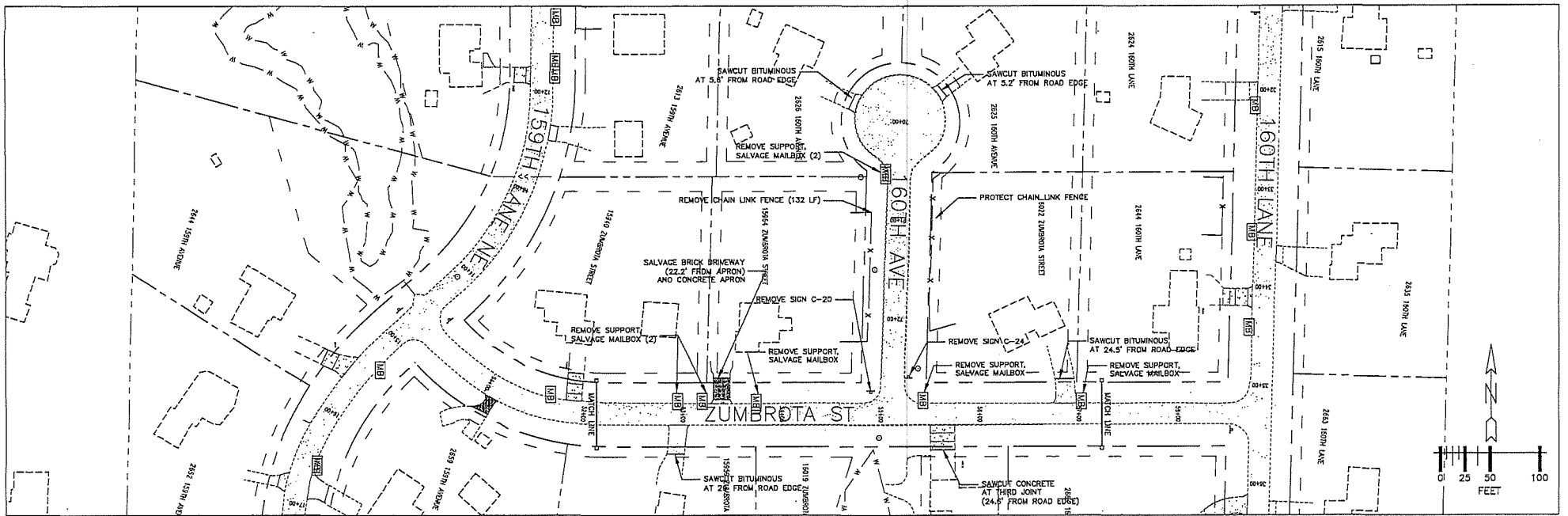
13635 Johnson Street
Ham Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS

159TH LANE AND 160TH LANE
REMOVALS

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC

DWG: 1907 REMOVAL 1
DATE: 04/28/21
JOB NUMBER: 1907
SHEET: 16 OF 44
FILE: 35-1-145



- NOTES:
 1. ALL DISTURBED AREAS TO BE SEEDED, MULCHED AND FERTILIZED WITHIN 7 DAYS OF ROUGH GRADING.
 2. ALL LOCATIONS OF STOCKPILES SHALL BE SUBMITTED FOR THE CITY ENGINEER'S APPROVAL PRIOR TO STOCKPILING. ALL EROSION CONTROL FOR STOCKPILES SHALL BE PER BMP'S AND SWPPP.
 3. ALL SILT FENCE MUST BE IN PLACE BEFORE ANY LAND IS DISTURBED.

SOPHER STATE ONE CALL
 800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 712-5017
 CENTERPOINT ENERGY (763) 323-2745
 COMCAST (652) 607-4078
 CONNEXUS ENERGY (763) 323-4268
 XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: _____ REC. NO. _____

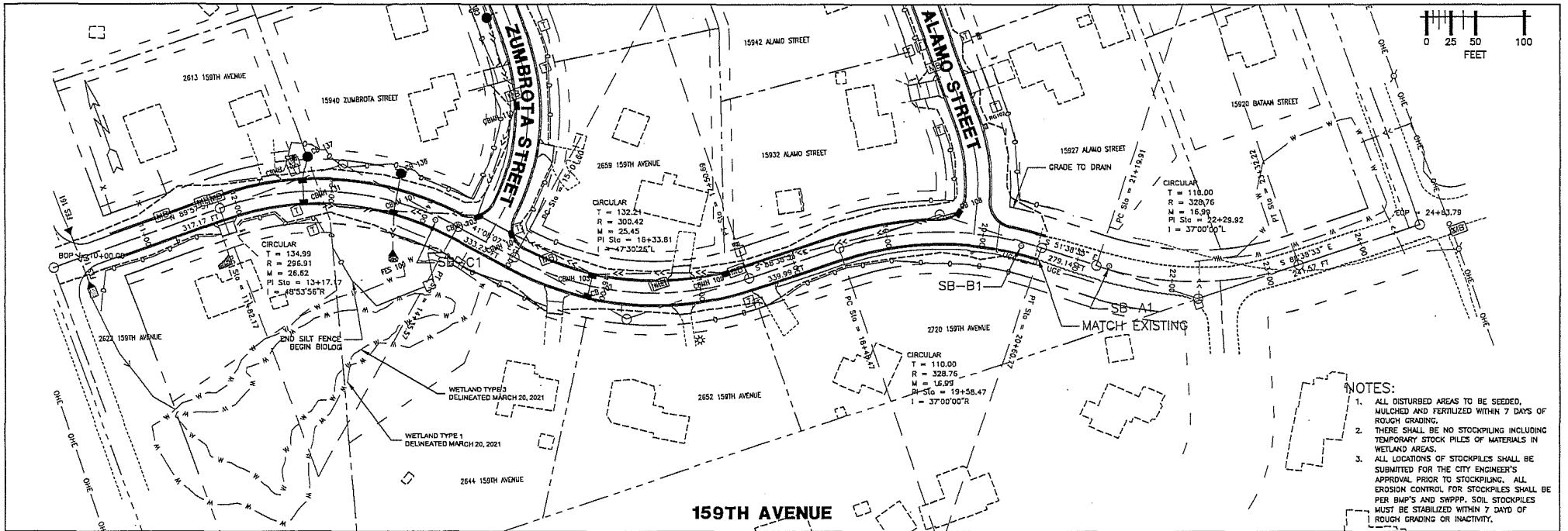
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Horn Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

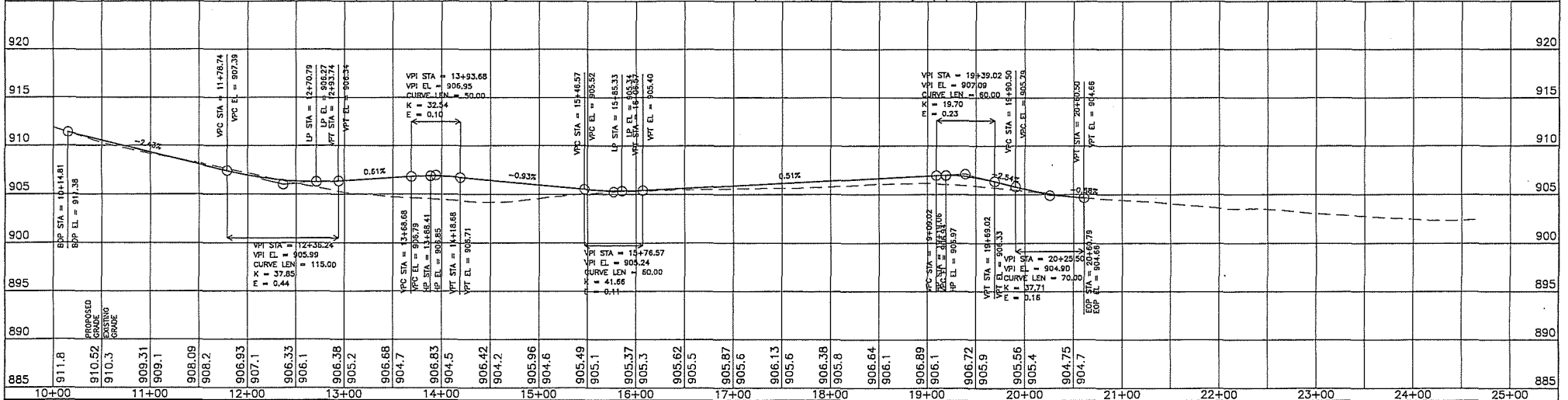
HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 REMOVALS

DWG: 1907 REMOVAL 2
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 17 OF 44
 FILE: 35-1-146

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



- NOTES:**
1. ALL DISTURBED AREAS TO BE SEED, MULCHED AND FERTILIZED WITHIN 7 DAYS OF ROUGH GRADING.
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 3. ALL LOCATIONS OF STOCKPILES SHALL BE SUBMITTED FOR THE CITY ENGINEER'S APPROVAL PRIOR TO STOCKPILING. ALL EROSION CONTROL FOR STOCKPILES SHALL BE PER BMP'S AND SWPPP. SOIL STOCKPILES MUST BE STABILIZED WITHIN 7 DAY OF ROUGH GRADING OR INACTIVITY.



UTILITIES: CENTURYLINK, COMEDPOINT ENERGY, COMCAST, CONNEXUS ENERGY, XCEL ENERGY

(763) 712-5017
 (763) 353-2780
 (823) 607-4079
 (763) 323-4288
 (612) 526-4508

DATE	REVISION HISTORY

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PURVIS

RFC ENGINEERING, INC.
 Consulting Engineers

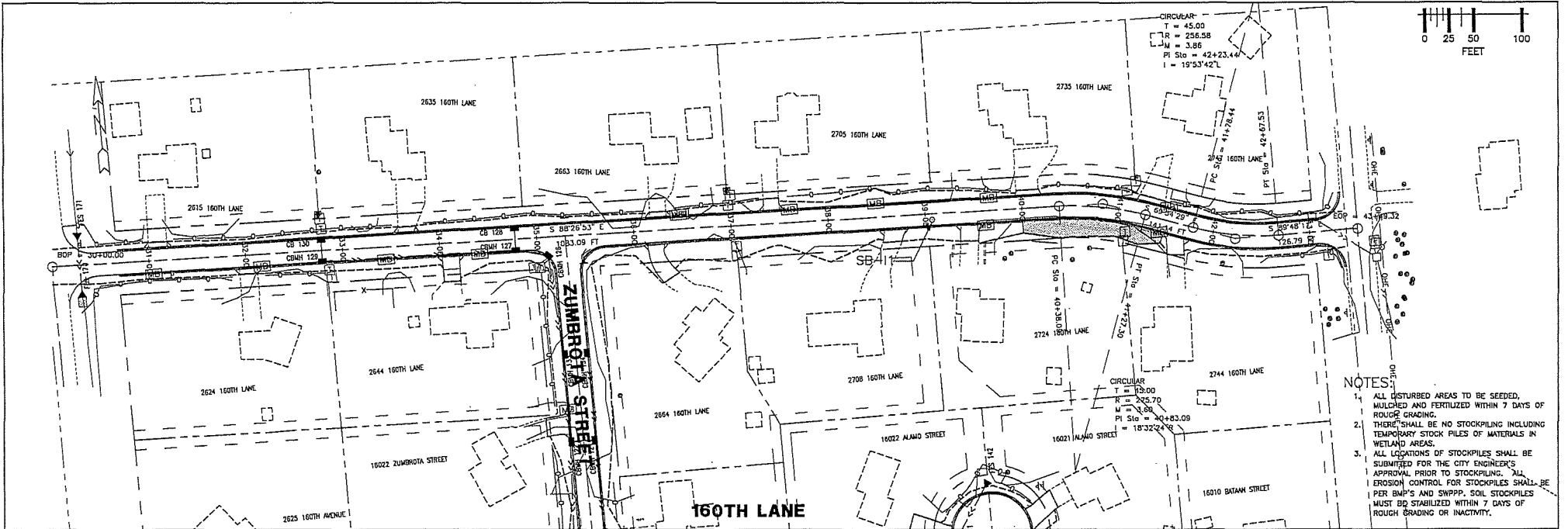
13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

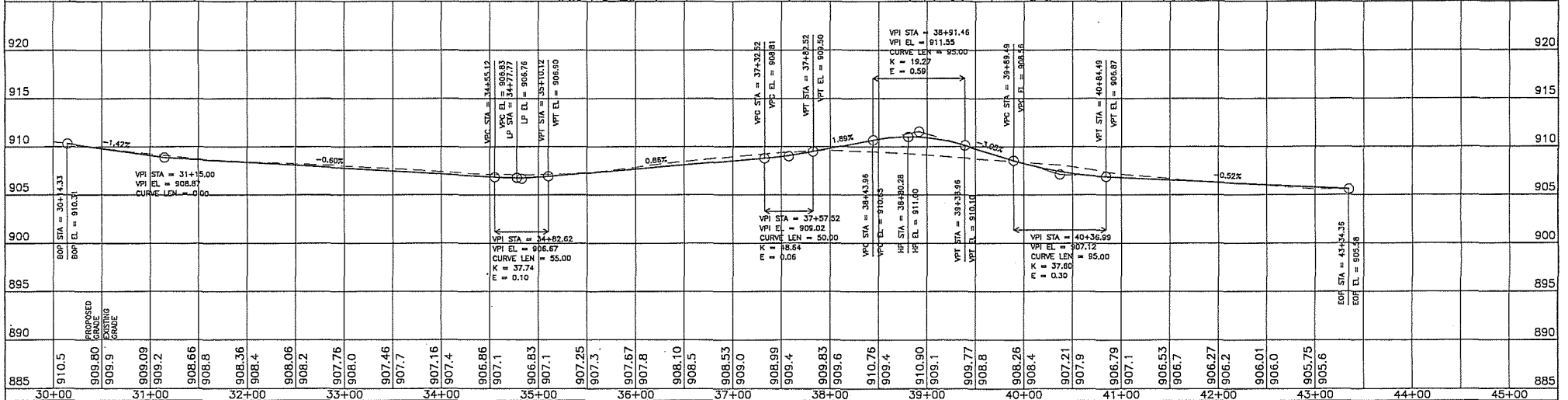
159TH AVENUE PLAN AND PROFILE

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC

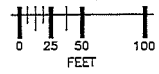
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 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 18 OF 44
 FILE: 35-1-147



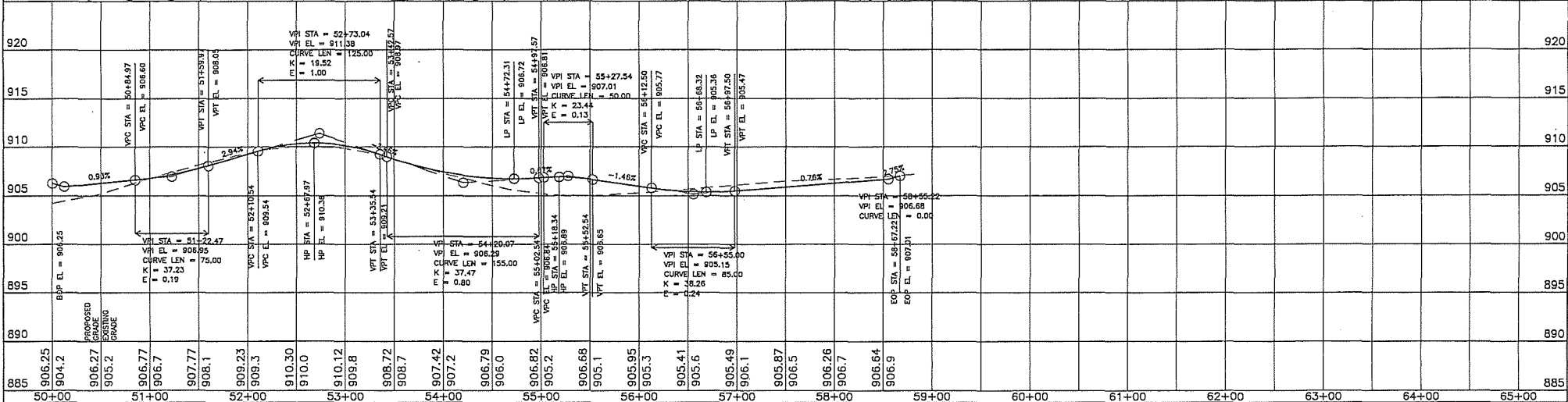
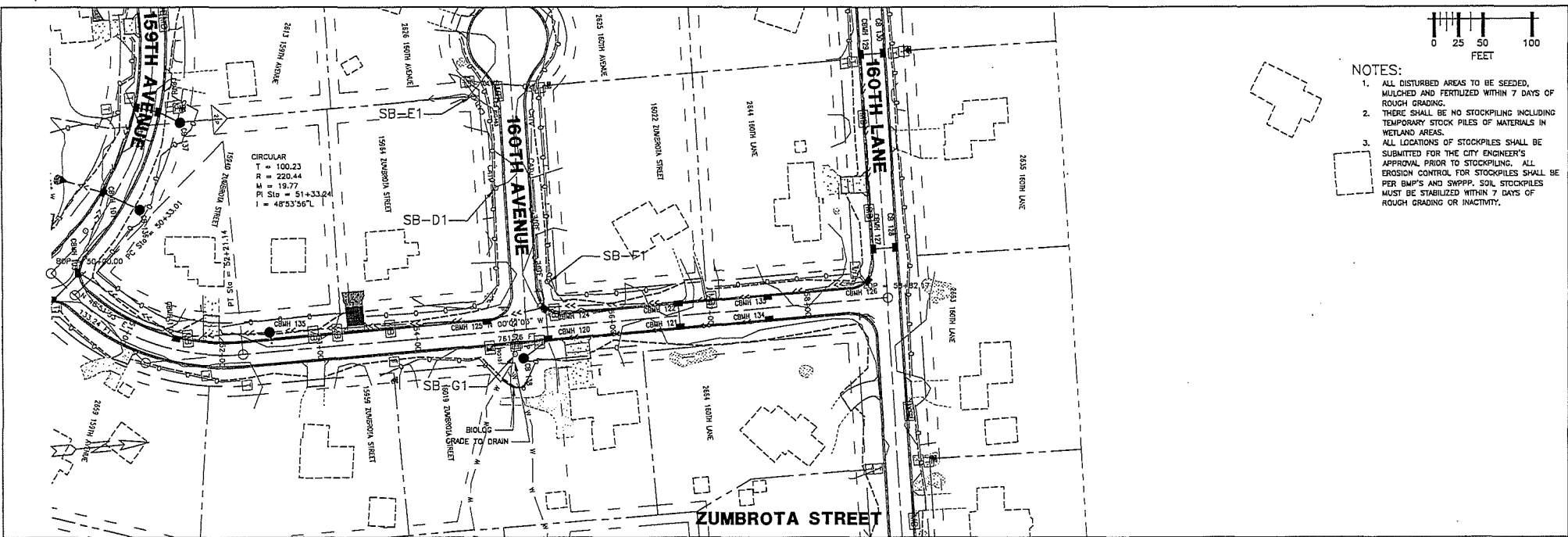
- NOTES:**
1. ALL DISTURBED AREAS TO BE SEED, MULCHED AND FERTILIZED WITHIN 7 DAYS OF ROUGH GRADING.
 2. THERE SHALL BE NO STOCKPILING INCLUDING TEMPORARY STOCK PILES OF MATERIALS IN WETLAND AREAS.
 3. ALL LOCATIONS OF STOCKPILES SHALL BE SUBMITTED FOR THE CITY ENGINEER'S APPROVAL PRIOR TO STOCKPILING. ALL EROSION CONTROL FOR STOCKPILES SHALL BE PER BMP'S AND SWPPP. SOIL STOCKPILES MUST BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY.



<p>800-252-1166 651-454-0002 <small>PL01 DATE: 02/20/21 13:53</small></p>	<p>UTILITIES: CENTURYLINK (783) 712-5017 CENTERPOINT ENERGY (783) 323-2780 COMCAST (953) 607-4078 CONNEXUS ENERGY (783) 323-4268 XCEL ENERGY (612) 528-4508</p>	<p>DATE: _____</p> <p>REVISION HISTORY</p>	<p>HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.</p> <p>PURPOSE: _____</p> <p>DATE: _____ REC. NO. _____</p>	<p>RFC ENGINEERING, INC. Consulting Engineers</p>	<p>13635 Johnson Street Ham Lake, MN 55304 Telephone 763-862-8000 Fax 763-862-8042</p>	<p>HAM LAKE IMPROVEMENT PROJECT 1907 LUND'S LAKEVIEW FOREST RECONSTRUCTION 159TH AVE NE, 160TH LN NE, AND OTHERS</p> <p>160TH LANE PLAN AND PROFILE</p>	<p>DWG: RCF01002 DATE: 04/29/21 JOB NUMBER: 1907 SHEET: 19 OF 44 FILE: 35-1-148</p>
	<p>DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC</p>						



- NOTES:**
1. ALL DISTURBED AREAS TO BE SEED, MULCHED AND FERTILIZED WITHIN 7 DAYS OF ROUGH GRADING.
 2. THERE SHALL BE NO STOCKPILING INCLUDING TEMPORARY STOCK PILES OF MATERIALS IN WETLAND AREAS.
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UTILITIES: CENTURYLINK (783) 712-5017
 CENTURYPUNK (783) 323-2760
 CONCAST (953) 697-4778
 CONDUKUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4598

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

RFC ENGINEERING, INC.
 Consulting Engineers

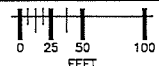
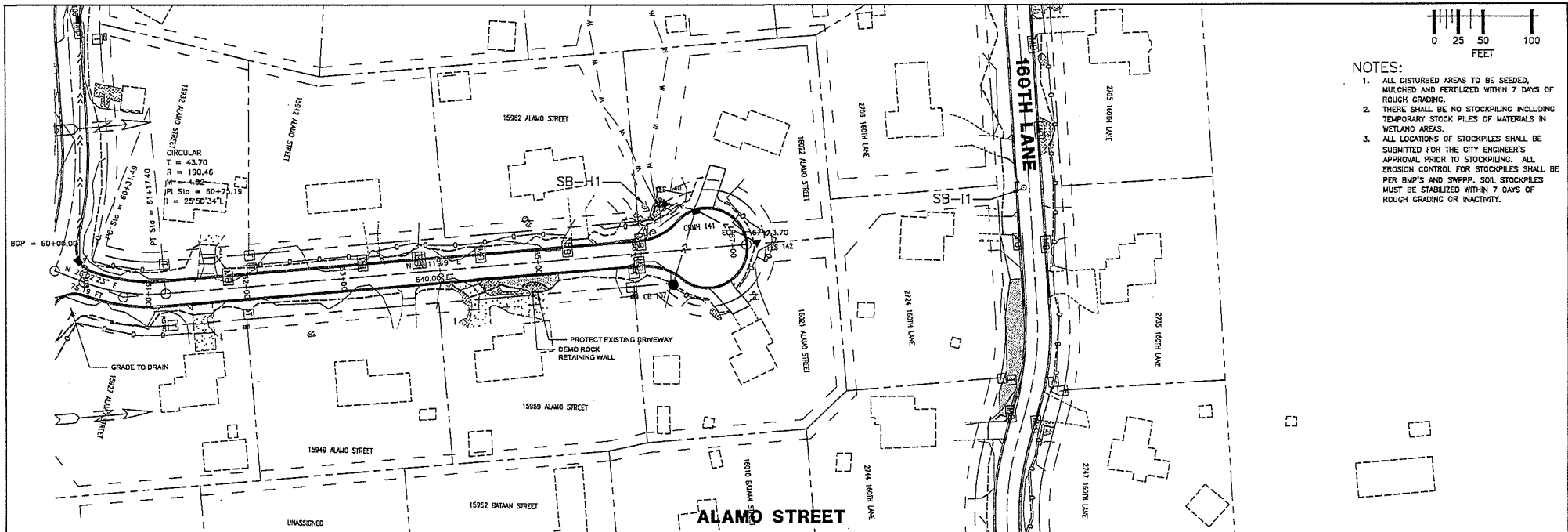
13835 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

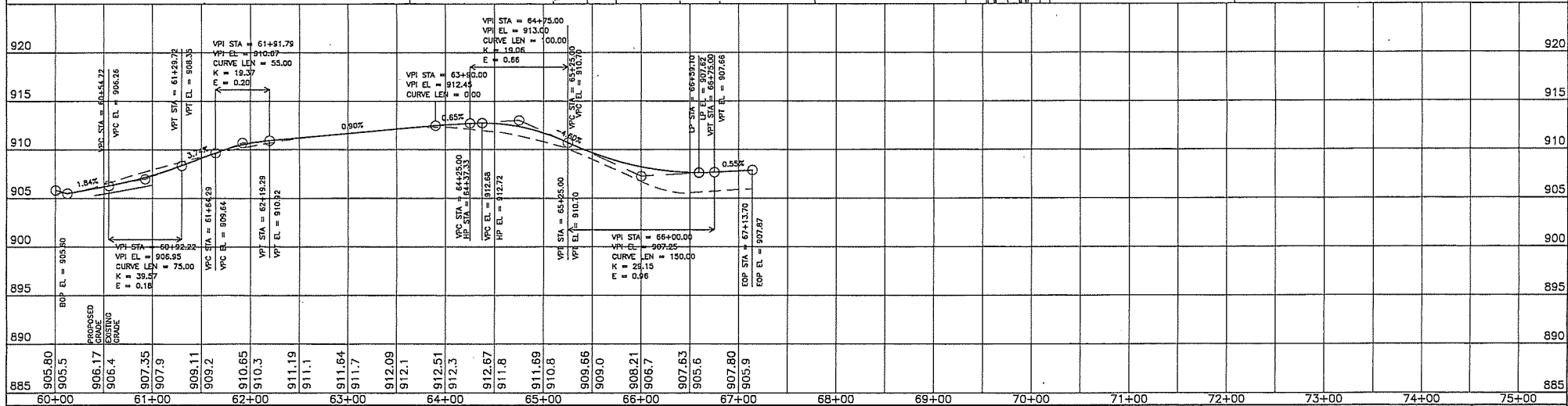
ZUMBROTA STREET PLAN AND PROFILE

DWG:	RCPO1003
DATE:	04/29/21
JOB NUMBER:	1907
SHEET:	20 OF 44
FILE:	35-1-149

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



- NOTES:**
1. ALL DISTURBED AREAS TO BE SEEDED, MULCHED AND FERTILIZED WITHIN 7 DAYS OF ROUGH GRADING.
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GOPPER STATE ONE CALL
 800-252-1166 651-454-0002
 PLOT DATE: 4/29/21 13:53

UTILITIES:
 CENTURYLINK 763) 712-9917
 CENTERPOINT ENERGY 763) 323-2760
 COMCAST 952) 807-4078
 CONXUS ENERGY 763) 323-4208
 XCEL ENERGY (612) 528-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

PURPOSE: _____
 DATE: _____ REC. NO.: _____

RFC ENGINEERING, INC.
 Consulting Engineers

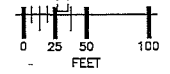
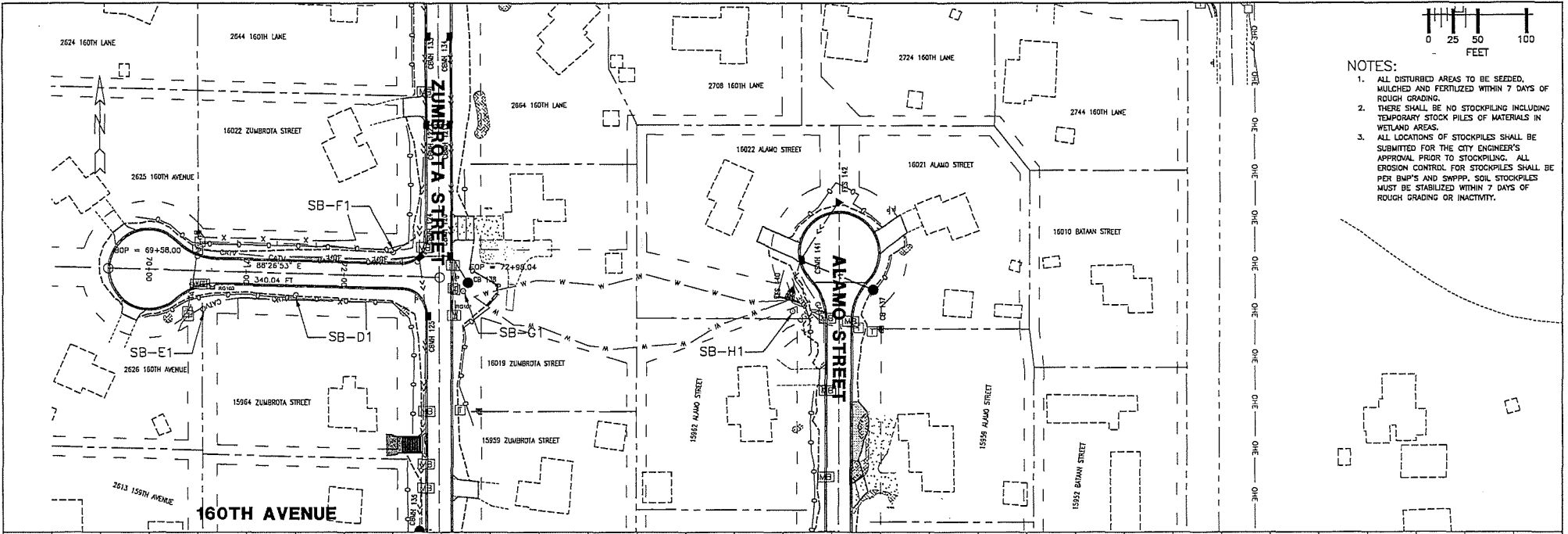
13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUNO'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

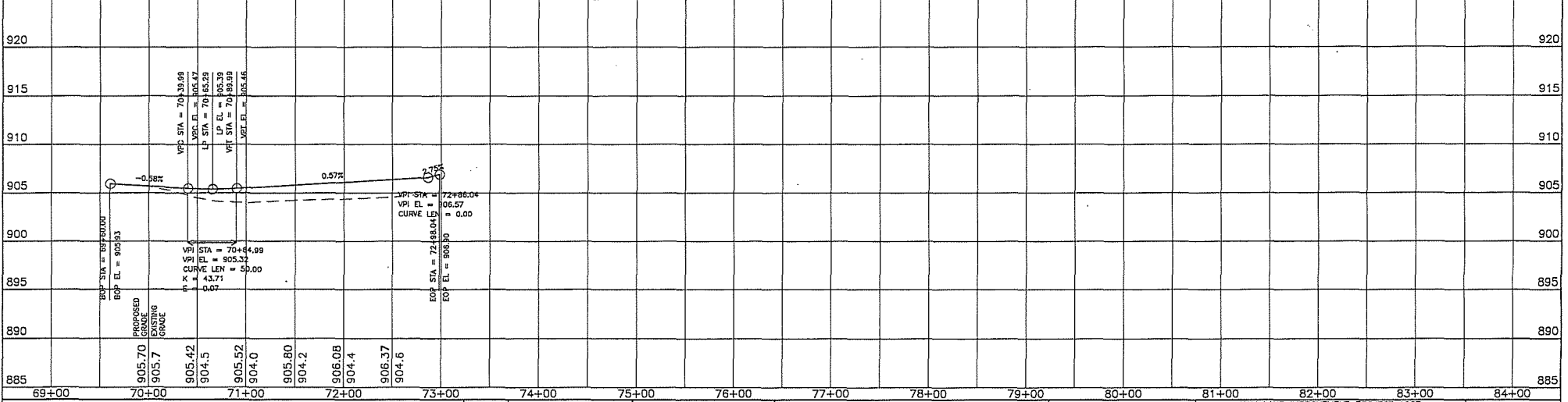
ALAMO STREET PLAN AND PROFILE

DWG: RCP01004
 DATE: 04/29/21
 JOB NUMBER: 1607
 SHEET: 21 OF 44
 FILE: 35-1-150

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: YPC



- NOTES:**
1. ALL DISTURBED AREAS TO BE SEED, MULCHED AND FERTILIZED WITHIN 7 DAYS OF ROUGH GRADING.
 2. THERE SHALL BE NO STOCKPILING INCLUDING TEMPORARY STOCK PILES OF MATERIALS IN WETLAND AREAS.
 3. ALL LOCATIONS OF STOCKPILES SHALL BE SUBMITTED FOR THE CITY ENGINEER'S APPROVAL PRIOR TO STOCKPILING. ALL EROSION CONTROL FOR STOCKPILES SHALL BE PER BMP'S AND SWPPP. SOIL STOCKPILES MUST BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY.



885	69+00	70+00	71+00	72+00	73+00	74+00	75+00	76+00	77+00	78+00	79+00	80+00	81+00	82+00	83+00	84+00
920																920
915																915
910																910
905																905
900																900
895																895
890																890
885																885



UTILITIES:

CENTURYLINK	(763) 712-5017
CENTERPOINT ENERGY	(763) 323-2760
COMCAST	(952) 607-4078
CONEDUS ENERGY	(763) 323-4288
XCEL ENERGY	(612) 528-4308

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

RFC ENGINEERING, INC.
Consulting Engineers

13635 Johnson Street
Ham Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1507
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS

160TH AVENUE PLAN AND PROFILE

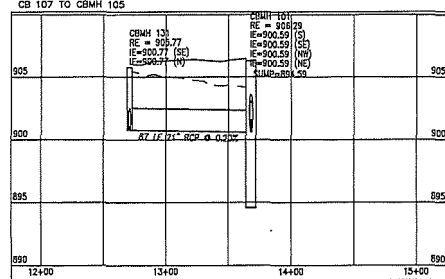
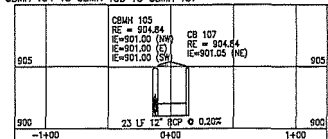
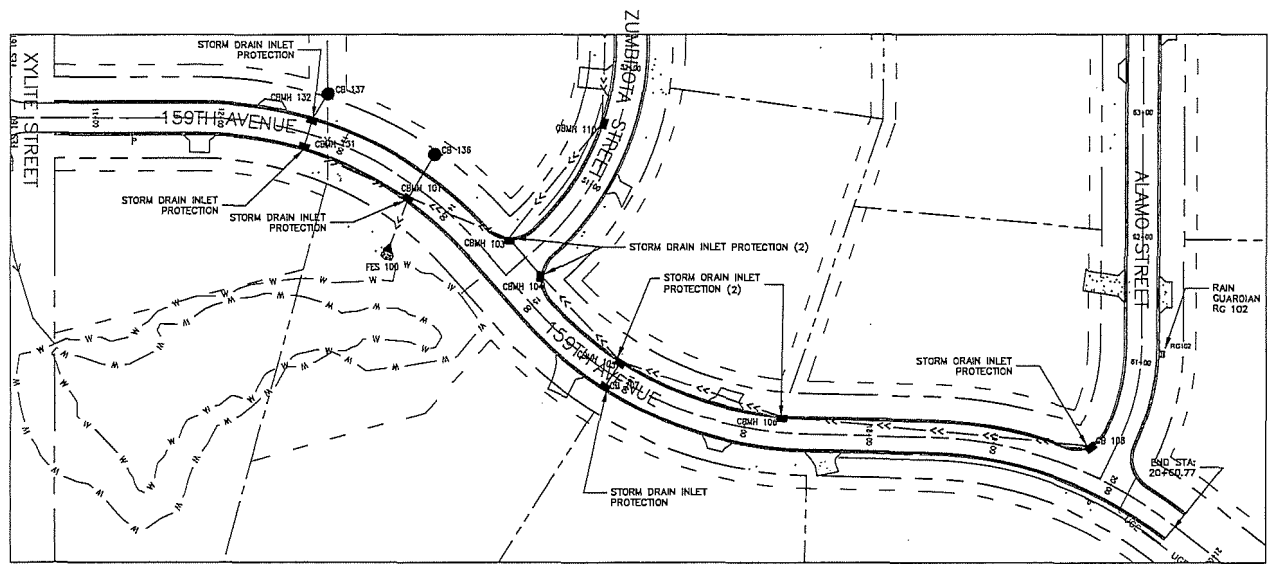
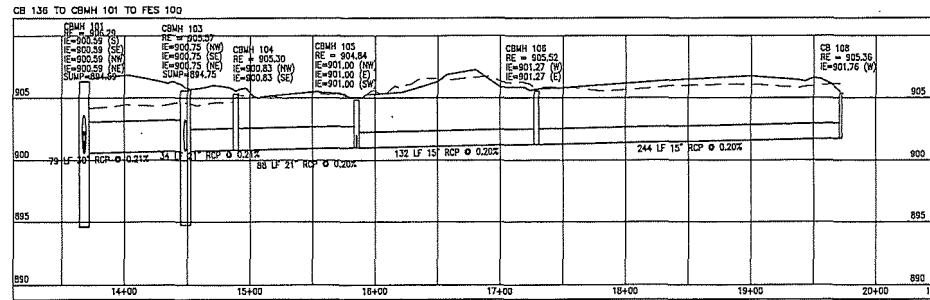
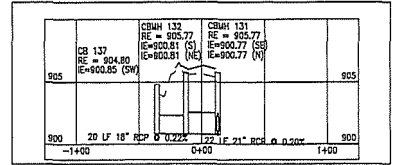
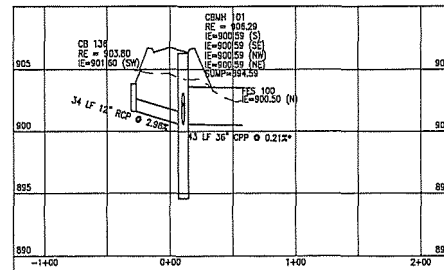
DWG:	RCP01005
DATE:	04/29/21
JOB NUMBER:	1607
SHEET:	22 OF 44
FILE:	35-1-151

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC

STORM DRAIN

STRUCTURE	STATION	LOCATION	SIZE OF STRUCTURE	DESIGN	TOP OF CASTING OR INLET	INVERT	CASTING ASSEMBLY (NEENAH, ED. DL)*	TYPE GRATE (NEENAH CASTINGS)	12" R.C.P. LIN FT	15" R.C.P. LIN FT	18" R.C.P. LIN FT	21" R.C.P. LIN FT	30" R.C.P. LIN FT	36" C.P.P. LIN FT	PIPE APRON LIN FT	TRASH GUARD EACH	APRON EACH	FLOWS TO	INLET	% GRADE
CB 137	12+76.1	LT.	48" ø	RFC-465C1	904.8	900.65	R-2577	c										CBMH 132	900.81	0.22
CBMH 132	12+70.8	LT.	48" ø	RFC-465A1	905.77	900.81	R-3246	L			20							CBMH 131	900.77	0.2
CBMH 131	12+70.8	RT.	48" ø	RFC-465A1	905.77	900.77	R-3246	L					87					CBMH 101	900.59	0.2
CB 108	19+71.9	LT.	2' x 3'	RFC-459B	905.36	901.76	R-3246	L		244								CBMH 106	901.27	0.2
CBMH 106	17+28.9	LT.	48" ø	RFC-465A1	905.52	901.27	R-3246	L										CBMH 105	901.00	0.2
CB 107	15+85.3	RT.	2' x 3'	RFC-459B	904.84	901.05	R-3246	L		132								CBMH 105	901	0.20
CBMH 105	15+85.3	LT.	48" ø	RFC-465A1	904.84	901	R-3246	L	23									CBMH 104	900.83	0.2
CB 136	13+64.8	LT.	48" ø	RFC-465C1	903.8	901.6	R-2577	c										CBMH 101	900.59	2.98
CBMH 104	14+88.7	LT.	48" ø	RFC-465A1	905.3	900.83	R-3246	L	34									CBMH 103	900.75	0.21
CBMH 103	14+48.3	LT.	96" ø	RFC-465A2	905.57	900.75	R-3246	L					34					CBMH 101	900.59	0.21
CBMH 101	13+68	RT.	96" ø	RFC-465A2	906.29	900.59	R-3246	L					79					CBMH 101	900.59	0.21
RG 102	61+07.7	RT	5' x 2.5'	BUNKER	907.19	906.19								38	5	1	FES 100	900.3	0.21	
TOTAL									57	376	20	231	79	38	5	4	1			

*NEENAH FOUNDRY R-3246; EAST JORDAN IRON WORKS V-4520; D&L FOUNDRY I-1804.



NOTES:
 1. ALL GRADING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE THE POTENTIAL FOR SITE EROSION.
 2. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE MORE THAN 7 DAYS.
 3. SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE

*PIPE LENGTHS IN PROFILE VIEW INCLUDE PIPE AND APRON

GOVERNOR STATE ONE CALL
 800-252-1166 651-454-0002

UTILITIES:
 CENTURYLINK (763) 712-5017
 CENTERPOINT ENERGY (763) 322-2760
 COMCAST (651) 607-4078
 CONSOLIDUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4508

DATE: _____ REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: _____ REC. NO. _____

RFC ENGINEERING, INC.
 Consulting Engineers

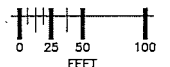
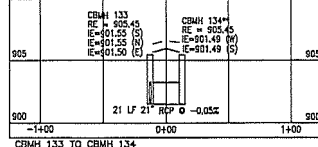
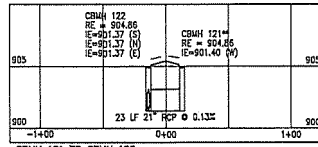
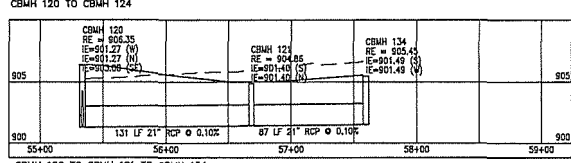
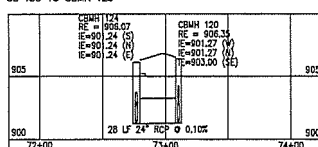
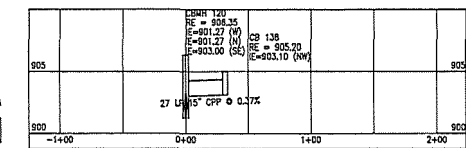
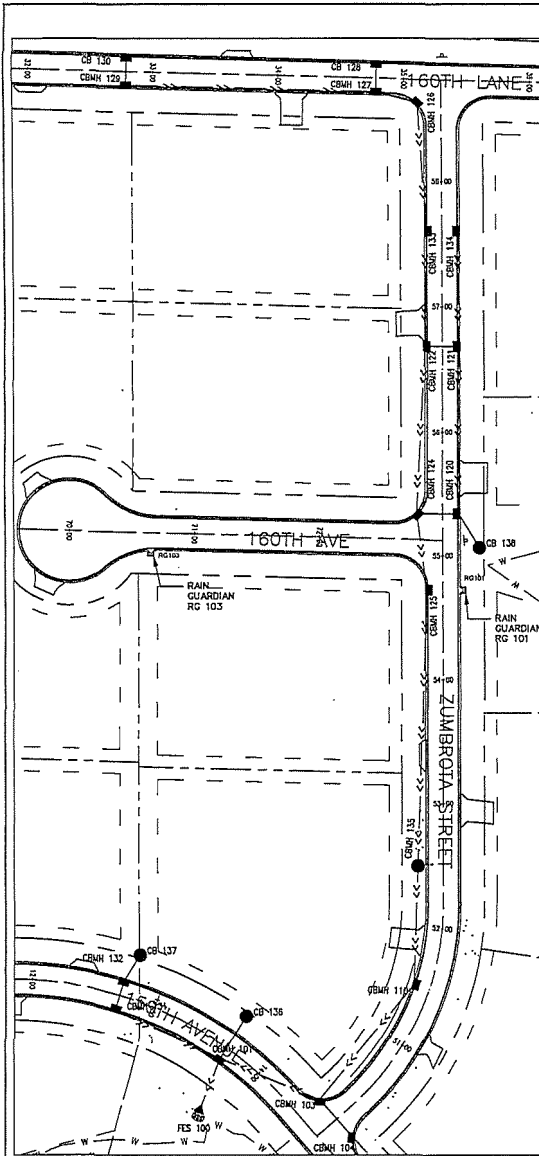
13635 Johnson Street
 Horn Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

STORM DRAIN TABULATIONS

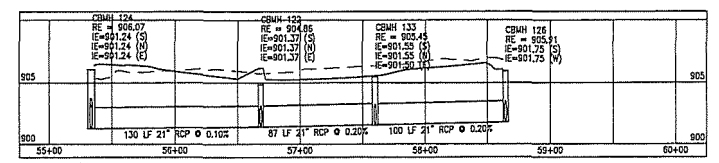
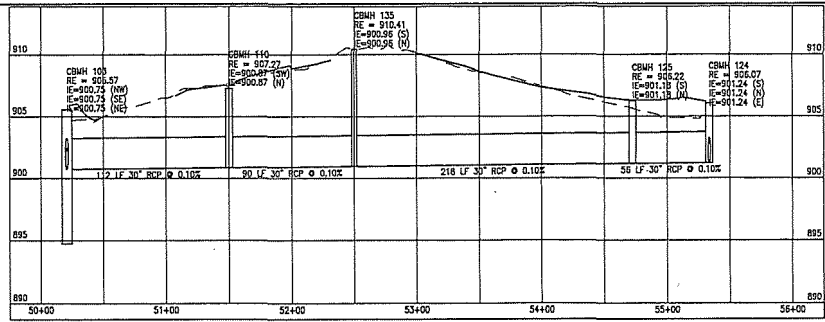
DWG: 1907 STORM 1
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 23 OF 44
 FILE: 35-1-152

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



- NOTES:
1. ALL GRADING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE THE POTENTIAL FOR SITE EROSION.
 2. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE MORE THAN 7 DAYS.
- *PIPE LENGTHS IN PROFILE VIEW INCLUDE PIPE AND APRON

* NEENAH FOUNDRY R-3246; EAST JORDAN IRON WORKS V-4520; D&L FOUNDRY I-1804.
 ** LISTING CONTAINS SECONDARY OUTLET/INLET PIPE



STRUCTURE	STATION	LOCATION	SIZE OF STRUCTURE	DESIGN	TOP OF CASTING OR INLET	INVERT	CASTING ASSEMBLY (NEENAH, EJ, DL)*	TYPE GRATE (NEENAH CASTINGS)	PIPE				TRASH GUARD	APRON	FLOWS TO	INLET	% GRADE	
									21" R.C.P.	24" R.C.P.	30" R.C.P.	15" C.P.P.						
									LN FT	LN FT	LN FT	LN FT	LN FT	EACH	EACH			
CBMH 126	58+64.4	LT.	48" ø	RFC-465A1	905.91	901.75	R-3246	L								CBMH 133	901.55	0.2
CBMH 134	57+59.8	LT.	54" ø	RFC-465A1	905.45	901.49	R-3246	L	100							CBMH 121	901.40	0.1
CBMH 121	56+68.3	LT.	48" ø	RFC-465A1	904.86	901.4	R-3246	L	87							CBMH 120	901.27	0.1
CBMH 120	55+33.4	LT.	54" ø	RFC-465A1	905.35	901.27	R-3246	L	131							CBMH 124	901.24	0.1
CBMH 134**	57+59.7	LT.	54" ø	RFC-465A1	905.45	901.49	R-3246	L	28							CBMH 133	901.5	-0.05
CBMH 133	57+59.8	LT.	54" ø	RFC-465A1	905.45	901.55	R-3246	L	21							CBMH 122	901.37	0.2
CBMH 121**	56+68.3	LT.	48" ø	RFC-465A1	904.86	901.4	R-3246	L	87							CBMH 122	901.37	0.13
CBMH 122	56+68.3	LT.	54" ø	RFC-465A1	904.86	901.37	R-3246	L	23							CBMH 124	901.24	0.1
CBMH 124	55+33.4	LT.	66" ø	RFC-465A1	906.07	901.24	R-3246	L	130							CBMH 125	901.18	0.1
CBMH 125	54+72.3	LT.	66" ø	RFC-465A1	906.22	901.18	R-3246	L		56						CBMH 135	900.86	0.1
CBMH 135	52+50	LT.	48" ø	RFC-465C1	910.41	900.96	R-2577	L			218					CBMH 110	900.87	0.1
CBMH 110	51+50	LT.	66" ø	RFC-465A1	907.27	900.97	R-3246	L		90						CBMH 103	900.75	0.1
CB 138	55+06.4	RT.	48" ø	RFC-465C1	905.2	903.1	R-2577	C			112					CBMH 120	903	0.37
RG 101	54+72.3	RT.	5' x 2.5'	BUNKER	906.33	905.33						27						
RG 103	70+84.9	RT.	5' x 2.5'	BUNKER	905.15	904.15												
TOTAL									579	28	476	27						

SOPHER STATE ONE CALL
 800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 712-3017
 CENTERPOINT ENERGY (763) 323-2700
 COMCAST (650) 667-4078
 CONXUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: _____ REC. NO. _____

RFC ENGINEERING, INC.
 Consulting Engineers

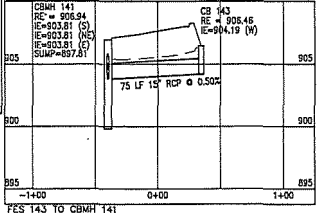
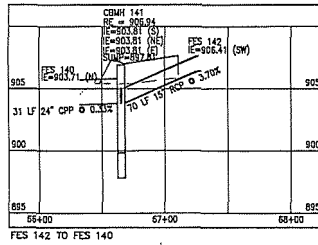
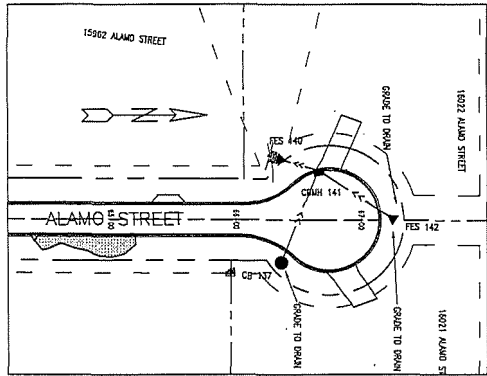
13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907 LUND'S LAKEVIEW FOREST RECONSTRUCTION 159TH AVE NE, 160TH LN NE, AND OTHERS

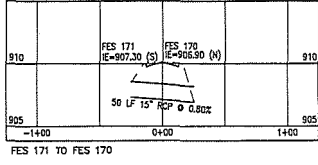
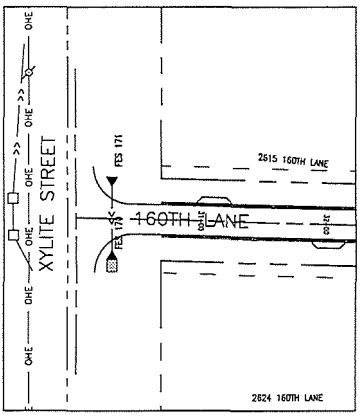
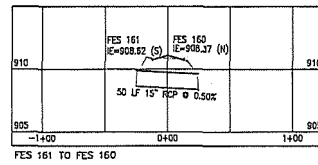
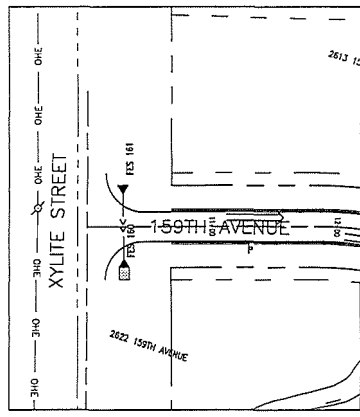
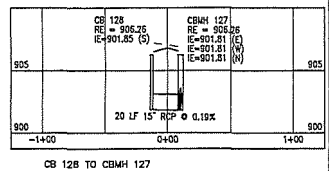
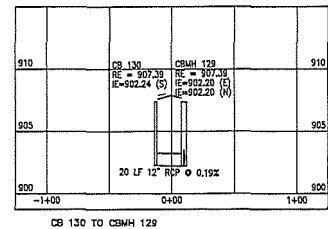
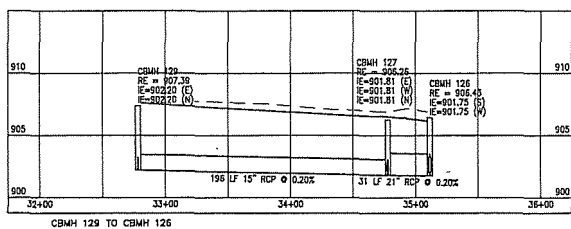
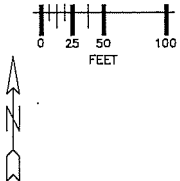
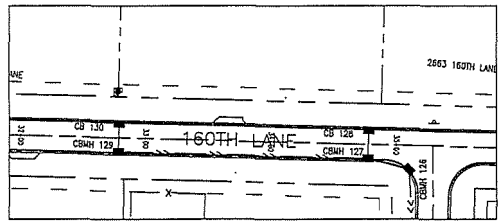
STORM DRAIN TABULATIONS

DWG: 1907 STORM 2
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 24 OF 44
 FILE: 35-1-15.3

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



STORM DRAIN																							
STRUCTURE	STATION	LOCATION	SIZE OF STRUCTURE	DESIGN	TOP OF CASTING OR INLET	INVERT	CASTING ASSEMBLY (NEENAH, E.I., DL)*	TYPE GRATE (NEENAH CASTINGS)	12" R.C.P.				15" R.C.P.		21" R.C.P.		24" C.P.P.		TRASH GUARD EACH	APRON EACH	FLOWS TO	INLET	% GRADE
									LN FT	LIN FT	LN FT	LN FT	LN FT	LN FT	LN FT	LN FT							
CB 143	66+35.7	RT.	48" ø	RFC-465C1	906.46	904.19	R-2577	C													CBMH 141	903.81	0.5
FES 142	67+26.7	LT.		FES		906.41	-	-													CBMH 141	903.81	3.7
CBMH 141	66+65.3	LT.	72" ø	RFC-465B3	906.94	903.81	R-3501-TB	C													FES 140	903.71	0.33
CB 130	32+78.2	LT.	2' x 3'	RFC-459B	907.39	902.24	R-3246	C															
CBMH 129	32+78.2	RT.	48" ø	RFC-465A1	907.39	902.2	R-3246	C															
CB 128	34+77.8	LT.	2' x 3'	RFC-459B	906.26	901.85	R-3246	C															
CBMH 127	34+77.8	RT.	48" ø	RFC-465A1	906.26	901.81	R-3246	C															
FES 161	10+28.7	LT.		FES		908.62	-	-															
FES 171	30+28	LT.		FES		907.3	-	-															
TOTAL																							



NOTES:

1. ALL GRADING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE THE POTENTIAL FOR SITE EROSION.
2. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE MORE THAN 7 DAYS.
3. SLOPES SHOWN ARE FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

*PIPE LENGTHS IN PROFILE VIEW INCLUDE PIPE AND APRON

GOPHER STATE ONE CALL
800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 323-2017
CENTERPOINT ENERGY (763) 323-2760
COMCAST (952) 607-4078
CONNEXUS ENERGY (763) 323-4268
XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: _____ REC. NO. _____

RFC ENGINEERING, INC.
Consulting Engineers

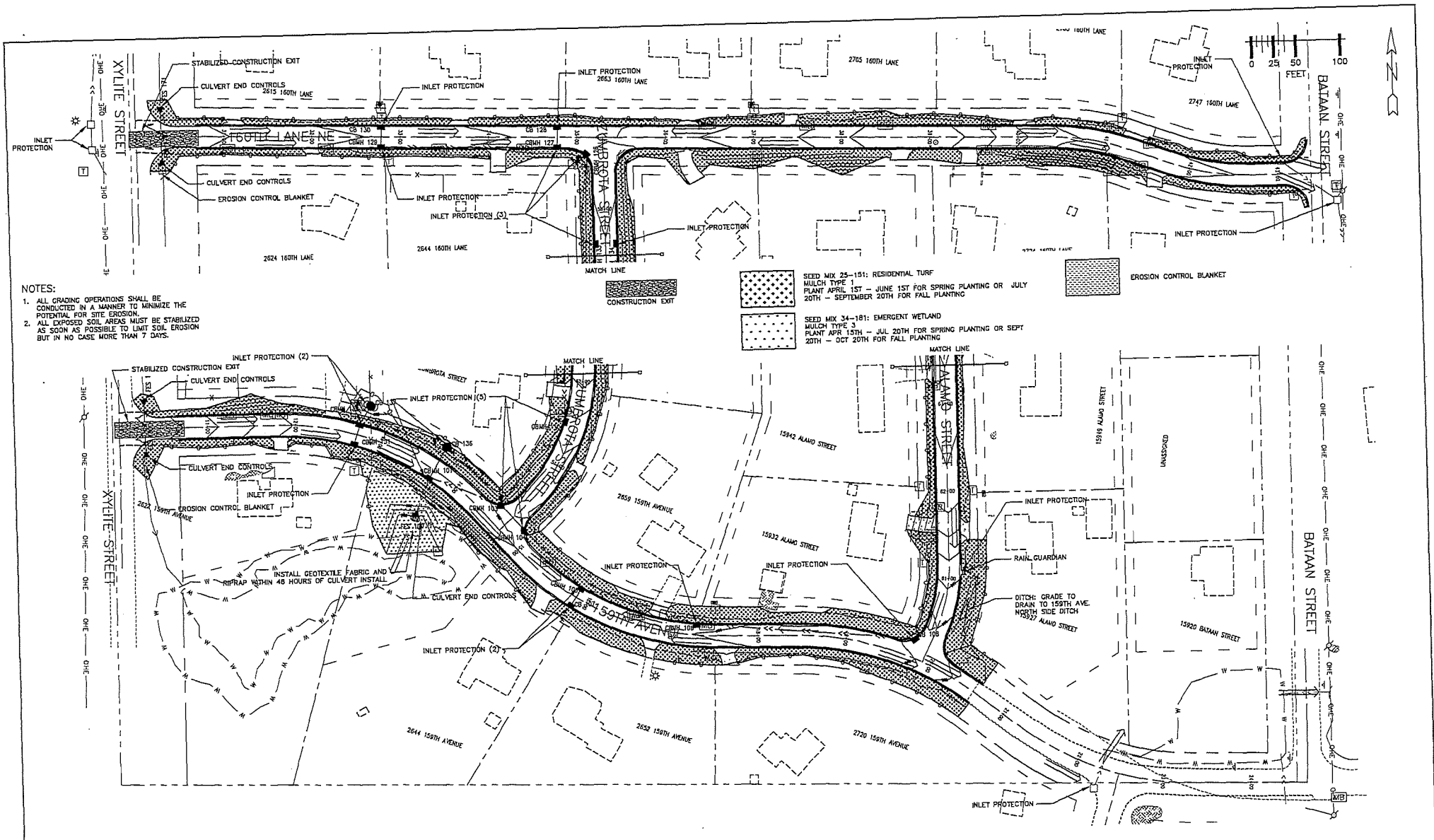
13635 Johnson Street
Horn Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS

STORM DRAIN TABULATIONS

DWG: 1907 STORM 3
DATE: 04/29/21
JOB NUMBER: 1907
SHEET: 25 OF 44
FILE: 35-1-154

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



- NOTES:**
1. ALL GRADING OPERATIONS SHALL BE CONDUCTED IN A MANNER TO MINIMIZE THE POTENTIAL FOR SITE EROSION.
 2. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE MORE THAN 7 DAYS.

SDPHER STATE ONE CALL
 800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 712-5017
 CENTURPOINT ENERGY (763) 323-2760
 COMCAST (952) 607-4078
 COMMUNEXUS ENERGY (763) 323-4268
 XCEL ENERGY (612) 528-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: _____ REC. NO. _____

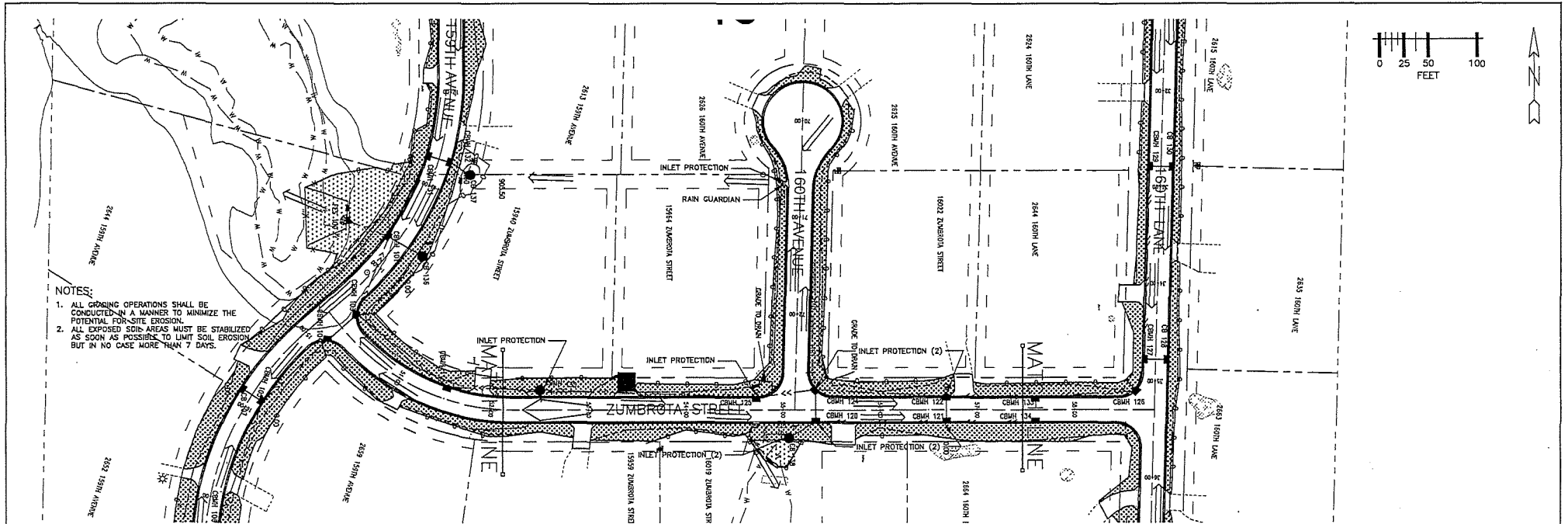
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

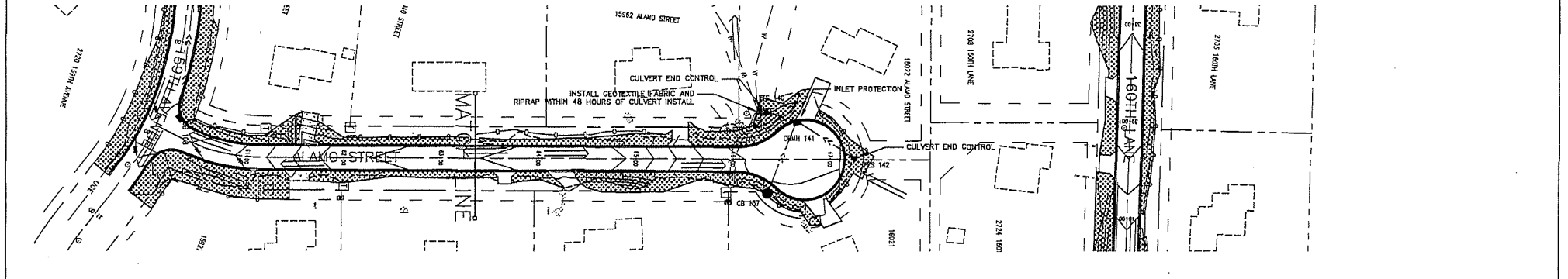
HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 STORMWATER POLLUTION PREVENTION PLAN


DWC: 1907 SWPPP 1
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 26 OF 44
 FILE: 35-1-155

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



-  CONSTRUCTION EXIT
-  SEED MIX 25-151: RESIDENTIAL TURF MULCH TYPE 1
PLANT APRIL 1ST - JUNE 1ST FOR SPRING PLANTING OR JULY 20TH - SEPTEMBER 20TH FOR FALL PLANTING
-  SEED MIX 24-181: EMERGENT WETLAND MULCH TYPE 3
PLANT APR 15TH - JUL 20TH FOR SPRING PLANTING OR SEPT 20TH - OCT 20TH FOR FALL PLANTING
-  EROSION CONTROL BLANKET



 800-252-1166 651-454-0002	UTILITIES: CENTURYLINK (763) 712-5017 CENTERPOINT ENERGY (763) 323-2760 COMCAST (952) 607-4070 COMNEXUS ENERGY (763) 323-4288 XCEL ENERGY (612) 528-4508	DATE: _____ REVISION HISTORY: _____ _____ _____	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA. DATE: _____ REG. NO. _____	RFC ENGINEERING, INC. Consulting Engineers	13635 Johnson Street Ham Lake, MN 55304 Telephone 763-862-8000 Fax 763-862-8042	HAM LAKE IMPROVEMENT PROJECT 1907 LUND'S LAKEVIEW FOREST RECONSTRUCTION 159TH AVE NE, 160TH LN NE, AND OTHERS STORMWATER POLLUTION PREVENTION PLAN	DWG: 1907 SWPPP 2 DATE: 04/29/21 JOB NUMBER: 1907 SHEET: 27 OF 44 FILE: 35-1-156
	DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC						

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

CONSTRUCTION ACTIVITY INFORMATION:

LUND'S LAKEVIEW FOREST ROAD RECONSTRUCTION, HAM LAKE, ANOKA COUNTY, MINNESOTA, 55304, 43.2527 LATITUDE NORTH, 93.2355 LONGITUDE WEST (BY ONLINE TOOL).

TOTAL PROJECT DISTURBED AREA IS 5.73 ACRES.

THIS IS A ROAD CONSTRUCTION PROJECT.

0.44 ACRES OF NEW IMPERVIOUS SURFACE.
0.00 ACRES OF NEW PERVIOUS SURFACE.

DRAINAGE IS TO REGIONAL PONDS AND WETLANDS LOCATED THROUGHOUT THE PROJECT WITHIN DRAINAGE AND UTILITY EASEMENTS.

CONTACT INFORMATION:

OWNER: CITY OF HAM LAKE, OWNER CONTACT: DENISE WEBSTER, CITY ADMINISTRATOR, DWEBSTER@CI.HAM-LAKE.MN.US, 763-235-1850, 15544 CENTRAL AVENUE, HAM LAKE, MN, 55304

ALTERNATE OWNER CONTACT: TOM COLLINS, CITY ENGINEER, TCOLLINS@ENGINEERING.COM 763-862-8000.
RFC ENGINEERING INC, 13635 JOHNSON STREET NE, HAM LAKE, MN 55304

CONTRACTOR:

ALTERNATE CONTRACTOR CONTACT:
PARTY RESPONSIBLE FOR OPERATION AND MAINTENANCE OF PERMANENT STORMWATER MANAGEMENT SYSTEM: CITY OF HAM LAKE PUBLIC WORKS, JOHN WITKOWSKI, 763-235-1862, 15544 CENTRAL AVENUE, HAM LAKE, MN, 55304

GENERAL CONSTRUCTION PROJECT INFORMATION:

THE PROJECT CONSISTS OF STREET RECONSTRUCTION TO THE LUND'S LAKEVIEW FOREST DEVELOPMENT. CONCRETE CURB AND GUTTER, STORM SEWER AND STORMWATER POND CONSTRUCTION IS INCLUDED.

THE SOILS ON THE SITE ARE PRIMARILY HYDROLOGIC SOIL GROUP TYPE B WITH MODERATE INFILTRATION CAPACITY. THE GROUNDWATER IN THIS AREA IS LOW.

GENERAL SITE INFORMATION:

ALL EROSION CONTROL MEASURES MUST BE PLACED PRIOR TO COMMENCEMENT OF LAND DISTURBING ACTIVITIES AND BE MAINTAINED UNTIL ALL DISTURBED AREAS ON THE SITE HAVE BEEN RESTORED.

CONSTRUCTION EXITS SHALL BE SURFACED WITH CRUSHED ROCK AND DESIGNATED PRIOR TO CONSTRUCTION (REFER TO DETAIL).

TRENCHES FOR STORM DRAIN PIPE AND STRUCTURES ARE TO BE BACKFILLED BY THE END OF THE WORK DAY.

NO STORMWATER MITIGATION MEASURES ARE REQUIRED AS THE RESULT OF AN ENVIRONMENTAL, ARCHAEOLOGICAL, OR OTHER REQUIRED LOCAL, STATE, OR FEDERAL REVIEW OF THE PROJECT.

THE PROJECT IS NOT LOCATED IN A KARST AREA.

THE PROJECT DOES NOT DISCHARGE TO A CALCAREOUS FEN LISTED IN MINN. R. 7050.0180, SUBP. 6B.

THE SITE DOES NOT DISCHARGE TO A WATER THAT IS LISTED AS IMPAIRED FOR PHOSPHORUS, TURBIDITY, DISSOLVED OXYGEN OR BIOTIC IMPAIRMENT.

SELECTION OF A PERMANENT STORMWATER MANAGEMENT SYSTEM:

NEW IMPERVIOUS SURFACE CREATED BY THIS PROJECT IS 0.44 ACRES.

PER COON CREEK WATERSHED DISTRICT, ANOKA CONSERVATION DISTRICT, AND MINNESOTA BOARD OF WATER AND SOIL RESOURCES, THERE IS INFILTRATION ON SITE DUE TO THE LOW GROUNDWATER TABLE AND HYDROLOGIC SOIL GROUP.

HYDROLOGIC REPORT (DRAINAGE CALCULATIONS) AND DRAINAGE MAPS (WITH DRAINAGE DIMENSIONS) PREPARED FOR THIS PROJECT ARE AVAILABLE IN THE CITY'S ENGINEERS OFFICE. STORM WATER RUNOFF FROM THE SITE DRAINS INTO THE REGIONAL PONDS AND INFILTRATE WITHIN THE PONDS. THE RUNOFF FROM THE SITE WILL BE CONVEYED VIA NEW ON SITE STORM GRAINS. THE LAST STORM DRAIN STRUCTURE JUST PRIOR TO DISCHARGE WILL BE EQUIPPED WITH A SUMP (GRIT CHAMBERS). THE SUMP (GRIT CHAMBERS) ARE SIZED PER COON CREEK WATERSHED DISTRICT REQUIREMENTS.

EROSION PREVENTION PRACTICES:

THERE ARE NO CONSTRUCTION PAVING, VEGETATIVE BUFFER STRIPS, LONG HORIZONTAL SLOPE GRADING FOR THE PROJECT. THERE ARE UNDISTURBED AREAS WITHIN THE PROJECT LIMITS.

ALL DISTURBED AREAS SHALL BE RESTORED WITH SO2, SEED, WOOD FIBER BLANKET, OR PAVED SURFACE WITHIN SEVEN (7) DAYS OF ROUGH GRADING.

ALL EXPOSED SOIL AREAS MUST HAVE TEMPORARY EROSION PROTECTION OR PERMANENT COVER WITHIN SEVEN (7) DAYS AFTER THE AREA IS NOT ACTIVELY BEING WORKED.

FERTILIZER: M:DOT SPECIFICATION 3881 TYPE 2 SEEDING: M:DOT SEED MIXTURE 25-131 OR 33-261 (FOR PONDS). HYDROMULCH: M:DOT SPECIFICATION 3884 TYPE 1 OR 3 WITH APPLICATION RATE PER M:DOT SPECIFICATION 2375.34.

PROVIDE EROSION CONTROL FABRIC FOR ALL SLOPES STEEPER THAN 1:3.

THERE ARE NO DRAINAGE DITCHES CONSTRUCTED WITH THIS PROJECT.

SEDIMENT CONTROL PRACTICES:

THERE ARE SEDIMENT BASINS FOR THIS PROJECT.

THERE ARE NO SLOPES WITH A GRADE OF 1:3 OR STEEPER WITH A SLOPE LENGTH GREATER THAN 75 FEET.

THERE ARE NO DRAINAGE INFILTRATION BASINS FOR THIS PROJECT.

ALL SEDIMENT CONTROL DEVICES ARE TO BE IN PLACE PRIOR TO UPSTREAM LAND DISTURBING ACTIVITIES.

WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER, PIPE OUTLETS MUST CONTAIN RIPRAP, SEED AND PLACE EROSION CONTROL BLANKETS ON DISTURBED AREAS WITHIN 200 LINEAL FEET OF PIPE OUTLETS INCLUDING THE DOWN SLOPE TO THE PIPE OUTLET. SILT FENCING TO BE PLACED AROUND THE DISTURBED AREA AND SILT FENCE ROUTED ACROSS THE TOP OF THE OUTLET.

WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER, SEED AND PLACE EROSION CONTROL BLANKETS ON DISTURBED AREAS WITHIN 200 FEET OF PIPE INLET INCLUDING THE DOWN SLOPE TO THE PIPE INLET. SILT FENCING TO BE PLACED AROUND THE DISTURBED AREA, PLACE A SECOND SILT FENCE ROUTED ACROSS THE TOP OF THE INLET AND PLACE INLET PROTECTION. PIPE INLET PROTECTION SHALL BE PER BMP'S SUCH AS SILT FENCE OR STRAW BALES STAKED AROUND THE APRON OPENING OR OTHER APPROVED EQUIVALENT.

WITHIN 24 HOURS OF CONNECTION TO A SURFACE WATER, SEED AND PLACE EROSION CONTROL BLANKETS ON DISTURBED AREAS WITHIN 200 FEET OF CATCH BASIN INLET. PLACE INLET PROTECTION IMMEDIATELY AFTER STRUCTURE IS BACKFILLED. CATCH

BASIN INLET PROTECTION SHALL BE PER BMP'S SUCH AS CLEAR ROCK AROUND STEEL PLATE OVER FABRIC OR OTHER APPROVED EQUIVALENT UNTIL THE CATCH BASIN CASTING IS PLACED. IMMEDIATELY AFTER THE CASTING IS PLACED, PROVIDE CATCH BASIN INLET PROTECTION PER BMP'S SUCH AS FILTER BAG INSERT OR OTHER APPROVED EQUIVALENT. NO CAPTURED SEDIMENT SHOULD BE ALLOWED TO DROP INTO THE CATCH BASIN.

PROMOTE SILT FENCE DOWNSTREAM OF STOCKPILE AREAS. STOCKPILES ARE NOT TO BLOCK DRAINAGE CONVEYANCE SYSTEMS. SOIL STOCKPILES MUST BE STABILIZED WITHIN 7 DAYS OF ROUGH GRADING OR INACTIVITY.

SEDIMENT TRACKED OFFSITE SHALL BE MINIMIZED AND SWEEPED ON A DAILY BASIS.

TEMPORARY SEDIMENTATION BASINS ARE NOT BEING USED TO REDUCE WETLAND IMPACTS. DUE TO THE LACK OF RIGHT OF WAY.

DEWATERING AND BASIN DRAINING:
ALL DEWATERING IS TO DISCHARGE TO SEDIMENT SACKS, ROCK WEEPER, BID ROLL AREA, ETC. TO PREVENT EROSION AND MINIMIZE SEDIMENT DISCHARGING FROM THE SITE. EXCESSIVE SEDIMENT-LAIDEN WATER WILL NOT BE PERMITTED TO DISCHARGE FROM THE SITE. DEWATERING PRACTICES ARE NOT TO CAUSE DOWNSTREAM NUISANCE CONDITIONS, EROSION, OR NON-PERMITTED WETLAND INUNDATION CAUSING ADVERSE IMPACTS. DISCHARGE FROM DEWATERING WILL BE TO STORMWATER POND. LARGE VOLUMES OF DEWATERING WILL REQUIRE DISCHARGE INTO SEDIMENT SACKS PRIOR TO DISCHARGING INTO THE STORMWATER POND.

ADDITIONAL BMP'S FOR SPECIAL WATERS AND DISCHARGES TO WETLANDS:
THE PROJECT DOES NOT DISCHARGE INTO OR WITHIN 1 MILE OF SPECIAL WATERS.

THERE ARE NO BUFFER ZONES OR UNDISTURBED AREA ZONES.

THE STORM DRAIN SYSTEM WAS SET UP TO DISTRIBUTE THE STORMWATER RUNOFF INTO THE PROJECT PONDS AS CLOSE TO EXISTING CONDITIONS AS POSSIBLE. THIS INCLUDED PROVIDING STORM DRAIN ON BOTH SIDES OF THE STREET IN ORDER TO ACHIEVE THIS. THE DRAINAGE WAS APPROVED BY COON CREEK WATERSHED DISTRICT.

THERE IS NO CONVERSION OF WETLANDS INTO STORMWATER PONDS.

INSPECTION AND MAINTENANCE:
THE CONTRACTOR SHALL PLACE A RAIN GAUGE ON THE PROJECT SITE AT A LOCATION APPROVED BY THE ENGINEER. RAINFALL DATA SHALL BE KEPT WITH THE SWPPP RECORDS.

THE CONTRACTOR MUST INSPECT THE CONSTRUCTION SITE ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. INSPECTIONS AND MAINTENANCE TO BE RECORDED IN WRITING. THE SWPPP INSPECTION FOR THE CONSTRUCTION IS TO BE CONDUCTED BY _____ OF _____.

INSPECTIONS FORMS ARE AVAILABLE AT:
<http://www.mn.gov/online/index.cfm?center=/water/bases-and-programs/stormwater/construction-stormwater/construction-stormwater.html>
THE ACTUAL FORM IS UNDER INSPECTION CHECKLIST.

THE CONTRACTOR WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT DEVICES, AS WELL AS ALL EROSION AND SEDIMENT CONTROL, FOR THE DURATION OF THE PROJECT.

THE CONTRACTOR WILL INVESTIGATE AND COMPLY WITH THE FOLLOWING:
SILT FENCE WILL BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN IT BECOMES NONFUNCTIONAL OR THE SEDIMENT REACHES 1/3 OF THE FENCE HEIGHT. THE CORRECTIONS MUST BE MADE WITHIN 24 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

SEDIMENT WILL BE REMOVED FROM SEDIMENTATION BASIN WHEN IT REACHES A DEPTH OF TWO FEET OR ONE-HALF OF THE STORAGE VOLUME, WHICHEVER IS LESS, WITHIN 72-HOURS OF DISCOVERY.

SEDIMENT DEPOSITED IN SURFACE WATERS WILL BE REMOVED WITHIN SEVEN (7) DAYS OF DISCOVERY. RESTABILIZING THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL WILL BE COMPLETED WITHIN THE SAME SEVEN (7) DAY TIME FRAME.

CONSTRUCTION SITE VEHICLE EXIT LOCATIONS WILL BE INSPECTED FOR OFFSITE SEDIMENT TRACKING ONTO PAVED SURFACES. TRACKED SEDIMENT WILL BE REMOVED FROM THE PAVED SURFACE WITHIN 24 HOURS OF DISCOVERY.

OFFSITE ACCUMULATIONS OF SEDIMENT WILL BE REMOVED IN A TIMELY MANNER AND AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS.

POLLUTION PREVENTION MANAGEMENT MEASURES:
THE CONTRACTOR SHALL IMPLEMENT THE FOLLOWING POLLUTION PREVENTION MANAGEMENT MEASURES ON THE SITE:
SOLID WASTE, COLLECT SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS, AND OTHER WASTES MUST BE DISPOSED OF PROPERLY OFFSITE AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

HAZARDOUS MATERIALS: OIL, GASOLINE, PAINT AND ANY HAZARDOUS SUBSTANCES MUST BE PROPERLY STORED, INCLUDING SECONDARY CONTAINMENT, TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. RESTRICTED ACCESS TO STORAGE AREAS MUST BE PROVIDED TO PREVENT VANDALISM. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MUST BE IN COMPLIANCE WITH MPCA REGULATIONS.

EXTERNAL WASHING OF TRUCKS, INCLUDING CONCRETE DELIVERY TRUCKS, AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEWATERING IS ALLOWED ON SITE. CONCRETE WASHOUT ON SITE MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER.

THE CITY IS RESPONSIBLE FOR LONG TERM MAINTENANCE OF THE STORM DRAIN INCLUDING THE SUMPS (GRIT CHAMBERS). THE GRIT CHAMBERS ARE TO BE INSPECTED EARLY AND CLEANED OUT AS NECESSARY TO MAINTAIN FUNCTION.

THE CONTRACTOR IS RESPONSIBLE FOR MONITORING AIR POLLUTION AND ENSURING IT DOES NOT EXCEED LEVELS SET BY LOCAL, STATE, OR FEDERAL REGULATIONS. THIS INCLUDES DUST CREATED BY WORK BEING PERFORMED ON THE SITE. AIR POLLUTION AND DUST CONTROL CORRECTION ARE CONSIDERED INCIDENTAL TO THE UNIT BID PRICES FOR WHICH WORK IS BEING PERFORMED. ADDITIONAL DUST CONTROL MEASURES MAY BE REQUIRED BY THE ENGINEER.

NO SANITARY AND SEPTIC WASTE IS ON THE SITE.

FINAL STABILIZATION:
THE CONTRACTOR MUST ENSURE FINAL STABILIZATION OF THE SITE. FINAL STABILIZATION IS ACHIEVED WHEN ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND ALL SOILS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70 PERCENT OF THE PERVIOUS SURFACE AREA, OR OTHER EQUIVALENT MEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSION CONDITIONS.

ALL TEMPORARY EROSION PROTECTION, INCLUDING SILT FENCE, ARE TO BE REMOVED AFTER FINAL STABILIZATION OF THE SITE.

RECORDS RETENTION:
ALL REQUIREMENTS OF THE NPDES PERMIT AND THIS SWPPP SHALL REMAIN IN EFFECT UNTIL ALL LAND DISTURBING ACTIVITY HAS BEEN COMPLETED, ALL FINAL RESTORATION HAS BEEN COMPLETED AND THE NOTICE OF TERMINATION FORM HAS BEEN

SUBMITTED TO THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA).

REFER TO OTHER SHEETS OF THIS PLAN SET FOR DETAILED CONSTRUCTION INFORMATION. EXISTING AND PROPOSED GRADERS FOR THE ROADWAY ARE SHOWN ON THE PLAN AND PROFILE SHEETS AND ON THE CROSS SECTION SHEETS.

THE CONTRACTOR SHALL MAINTAIN A COPY OF THE PLANS ONSITE AT ALL TIMES UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE CITY. THE CONTRACTOR SHALL UPDATE THE SWPPP AS NECESSARY TO REFLECT CURRENT CONDITIONS ON THE SITE. CONTRACTOR IS TO PROVIDE THE ENGINEER A COPY OF THE REVISED SWPPP. THE REVISED SWPPP IS TO BE MAINTAINED WITH THE CONSTRUCTION SET OF PLANS.

THE CONSTRUCTION PLANS, INCLUDING THE SWPPP, AND THE SWPPP INSPECTION REPORTS ARE TO BE AVAILABLE TO THE ENGINEER AND TO THE MPCA AND COON CREEK WATERSHED DISTRICT INSPECTORS AT ALL TIMES.

THE CONTRACTOR IS TO PROVIDE THE ENGINEER A COPY OF THE SWPPP INSPECTION REPORTS WITHIN SEVEN (7) DAYS AFTER THE INSPECTION.

THE CONTRACTOR IS TO PROVIDE THE ENGINEER A COPY OF THE REVISED SWPPP WITHIN SEVEN (7) DAYS AFTER THE CONTRACTOR REVISES THE SWPPP.

ALL SWPPP INSPECTIONS AND ALL BMP'S SHALL BE PLACED UNDER THE SUPERVISION OF A CONSTRUCTION INSTALLER CERTIFIED BY THE MPCA. THE CONSTRUCTION SITE SHALL BE MANAGED AND MAINTAINED BY A MPCA CERTIFIED CONSTRUCTION SITE MANAGEMENT.

THE CONTRACTOR SHALL PROVIDE THE CITY WITH A COPY OF CONSTRUCTION INSTALLER CERTIFICATION AND CONSTRUCTION SITE MANAGEMENT CERTIFICATION. A COPY OF THE CERTIFICATIONS, INCLUDING SWPPP DESIGNER, SHALL BE KEPT WITH THE SWPPP.

THE SWPPP, THE SWPPP INSPECTIONS REPORTS AND MAINTENANCE RECORDS SHALL BE KEPT FOR 3 YEARS.

DRAINAGE CALCULATIONS AND DRAINAGE MAPS WILL BE KEPT BY THE CITY FOR AT LEAST 3 YEARS.

SEQUENCE OF EROSION CONTROL:
1. OBTAIN ALL NECESSARY PERMITS, INCLUDING NPDES GENERAL STORMWATER PERMIT.
2. PLACE ALL PERIMETER SEDIMENT CONTROL DEVICES, TEMPORARY SEDIMENTATION BASINS, SILT FLATION CURTAINS, AND ROCK CONSTRUCTION EXITS.
3. CONTACT CITY ENGINEER FOR APPROVAL OF SEDIMENT CONTROL DEVICES.
4. ROUGH IN GRADE.
5. PLACE TEMPORARY EROSION CONTROL DEVICES AS NECESSARY.
6. PLACE STORM DRAIN SYSTEM.
7. RE-ADJUST TEMPORARY EROSION CONTROL DEVICES AS NECESSARY. PLACE STORM DRAIN INLET PROTECTION AND OUTLET PROTECTION DEVICES AS NECESSARY.
8. PLACE SITE PAVEMENT.
9. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, OBTAIN APPROVAL OF CITY ENGINEER.
10. CONTRACTOR TO REMOVE ALL TEMPORARY EROSION CONTROL DEVICES AFTER ACCEPTANCE BY THE CITY.

TABULATION SUMMARY		
ITEM	UNIT	TOTAL
SILT FENCE	L.F.	5,078
EROSION CONTROL LOG	L.F.	263
CULVERT END CONTROLS	EACH	7
EROSION CONTROL BLANKET	S.Y.	423.9
CATCH BASIN INLET PROTECTION	EACH	23
CLASS II RIPRAP W/ FABRIC	C.Y.	18.7
GEOTEXTILE FILTER FABRIC	S.Y.	82.8
HYDROMULCH TYPE G	ACRE	2.47
TURF ESTABLISHMENT: SEED MIX 25-151	ACRE	2.34
TURF ESTABLISHMENT: SEED MIX 34-101	ACRE	0.13



UTILITIES:	CONTACT:	PHONE:
CENTURYLINK	(763) 712-5017	
CENTERPOINT ENERGY	(763) 323-2760	
CONCAST	(952) 807-4078	
CONQUICK ENERGY	(763) 323-4288	
XCEL ENERGY	(612) 526-4500	

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.
DATE: _____ REG. NO. _____

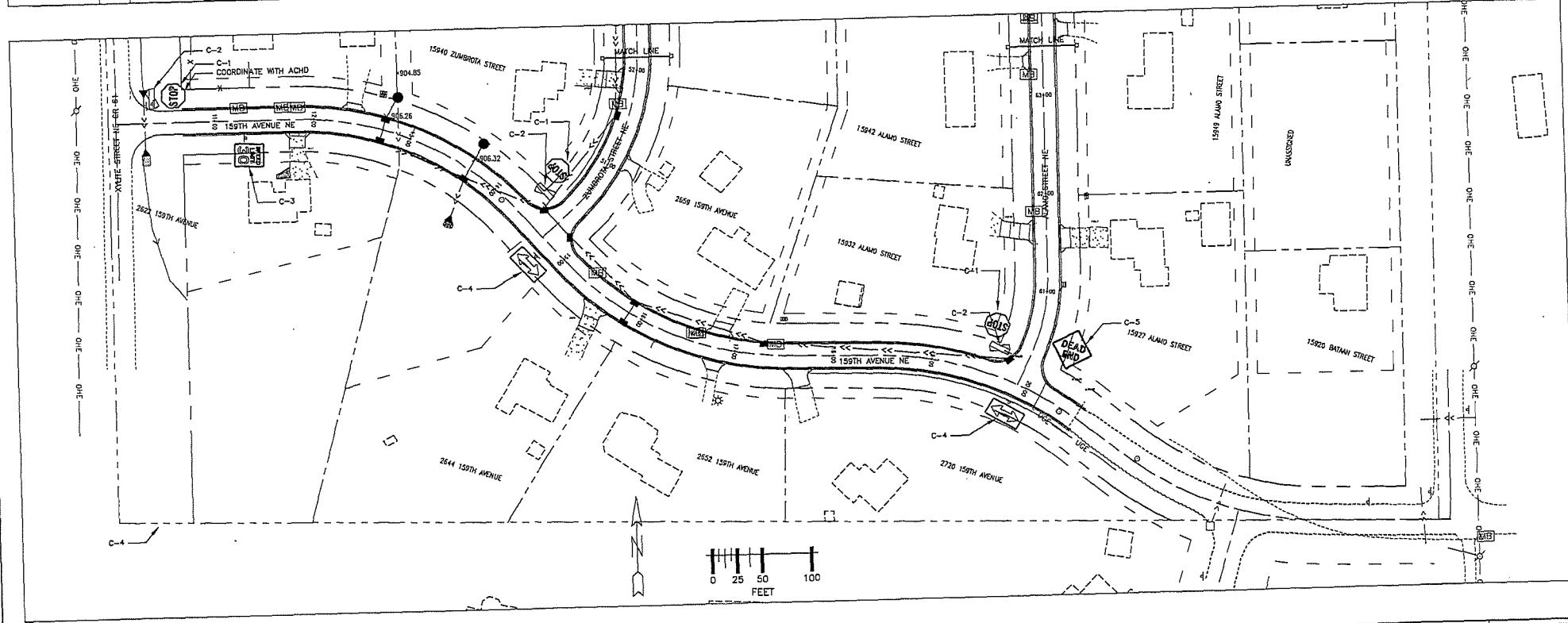
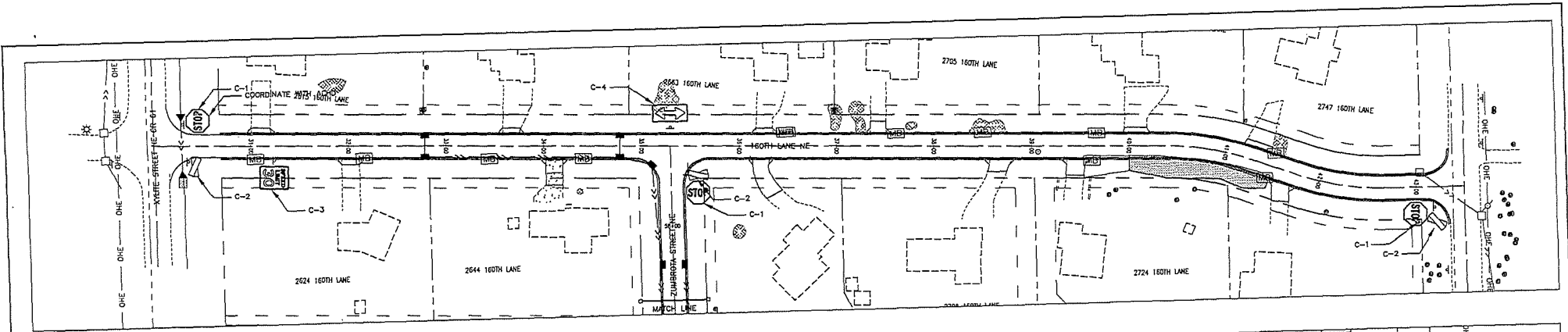
RFC ENGINEERING, INC.
Consulting Engineers

13635 Johnson Street
Ham Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS
STORMWATER POLLUTION PREVENTION PLAN

DWG: 1907 SWPPP 3
DATE: 04/28/21
JOB NUMBER: 1907
SHEET: 28 OF 44
FILE: 35-1-157

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



NOTE:
1. LOCATION OF SIGNS PER MNMUTCD SPECIFICATIONS.

UTILITIES: CENTURILINK (763) 712-5917
 CENTERPOINT ENERGY (763) 323-2760
 COMCAST (952) 607-4078
 CONNEXUS ENERGY (763) 333-4268
 XCEL ENERGY (612) 526-4500

DATE	REVISION HISTORY

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DATE: _____ REG. NO. _____

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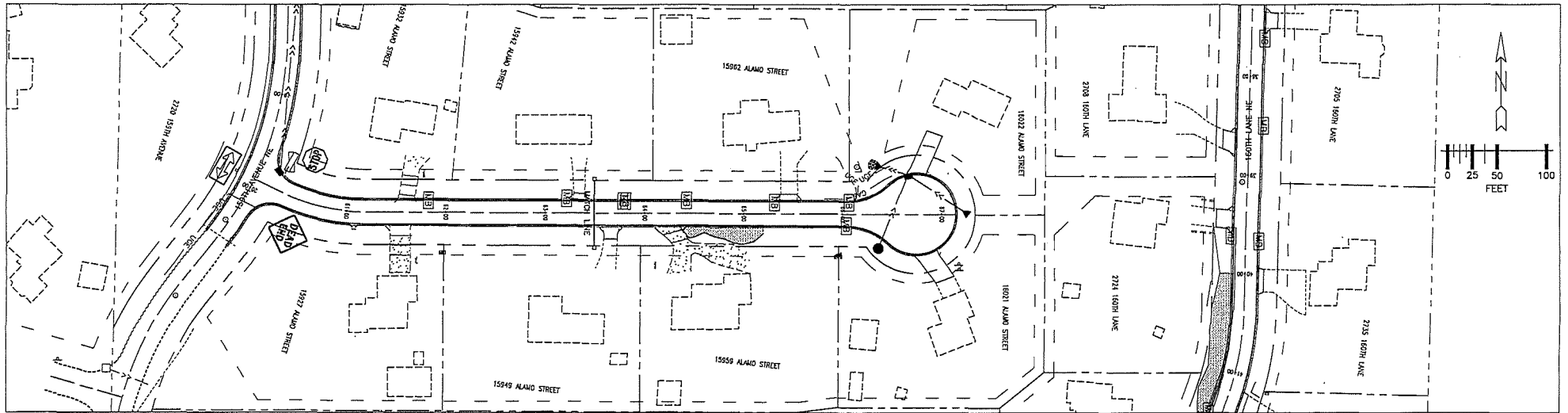
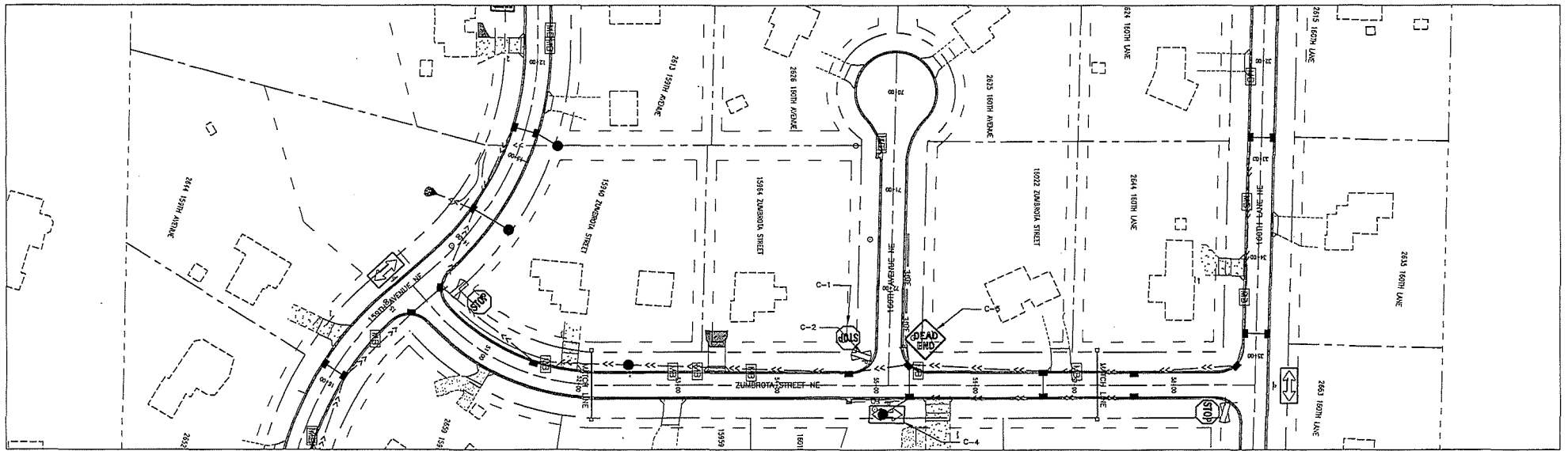
HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

SIGNING PLAN

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC

DWG: 1907 SIGN 1
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 29 OF 44
 FILE: 35-1-158

GOPHER STATE
ONK CALL
 800-252-1166 651-454-0002



NOTE:
1. LOCATION OF SIGNS PER UNMATED SPECIFICATIONS.

GOPHER STATE ONE CALL
800-252-1166 651-454-0002

UTILITIES: CENTURYLINK (763) 712-5017
CENTERTPOINT ENERGY (763) 323-2788
COMCAST (952) 607-4078
CONNOROUS ENERGY (763) 323-4288
XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: _____ REG. NO. _____

RFC ENGINEERING, INC.
Consulting Engineers

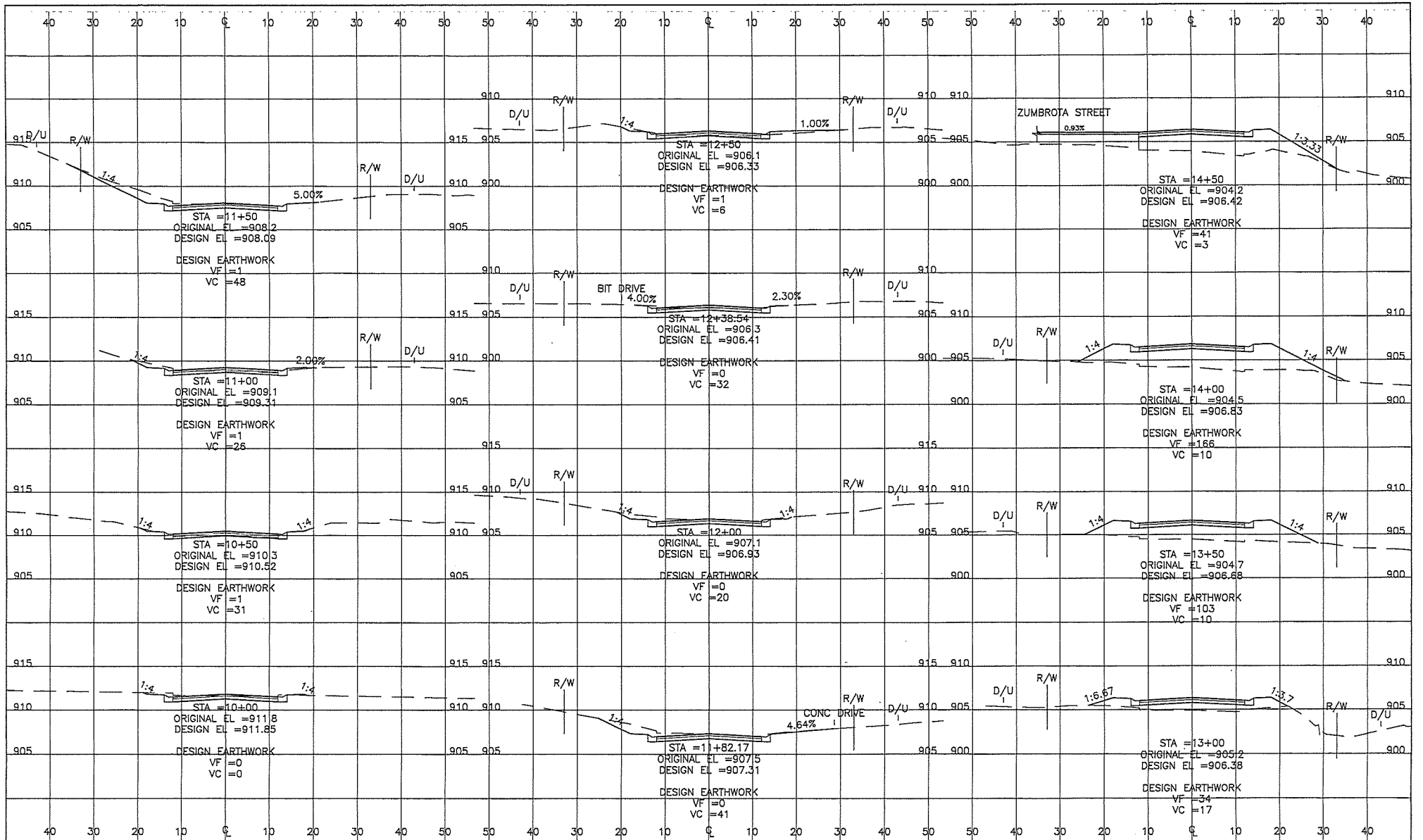
13635 Johnson Street
Ham Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS

SIGNING PLAN

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC

DWG: 1907 SIGN 2
DATE: 04/26/21
JOB NUMBER: 1907
SHEET: 30 OF 44
FILE: 35-1-159



GOVERNOR STATE
ONE CALL
 800-252-1166 651-454-0002
PLST DATE: 03/20/11 13:55

UTILITIES: CENTURION ENERGY (763) 712-3617
 CENTURION ENERGY (763) 333-2760
 COMCAST (952) 807-4078
 CONINGUS ENERGY (763) 333-4266
 XCEL ENERGY (612) 326-4598

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.
PURPOSE OF THIS PLAN
 DATE: _____ REG. NO. _____

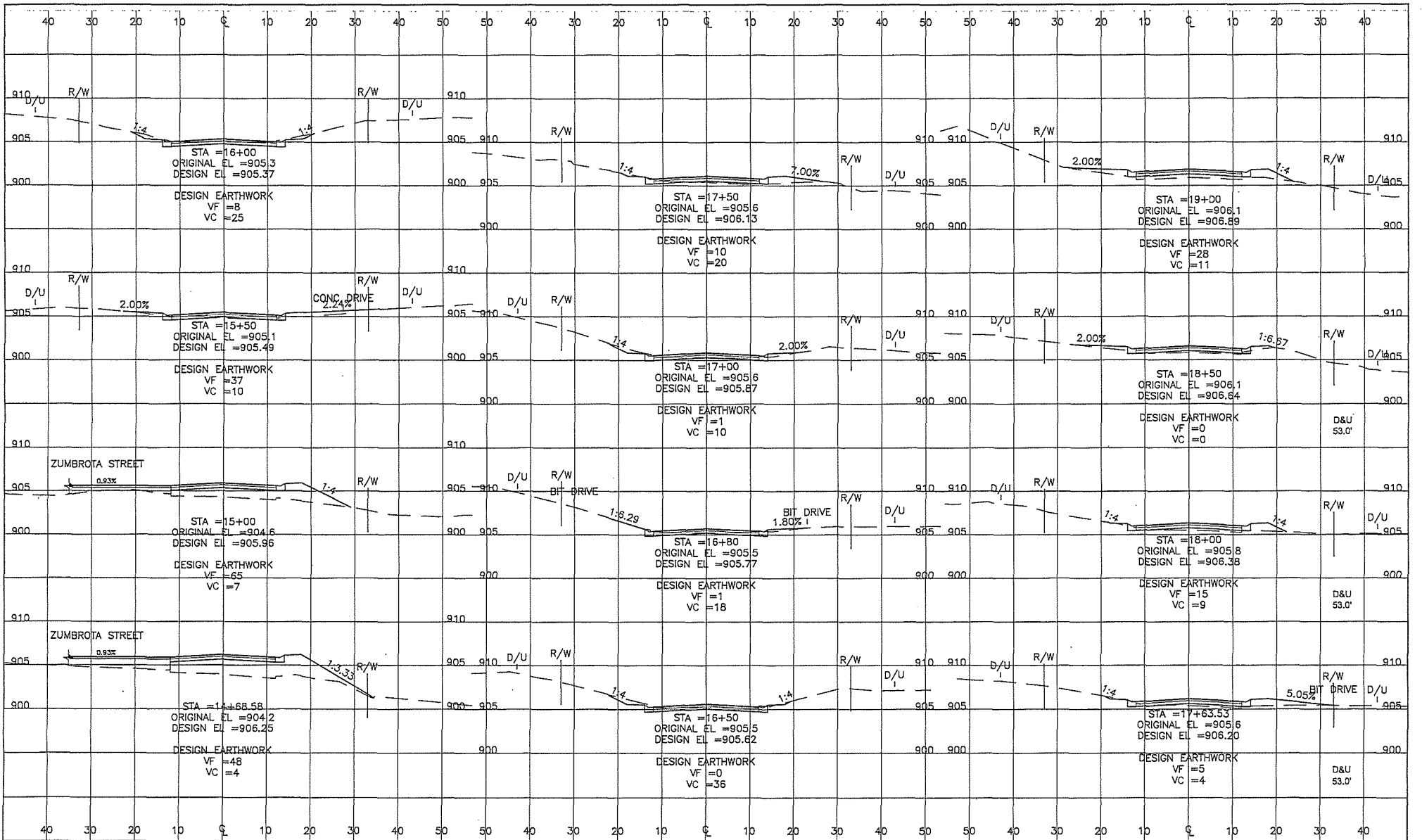
RFC ENGINEERING, INC.
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13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 159TH AVENUE CROSS SECTIONS

DWG: R0001001
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 31 OF 44
 FILE: 35-1-160

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



GOVERNOR STATE ONE CALL
 800-252-1166 651-454-0002
PLAN DATE: APRIL 19, 2007

UTILITIES: CENTURYLINK (763) 712-3017
 CENTERPOINT ENERGY (763) 323-2700
 COMCAST (952) 607-4078
 CONINGDAUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

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 DATE: _____ REG. NO. _____

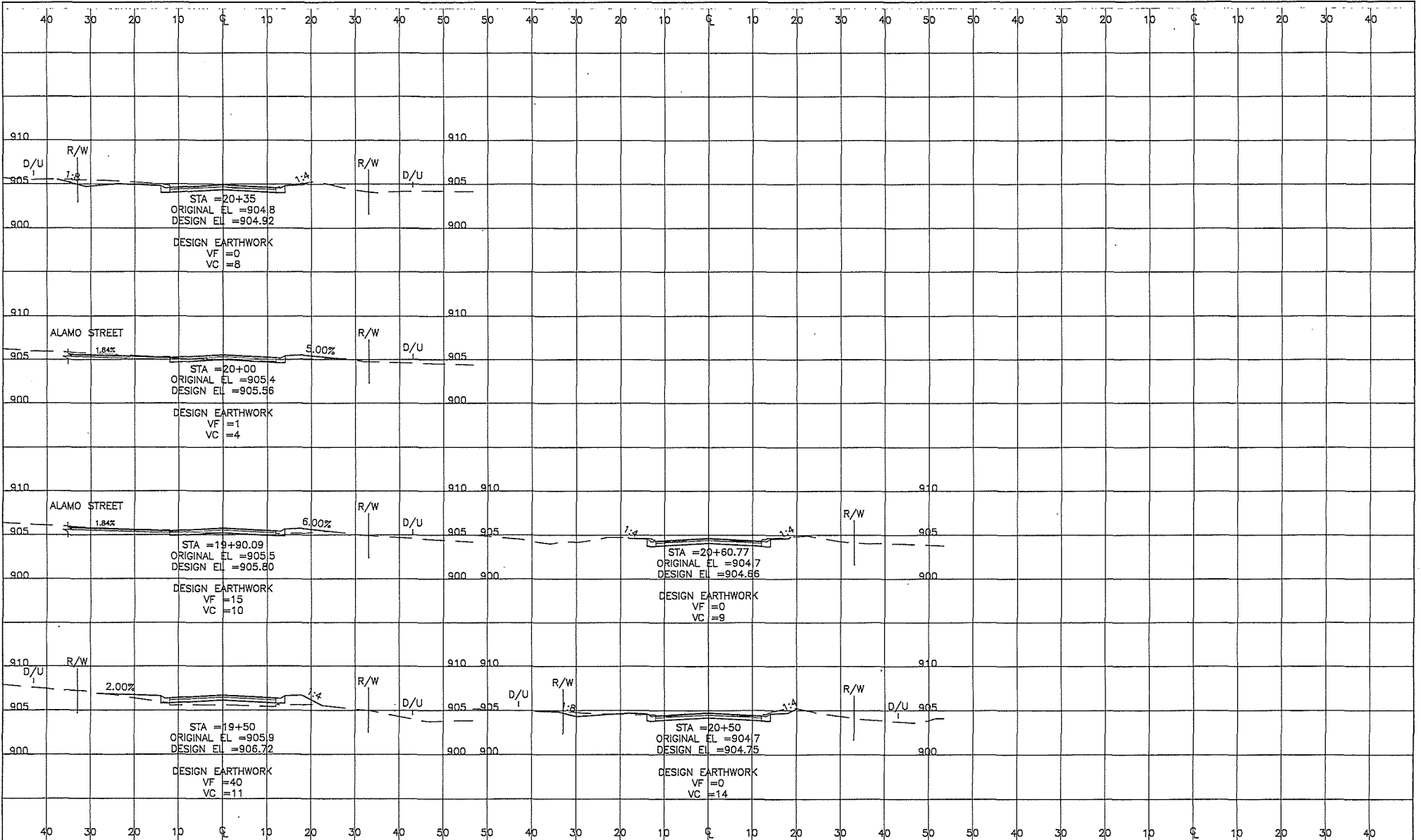
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13635 Johnson Street
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HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 159TH AVENUE CROSS SECTIONS

DWG: R0020091
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 32 OF 44
 FILE: 35-1-161

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



GOPHER STATE
ONE CALL
 800-252-1166 651-454-0002
PL01 DATE: 4/29/2011 13:02

UTILITIES:
 CENTURYLINK (763) 712-5017
 CENTERPOINT ENERGY (763) 323-2760
 COMCAST (952) 607-4078
 CONNOROUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.
 PURPOSE: _____
 DATE: _____ REG. NO. _____

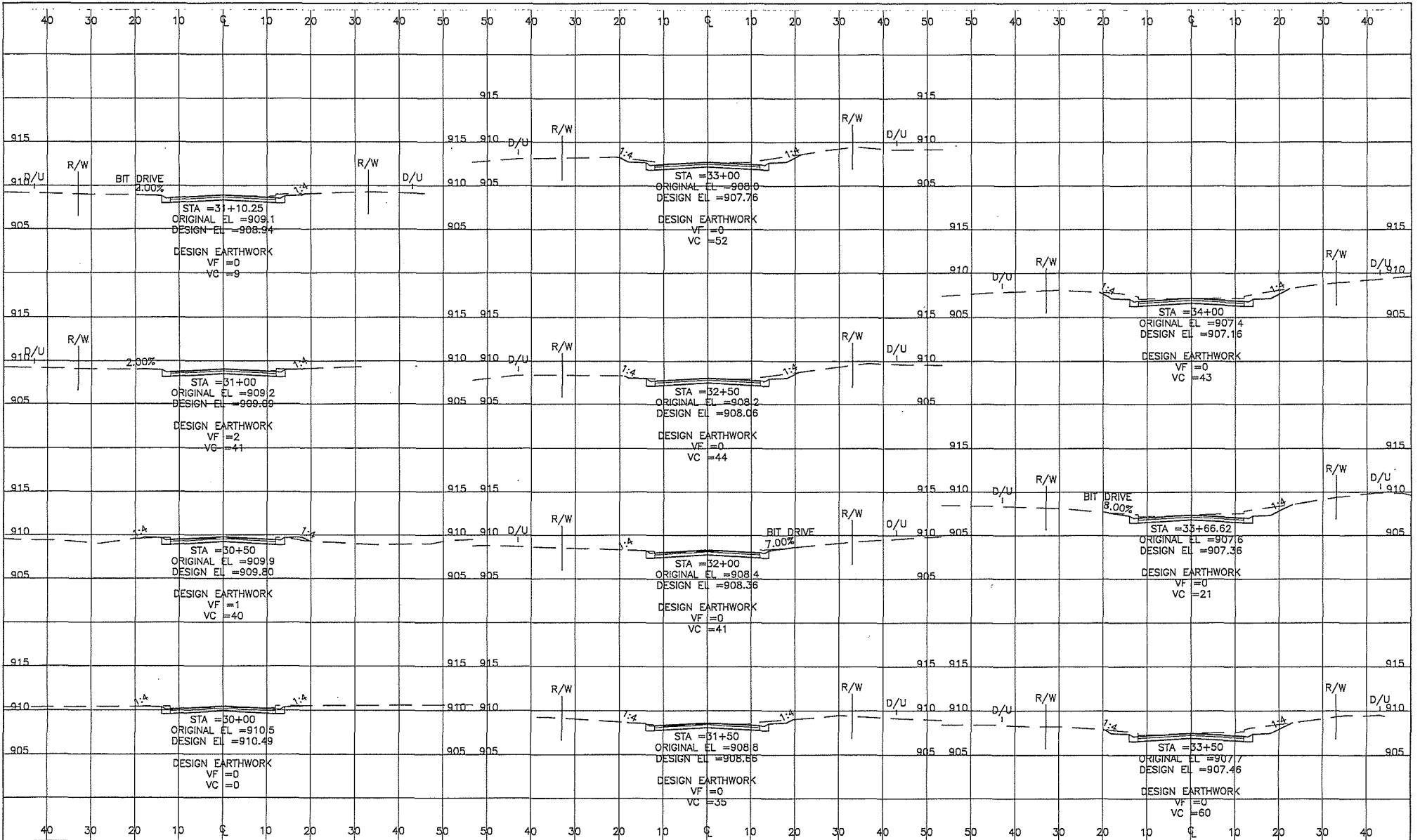
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 159TH AVENUE CROSS SECTIONS

DWG: RC003001
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 33 OF 44
 FILE: 35-1-162

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



GOPPER STATE ONE CALL
 800-252-1166 651-454-0002
 PLOT DATE: APR 20 1999

UTILITIES:
 CENTURLINK (763) 712-5017
 CENTERPOINT ENERGY (763) 323-2760
 COMCAST (652) 667-4078
 CONNEXUS ENERGY (763) 323-4268
 XCEL ENERGY (612) 526-4306

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

PURPOSE OF THE PLAN: _____

DATE: _____ REG. NO.: _____

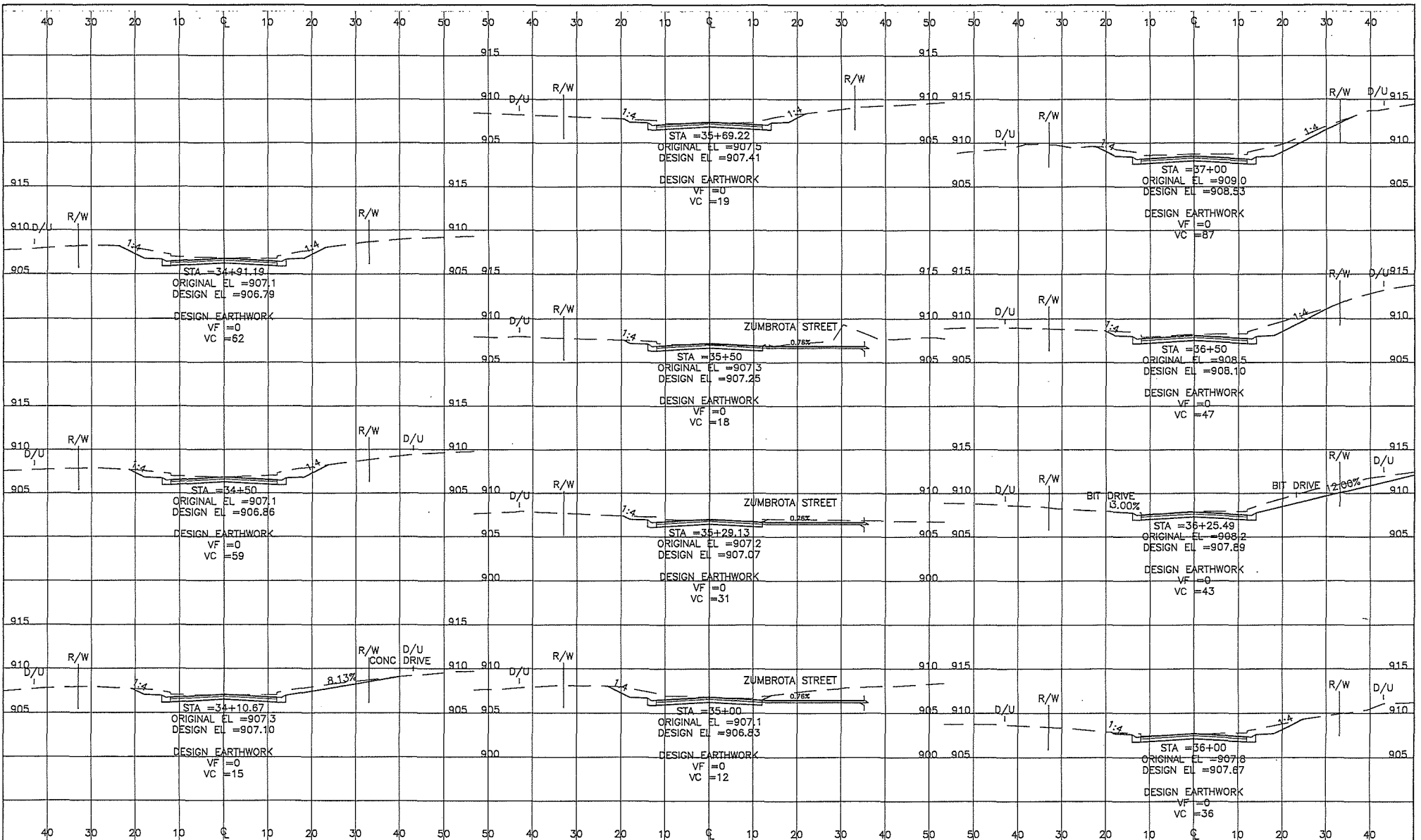
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 150TH LANE CROSS SECTIONS

DWG: R001002
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 34 OF 44
 FILE: 35-1-163

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



SOPHER STATE
ONE CALL
 800-252-1166 651-454-0002
 PLOT DATE: 02/29/21 12:03

UTILITIES:
 CENTURYLINK (763) 712-5017
 CENTERPOINT ENERGY (763) 323-2760
 COMCAST (952) 607-4078
 CONDUITS ENERGY (763) 323-4268
 XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.
PURPOSE: _____
 DATE: _____ REC. NO. _____

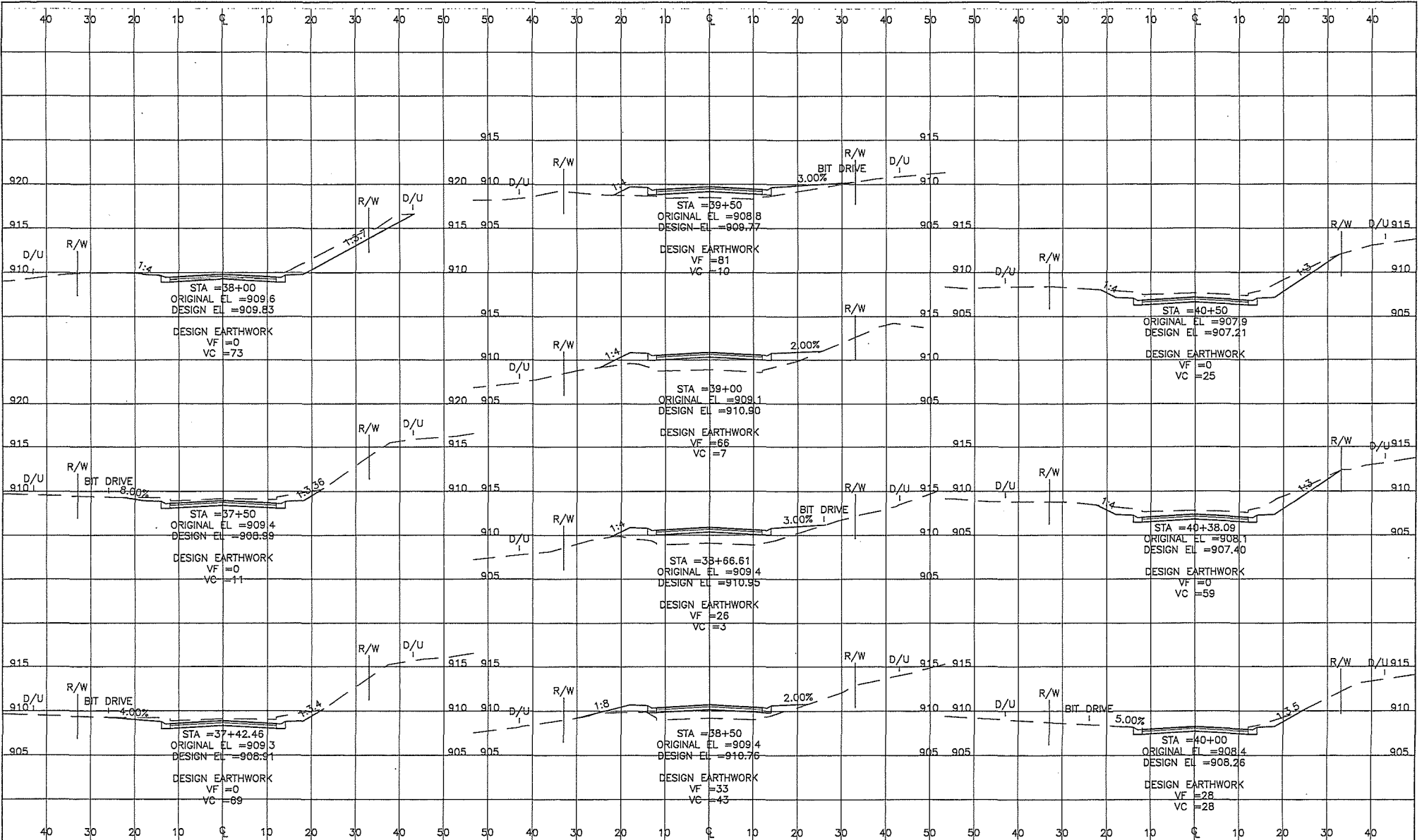
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 160TH LANE CROSS SECTIONS

DWG:	RC022002
DATE:	04/29/21
JOB NUMBER:	1907
SHEET:	35 OF 44
FILE:	35-1-164

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



GOPPER STATE
ONE CALL
 800-252-1166 651-454-0002
 PLOT DATE: 04/29/21

UTILITIES: CENTURYLINK (763) 712-5017
 COUNTRY ENERGY (763) 323-2760
 COMCAST (652) 607-4078
 CONDUITS ENERGY (763) 323-4268
 XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.
 PURPOSE: _____
 DATE: _____ REC. NO. _____

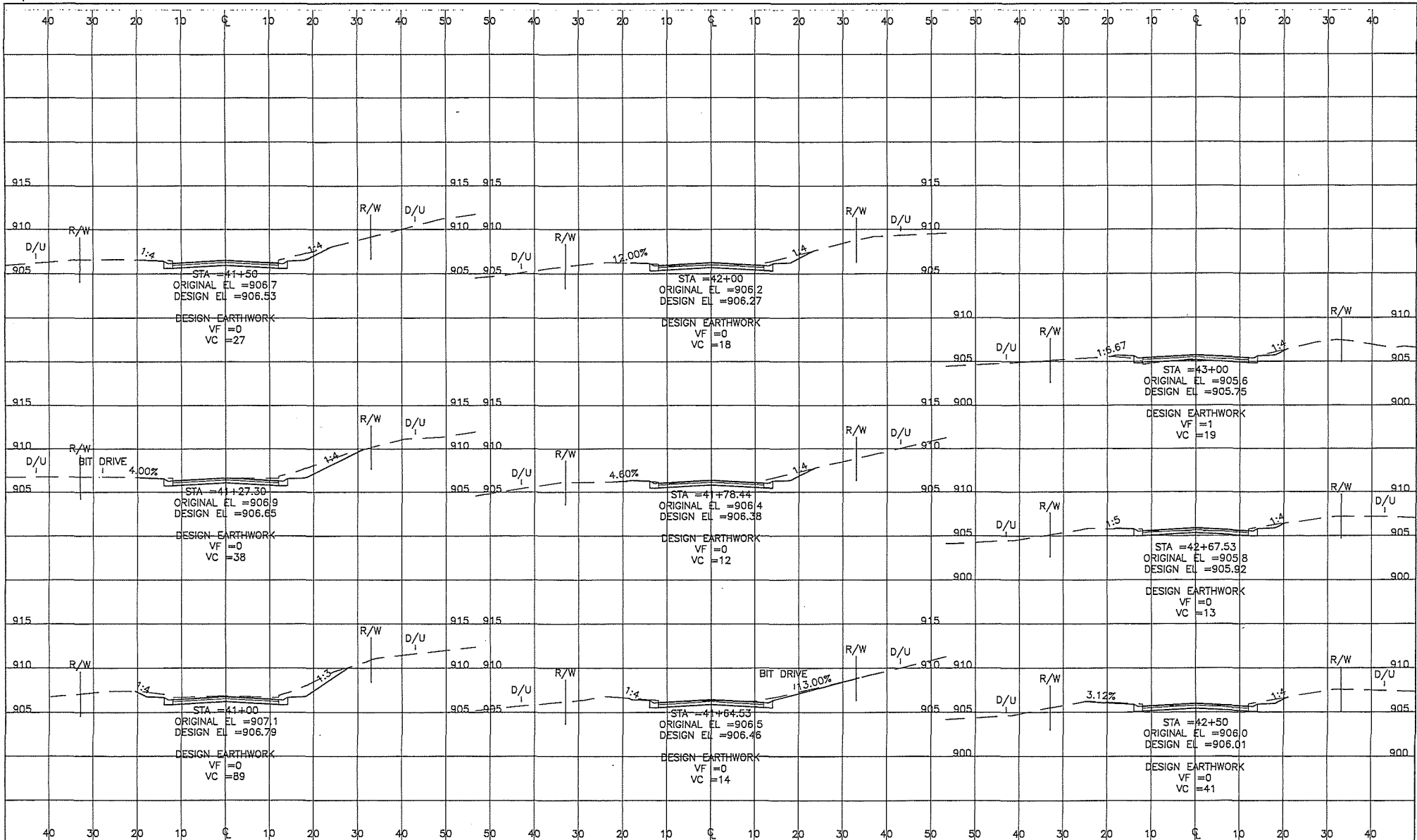
RFC ENGINEERING, INC.
Consulting Engineers

13635 Johnson Street
 Horn Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 160TH LANE CROSS SECTIONS

DWG: RCD03002
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 36 OF 44
 FILE: 35-1-165

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



GOPEK STATE ONE CALL
 800-252-1166 651-454-0002
 PLOT DATE: 02/29/21

UTILITIES:
 CENTURION ENERGY (763) 712-5017
 CENTERPOINT ENERGY (763) 323-2760
 COMCAST (922) 607-4078
 CONNEXUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4308

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: 02/25/21 REG. NO. 16052

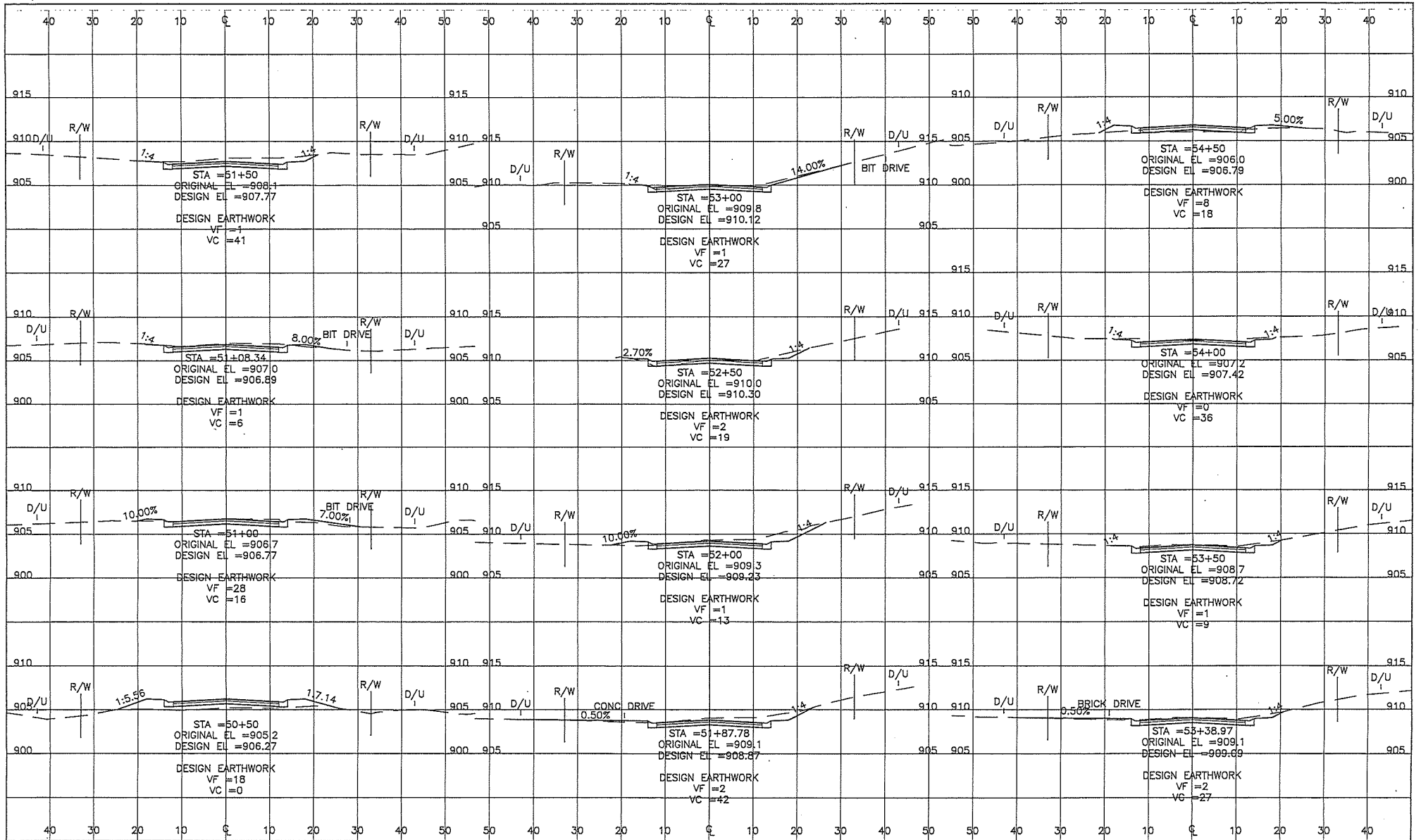
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 160TH LANE CROSS SECTIONS

DWG: RCD04002
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 37 OF 44
 FILE: 35-1-166

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



UTILITIES:
 CENTURILINK (763) 712-8017
 CENTERSHIFT ENERGY (763) 333-2760
 COMCAST (952) 807-4078
 COMHENSUS ENERGY (763) 323-4268
 XCEL ENERGY (612) 326-4908

800-252-1166 651-454-0002
 PLOT DATE: 04/29/21 1:35

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

PURPOSE: _____

DATE: _____ REG. NO.: _____

RFC ENGINEERING, INC.
 Consulting Engineers

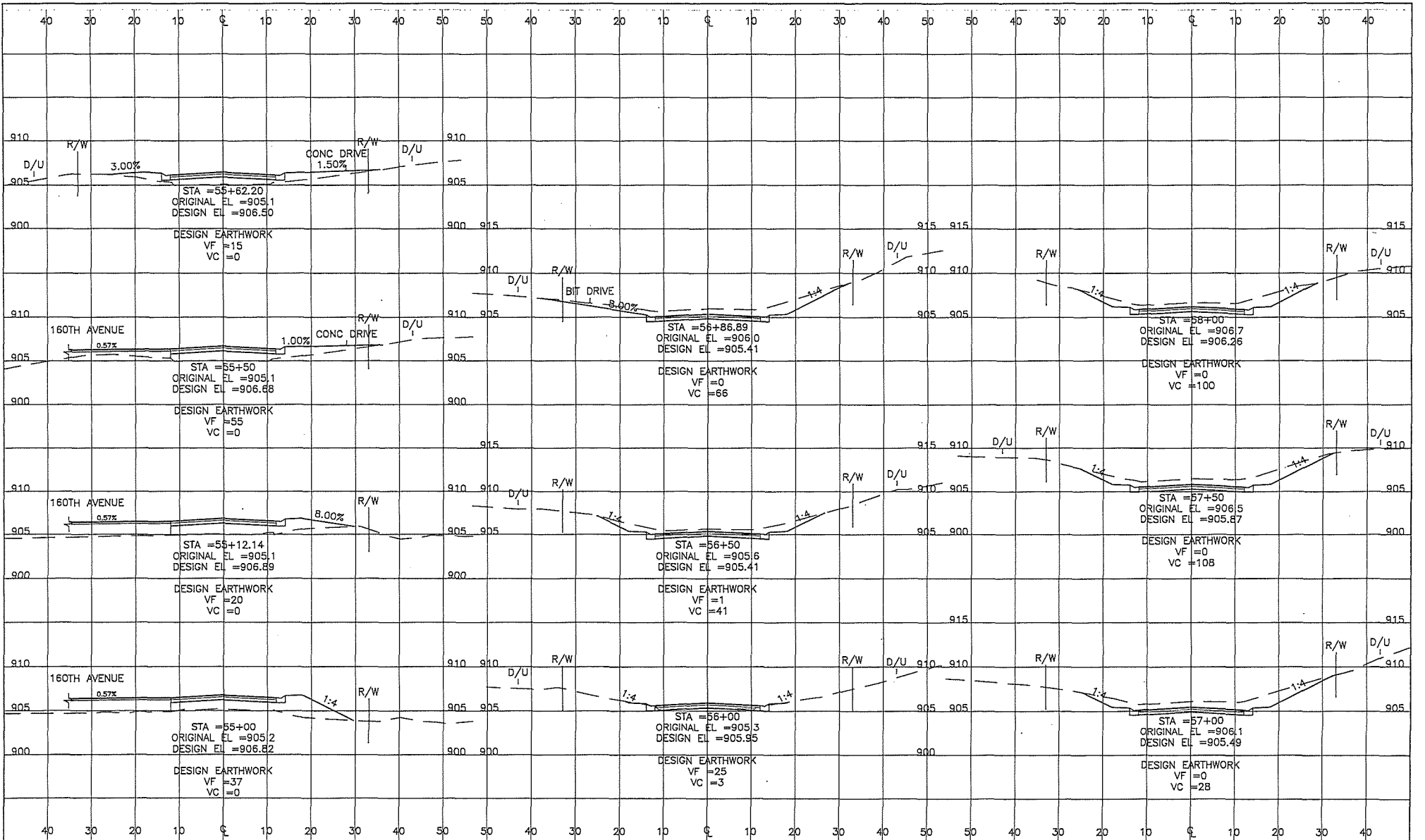
13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

ZUMBROTA STREET CROSS SECTIONS

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC

DWG: R001003
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 38 OF 44
 FILE: 35-1-167



800-252-1166 651-454-0002
 SUPER STATE ONE CALL

UTILITIES:
 CENTURYLAK (763) 712-5017
 CENTERPOINT ENERGY (763) 323-2766
 CONCAST (952) 807-4078
 CONNOROUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 326-4568

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DAILY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

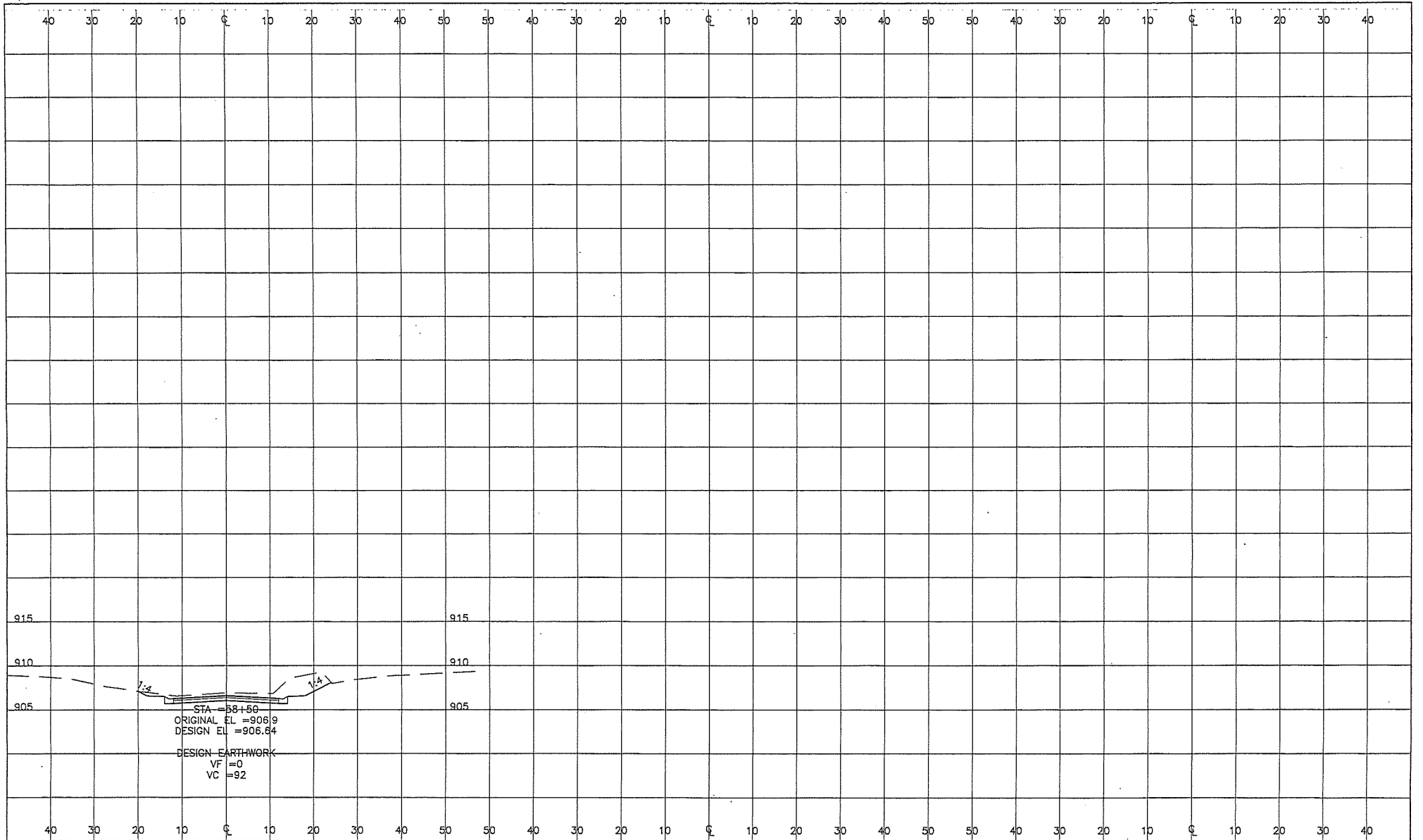
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 ZUMBROTA STREET CROSS SECTIONS

DWG:	RC002003
DATE:	04/29/21
JOB NUMBER:	1907
SHEET:	39 OF 44
FILE:	35-1-168

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



**GOPHER STATE
ONK CALL**
800-252-1166 651-454-0002
PLANT ENGINEER 11/2015

UTILITIES:
CENTURYLINK (763) 712-5077
CENTERPOINT ENERGY (763) 323-2760
COMCAST (952) 607-4076
CONNEXUS ENERGY (763) 323-4266
XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.
PURPOSE
DATE _____ REC. NO. _____

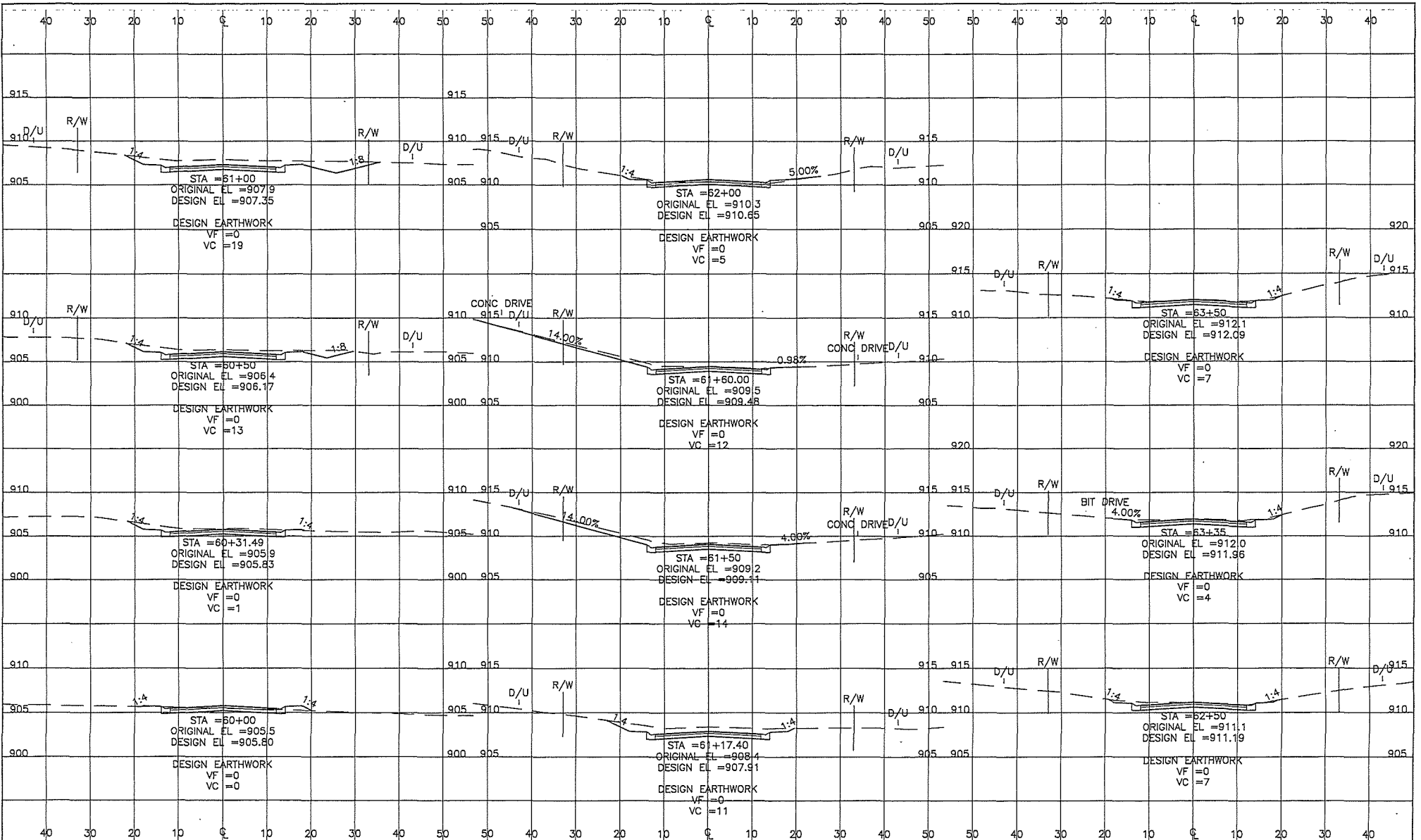
RFC ENGINEERING, INC.
Consulting Engineers

13635 Johnson Street
Ham Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS
ZUMBROTA STREET CROSS SECTIONS

DWG: RC003903
DATE: 04/29/21
JOB NUMBER: 1907
SHEET: 40 OF 44
FILE: 35-1-169

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



SOPHEM STATE
ONE CALL
 800-252-1166 651-454-0002
 PLOT DATE: 04/29/21

UTILITIES: CENTURYLINK (763) 712-5017
 CENTERPOINT ENERGY (763) 323-2760
 COMCAST (952) 607-4078
 COMEDUS ENERGY (763) 323-4288
 XCEL ENERGY (612) 526-4508

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

DATE: _____ REC. NO. _____

RFC ENGINEERING, INC.
 Consulting Engineers

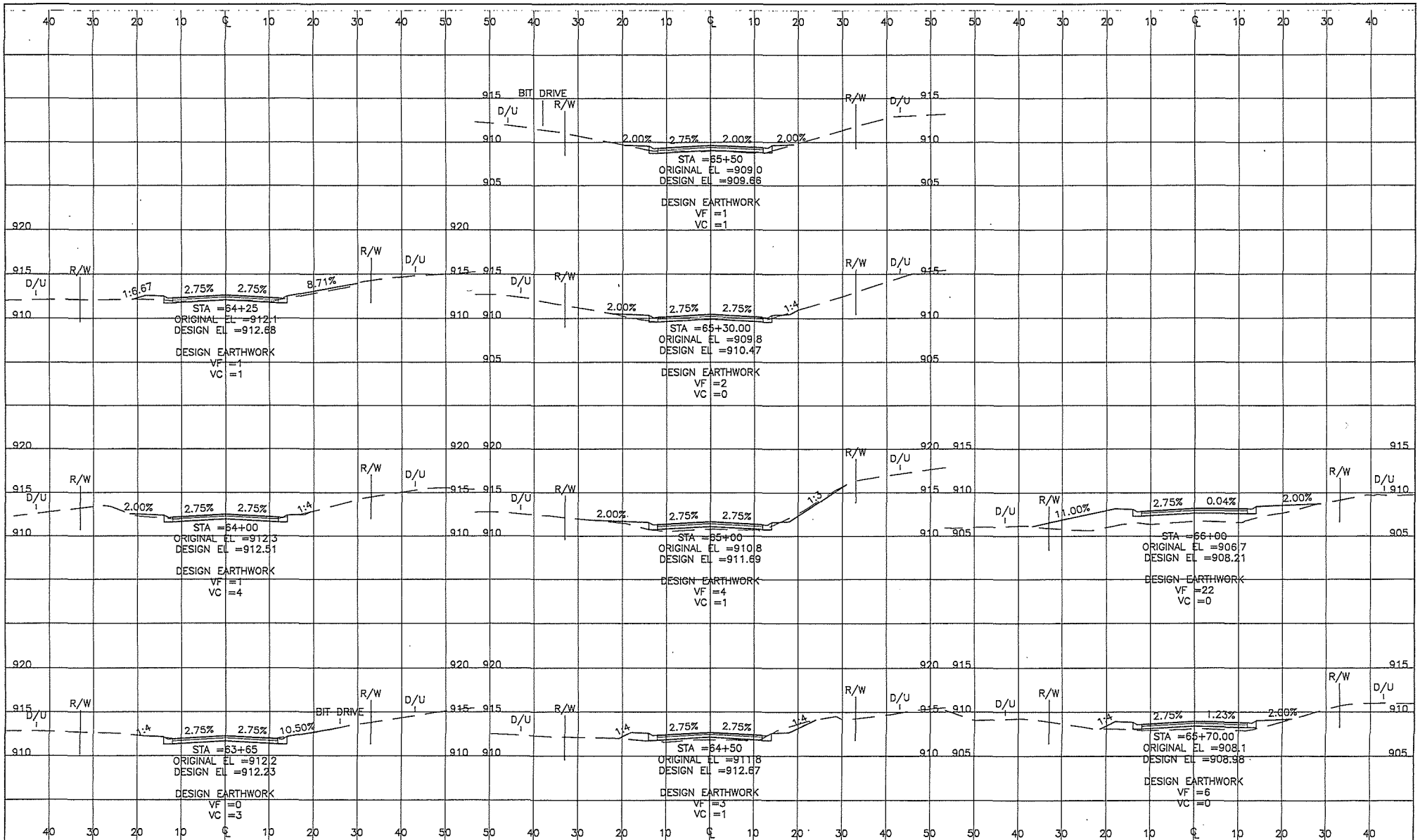
13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

ALAMO STREET CROSS SECTIONS

DWG: R0001004
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 41 OF 44
 FILE: 35-1-170

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



UTILITIES: CENTURYLINK (763) 712-9017
 CENTURPOINT ENERGY (763) 323-2760
 COMCAST (952) 607-4078
 CONNEXUS ENERGY (763) 323-4268
 XCEL ENERGY (612) 526-4508

800-252-1166 651-454-0002
 PLOT DATE: 07/29/21 10:53

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

PURPOSE

DATE: _____ REG. NO. _____

RFC ENGINEERING, INC.
 Consulting Engineers

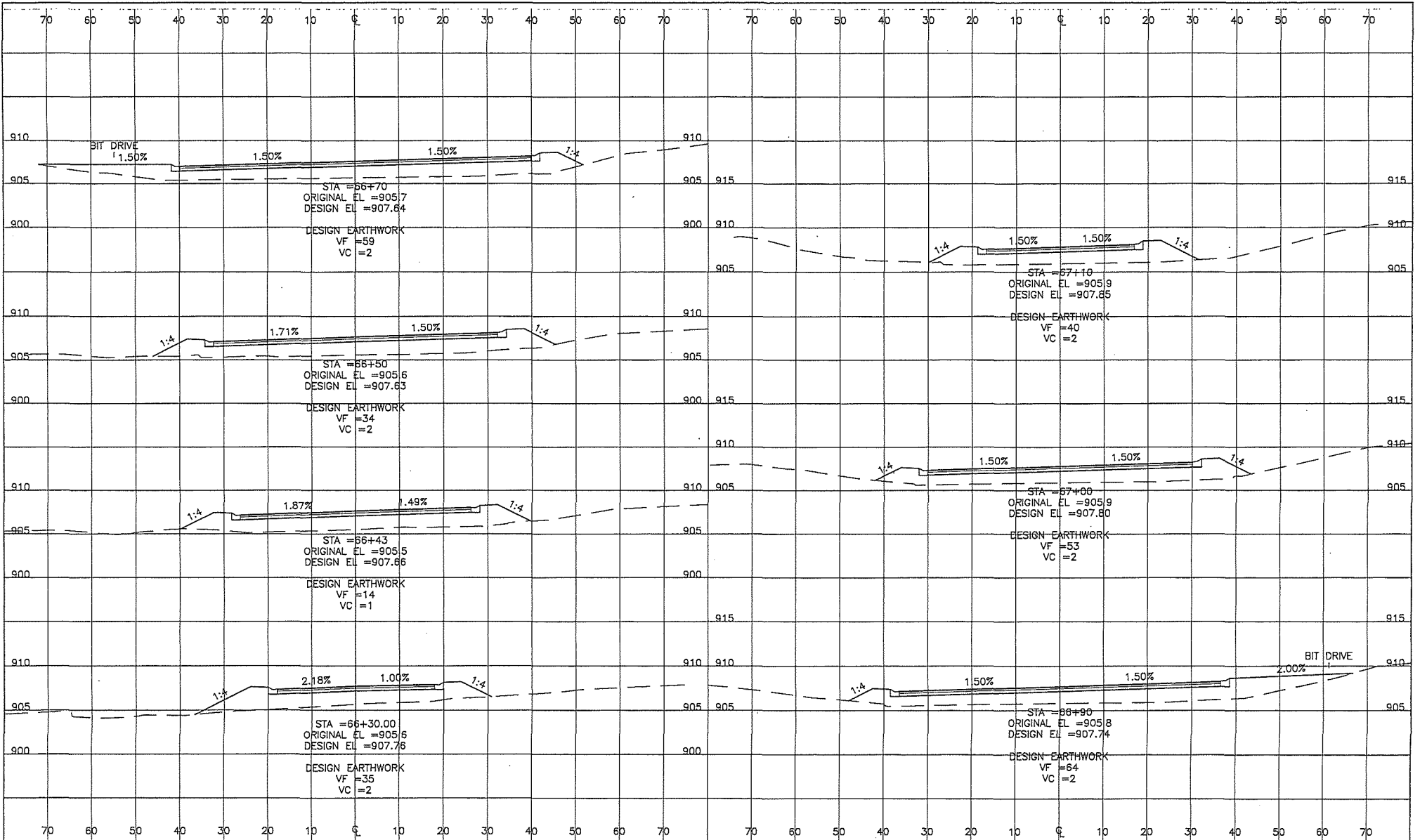
13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS

ALAMO STREET CROSS SECTIONS

DWG: RC022004
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 42 OF 44
 FILE: 35-1-171

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



SOPHIE STATE
ONE CALL
 800-252-1166 651-454-0002
PLANT DATE: 4/29/2021 1:12:05

UTILITIES:
 CENTURYLINK (763) 712-5917
 CENTERPOINT ENERGY (763) 323-2165
 COMCAST (952) 607-4078
 CONNOROUS ENERGY (763) 323-4268
 XCEL ENERGY (612) 526-4358

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.

PURPOSE: _____

DATE: _____ REC. NO.: _____

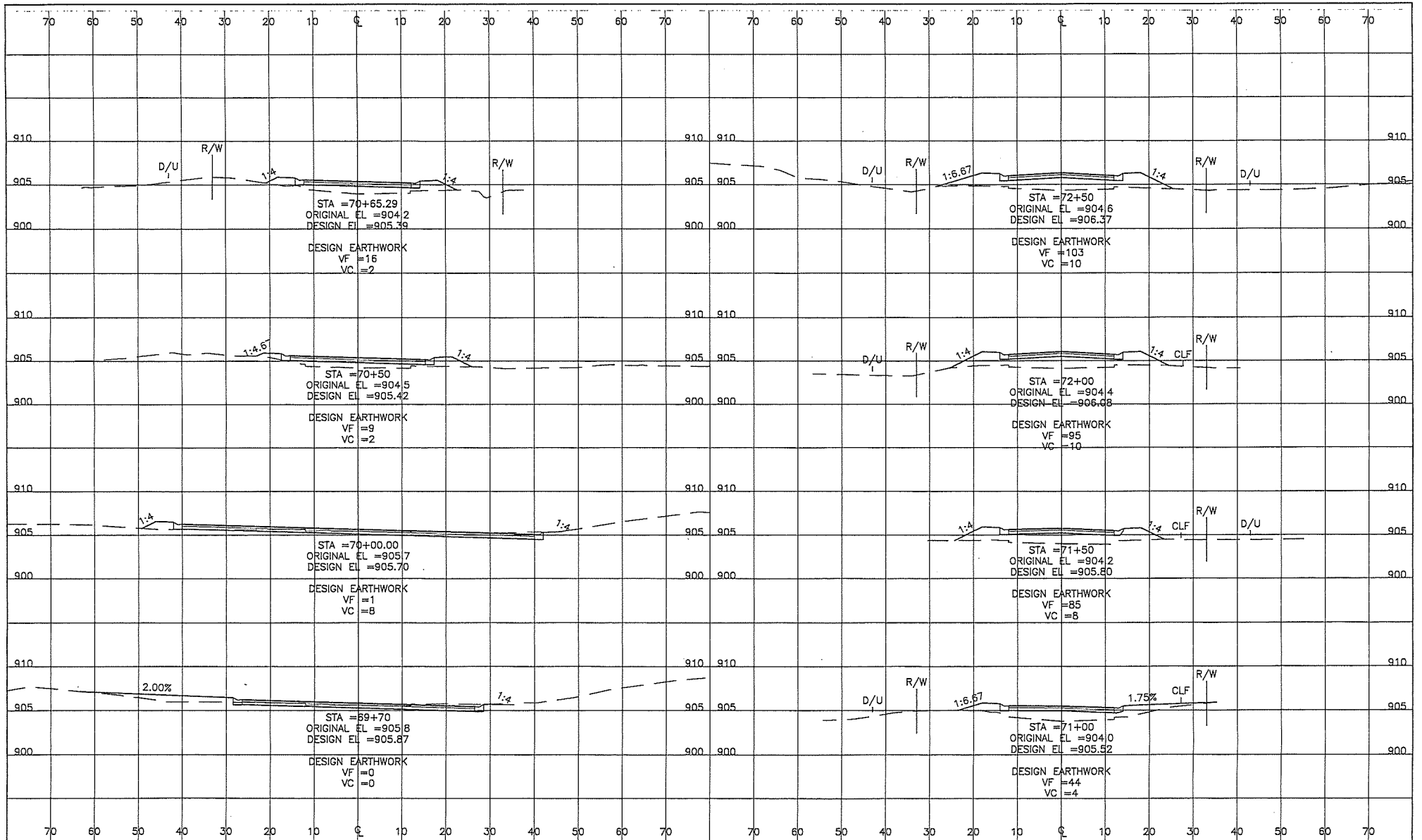
RFC ENGINEERING, INC.
 Consulting Engineers

13635 Johnson Street
 Ham Lake, MN 55304
 Telephone 763-862-8000
 Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
 LUND'S LAKEVIEW FOREST RECONSTRUCTION
 159TH AVE NE, 160TH LN NE, AND OTHERS
 ALAMO STREET CROSS SECTIONS

DWG: RC003004
 DATE: 04/29/21
 JOB NUMBER: 1907
 SHEET: 43 OF 44
 FILE: 35-1-172

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



**GOPHER STATE
ONE CALL**
800-252-1166 651-454-0002
PLANT DATE: 03/20/21

UTILITIES:
CENTURYLINK (763) 212-5017
CENTURYLINK ENERGY (763) 323-2700
COMCAST (952) 807-4078
CONNEXUS ENERGY (763) 323-4288
XCEL ENERGY (612) 326-4326

DATE	REVISION HISTORY

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MINNESOTA.
DATE: _____ REG. NO. _____

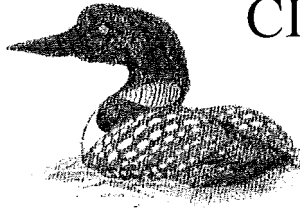
RFC ENGINEERING, INC.
Consulting Engineers

13635 Johnson Street
Ham Lake, MN 55304
Telephone 763-862-8000
Fax 763-862-8042

HAM LAKE IMPROVEMENT PROJECT 1907
LUND'S LAKEVIEW FOREST RECONSTRUCTION
159TH AVE NE, 160TH LN NE, AND OTHERS
160TH AVENUE CROSS SECTIONS

DWG: RC001005
DATE: 04/29/21
JOB NUMBER: 1907
SHEET: 44 OF 44
FILE: 35-1-173

DESIGN BY: GJM DRAWN BY: GJM CHECKED BY: TPC



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, APRIL 26, 2021

CALL TO ORDER: 6:00 p.m.

PLEDGE OF ALLEGIANCE

APPROVAL OF MINUTES: April 12, 2021

PUBLIC HEARINGS:

6:01 p.m. Jeff Stalberger, Crosstown Development, LLC, requesting Preliminary Plat approval and rezoning for Crosstown Rolling Acres 3rd Addition (49 Single Family Residential lots) in Section 6.

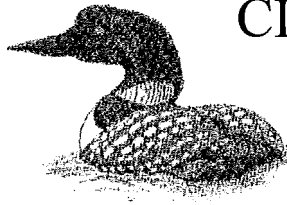
6:01 p.m. Jim Malvin and Tim Lang, Timber Valley Development, requesting Preliminary Plat approval and rezoning for Evergreen Estates (36 Single Family Residential lots) in Section 21.

NEW BUSINESS:

1. Classic Construction, Inc. requesting Commercial Site Plan approval to construct a 10,572 square foot daycare center at 13644 Radisson Road NE (PIN# 33-32-23-31-0006, Lot 9, Block 2 of Bunker Meadows).

COMMISSION BUSINESS:

1. City Council Update
2. Discussion of Article 9-220 of the City Code



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 MINUTES MONDAY, APRIL 26, 2021

The Ham Lake Planning Commission met for its regular meeting on Monday, April 26, 2021 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, Erin Dixon, Dave Ringler, Scott Heaton, Jonathan Fisher, and Jeff Entsminger

MEMBERS ABSENT: None

OTHERS PRESENT: City Engineer, Tom Collins and Building and Zoning Clerk, Jennifer Bohr

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

PLEDGE OF ALLEGIANCE:

The pledge of allegiance was recited by all in attendance.

APPROVAL OF MINUTES:

Motion by Ringler, seconded by Lejonvarn, to approve the minutes of the April 12, 2021 Planning Commission meeting as written. All in favor, motion carried.

PUBLIC HEARINGS:

Chair Pogalz asked the audience for a show of hands on who was present for the Crosstown Rolling Acres 3rd Addition public hearing. With the majority of the audience raising their hands, Chair Pogalz stated the order of public hearings would be changed; the public hearing for Evergreen Estates Preliminary Plat will be held first.

Jim Malvin and Tim Lang, Timber Valley Development, requesting Preliminary Plat approval and rezoning for Evergreen Estates (36 Single Family Residential lots) in Section 21

Jim Malvin was present. Mr. Malvin stated the development is located in the northwest corner of 153rd Avenue NE and Xylite Street NE and will have 36 single family residential lots. Mr. Malvin stated the Anoka County Highway Department has specific requirements for turn lanes into the development and those requirements have been incorporated into plans for the plat. Commissioner Fisher completed the inspection, a copy which is on file. Commissioner Fisher stated the area is primarily open field and appears suitable for a housing development. Chair Pogalz asked Engineer Collins to comment on the development. Engineer Collins stated the plans include construction of a 10-foot-wide path on the north side of 153rd Avenue NE right-of-way from Quamba Street NE to the

west; in addition, a 15-foot-wide path easement is included on four lots adjacent to Xylite Street NE. Engineer Collins stated there will be some minor modifications to the plans as the Anoka County Highway Department (ACHD) has agreed with the Developer's analysis that a northerly extension of Radisson Road into the plat was not feasible; the outlet to the development along 153rd Avenue NE will be via right-in/right-out turns at the Quamba Street NE intersection with a westbound right turn lane at Quamba Street NE, a west bound right turn lane and an east bound left run lane at Urbank Street NE and a south bound right turn lane and a north bound left turn lane at 154th Lane NE; the ACHD will permit driveway access onto County Road 61 for Lots 1, 2, 9 and 10 of Block 5; the driveways must be located directly adjacent to the side yard drainage and utility easements shared by Lots 1 and 2 and Lots 9 and 10. Engineer Collins stated the Coon Creek Watershed District has given conditional approval of the project. Chair Pogalz stated he was surprised that the ACHD did not want to extend Radisson Road NE to the north. Engineer Collins stated ACHD did want to extend Radisson Road NE north, however, the developer was able to prove doing so was not feasible as it would require a ditch crossing and have wetland impacts on property outside of their control. Engineer Collins stated the ACHD determined the westerly access would then be Quamba Street NE which aligns with the Quamba Street NE in the Radisson Sunset Estates development directly to south of Evergreen Estates.

Chair Pogalz opened the public hearing at 6:08 p.m. and asked for public comment.

Brett Schneider, 15326 Yancy Street NE, stated he lives in the Harmony Estates development to the east of this proposed development. Mr. Schneider asked if there would be an outlet to Xylite Street NE and would turn lanes be added that would widen Xylite Street NE. Mr. Schneider stated he is concerned that trees on the east side of Xylite Street NE, that currently provide a buffer for road noise, would be removed.

Chair Pogalz stated there will be access to the development off of Xylite Street NE. Engineer Collins stated northbound left and southbound right turn lanes will be added; no additional grading is proposed outside of the development boundaries.

Chris Hynes, 15260 Nightingale Street NW, Andover, stated he was present representing Slyzuk Family Farms LLC, owners of the property directly north of the proposed Evergreen Estates development. Mr. Hynes asked why he hadn't seen a map of the development until now; it is difficult to have questions when the only information sent to them was the legal description of the proposed development. Mr. Hynes stated there is an access easement on the west end of the proposed plat. Engineer Collins stated the proposed development does include a stub street on northern border. Mr. Hynes stated he is concerned that construction debris will blow into the ditch on the northern border of the development and asked that a four-foot snow fence be installed to try to contain debris.

Mary Ann Slyzuk, 14124 Crosstown Boulevard NW, Andover, asked if the field road easement would be impacted by the development.

Engineer Collins stated the field road within the access easement is in the southwest corner off of 153rd Avenue NE, traversing to the north within the westerly 33-feet of the proposed plat, and the easement will remain as is; it has not been included in the livability of any of the adjacent lots. Chair Pogalz asked what the City's process was for notifying adjacent property owners of land use applications. Building and Zoning Clerk Bohr stated all adjacent property owners, within a given radius, are sent letters; the notice is published in the Star Tribune, a notice is posted on a City bulletin board, a sign is posted on the property 10 days prior to the meeting and information is on the City's website; various types of notifications include city telephone numbers the residents can call if they have questions or need additional information.

Chair Pogalz asked for further public comment and with there being none, he closed the public hearing at 6:18 p.m.

Motion by Fisher, seconded by Entsminger, to recommend approval of the Preliminary Plat and rezoning to R-1 (single family residential) the development of Evergreen Estates consisting of 36 single family residential lots in Section 21 as submitted by Jim Malvin and Tim Lang of Timber Valley Development, subject to updating the plans as required by and meeting the requirements, of the Anoka County Highway Department, meeting the recommendations of the City Engineer, and meeting all City, State and County requirements. All in favor, motion carried. This item will be placed on the May 3, 2021 City Council Agenda.

Chair Pogalz asked Mr. Malvin to speak with Mr. Lang about controlling trash and debris within the development during construction. Mr. Malvin stated he would.

Jeff Stalberger, Crosstown Development, LLC, requesting Preliminary Plat approval and rezoning for Crosstown Rolling Acres 3rd Addition (49 Single Family Residential lots) in Section 6

Jeff Stalberger was present. Mr. Stalberger stated the northwest section of the plat will have 12 lots which will outlet onto County Highway 58; the Anoka County Highway Department (ACHD) is requesting a bypass lane and a turn lane going into that section of the development. Mr. Stalberger stated the intersection of 173rd Avenue NE and Crosstown Boulevard NE will be realigned to make it safer; the intersection will have right and left turn lanes onto 7th Street NE and 173rd Avenue NE with bypass lanes in each direction on Crosstown Boulevard NE. Mr. Stalberger stated the current intersection of 173rd Avenue NE and Crosstown Boulevard NE in the southwesterly portion of the development will be closed; with the closure will be the creation of Outlots A, B and C; the Outlots will be combined with adjacent parcels to the south. Mr. Stalberger stated driveways will change for three parcels near the newly aligned intersection; the land and new paved access onto the street or highway will be done at no expense to the homeowners. Mr. Stalberger stated a three-acre park will be located northeast of the intersection of 173rd Avenue NE and Terrace Road NE. Mr. Stalberger stated endangered butternut trees have been found within the development; a permit from the DNR will be required to remove them. Mr. Stalberger stated two houses were located within the proposed third addition of the plat; both have been taken down and the sites have been cleared of debris. Chair Pogalz asked if there would be access to Polk Street NE on the

far east side of this addition. Mr. Stalberger stated there will be. Commissioner Lejonvarn asked if 7th Street NE, on the opposite side of Crosstown Boulevard NE from the new alignment of 173rd Avenue NE, would need to be changed. Mr. Stalberger stated it would not, only parts of the current temporary cul-de-sac would need to be removed along with a temporary 173rd Lane access point on County Road 58. Chair Pogalz asked Mr. Stalberger if he had met with the residents impacted by driveway changes or was tonight the first notification for them that their driveways and roadway access was going to change. Engineer Collins stated he believes Mr. Stalberger's consultant sent letters to the property owners about changes to their driveways. Commissioner Ringler completed the inspection, a copy which is on file. Commissioner Ringler stated the area is open land and trees. Commissioner Ringler stated his primary concern was street access and addressing the hazardous intersection at 173rd Avenue NE and Crosstown Boulevard NE which has been discussed.

Chair Pogalz opened the public hearing at 6:32 p.m. and asked for public comment.

Kelan Schuster, 17413 Polk Street NE, stated he was concerned that the intersection of 173rd Avenue NE and Crosstown Boulevard NE would be closed causing more traffic to drive by his house and wanted reassurance that it will be realigned and not closed. Mr. Schuster asked where water will drain to in the new addition and also asked who is responsible for paving existing streets.

Chair Pogalz confirmed that the intersection of 173rd Avenue NE and Crosstown Boulevard NE will be realigned and not closed. Chair Pogalz stated the City is responsible for paving existing streets unless the road is a County Road. Engineer Collins stated an overlay for Polk Street NE is scheduled for 2022; water in the new addition will drain to the west and be contained within the area of the third addition. Chair Pogalz directed Mr. Schuster to contact city staff with his concerns about road maintenance and sediment in drainage areas.

Jim Calverley, 510 173rd Avenue NE, stated he had expected more communication about the advancement of this development between 2018 and now. Mr. Calverley stated he was concerned about the closure of the intersection at 173rd Avenue NE and Crosstown Boulevard NE. Mr. Calverley asked if power poles on the north side of 173rd Avenue NE were going to be moved, what improvements are proposed for 173rd Avenue NE as the road is absolutely terrible, and is the developer going to make improvements to 173rd Avenue NE. Chair Pogalz stated this is the first time in over a year the Planning Commission has received updated information on this development; other work has been done on the project behind the scenes internally at the city; communication is not sent out until the development reaches the preliminary plat stage. Engineer Collins stated the intersection of 173rd Avenue NE and Crosstown Boulevard NE will be realigned, not closed. Engineer Collins stated the City Council's position on roads is that property owners should pay for a street once; 173rd Avenue NE has never been paid for residents who have property abutting that road. Engineer Collins stated in 2018, when the sketch plan for the overall development of Crosstown Rolling Acres was presented, and had some lots with driveways along 173rd Avenue NE, residents in the area signed a petition for upgrading 173rd Avenue NE. Engineer Collins stated the feasibility study done at that

time included projected funding to be provided by developer to improve the road; the proposed assessment to each property owner at that time was \$16,000 per parcel; the majority of the property owners rejected the assessment during a public hearing held to get input on the improvement of 173rd Avenue NE. Engineer Collins stated city council members supported the improvement project; they felt it was not in the residents' best interest to reject the assessment but they were not going to force the street improvement on them. Commissioner Heaton asked for clarification on what part of 173rd Avenue NE would be improved with the realignment of the intersection. Engineer Collins stated new pavement would be put in place from the easterly edge of Terrace Road NE where it intersects with 173rd Avenue NE west to the intersection of 173rd Avenue NE at Crosstown Boulevard NE. Engineer Collins stated driveways along the realigned portion of the road will be paved and the improved portion of the road will have concrete curb and gutter. Engineer Collins stated there may be some realignment of power poles along the improved portion of 173rd Avenue NE; that issue will be reviewed later during the permitting and construction process.

Curtis Sharp, 700 173rd Avenue NE, stated he was one of the residents opposed to the assessment discussed in 2018 as it would have cost him \$96,000. Mr. Sharp stated 173rd Avenue NE is deteriorating, like Polk Street NE, and feels the potholes should be filled in to make the roads smoother. Mr. Sharp stated he feels road signs are needed to warn motorists of children at play and 30 mph speed limit signs should be placed throughout the development for safety of the children and residents. Commissioner Lejonvarn asked what the maintenance schedule was for dirt roads. Engineer Collins stated 173rd Avenue NE was a dirt road; reclaimed millings were placed on 173rd Avenue NE approximately twenty years ago but have since deteriorated; at some point 173rd Avenue NE will be converted to a gravel road by reclaiming the bituminous milling surface.

Jean Rono, 609 173rd Avenue NE, asked what type of park will be located in the development, where will the park be and how will it be accessed. Ms. Rono stated there was talk of walking paths on both sides of County Road 18 at one time; will there be walking paths and where would they be located. Chair Pogalz stated land has been dedicated for a park but no specific improvements have been proposed; trails would be part of overall city and county parks and trails plan, they are not part of this development. Engineer Collins stated there may be trails in the county right-of-way someday. Engineer Collins stated a number of parking stalls have been proposed internal to the park on the easterly part of the proposed east/west Terrace Road. Ms. Rono stated cars, big trucks and semi-trucks are parking along Polk Street NE all the time; she is concerned a child will run out from behind these vehicles and get hit. Ms. Rono stated the road is not wide enough for vehicles to park be parking along the street. Ms. Rono stated the roads in the area of this development are like a freeway now with several large trucks and semis traveling on them; does the City have any restrictions on vehicle size on these roads. Chair Pogalz directed Ms. Rono to contact city staff with her concerns. Ms. Rono stated she opposed the assessment to improve 173rd Avenue NE in 2018 because she didn't feel \$16,000 was a fair amount to pay; she thought there was going to be more discussion on options to fund the improvement. Commissioner Lejonvarn reiterated that the City Council held a public hearing for improvements on 173rd Avenue NE and accepted the residents' rejection of paying an assessment to improve the road.

Debbie Calverley, 510 173rd Avenue NE, asked for clarification on where road improvements will be done in the development. Chair Pogalz showed Ms. Calverley the improvements which was the new Terrace Road NE and 174th Avenue NE through the 3rd Addition, 173rd Avenue NE west from Terrace Road NE to the newly realigned intersection at Crosstown Boulevard NE.

Chair Pogalz asked for further public comment and with there being none, he closed the public hearing at 7:16 p.m.

Chair Pogalz asked Engineer Collins to comment on the development. Engineer Collins stated Mr. Stalberger addressed most of the significant matters concerning the development. Engineer Collins stated the county is requiring substantial road improvements. Engineer Collins stated where 173rd Avenue NE intersects with Crosstown Boulevard NE, the road directly across Crosstown Boulevard NE is 7th Street NE; that road will extend to Crosstown Boulevard NE and an existing temporary cul-de-sac will be removed; the two side streets at that intersection will require left, through and the right turn lanes in both directions; a temporary 173rd Lane access point on County Road 58, west of Concord Drive NE, will also be removed. Engineer Collins stated Mr. Stalberger provided information on the outlots that will be created; the developer will upgrade and pave the driveways of the three parcels affected the intersection realignment. Engineer Collins stated the development agreement will address license agreements that are required a few lots for septic lines and a driveway crossing drainage and utility easements. Engineer Collins stated three lots require Letters of Map Amendment (LOMA) from FEMA; plans demonstrate they will not be in a flood zone; no building permits can be issued for Lot 15, Block 1 and Lots 11 and 12, Block 3 until LOMA's have been received for those lots. Engineer Collins stated two different watershed districts are involved and all requirements for both watersheds have been met. Engineer Collins stated the Upper Rum River Watershed Management Organization has some specific requirements for areas that have vegetation removed in buffer areas during construction; the development agreement will address who is responsible for the maintenance of the buffer areas. Engineer Collins stated Mr. Stalberger must obtain a permit from the DNR to remove butternut trees on the site; construction cannot commence until the City and watershed districts receive a copy of the DNR permit.

Motion by Ringler, seconded by Lejonvarn, to recommend approval of the Preliminary Plat and rezoning to R-1 (single family residential) the development of Crosstown Rolling Acres 3rd Addition consisting of 49 single family residential lots in Section 6 as submitted by Jeff Stalberger of Crosstown Development, LLC, subject to meeting the requirements of the Anoka County Highway Department, meeting the requirements of Coon Creek Watershed District and the Upper Rum River Watershed District, obtaining FEMA letters of map amendment (LOMA) for Lot 15, Block 1, Lots 11 and 12, Block 3, obtaining a Special Permit from the DNR to remove 49 butternut trees and providing a copy of the permit to the City and the watershed districts, meeting the recommendations of the City Engineer, and meeting all City, State and County requirements. All in favor, motion carried. *This item will be placed on the May 3, 2021 City Council Agenda.*

NEW BUSINESS:

Classic Construction, Inc. requesting Commercial Site Plan approval to construct a 10,572 square foot daycare center at 13644 Radisson Road NE (PIN# 33-32-23-31-0006, Lot 9, Block 2 Bunker Meadows)

Steve Plienis, Project Manager for Classic Construction was present. Mr. Plienis stated they plan to construct a 10,572 square foot daycare center with playgrounds on the north and south sides of the building. Mr. Plienis stated there will be 20 staff members on duty caring for up to 110 children each day. Mr. Plienis stated the owners of the daycare center also operate centers in Andover and Hugo. Commissioner Dixon completed the inspection, a copy which is on file. Commissioner Dixon stated the location is currently a vacant lot with residential property to the west and south with trees on the southern border for screening; the site plan identifies additional trees that will be planted in the southwest corner and along the southern property line. Commissioner Dixon stated parking identified on the site plan appears to be adequate. Commissioner Heaton asked if there would be fencing at the site. Mr. Plienis stated semi-private, vinyl fencing will be installed in the back of the building and around playground areas. Mr. Plienis stated the Anoka County Highway Department (ACHD) approved a right-in turn lane along Radisson Road NE. Engineer Collins stated the (non-residential) lot is part of the 1998 Bunker Meadows development. Engineer Collins stated the ACHD has approved the plans and a turn lane; the Coon Creek Watershed District (CCWD) has approved the plans; an Operations and Maintenance Agreement for Stormwater Facilities needs to be executed between the daycare center and CCWD for on-site stormwater treatment. **Motion by Dixon, seconded by Ringler, to recommend approval of the Commercial Site Plan submitted by Classic Construction, Inc., to construct a 10,572 square foot daycare center at 13644 Radisson Road NE (PIN# 33-32-23-31-0006, Lot 9, Block 2 Bunker Meadows) subject to meeting the requirements of Article 11-1853 related to screening where commercially zoned property is adjacent to residential areas, meeting the requirements of the Anoka County Highway Department and the Coon Creek Watershed District, meeting the requirements of the City Engineer and meeting all City, State and County requirements. All in favor, motion carried. This item will be placed on the May 3, 2021 City Council Agenda.**

COMMISSION BUSINESS:

City Council Update

Commissioner Lejonvarn attended the April 19, 2021 City Council meeting. Commissioner Fisher will be attending the May 3, 2021 City Council meeting.

Discussion of Article 9-220 of the City Code

The commissioners discussed possible modifications to Article 9-220. It was the consensus of the Commission to table discussion on changes to Article 9-220 until a future meeting so that everyone could have an opportunity to review the code more thoroughly and prepare a list of potential changes.

ADJOURNMENT:

Motion by Heaton, seconded by Fisher, to adjourn the Planning Commission meeting at 7:41 p.m. All 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 7/21/2020

Date of Receipt _____

Receipt # _____

Meeting Appearance Dates:

Planning Commission X 4-26-2021

City Council 5-3-2021

Please check request(s):

Metes & Bounds Conveyance

Commercial Building Permit

Sketch Plan

Certificate of Occupancy

Preliminary Plat Approval*

Home Occupation Permit

Final Plat Approval

Conditional Use Permit (New)*

Rezoning*

Conditional Use Permit (Renewal)

Multiple Dog License*

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: Crosstown Development LLC

Address/Location of property: Co. RD. 58 & Crosstown Blvd.

Legal Description of property: Outlot A - Crosstown Rolling Acres / Outlot A C.R.A 2nd Add

PIN # 06-32-23-32-0002 06-32-23-34-0002 *0004 Current Zoning R-A Proposed Zoning R-1

Notes: 06-32-23-43-0002 *0006 Crosstown Rolling Acres 3rd Add.
06-32-23-44-0011

Applicant's Name: Jeffrey Stalburger

Business Name: Crosstown Development LLC

Address 17404 WARD LK. Dr. NW

City Andover State Mn. Zip Code 55304

Phone 12-799-1471 Cell Phone _____ 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 7/21/2020

- FOR STAFF USE ONLY -

ACTION BY: Planning Commission 4-26-2021
City Council _____

PROPERTY TAXES CURRENT YES NO

ORDINANCE NO. 21-XX

AN ORDINANCE AMENDING A PORTION OF CHAPTER 9 OF THE CITY OF HAM LAKE, COUNTY OF ANOKA, STATE OF MINNESOTA.

The City Council of the City of Ham Lake does hereby ordain as follows, pursuant to Article 9 of the Ham Lake City Code.

That the zoning classification for the following described property situated in the City of Ham Lake, Anoka County, Minnesota is hereby designated R-1 (Single Family Residential) (Crosstown Rolling Acres 3rd Addition).

The land referred to herein is situated in the State of Minnesota, Anoka County described as follows:

Outlot A, CROSSTOWN ROLLING ACRES, Anoka County, Minnesota.

AND

Outlot A, CROSSTOWN ROLLING ACRES SECOND ADDITION, Anoka County, Minnesota.

AND

That part of the Northwest Quarter of Southwest Quarter of Section 6, Township 32, Range: 23, Anoka County, Minnesota, lying southerly and southwesterly of the centerline of County Road No. 58 (A.K.A. 177th Avenue N.E.).

AND

That part of the South Half of the Southwest Quarter of Section 6, Township 32, Range 23, Anoka County, Minnesota, lying southeasterly of the southerly right of way line of C.S.A.H. No. 18 (A.K.A. Crosstown Boulevard N.E.).

AND

That part of the South Half of the Southwest Quarter of the Southeast Quarter of Section 6, Township 32, Range 23, Anoka County, Minnesota, lying southerly and southeasterly of the southerly right of way line of C.S.A.H. No. 18 (A.K.A. Crosstown Boulevard N.E.).

EXCEPT THAT PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 6 DESCRIBED AS FOLLOWS:

Commencing at the Southwest corner of the Southwest Quarter of the Southeast Quarter of said Section 6; thence North along the West line of said Southwest Quarter of Southeast Quarter a distance of 300 feet; thence East and parallel with the South line of said Southwest Quarter of Southeast Quarter a distance of 616 feet; thence South and parallel with the West line of said Southwest Quarter of Southeast Quarter a distance of 300 feet, to the South line of said Southwest Quarter of Southeast Quarter; thence West along said South line to the point of beginning.

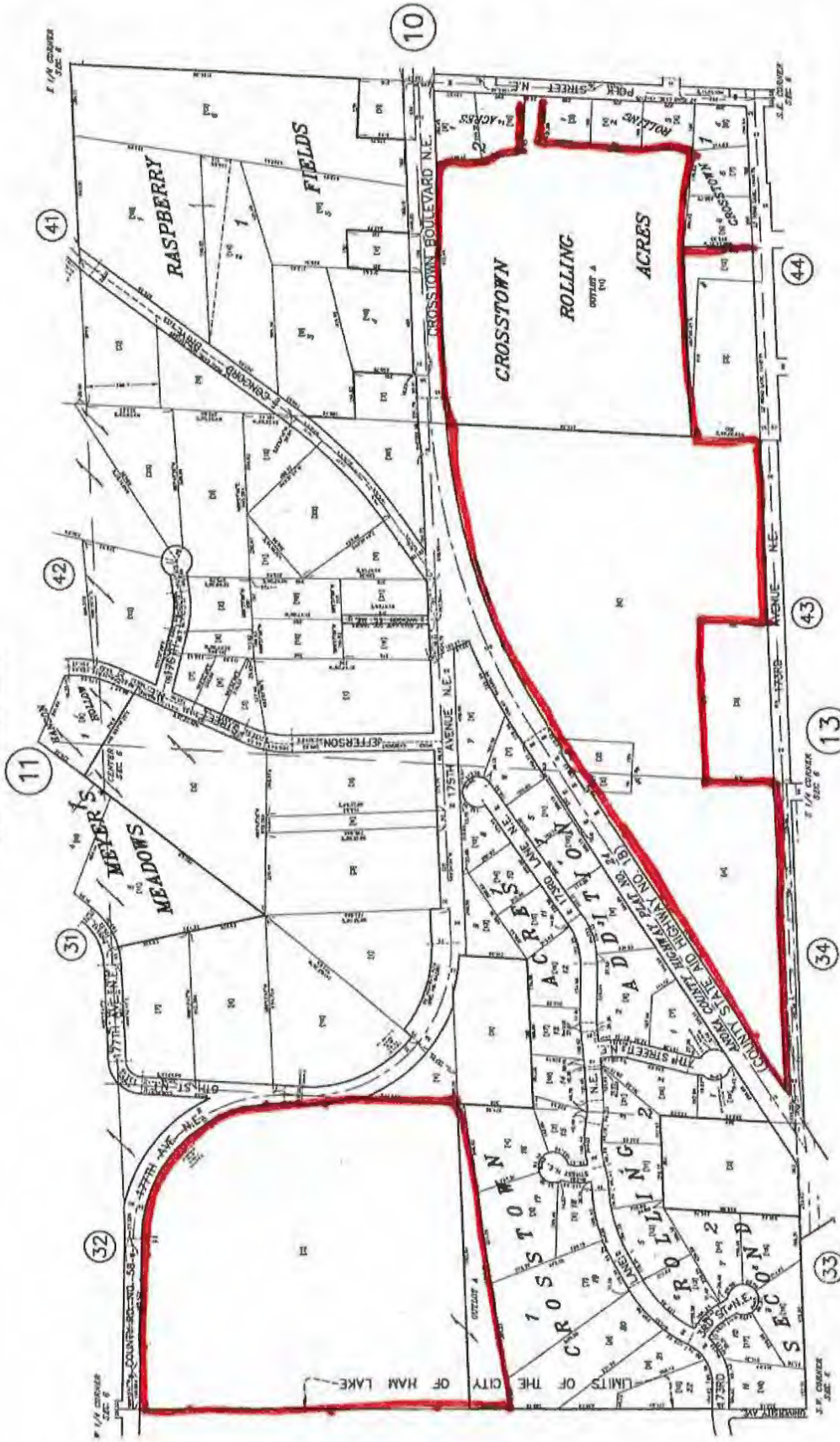
**Presented to the Ham Lake City Council on May 3, 2021 and adopted by a unanimous vote
this _____ day of _____, 2021.**

Michael G. Van Kirk, Mayor

Denise Webster, City Clerk

S 1/2 SECTION 6, T. 32, R. 23

CITY OF HAM LAKE



CITY OF ANDOVER

THIS IS A COMPILATION OF RECORDS AS THEY APPEAR IN THE ANOKA COUNTY RECORDS. THIS DRAWING IS TO BE USED ONLY FOR REFERENCE PURPOSES AND THE COUNTY RECORDS SHALL BE THE AUTHORITY IN ALL MATTERS HEREIN. (PLAT) 22-03-130

PROPERTY IDENTIFICATION NUMBER
 Section Township Range Quarter Specific
 Number Number Number Number Parcel
 XX XX XX XX XXXX
 SPECIFIC PARCEL NUMBERS ARE IN BRACKETS ()
 EXAMPLE OF PIN NUMBER: 96-23-23-34-0004

QUARTER QUARTER INDEX

NORTH HALF OF SECTION				SOUTH HALF OF SECTION			
22	21	12	11	23	24	13	14

ANOKA COUNTY
 SURVEYOR'S OFFICE
 ROOM 214
 2100 3RD AVENUE
 ANOKA, MN 55403
 (763) 224-1300





CITY OF HAM LAKE

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

NOTICE OF PUBLIC HEARING
CITY OF HAM LAKE
COUNTY OF ANOKA
STATE OF MINNESOTA

TAKE NOTICE, that pursuant to the requirements of Minnesota Law, a public hearing shall be held before the Ham Lake Planning Commission on Monday, April 26, 2021 at 6:01 p.m. at the City Hall located at 15544 Central Avenue NE for the purpose of considering the application of Jeff Stalberger, Crosstown Development, LLC, requesting preliminary plat approval and rezoning to R-1 (single family residential) for the development of Crosstown Rolling Acres 3rd Addition (49 residential single family lots) located in Section 6, a parcel of certain land situated in the City of Ham Lake, Anoka County, Minnesota and which is described as follows to wit:

Outlot A, CROSSTOWN ROLLING ACRES, Anoka County, Minnesota.

AND

Outlot A, CROSSTOWN ROLLING ACRES SECOND ADDITION, Anoka County, Minnesota.

AND

That part of the Northwest Quarter of Southwest Quarter of Section 6, Township 32, Range: 23, Anoka County, Minnesota, lying southerly and southwesterly of the centerline of County Road No. 58 (A.K.A. 177th Avenue N.E.).

AND

That part of the South Half of the Southwest Quarter of Section 6, Township 32, Range 23, Anoka County, Minnesota, lying southeasterly of the southerly right of way line of C.S.A.H. No. 18 (A.K.A. Crosstown Boulevard N.E.).

AND

That part of the South Half of the Southwest Quarter of the Southeast Quarter of Section 6, Township 32, Range 23, Anoka County, Minnesota, lying southerly and southeasterly of the southerly right of way line of C.S.A.H. No. 18 (A.K.A. Crosstown Boulevard N.E.).

EXCEPT THAT PART OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 6 DESCRIBED AS FOLLOWS:

Commencing at the Southwest corner of the Southwest Quarter of the Southeast Quarter of said Section 6; thence North along the West line of said Southwest Quarter of Southeast Quarter a distance of 300 feet; thence East and parallel with the South line of said Southwest Quarter of Southeast Quarter a distance of 616 feet; thence South and parallel with the West line of said Southwest Quarter of Southeast Quarter a distance of 300 feet, to the South line of said Southwest Quarter of Southeast Quarter; thence West along said South line to the point of beginning.

At such hearing both written and oral comments will be heard.

DATED: April 16, 2021

Jennifer Bohr
Zoning and Building Clerk
City of Ham Lake

Jennifer Bohr

From: tessahop@yahoo.com
Sent: Tuesday, April 27, 2021 10:33 AM
To: Jennifer Bohr
Subject: Crosstown Rolling Acres Project

Received after public hearing was held.

Caution: This email originated outside our organization; please use caution.

Good Morning Jennifer,

My name is Tessa Hop, I live on Crosstown BLVD & CR-58. I am writing this email to formally object to the zoning project of the Crosstown Rolling Acres. Jeff Stalberger is taking over our quiet neighborhood for his profit. He already has two developments in the process, he should not be allowed to build on wetland. We already have traffic issues on Crosstown Blvd & CR-58 as it is, adding more developments will only further increase these problems. Also, we have noticed that the wildlife has been severely disrupted by his projects. I believe these concerns should greatly impact your decision on approving this project.

Thank you,
Tessa Hop
763-710-0713

11-177th Ave. NW, Andover

Memorandum

Date: April 22, 2021
To: Planning Commissioners
From: Tom Collins, City Engineer *TPC*
Subject: Crosstown Rolling Acres Third Addition

Introduction:

The Preliminary Plat, Grading, Erosion Control and Tree Protection Plan, Livability Plan, Street and Storm Sewer Profiles, Stormwater Sizing & Location Plan, Details, Stormwater Drainage Report and Stormwater Pollution Prevention Plan were received March 25th, the revised Title Sheet T1 and Street Plan and Profile sheets C1.4 and C1.5 and revised storm sewer sizing calculations were received on March 31st and the revised Preliminary Plat Sheet 1 and Grading, Erosion Control and Tree Protection Plan Sheets 4 and 5 were received on April 22nd for the proposed 49 lot residential development located on 102.6 non-contiguous acres of parcels 06-32-23-32-0002, 06-32-23-34-0002, 06-32-23-34-0004, 06-32-23-43-0002, 06-32-23-43-0005, 06-32-23-43-0006 and 06-32-23-44-0011. The Third Addition is a portion of the overall Crosstown Rolling Acres plan that received Sketch Plan approval at the February 5, 2018 City Council meeting. The parcels are currently zoned Rural Single Family Residential (R-A) and will be zoned R-1. All of the prior review comments have been addressed.

Discussion:

173rd Avenue at Crosstown Boulevard is being realigned to a 90-degree intersection, per the requirements of the Anoka County Highway Department. There is an existing power line (and possibly other utilities) within the current roadway for 173rd Avenue. These utility(s) will need to be relocated to allow for the vacation of the right-of-way for that portion of 173rd Avenue adjacent to the outlots once the realignment is completed. If the utility(s) are not relocated, the road easement can be vacated while recording a drainage and utility easement containing the utility(s).

Three outlots are shown in the southwesterly portion of the proposed development. The 392 square foot Outlot A is to be combined with the adjacent 430 173rd Avenue parcel to the south. The 14,816 square foot Outlot B is to be combined with the adjacent 444 173rd Avenue parcel to the south. The 5,273 square foot Outlot C is to be combined with adjacent 450 173rd Avenue to the south. The Development Agreement will include the conveyance of the outlots to the adjacent properties.

A License Agreement will be required for Lot 15, Block 1 and Lot 9, Block 3 due to the septic lines crossing the drainage and utility easement. A License Agreement will also be required for the Lot 16, Block 1 driveway being located within a drainage and utility easement. The Lot 16, Block 1 driveway is proposed to be located within the drainage and utility easement so that Public Works can access the Pond 4 outlet and the storm sewer on the west side of the driveway

from the designated City maintenance access on the east side of the driveway. The License Agreements will be covered in the Development Agreement.

A FEMA Letter of Map Amendment is required for Lot 15, Block 1 and Lots 11 and 12, Block 3. The Development Agreement will stipulate that these lots are not eligible for a building permit until the Letter of Map Amendment is approved by FEMA.

The Braun Intertec Revised Summary of Water Level Readings and Lowest Floor Slab Recommendations that was received August 27, 2018 adequately addressed prior review comments. The April 20th Tradewell letter certifies that each of the proposed lots will support two standard septic systems in accordance with Minnesota Rules 7080.

The north portion of the development (Block 3) is located within the Upper Rum River Watershed Management Organization (URRWMO). The wetland buffers provided meet the requirements of the URRWMO based on the Minnesota Routine Assessment Method (MnRAM) functions and values assessment of the wetlands. The Plans show grading within wetland buffers. The URRWMO requires that any areas where vegetation is removed in the buffer area during construction must be reseeded with a native seed mix, and the applicant is responsible for maintenance or reseeded for 3 years through a legally enforceable agreement with the City. Per the attached City Attorney email, enforcement will be incorporated in the Development Agreement for the grading proposed by the Developer and either in the Short Form Development Agreement or as a special condition of any building permit for grading by lot owners.

The Coon Creek Watershed District conditionally approved the development at the March 22nd Board of Managers meeting. The Anoka County Highway Department has not completed their review. Per the attached Preliminary Turn Lane Plan, it is anticipated that the improvements to Crosstown Boulevard include the 7th Street connection from the Crosstown Rolling Acres Second Addition and construction of both east bound and west bound left and right turn lanes at 7th Street. The anticipated improvements to County Road 58 include removal of the 173rd Lane intersection and construction of a southbound right turn lane and a northbound bypass lane.

The Midwest Natural Resources rare plant survey documented the presence butternut trees within the properties, which the DNR has classified as endangered. The DNR is requiring the execution of a Special Permit for the taking of approximately 49 butternut trees. The Developer has acknowledged that the permit will be obtained after preliminary plat approval is received. Grading cannot commence without this permit.

Recommendations:

It is recommended that the Preliminary Plat of Crosstown Rolling Acres Third Addition be recommended for approval to the City Council.

**Tradewell Soil Testing
18330 Dahlia Street NW
Cedar, MN 55011**

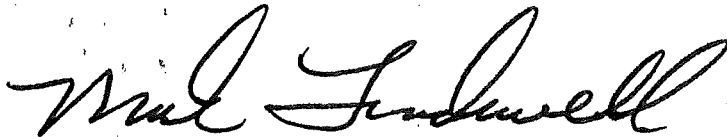
April 20th, 2021

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

Dear Mr. Collins:

As a licensed site evaluator who conducted the soil borings in Crosstown Rolling Acres 3rd for Jeff Stalberger, I found the following: Each boring has at least 12" of natural, undisturbed and unmottled soil. In order to design and install a standard soil treatment system according to MN Chapter 7080 Code, at least 12" of natural soil with no signs of mottling is required. Therefore, each of the proposed lots will support 2 "standard" septic systems within the 7,500 square feet septic area as shown on the Grading Plan.

Sincerely,



Mark Tradewell
MPCA #307

Tom Collins

From: Joseph Murphy <joseph.murphy@carsoncs.net>
Sent: Wednesday, April 21, 2021 10:39 AM
To: Tom Collins
Subject: RE: Crosstown Rolling Acres 3rd Addition

Hi Tom,

I think that the enforcement of this URRWMO rule requirement will have to be incorporated into the development agreement and the short form development agreement. The obligations of the developer for grading and re-seeding Lots 2, 3, 4, 7 and 8 can be expressly included in the development agreement. The language of the development agreement can also provide that these specific obligations continue for the developer's successors in title. The grading during construction for lots 11 and 12 is potentially more complicated, but I think we can do so through the short form development agreement and recording that with the county. Similar to the drainage fund contribution or park land dedication lien typically expressed in the short form agreement, the city could make the release of the lien contingent upon the buyer entering into a legally enforceable agreement with the city upon the sale of each impacted lot. It could also potentially be addressed as a special condition of any building permit (or certificate of occupancy) issued by the city. Those are a few options, but we can continue to review how this URRWMO rule has been implemented in the past prior to drafting the development agreement and short form agreement.

Thanks,

Joseph Murphy
Carson, Clelland & Schreder
6300 Shingle Creek Parkway, Suite 305
Minneapolis, MN 55430
(763)-561-2800

From: Tom Collins [mailto:TCollins@rfcengineering.com]
Sent: Wednesday, April 14, 2021 9:35 AM
To: Joseph Murphy <joseph.murphy@carsoncs.net>
Subject: FW: Crosstown Rolling Acres 3rd Addition

Hi Joe,

The public hearing for the Preliminary Plat of Crosstown Rolling Acres 3rd Addition is scheduled for the April 26th Planning Commission meeting. Can I get a response to the November email below so that I can include it in my recommendation for approval memo?

Tom

From: Tom Collins
Sent: Wednesday, November 18, 2020 12:49 PM
To: 'Joseph Murphy' <joseph.murphy@carsoncs.net>
Subject: Crosstown Rolling Acres 3rd Addition

Hi Joe,

Crosstown Development is proposing a new residential development (Crosstown Rolling Acres 3rd Addition) that is within the Upper Rum River Watershed Management Organization (URRWMO). Ham Lake and the URRWMO have a joint powers agreement to enforce the URRWMO Rules. The URRWMO requires wetland buffers adjacent to wetlands, and the project is proposing filling within some wetland buffers. Per the URRWMO Rules:

“The delineated wetland, but not necessarily the buffer area, must be protected during construction with appropriate perimeter erosion control... Any areas where vegetation is removed in the buffer area during construction must be reseeded with a native seed mix, and the applicant is responsible for maintenance or reseeded for 3 years through a legally enforceable agreement with the city/township. These requirements do not apply if the buffer area vegetation is not disturbed during construction...”

Trying to determine how the City can enforce this Rule requirement. There are a total of 7 lots that are proposing grading within the buffer within Block 3. The grading for Lots 2, 3, 4, 7 and 8 will be completed by the Developer for construction of the stormwater ponds. The grading for Lots 11 and 12 will occur during home construction. It is anticipated that all of these 7 lots (shown in red on the attached) will sell well before the 3-year period expires, so trying to determine how the City can enforce the Rules. Include the requirement within the Development Agreement, which could pass on to the lot buyer? Have to record something with the County?

We are having the developer update the plans to stipulate that these areas need to be reseeded with native seed mix.

Tom

NOTICE OF PERMIT APPLICATION STATUS

Project: Crosstown Rolling Acres 3rd Addition

Date: March 26, 2021

Applicant: Crosstown Development
17404 Ward Lake Dr NW
Andover, MN 55304

Permit Application#: 20-097

Purpose: Residential development for 38 single family homes

Location: Crosstown Blvd NE (173rd-176th), Ham Lake MN

At their meeting on March 22, 2021 the Board of Managers of the Coon Creek Watershed District **conditionally approved** the above referenced project with 4 conditions and 2 stipulations. **This is NOT a permit.**

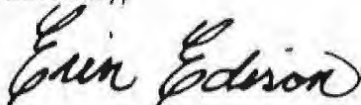
Since your last submittal on 3/25/2021, the following 2 conditions remain which must be addressed before permit issuance (please see note below on how to address conditions).

1. Receipt of escrows.
2. Provide DNR Takings Permit. If the DNR requires significant changes to the site plan, additional requirements and Board review may be needed prior to issuance of permit.

Please note that there is also 2 stipulations.

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

Sincerely,



Erin Edison
Water Resource Regulation Coordinator

cc: File 20-097
Ed Matthiesen, Wenck
Danielle Tourtillott, Wenck
Tom Collins, City of Ham Lake

Tom Collins

From: Michelle A. Pritchard <Michelle.Pritchard@co.anoka.mn.us>
Sent: Tuesday, March 30, 2021 10:06 AM
To: David Krugler
Cc: Jane Rose; Daniel Frey; Joe J. MacPherson; Tom Collins
Subject: RE: PAN 20-097 (Crosstown Rolling Acres 3rd Addition)

David,

We actually didn't really get started on a review because they were missing several components in their plans that would be needed to do a comprehensive review. I did let them know on March 24 that they will need to include this information prior to our review, including road stationing, removals, shoulder information, cross-sections, signing/stripping, etc.

That said, we do share your concern about the excessive cross-slope and would ask them to provide an engineering justification for it. I think we'd want to see a superelevation plan, and they would need to update the typical section to match what they are actually proposing.

Michelle Pritchard

Design Engineer

Anoka County Highway Department

Direct – 763.324.3162

Office – 763.324.3100

Fax – 763.324.3020

Michelle.Pritchard@co.anoka.mn.us

From: David Krugler <DKrugler@rfcengineering.com>
Sent: Tuesday, March 30, 2021 9:32 AM
To: Michelle A. Pritchard <Michelle.Pritchard@co.anoka.mn.us>
Cc: Jane Rose <Jane.Rose@co.anoka.mn.us>; Daniel Frey <Daniel.Frey@co.anoka.mn.us>; Joe J. MacPherson <Joe.MacPherson@co.anoka.mn.us>; Tom Collins <TCollins@rfcengineering.com>
Subject: RE: PAN 20-097 (Crosstown Rolling Acres 3rd Addition)

Michelle,

We are reviewing the latest plan set from Plowe regarding Crosstown Rolling Acres 3rd Addition. Plowe has stated plans were supplied to Anoka County on 3/15. There is enough information for the proposed intersection of 176th Lane NE and CSAH 58 that has raised a question.

They are showing an existing 7.3% superelevation of CSAH 58 at the intersection. They are showing a 0.9% slope sloping away from the curve. The plan shows an algebraic difference of 8.2% which exceeds the maximum 7% algebraic difference between the through-lane slope and the shoulder slope and also which is less than the minimum 1% required for the shoulder.

The MnDOT design manual discusses the necessity to allow for a greater algebraic difference with supers larger than 6% and AASHTO allows up to a 8% algebraic difference.

Their typical also doesn't describe the slope conditions of the turn lane, if they are to match the superelevation or if they are to provide the 2% grade as suggested.

Do you have any concerns with this?



David A. Krugler, P.E.
RFC Engineering, Inc.
(763) 862-8000
(763) 862-8042 (fax)
(763) 207-9853 (Direct)

From: Michelle A. Pritchard <Michelle.Pritchard@co.anoka.mn.us>
Sent: Wednesday, January 20, 2021 8:48 AM
To: Joe J. MacPherson <Joe.MacPherson@co.anoka.mn.us>; Tom Collins <TCollins@rfcengineering.com>
Cc: Jane Rose <Jane.Rose@co.anoka.mn.us>; Daniel Frey <Daniel.Frey@co.anoka.mn.us>
Subject: RE: PAN 20-097 (Crosstown Rolling Acres 3rd Addition)

Thanks Tom. We have not received engineering plans, only preliminary sketches, so we have not done an engineering review yet. Dan Frey has been working with Adam Ginkel at Plowe to answer his design questions as they come up.

Michelle Pritchard

Design Engineer

Anoka County Highway Department

Direct – 763.324.3162

Office – 763.324.3100

Fax – 763.324.3020

Michelle.Pritchard@co.anoka.mn.us

From: Joe J. MacPherson <Joe.MacPherson@co.anoka.mn.us>
Sent: Wednesday, January 20, 2021 8:34 AM
To: Tom Collins <TCollins@rfcengineering.com>
Cc: Michelle A. Pritchard <Michelle.Pritchard@co.anoka.mn.us>; Jane Rose <Jane.Rose@co.anoka.mn.us>
Subject: RE: PAN 20-097 (Crosstown Rolling Acres 3rd Addition)

Thank you for the update. Please keep me informed on the status of this project so I can keep everyone on our end updated.

Sincerely,

Joe MacPherson

From: Tom Collins <TCollins@rfcengineering.com>
Sent: Wednesday, January 20, 2021 8:12 AM
To: Joe J. MacPherson <Joe.MacPherson@co.anoka.mn.us>
Cc: Michelle A. Pritchard <Michelle.Pritchard@co.anoka.mn.us>; Jane Rose <Jane.Rose@co.anoka.mn.us>
Subject: RE: PAN 20-097 (Crosstown Rolling Acres 3rd Addition)

Joe,

The temporary access will be removed with the Crosstown Rolling Acres 3rd Addition project. CRA3 has not yet received approval from the CCWD and has not received preliminary plat approval from the City. I do not know whether the Engineering Plan Review at the County has been completed and/or whether the County has issued a permit. Anticipating that the project will have all necessary approvals by the time road restrictions are lifted, and the CR58 temporary access will be removed after the CSAH 18 accesses are constructed.

Tom

From: Joe J. MacPherson <Joe.MacPherson@co.anoka.mn.us>
Sent: Wednesday, January 20, 2021 7:41 AM
To: Tom Collins <TCollins@rfcengineering.com>; Michelle A. Pritchard <Michelle.Pritchard@co.anoka.mn.us>; Jane Rose <Jane.Rose@co.anoka.mn.us>
Subject: FW: PAN 20-097 (Crosstown Rolling Acres 3rd Addition)

I wanted to check in on this development and the removal of the temporary access on CR 58 (175th Avenue). Have any of you heard anything about the status of this project recently?

Sincerely,

Joe MacPherson

From: JEFFREY Stalberger <stally68@msn.com>
Sent: Tuesday, November 3, 2020 11:23 AM
To: Joe J. MacPherson <Joe.MacPherson@co.anoka.mn.us>; Susan M. Burgmeier <Susan.Burgmeier@co.anoka.mn.us>; Jane Rose <Jane.Rose@co.anoka.mn.us>; Michelle A. Pritchard <Michelle.Pritchard@co.anoka.mn.us>
Subject: Fw: PAN 20-097 (Crosstown Rolling Acres 3rd Addition)

EXTERNAL EMAIL ALERT: This message originated from outside the Anoka County email system. Use Caution when clicking hyperlinks, downloading pictures or opening attachments.

Joe, see below.

We are moving forward just trying to get through the Coon Creek Water shed which is not an easy task.

Jeff

From: Adam Ginkel <adam@plowe.com>
Sent: Tuesday, November 3, 2020 10:29 AM
To: Matthew Danzl <mdanzl@cooncreekwd.org>; Tom Collins <TCollins@rfcengineering.com>
Cc: Jason Rud <jrud@egrud.com>; Jeff Stalberger (<stally68@msn.com> <stally68@msn.com>); Matt Davich <mdavich@egrud.com>
Subject: PAN 20-097 (Crosstown Rolling Acres 3rd Addition)

Matt, Tom:

Below is a link to the revised plans and calculations for Crosstown Rolling Acres 3rd Addition. The revisions were in response to CCWD and RFC review comments.

<https://www.dropbox.com/sh/j7vk6pw37ies8lw/AAAnxDZIDxXmV-iiS4vJ4S2Oa?dl=0>

The link includes:

1. CROSTOWN ROLLING ACRES 3RD(11-02-20), which includes:
 - a. Preliminary Plat
 - b. Grading, Erosion Control and Tree Protection Plan

- c. Livability Plan
- d. Livability Chart
2. 1882 Civils (11-2-2020), which includes
 - a. Utility Plan
 - b. Details
 - c. SWPPP
3. Stormwater Drainage Report
4. Drainage Areas Maps
5. Storm sewer sizing calculations
6. Response memo to CCWD comments
7. Response memo to RFC comments
8. MPCA Contamination screening checklist
9. Rare Plant Survey (by Midwest Natural Resources)
10. Draft of a DNR "Take" permit

Two (2) paper copies of the above materials will be delivered to CCWD office. (Tom – if you would like a paper copy, let me know).

Thanks, and let me know if you have any questions.

Adam Ginkel
PLOWE ENGINEERING, INC.
6776 Lake Dr Ste 110
Lino Lakes, MN 55014
(651) 361-8234

Click [here](#) to report this email as spam.

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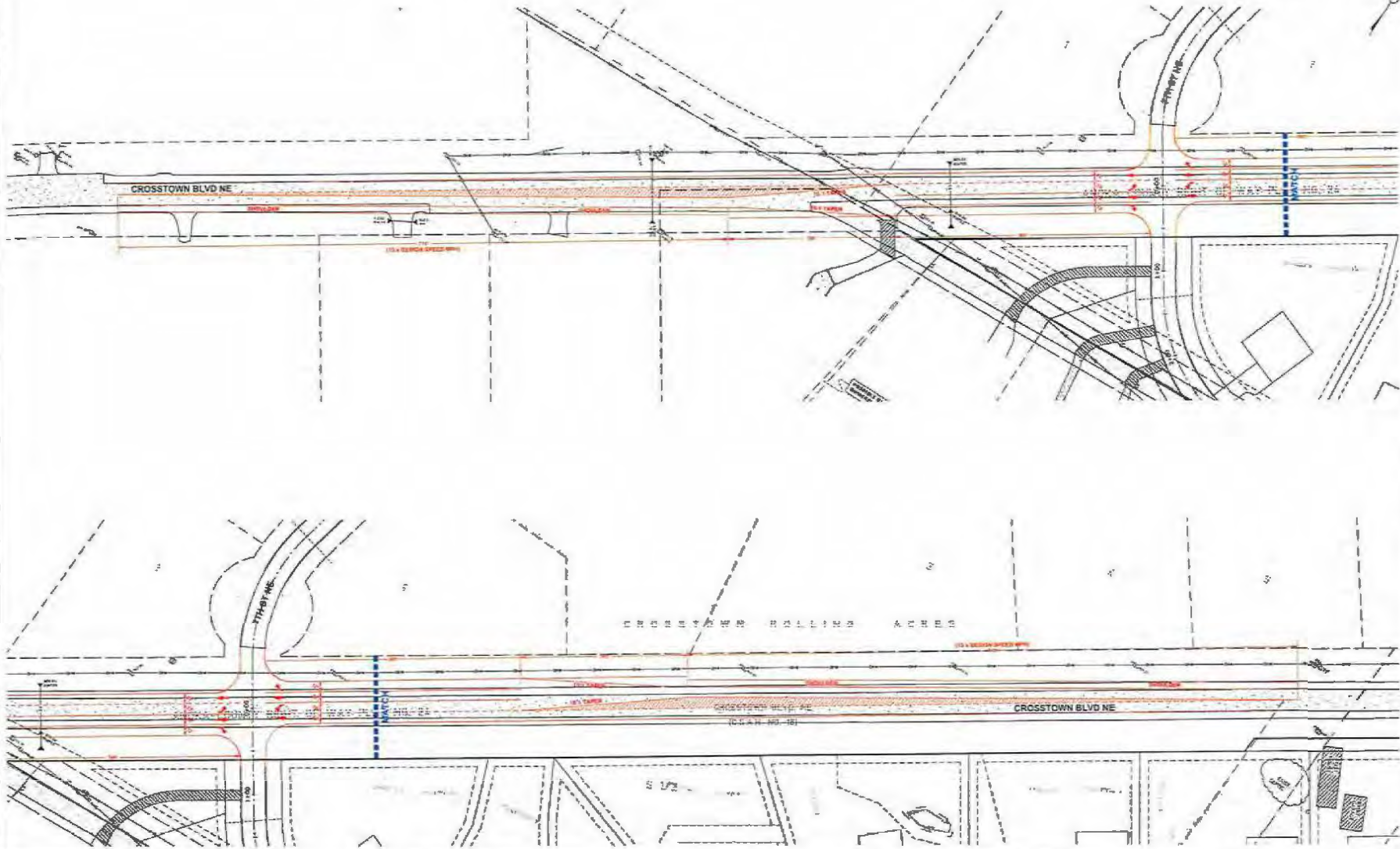
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CROSTOWN ROLLING ACRES THIRD ADDITION

CITY OF HAM LAKE, ANOKA COUNTY, MN
 PRELIMINARY TURN LANE PLAN



Know what's below.
 Call before you dig.



PLOWE ENGINEERING, INC.
 8700 W. 130TH AVENUE
 SUITE 100
 HAM LAKE, MN 55434
 PHONE: 952-241-4270
 FAX: 952-241-4271

DESIGNED BY	CHIEF
DRAWN BY	CHIEF
CHECKED BY	AG
JOB NO.	19-1982
DATE	7-10-20
SCALE	AS SHOWN

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PRELIMINARY
 CROSTOWN ROLLING ACRES
 THIRD ADDITION
 CITY OF HAM LAKE, MN
 PRELIMINARY TURN LANE PLAN
 PREPARED FOR: CROSTOWN DEVELOPMENT LLC

SHEET
C2.1

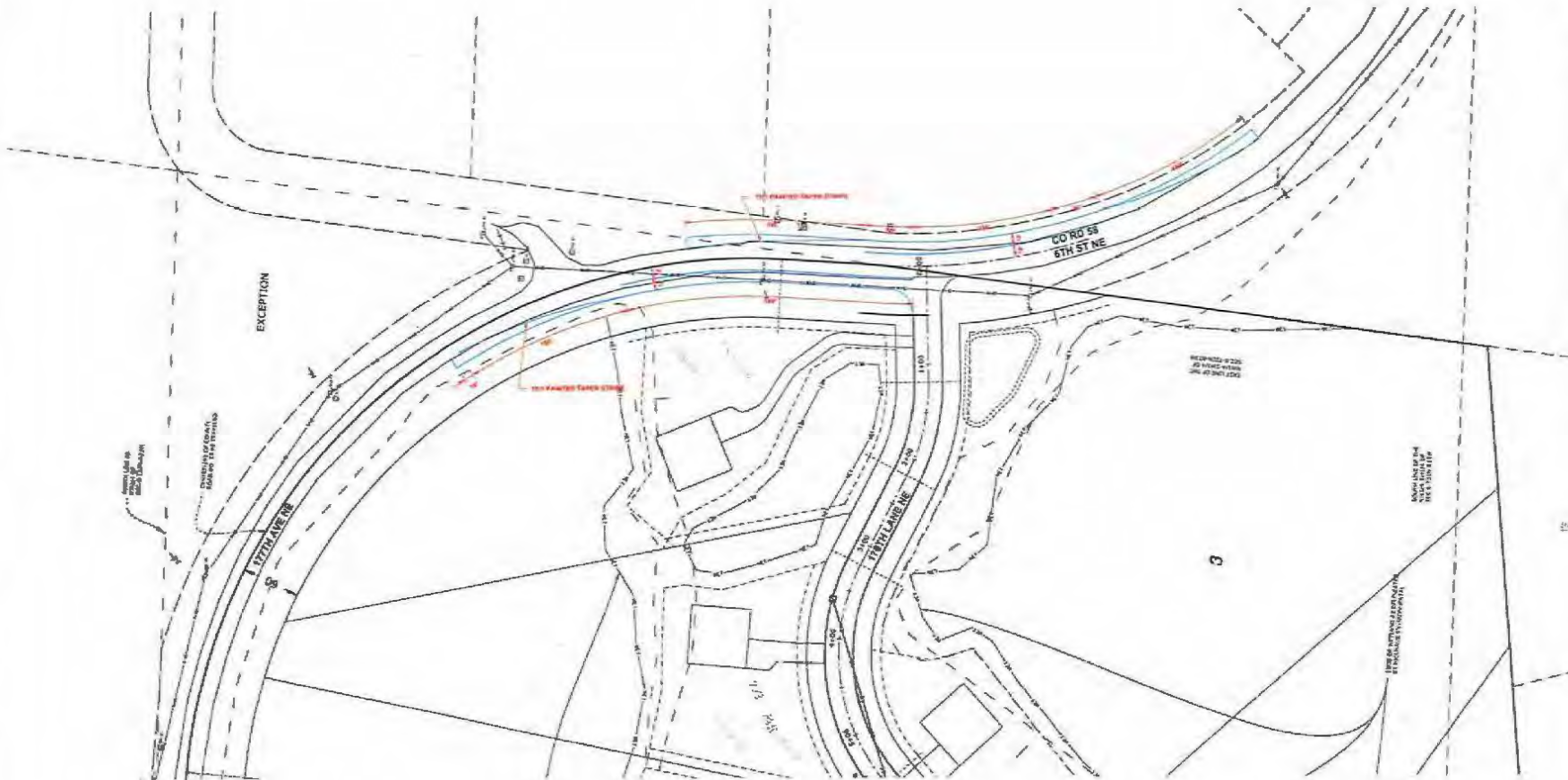
CROSTOWN ROLLING ACRES THIRD ADDITION

CITY OF HAM LAKE, ANOKA COUNTY, MN

PRELIMINARY TURN LANE PLAN



Know what's below.
Call before you dig.



4075 LAKE DRIVE
SUITE 110
HAM LAKE, MN 55124

PHONE: (763) 794-4111
FAX: (763) 794-4171

DRAWING BY: CHUCK BYE
AD

JOB NO. DATE: 2-15-20

DATE: 2-15-20

DATE: 2-15-20

DATE: 2-15-20

DATE: 2-15-20

DATE: 2-15-20

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CROSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAM LAKE, MN
PRELIMINARY TURN LANE PLAN
PREPARED FOR: CROSTOWN DEVELOPMENT LLC

SHEET
C2.2



Mr. Jeffrey Stalberger
2500 Shadywood Road, Suite 130
Orono, MN 55331

December 12, 2018

Mr. Stalberger,

Midwest Natural Resources, Inc. (MNR) is pleased to provide the following rare plant survey report for the recent survey effort for the Crosstown 2 South Development located in Ham Lake, Minnesota (**Figure 1**). This is a revised report, which now includes an additional parcel component that had been surveyed in 2017.

Background Data

Prior to conducting field surveys, MNR staff reviewed available data including aerial photographs and other spatial resources for the approximately 60-acre project area. This included the Minnesota Department of Natural Resources (DNR) Native Plant Community and the Sites of Biodiversity Significance data layers. There are no native plant communities mapped within the project area according to the Native Plant Community data layer (**Figure 2**), and the site is not within an area identified in the Sites of Biodiversity Significance data layer (**Figure 3**).

There was no request of the DNR's Natural Heritage Information System (NHIS) database to determine if there are known element occurrences either at the near the proposed development site. However, surveys conducted previously by MNR staff in the area documented the presence of butternut (*Juglans cinerea*) nearby.

Field Methods

The site was surveyed in two phases by MNR botanist, Otto Gockman. The eastern component was surveyed on September 29, 2017 as part of a preliminary reconnaissance effort. No formal report had been prepared for that survey. The western component was surveyed this year on October 3, 2018 and a subsequent report was issued in October.

The sites were evaluated for all potential state-listed species known from this region of the state. The survey effort involved meandering throughout the site, focusing on areas with suitable habitat for rare species. Both survey efforts additionally evaluated the potential for early season species since surveys were conducted at the end of each growing season.

Locations of state-listed species when observed were documented spatially using a sub-meter GPS unit. Representative photos were also collected for observed state-listed species were collected. Voucher specimens were not collected due to the growth form of the target species.

Results

The site includes a house and two large hay fields as well as several woodland areas. The wooded portions of the site are fire-dependent forest dominated by pin oak (*Quercus ellipsoidalis*), red oak (*Quercus rubra*), red maple (*Acer rubra*), and black cherry (*Prunus serotina*). The shrub layer varies in density but typically includes American hazel (*Corylus americana*), highbush blackberry (*Rubus allegheniensis*), and other species of *Rubus*. The ground layer is rare to sparse in terms of cover, likely due to the late timing of surveys. Ground layer species noted, include Pennsylvania sedge (*Carex pennsylvanica*) and interrupted fern (*Osmunda claytoniana*). The site also includes a portion of a wetland community dominated by reed canary grass (*Phalaris arundinacea*), woolgrass (*Scirpus cyperinus*), and steeplebush (*Spiraea tomentosa*).

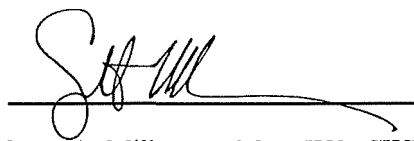
In total, 105 vascular plant species were noted during survey efforts. This included butternut, which was found in the wooded components of the western segment (**Figure 4**). This species has a state status of Endangered in Minnesota. No other state listed species were observed during this late season survey effort. A list of all vascular plants observed during our survey effort were documented and included in **Appendix A** and representative photos of the site and of the butternut found onsite are provided in **Appendix B**.

Conclusion

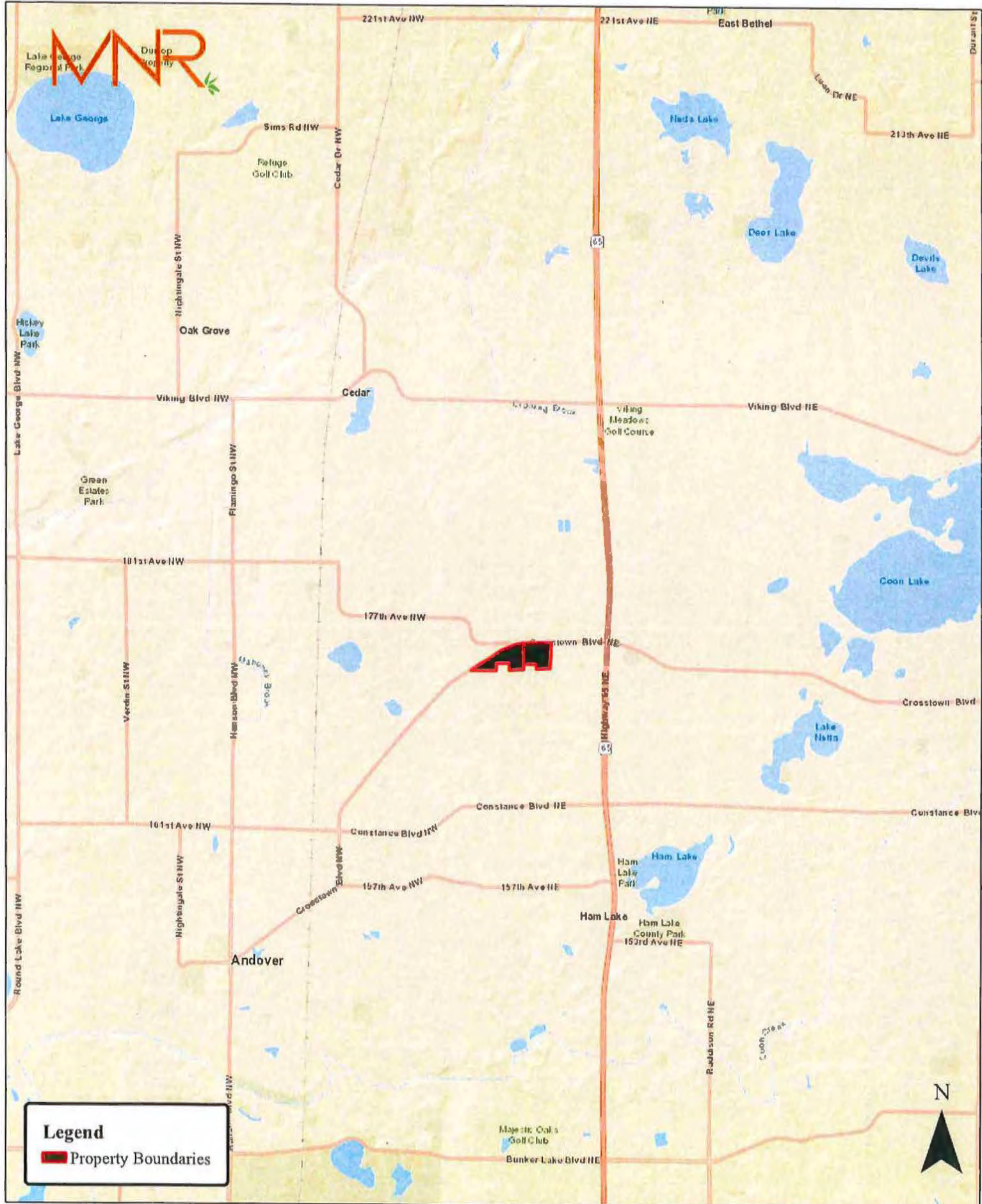
As noted, one state-listed species, butternut, was documented during survey efforts. This species is protected by state law which prohibits the taking, importing, transportation, or selling of any part of a threatened or endangered species. A taking permit through the DNR will be required if impacts are unavoidable. No other state-listed species were observed, and no additional surveys next spring are recommended based on our field review. The spatial data collected during the survey effort has been provided to the DNR in accordance with our collector's permit. This dataset is also being provided to you to help with site planning.

Please feel free to contact us with any questions.

Best regards,

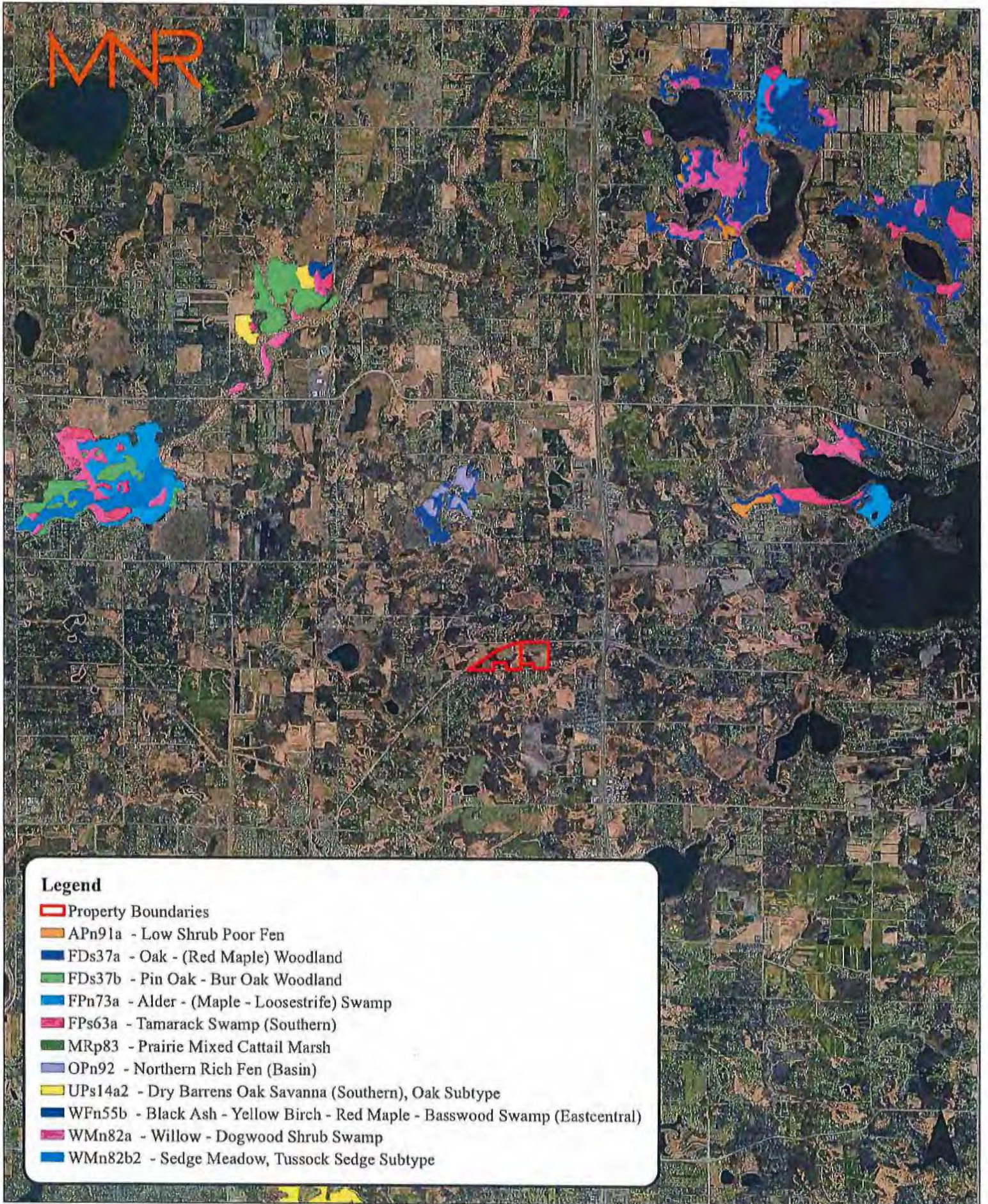


Scott A. Milburn, M.S., PWS, CWD
Sr. Botanist/President
Midwest Natural Resources, Inc.



Project Location
Crosstown 2 South/East Parcel
Ham Lake, Anoka County, Minnesota

Figure 1



0 0.5 1 Miles

**DNR Native Plant Communities
 Crosstown 2 South/East Parcel
 Ham Lake, Anoka County, Minnesota**

Figure 2

MNR



Legend

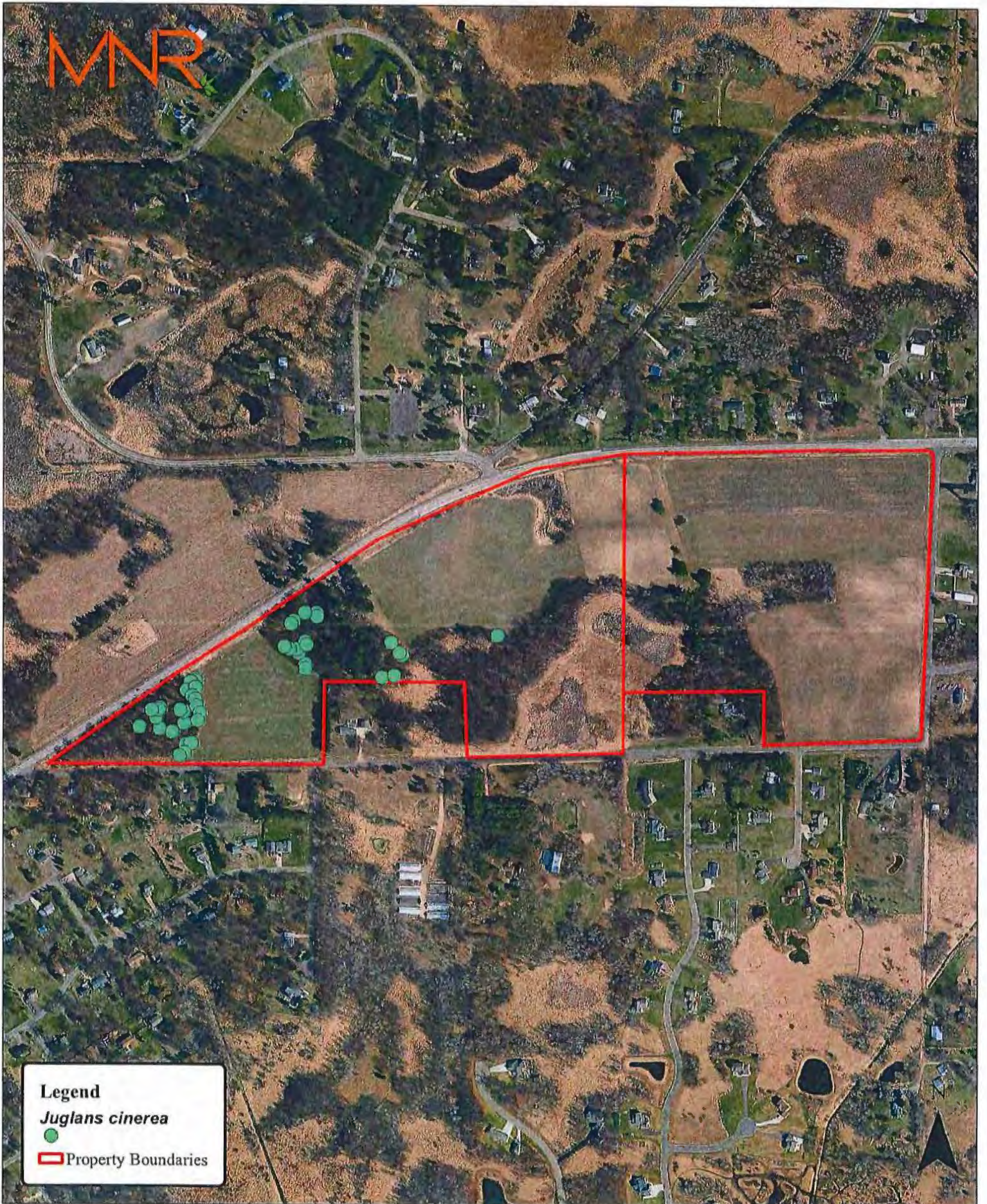
- Property Boundaries
- Sites of Biodiversity Significance**
- Below
- Moderate
- High
- Outstanding

0 0.5 1 Miles

**Sites of Biodiversity Significance
Crosstown 2 South/East Parcel
Ham Lake, Anoka County, Minnesota**

Figure 3

MNR



Legend
Juglans cinerea
●
▭ Property Boundaries

0 0.0425 0.085 Miles
|-----|-----|

Survey Results
Crosstown 2 South/East Parcel
Ham Lake, Anoka County, Minnesota

Figure 4

APPENDIX A

Species List

Species List

<i>Acer negundo</i>	<i>Morus alba</i>
<i>Acer rubrum</i>	<i>Onoclea sensibilis</i>
<i>Acer saccharinum</i>	<i>Osmorhiza claytonii</i>
<i>Achillea millefolium</i>	<i>Osmorhiza longistylis</i>
<i>Amphicarpaea bracteata</i>	<i>Osmunda regalis</i>
<i>Aquilegia canadensis</i>	<i>Parthenocissus vitacea</i>
<i>Aralia nudicaulis</i>	<i>Persicaria amphibia</i>
<i>Asclepias syriaca</i>	<i>Persicaria sagittata</i>
<i>Athyrium filix-femina</i>	<i>Phalaris arundinacea</i>
<i>Betula papyrifera</i>	<i>Phleum pratense</i>
<i>Botrychium dissectum</i>	<i>Picea cf glauca</i>
<i>Bromus inermis</i>	<i>Pinus banksiana</i>
<i>Calamagrostis canadensis</i>	<i>Pinus resinosa</i>
<i>Carex lasiocarpa</i>	<i>Pinus strobus</i>
<i>Carex pellita</i>	<i>Poa pratensis</i>
<i>Carex pensylvanica</i>	<i>Populus tremuloides</i>
<i>Carex utriculata</i>	<i>Prunus serotina</i>
<i>Centaurea stoebe</i>	<i>Quercus alba</i>
<i>Conyza canadensis</i>	<i>Quercus ellipsoidalis</i>
<i>Cornus racemosa</i>	<i>Quercus rubra</i>
<i>Corylus americana</i>	<i>Rhus typhina</i>
<i>Corylus cornuta</i>	<i>Ribes missouriense</i>
<i>Dactylis glomerata</i>	<i>Robinia pseudoacacia</i>
<i>Desmodium glutinosum</i>	<i>Rubus idaeus</i>
<i>Dichanthelium acuminatum</i>	<i>Rubus occidentalis</i>
<i>Diervilla lonicera</i>	<i>Rumex acetosella</i>
<i>Dryopteris carthusiana</i>	<i>Sambucus racemosa</i>
<i>Dryopteris cristata</i>	<i>Scirpus cyperinus</i>
<i>Echinocystis lobata</i>	<i>Scutellaria galericulata</i>
<i>Eleocharis palustris</i>	<i>Solidago altissima</i>
<i>Elymus repens</i>	<i>Solidago canadensis</i>
<i>Eragrostis spectabilis</i>	<i>Sorbus aucuparia</i>
<i>Euthamia graminifolia</i>	<i>Sorghastrum nutans</i>
<i>Fragaria virginiana</i>	<i>Spiraea alba</i>
<i>Fraxinus pemsylvanica</i>	<i>Spiraea tomentosa</i>
<i>Glechoma hederacea</i>	<i>Symphotrichum ciliolatum</i>
<i>Gleditsia triacanthos</i>	<i>Symphotrichum lanceolatum</i>
<i>Helianthus hirsutus</i>	<i>Taraxacum officinale</i>
<i>Humulus lupulus</i>	<i>Thelypteris palustris</i>
<i>Ilex verticillata</i>	<i>Thuja occidentalis</i>
<i>Iris versicolor</i>	<i>Toxicodendron rydbergii</i>
<i>Juglans cinerea</i>	<i>Triadenum fraseri</i>
<i>Juglans nigra</i>	<i>Typha x glauca</i>
<i>Juncus brevicaudatus</i>	<i>Ulmus americana</i>
<i>Juncus canadensis</i>	<i>Ulmus pumila</i>
<i>Juniperus virginiana</i>	<i>Urtica dioica</i>
<i>Lonicera X bella</i>	<i>Uvularia sessilifolia</i>
<i>Lycopodium clavatum</i>	<i>Vaccinium angustifolium</i>
<i>Lycopus uniflorus</i>	<i>Verbascum thapsus</i>
<i>Maianthemum canadense</i>	<i>Viburnum lentago</i>
<i>Maianthemum racemosum</i>	<i>Viola sororia</i>
<i>Medicago sativa</i>	<i>Vitis riparia</i>
<i>Melilotus officinalis</i>	

APPENDIX B
Representative Photos



Residential component



Open hay field



Mesic hardwood forest



Wetland component



Juglans cinerea tree (left) and branch showing characteristic leaf-scar (right)



STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF ECOLOGICAL AND WATER RESOURCES
500 LAFAYETTE ROAD, BOX 25
ST. PAUL, MN 55155

SPECIAL PERMIT NO. 28536
(Taking of endangered and/or threatened species)
April 27, 2020

TO WHOM IT MAY CONCERN:

Under the authority of Minn. Statutes, Section 84.0895 and Minn. Rules, Parts 6212.1800-2100, and informed by the accompanying Findings of Fact and Decision Rationale, permission is hereby granted to:

Jeff Stalberger
Crosstown Development, LLC
17404 Ward Lake Dr NW,
Andover, MN 55304

and his agents, employees, and contractors, to take 49 state-endangered Butternut trees (*Juglans cinerea*), incidental to development of the Crosstown Rolling Acres residential development in Ham Lake, Anoka County, MN, subject to the following conditions:

1. Permitted take of the specified listed species is limited to the 99.88 acre area of proposed development within Section 6, Township 32N, Range 23W, Ham Lake, Anoka County, as depicted in the attached graphic. Any additional taking of endangered or threatened species is beyond the authority of this permit and may only be conducted under the authority of a separate permit.
2. The Permittee shall contact the University of Minnesota Arboretum's Plant Conservation Program and allow them the opportunity to salvage any of the listed species for conservation purposes at least 7 days prior to destruction.
3. Compensatory mitigation for this taking totals dollars (\$26,000), which will be provided to the Minnesota Department of Natural Resources, pursuant to Minn. Statutes, 84.085 subd. 1., for the purpose of funding research, surveys, land protection, and/or land management activities contributing to the recovery and eventual delisting of endangered and threatened plants in Minnesota, and so create a net benefit to these species in Minnesota.
4. This permit is effective indefinitely upon receipt of a countersigned copy of this permit and the mitigation payment by the DNR. Receipt by the DNR will be confirmed by email.

Steve Colvin
Director, Division of Ecological and Water Resources

Date

I hereby certify that I have read, understand, and accept the provision of this permit and understand that this permit is not valid unless it is signed by me.

Jeff Stalberger, Permittee

Date

- C: Richard J. Baker, Endangered Species Coordinator, Div. Ecological and Water Resources
 Dan Lais, Regional Manager, Div. Ecological and Water Resources
 Jan Shaw Wolff, EMP Section Manager, Div. Ecological and Water Resources
 Jason Peterson, District Supervisor, Div. Enforcement
 Jane Norris, CMRR Supervisor, Div. Ecological and Water Resources
 Becky Horton, Reg. Env. Assessment Ecologist, Div. Ecological and Water Resources
 Kit Elstad-Haveles, Reg. Ecologist, Div. Ecological and Water Resources
 Jason Husveth, Critical Connections Ecological Services, Inc.
 Permit Clerk, Div. Fish and Wildlife

MNDNR Special Permit No. 28536
 Permittee: Stalberger

Page 2

Area in which taking is permitted ("Proposed Crosstown Rolling Acres boundary")

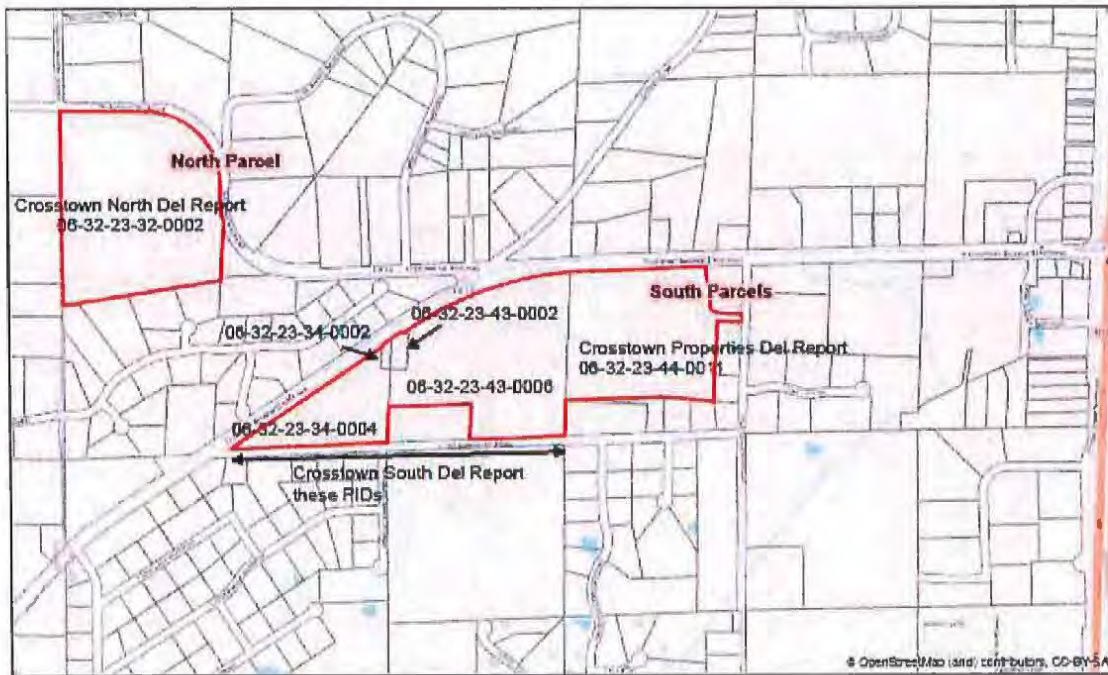
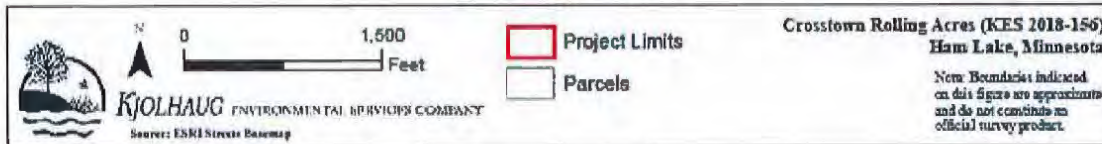


Figure 1 - Site Location





**Findings of Fact and Decision Rationale
for
Endangered and Threatened Species Taking Permit #28536**

Project: Crosstown Rolling Acres, Anoka County, MN

Applicant: Crosstown Development, Inc.

Date: April 27, 2020

Prepared By: Bridget Henning-Randa, Endangered Species Coordinator
Division of Ecological and Water Resources
Minnesota Department of Natural Resources

History of Permit Application

1. Crosstown Development, Inc. ("Applicant") proposes to construct the Crosstown Rolling Acres residential development project ("Project") in Section 6, T32N, R23W, Ham Lake, Anoka County, Minnesota.
2. Midwest Natural Resources conducted rare plant surveys on the project site in September 2017, October 2018, and August 2019, during which they located and assessed the health of 49 state-listed endangered butternut trees (*Juglans cinerea*).
3. On November 8, 2019, the DNR received from the Applicant's contractor, Kjolhaug Environmental Services Company, Inc., an application for a Takings Permit on behalf of the Applicant for the taking of 49 state-listed endangered butternut (*Juglans cinerea*).

Justification and Scope of Proposed Taking

4. The Application proposes to develop 99.88 acres in the City of Ham Lake ("City") into a single-family residential development.
5. The Application states that because the individual butternut on the north parcel and numerous individuals in the south parcels currently have butternut canker which will likely, over time, spread to nearby relatively healthy trees, complete avoidance of butternut trees was rejected as a feasible project alternative.
6. The Applicant rejects minimization because even though a small number of Butternut trees are currently in relatively good health and could be avoided with customized lot grading, these trees will likely succumb to canker in the future, and custom grading would still require work to occur in at least some of the root zone, which is a stressor that often leads to or is a factor in declined tree health and viability.
7. The Application proposes to take 49 butternut trees.
8. The impact will be direct destruction of 47 trees and indirect impact on 2 trees, which occur outside the grading limits.

Justification for Permit with Compensatory Mitigation

Crosstown Rolling Acres / Findings of Fact & Decision Rationale

9. *Juglans cinerea* (butternut) is a midsize to large tree that, in Minnesota, occurs in mesic hardwood forests. Until recently, it was a fairly common tree in southern Minnesota. The main issue facing butternut is the spread of the lethal fungal disease known as butternut canker, which has resulted in a massive die-off and the list of the species as endangered in Minnesota in 2013. There is no treatments for butternut canker and few trees are thought to be immune, but healthy and presumably resistant trees have been found growing adjacent to diseased trees. These trees could be extremely valuable in efforts to preserve the species.
10. Minn. Stat. § 84.0895 and Minn. R. 6212.1800 to 6212.2300 govern the taking of endangered or threatened species in Minnesota. Under this statute and the rules, the DNR may issue permits to applicants authorizing the take of such species under specified conditions.
11. Minn. Stat. § 84.0895, subd. 1, states that “a person may not take, import, transport, or sell any portion of an endangered species of wild animal or plant, ... except as provided in subdivisions 2 and 7.” Subdivision 7 authorizes the commissioner of natural resources to issue permits and prescribe conditions for the taking of endangered and threatened species of animals and plants under any of four conditions, including if “the act enhances the propagation or survival of the affected species” or “the social and economic benefits of the act outweigh the harm caused by it.”
12. Minn. R. 6212.1800, subp. 1 states that “[a] person may not take ... a threatened or endangered species of plant or animal without a permit from the commissioner.” Subpart 2 states that “[a] permit may not be issued unless the commissioner has first determined that the permitted act will not be detrimental to the species.”
13. Minn. R. 6212.2100 states that a permit for the taking of a threatened or endangered species of plant, animal, or insect, may be issued on prescribed conditions when the commissioner has determined that “the permitted act enhances the propagation or survival of the affected species” or “the social and economic benefits of the permitted act outweigh the harm caused by it, provided that the killing of a specimen for these purposes will be permitted only after all other alternatives have been evaluated and rejected.”
14. The DNR has determined that, under some circumstances where compensatory mitigation benefits the species as a whole, it is appropriate to condition a takings permit for a proposed project that involves the take of an endangered or threatened species on compensatory mitigation that provides a net benefit to the species. Consequently, when all other conditions found in statute and rule are met, a taking may be allowed, and where a condition of a permitted take is compensatory mitigation that benefits the species as a whole, a permit can be issued for the take of an endangered or threatened species.
15. The DNR concludes that the Project as currently proposed is a reasonable and necessary action that provides a social benefit to the public. The DNR finds that the Applicant has considered and evaluated reasonable alternatives for the Project, and cannot avoid the proposed take of this species of threatened plant.
16. The DNR has determined that the harm caused to butternut by the Project as currently proposed can be fully mitigated as set forth below.
17. With the implementation of compensatory mitigation as described below, the DNR concludes that the Project as currently proposed and mitigated will not be detrimental to Minnesota’s populations of buternut, but will enhance the conservation of these species in Minnesota. In addition, with the implementation of compensatory mitigation as described

below, the social benefit of the Project outweighs the harm caused by the taking of the individual plants of this threatened species.

Valuation of Compensatory Mitigation for the Taking of Butternut

18. The Application request a permit to take 49 individual butternut trees, which have been assessed for their overall health and condition.
19. Compensatory mitigation will not be required for saplings or unhealthy trees.
20. Most of the trees are diseased or dying of butternut canker disease, but five of the individual trees have been given a rating of good (no apparent problems) and 15 trees are rated as fair (minor problems but, still relatively healthy), indicating they may have considerable conservation value to the species as a whole.
21. Two of the trees in good health are over 5 inches DBH and 11 of the trees in fair health are over 5 inches DBH, indicating they are potentially healthy and reproductive.
22. Minnesota's restitution rules (M.R. Parts 6133.0060-0070) place value on individuals of endangered animal species at \$2000 per individual. Using this guidance, and acknowledging that this guidance is intended to be applied to animals rather than plants, the DNR proposes that compensatory mitigation for the proposed taking be calculated as 13 healthy and reproductive individuals x \$2,000 per individual = \$26,000.

Based upon the above Findings of Fact, the DNR makes the following:

CONCLUSIONS

23. The DNR concludes that in order to attain a net benefit to Minnesota's population of butternut, it is necessary to condition any takings permit issued under Minn. Stat. § 84.095, subd. 7 on mitigation for that taking. The DNR concludes that compensatory mitigation totaling \$26,000 is reasonable.
24. The DNR concludes that pursuant to Minn. Stat. § 84.095, subd. 1 and Subd. 7 and Minn. R. 6212.1800, subp. 1 and Minn. R. 6212.2100 C, the social and economic benefits of the Project as mitigated outweigh the harm caused by the Project to the butternut as described herein.
25. DNR will issue an Endangered and Threatened Species Taking Permit for the Project that requires a compensatory mitigation payment to the DNR of \$26,000 to be used by the DNR to fund research, surveys, land protection, and/or land management activities contributing to the recovery and eventual delisting of endangered and threatened plants in Minnesota, and so create a net benefit to this species in Minnesota.

DNR RESPONSE TO COVID-19: For details on adjustments to DNR services, [visit this webpage \(https://www.dnr.state.mn.us/covid-19\)](https://www.dnr.state.mn.us/covid-19). For information on the state's response, visit the [Minnesota COVID response webpage \(https://mn.gov/covid19/\)](https://mn.gov/covid19/).

[../index.html](#)

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Juglans cinerea L.

But

MN Status:

endangered

Federal Status:

none

CITES:

none

USFS:

none

Group:

vascular plant

Class:

Dicotyledoneae

Order:

Juglandales

Family:

Juglandaceae

Life Form:

tree

Longevity:

perennial

Leaf Duration:

deciduous

Water Regime:

terrestrial

Soils:

loam

Light:

partial shade

Habitats:

[Mesic Hardwood](#)

Forest

Best time to see:



JAN

FEB

MAR

APR

MAY

Basis for Listing

Until recently, *Juglans cinerea* (butternut) was a fairly common forest tree in the eastern half of the United States and Canada. Unfortunately, *J. cinerea* is very susceptible to butternut canker (*Sirococcus clavigignenti-juglandacearum*), a lethal fungal disease of unknown origin. The disease was first reported in Wisconsin in 1967 (Renlund 1971) and reached southeastern Minnesota in the 1970s. It has since spread throughout the state and throughout the North American range of *J. cinerea*. The fungus attacks the cambium, leaving a blackened elliptical area of dead cambium just beneath the bark (Ostry et al. 1996 (http://www.na.fs.fed.us/spfo/pubs/howtos/ht_but/ht_but.htm)). When the number of cankers becomes too great, the branch or trunk is essentially girdled and dies. There is no known treatment or control for butternut canker, and few if any trees are immune. This tragic situation has progressed to the point where nearly all *J. cinerea* in Minnesota are now dead or dying. The species was listed as special concern in 1996. A status of endangered was considered at that time, but it was hoped the disease could be abated. Since that time, it has become clear the threat has not and will not likely be abated in the foreseeable future. For that reason, its status was elevated to endangered in 2013.

Description

Juglans cinerea is a midsize to large tree, with moderately thick gray to gray-brown bark. The leaves are alternate on the stem and pinnately compound, with 11-17 individual leaflets. The male flowers are borne on a slender catkin, and the female flowers are on a short spike. The fruit is an ellipsoidal nut enclosed in a thin husk covered with sticky glandular hairs.

Habitat

Juglans cinerea occurs in [northern and central mesic hardwood forests](#) (http://files.dnr.state.mn.us/natural_resources/npc/mesic_hardwood/lmf_mh_system.pdf) PDF in the [Laurentian Mixed Forest Province](#) (http://files.dnr.state.mn.us/natural_resources/npc/mesic_hardwood/lmf_mh_system.pdf) PDF and [southern mesic hardwood forests](#) (http://files.dnr.state.mn.us/natural_resources/npc/mesic_hardwood/ebf_mh_system.pdf) PDF in the [Eastern Broadleaf Forest Province](#) (<https://www.dnr.state.mn.us/ecs/222/index.html>). The species occurs in loamy or alluvial soils or in sandy soil if the water table is relatively near the surface. It is perhaps most common on river terraces elevated several feet or more above the active floodplain, where it is protected from siltation and flood scouring ([Smith 2008](#)) (https://www.dnr.state.mn.us/books/trees_shrubs_slides.html).

Biology / Life History

Until recently, *J. cinerea* was a fairly common tree in southern Minnesota, though it never occurred as a dominant tree. It was seen as scattered individuals or in small groves, typically with *Quercus* spp. (oaks), *Prunus serotina* (black cherry), *Tilia americana* (basswood), *Acer saccharum* (sugar maple), or *Ulmus americana* (American elm). *Juglans cinerea* is intolerant of shade, so it rarely reproduces in mature forests, unless there is a substantial gap in the canopy to provide light for seedlings. The greatest recorded age of a *J. cinerea* in Minnesota is 221 years (Hale 1996), which is probably near its maximum potential.

Conservation / Management

The main issue facing the conservation of *J. cinereo* is not loss of habitat but the spread of the lethal fungal disease known as [canker](#) (http://www.na.fs.fed.us/spfo/pubs/howtos/ht_but/ht_but.htm). In some areas, healthy and presumably resistant trees have been found growing adjacent to diseased trees. These trees, if they are truly resistant, could be extremely valuable in efforts to



[Map Interpretation \(maps\)](#)



[Map Interpretation \(maps\)](#)

JUN preserve the species, and they must not be cut down. Cuttings and seeds taken from disease resistant trees and propagated in plantations could potentially provide stock for landscaping purposes and possibly for reestablishing wild populations. It is also advised to consider augmenting existing populations by direct planting of seeds taken from healthy trees.

JUL

Best Time to Search

AUG

When searching for *J. cinerea*, it is useful to know that the bark is distinctive and, with a little practice, can be recognized at any time of the year. The flowers appear in mid-spring, and the fruits develop throughout the summer, though neither flowers nor fruits are needed for identification.

SEP

OCT

Conservation Efforts in Minnesota

NOV

Since 1992, there has been a moratorium on the harvest of healthy *J. cinerea* trees from state lands administered by the Minnesota DNR Forestry. While the moratorium does not prohibit the salvage or harvest of infected or dying trees; in some cases, it may be appropriate to leave such trees for research purposes.

DEC

Authors/Revisions

Welby Smith (MNDNR), 2008 and 2018

(Note: all content ©MNDNR)



Questions?

Call 651-296-6157 or 888-MINNDNR (646-6367)

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Tom Collins

From: Henning-Randa, Bridget (DNR) <Bridget.Henning-Randa@state.mn.us>
Sent: Wednesday, May 6, 2020 9:01 AM
To: JEFFREY Stalberger; Tom Collins
Cc: Joyal, Lisa (DNR); Horton, Becky (DNR); Wolff, Jan Shaw (DNR); Melissa Barrett
Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Hi Jeff,

See my responses below in red.

Thanks,
Bridget

From: JEFFREY Stalberger <stally68@msn.com>
Sent: Tuesday, May 5, 2020 1:02 PM
To: Henning-Randa, Bridget (DNR) <Bridget.Henning-Randa@state.mn.us>; Tom Collins <TCollins@rfcengineering.com>
Cc: Joyal, Lisa (DNR) <lisa.joyal@state.mn.us>; Horton, Becky (DNR) <becky.horton@state.mn.us>; Wolff, Jan Shaw (DNR) <jan.wolff@state.mn.us>; Melissa Barrett <melissa@kjolhaugenv.com>
Subject: Re: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Hi Bridget, I do agree to the terms but have a couple questions.

- 1) I would like to wait for payment till we have preliminary plat approval from the city of Ham Lake if that is OK? Maybe 3 to 4 months. **The permit will not be effective until the payment is made. If you don't need the permit in hand, we can wait to issue the permit until you are prepared to pay. Once the invoice is issued there maybe fees, if it is not paid within a month, so it may be wise to wait. Let me know what you prefer.**
- 2) Do I sign this draft for the agreement or wait till you send the other? **Wait for the final draft signed by DNR before you sign.**
- 3) If, when we are done designing and its determined that we will not impact some of the trees can the cost be reduced to reflect that? **We could stop this permit and you could apply for a permit with different design that would have less impact and less mitigation costs. But if you are needing the permit now, I do not think we can make a refund after you have paid. At least we have never done so in the past. I will check with leadership to get a definitive answer on giving refunds.**

Thanks, Jeff Stalberger

From: Henning-Randa, Bridget (DNR) <Bridget.Henning-Randa@state.mn.us>
Sent: Tuesday, May 5, 2020 2:57 PM
To: JEFFREY Stalberger <stally68@msn.com>; Tom Collins <TCollins@rfcengineering.com>
Cc: Joyal, Lisa (DNR) <lisa.joyal@state.mn.us>; Horton, Becky (DNR) <becky.horton@state.mn.us>; Wolff, Jan Shaw (DNR) <jan.wolff@state.mn.us>; Melissa Barrett <melissa@kjolhaugenv.com>
Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Hello Tom and Jeff,

Please, see the attached draft permit. I am sending you these as a courtesy so that you can anticipate the permit terms and make appropriate preparations. You can expect the final permit shortly, hopefully today.

Take care.
Bridget

Bridget Henning-Randa, Ph.D.

Minnesota Endangered Species Consultant | Division of Ecological and Water Resources
Pronouns: she/her/hers

Minnesota Department of Natural Resources

500 Lafayette Rd., Box 25

St. Paul, MN 55155

Email: bridget.henning-randa@state.mn.us

<http://www.dnr.state.mn.us/eco/nhnrp>



From: Tom Collins <TCollins@rfcengineering.com>

Sent: Monday, May 4, 2020 4:30 PM

To: Henning-Randa, Bridget (DNR) <Bridget.Henning-Randa@state.mn.us>

Cc: Baker, Richard (DNR) <richard.baker@state.mn.us>; Joyal, Lisa (DNR) <lisa.joyal@state.mn.us>; Horton, Becky (DNR) <becky.horton@state.mn.us>; Norris, Jane C (DNR) <jane.norris@state.mn.us>; JEFFREY Stalberger <stally68@msn.com>; Melissa Barrett <melissa@kjolhaugenv.com>

Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Hi Bridget,

Please let us know the status of the requested permit to take when determined. The schedule is getting pretty tight. Thanks.

Tom

From: Henning-Randa, Bridget (DNR) [<mailto:Bridget.Henning-Randa@state.mn.us>]

Sent: Friday, April 24, 2020 10:02 AM

To: Tom Collins

Cc: Baker, Richard (DNR); Joyal, Lisa (DNR); Horton, Becky (DNR); Norris, Jane C (DNR); JEFFREY Stalberger; Melissa Barrett

Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Hello Mr. Collins,

Apologies for the delay. We have been going through staff changes, but I am currently working on this permit. I will be discussing this project and hope to have a decision to you next week. Our upper level management is largely consumed with the state's COVID response, but I will convey to them the urgency.

Thank you,
Bridget

Bridget Henning-Randa, PhD

Minnesota Endangered Species Coordinator | Division of Ecological and Water Resources
Pronouns: she/her/hers

Minnesota Department of Natural Resources

500 Lafayette Rd., Box 25

St. Paul, MN 55155

Email: bridget.henning-randa@state.mn.us

<http://www.dnr.state.mn.us/eco/nhnrp>



From: Tom Collins <TCollins@rfcengineering.com>

Sent: Friday, April 24, 2020 7:13 AM

To: Baker, Richard (DNR) <richard.baker@state.mn.us>; Joyal, Lisa (DNR) <lisa.joyal@state.mn.us>

Cc: Horton, Becky (DNR) <becky.horton@state.mn.us>; Norris, Jane C (DNR) <jane.norris@state.mn.us>;

JEFFREY Stalberger <stally68@msn.com>; Melissa Barrett <melissa@kjolhaugenv.com>

Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

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Hi Richard and Lisa,

I am the City Engineer for Ham Lake, and I am reaching out to request a determination on the butternut tree permit to take for the proposed Crosstown Rolling Acres project in Ham Lake. The application was submitted to the two of you on November 8, 2019. Richard's December 2nd email states that "The DNR received the subject Application for a Permit to Take from Melissa Barrett on 11/18/19. As stated on the DNR website, a permit will be issued or denied within 150 days of receipt." The application is beyond 150 days, so does that mean that the taking is approved? My understanding is that Melissa has not received a response to her email from last Friday. Becky and Jane – can you assist in this to determine the status of the permit? The developer's consultants need the determination to complete the design and the clock is ticking on being able to get approvals and construct this construction season.

Tom Collins

RFC Engineering, Inc.

13635 Johnson Street

Ham Lake, Minnesota 55304

P: (763) 862-8000

F: (763) 862-8042

From: Melissa Barrett <melissa@kjolhaugenv.com>
Sent: Friday, April 17, 2020 11:56 AM
To: Baker, Richard (DNR) <richard.baker@state.mn.us>
Cc: JEFFREY Stalberger <stally68@msn.com>; Joyal, Lisa (DNR) <lisa.joyal@state.mn.us>
Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Hello Richard,

I hope you are doing well. We believe that the 150 review period for this application has now past. Prior to investing too much time in plans and regulatory coordination, Jeff Stallberger would like to know the results of DNR review of this site and proposed taking of Butternut trees.

Are you able to provide an update on review of the application? Thank you.

Melissa Lauterbach-Barrett
Kjolhaug Environmental Services
2500 Shadywood Road, Suite 130
Orono, MN 55331
Office: 952-401-8757
Cell: 952-388-3752

From: Baker, Richard (DNR) <richard.baker@state.mn.us>
Sent: Thursday, January 23, 2020 12:36 PM
To: Melissa Barrett <melissa@kjolhaugenv.com>
Cc: JEFFREY Stalberger <stally68@msn.com>; Joyal, Lisa (DNR) <lisa.joyal@state.mn.us>
Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Thanks for your email, Melissa.

I have yet to review the Crosstown Rolling Acres permit application.

Rich Baker

Richard J. Baker
Minnesota Endangered Species Coordinator | Division of Ecological and Water Resources

Minnesota Department of Natural Resources
500 Lafayette Rd., Box 25
St. Paul, MN 55155
Phone: 651-259-5073
Fax: 651-296-1811
Email: richard.baker@state.mn.us
<http://www.dnr.state.mn.us/eco/nhnrp>

 **DEPARTMENT OF
NATURAL RESOURCES**



From: Melissa Barrett <melissa@kjolhaugenv.com>
Sent: Wednesday, January 22, 2020 2:06 PM
To: Baker, Richard (DNR) <richard.baker@state.mn.us>; JEFFREY Stalberger <stally68@msn.com>; Joyal, Lisa (DNR)

<lisa.joyal@state.mn.us>

Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Richard,

I just wanted to check in to see if you or Lisa have been able to review this application, and to see if you had any questions or comments, or if you think additional information will be required.

Thank you.

Melissa Barrett

Certified Wetland Delineator, Licensed Soil Scientist

Kjolhaug Environmental Services, Inc.

2500 Shadywood Road, Suite 130

Orono, MN 55331

Office: (952) 401-8757

Cell: (952) 388-3752

From: Baker, Richard (DNR) <richard.baker@state.mn.us>

Sent: Monday, December 2, 2019 10:25 AM

To: JEFFREY Stalberger <stally68@msn.com>; Melissa Barrett <melissa@kjolhaugenv.com>; Joyal, Lisa (DNR) <lisa.joyal@state.mn.us>

Subject: RE: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Mr. Stalberger,

The DNR received the subject Application for a Permit to Take from Melissa Barrett on 11/18/19. As stated on the DNR website, a permit will be issued or denied within 150 days of receipt.

Please get back to me with any questions or concerns.

Rich Baker

Richard J. Baker

Minnesota Endangered Species Coordinator | Division of Ecological and Water Resources

Minnesota Department of Natural Resources

500 Lafayette Rd., Box 25

St. Paul, MN 55155

Phone: 651-259-5073

Fax: 651-296-1811

Email: richard.baker@state.mn.us

<http://www.dnr.state.mn.us/eco/nhnrp>



From: JEFFREY Stalberger [<mailto:stally68@msn.com>]

Sent: Tuesday, November 26, 2019 1:11 PM

To: Melissa Barrett <melissa@kjolhaugenv.com>; Baker, Richard (DNR) <richard.baker@state.mn.us>; Joyal, Lisa (DNR)

<lisa.joyal@state.mn.us>

Subject: Re: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Hi Richard and Lisa, I wanted to check to see how things are going on the below taking permit in the Ham Lake subdivision. If its possible can you give me an idea what we would be looking at for timing on this?

Thank you

Happy Thanksgiving

Jeff Stalberer

From: Melissa Barrett <melissa@kjolhaugenv.com>

Sent: Friday, November 8, 2019 10:54 PM

To: Baker, Richard (DNR) <richard.baker@state.mn.us>; Joyal, Lisa (DNR) <lisa.joyal@state.mn.us>

Cc: Stally68@msn.com <Stally68@msn.com>; Mark Kjolhaug <mkjol@kjolhaugenv.com>

Subject: Crosstown Rolling Acres, Ham Lake - Permit for Take (Butternut)

Richard and Lisa,

Attached is an application to take butternut trees with the construction of residential project in Ham Lake.

Also Attached is MNR's GIS data for the observed trees.

I will send a hard copy of this application to Richard in the mail, as Scott Millburn indicated that some emails may not be getting to your inbox.

Thank you.

Melissa Barrett

Certified Wetland Delineator, Licensed Soil Scientist

Kjolhaug Environmental Services, Inc.

2500 Shadywood Road, Suite 130

Orono, MN 55331

Office: (952) 401-8757

Cell: (952) 388-3752

TITLE SHEET

-of- CROSSTOWN ROLLING ACRES THIRD ADDITION
 -for- CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

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



**PLOWE
 ENGINEERING, INC.**

5776 LAKE DRIVE
 SUITE 100
 LINO LAKES, MN 55014
 PHONE: (651) 361-6716
 FAX: (651) 361-6716

SITE PLANNING
 & ENGINEERING

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 Givvel
 ADAM GIVVEL

DATE: 03/31/21 LIC. NO. 43563

DATE	BY	NO.	DESCRIPTION
11-12-20	ADAM GIVVEL	1	CITY & COUNTY REVIEW COMMENTS
12-21-20	ADAM GIVVEL	2	CITY & COUNTY REVIEW COMMENTS
2-26-21	ADAM GIVVEL	3	CITY & COUNTY REVIEW COMMENTS
3-26-21	ADAM GIVVEL	4	CITY COMMENTS
3-29-21	ADAM GIVVEL	5	CITY COMMENTS
03/31/21	ADAM GIVVEL	6	REVISIONS

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. Blod
 JASON S. BLOD
 Date: 3/31/21 License No. 41578

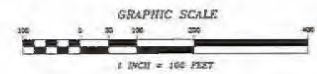


SHEET INDEX

T1	TITLE SHEET
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11-17	LIVABILITY PLAN
18-20	LIVABILITY CHART
C1.1 - C1.9	UTILITY PLANS - PLAN/PROFILE
C2.1 - C2.3	PRELIMINARY TURN LANE DETAILS
C3.1 - C3.5	DETAILS
C4.1 - C4.2	SWPPP



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 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110
 Lino Lakes, MN 55014
 Tel. (651) 961-6200 Fax (651) 961-6701



CROSSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAM LAKE, MN
PLAN PROFILE - 176TH LANE
PREPARED FOR: CROSSTOWN DEVELOPMENT LLC

DATE: 03/25/2021
LDC NO: 43583
ADAM GIBSON
REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

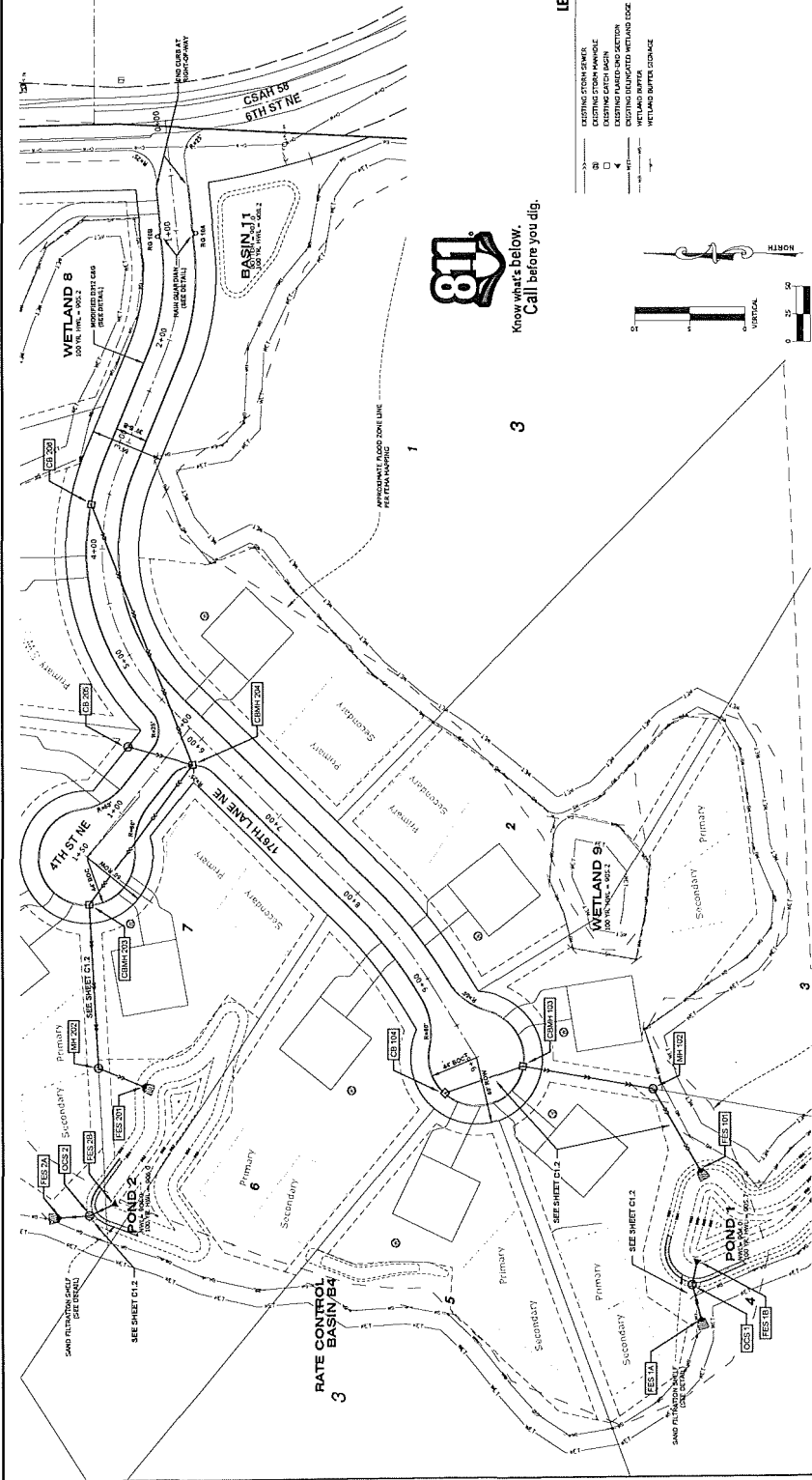
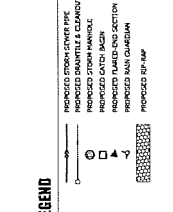
NO.	DATE	DESCRIPTION
1	03/25/2021	ISSUE FOR PERMIT
2	03/25/2021	ISSUE FOR PERMIT
3	03/25/2021	ISSUE FOR PERMIT
4	03/25/2021	ISSUE FOR PERMIT
5	03/25/2021	ISSUE FOR PERMIT
6	03/25/2021	ISSUE FOR PERMIT
7	03/25/2021	ISSUE FOR PERMIT
8	03/25/2021	ISSUE FOR PERMIT
9	03/25/2021	ISSUE FOR PERMIT
10	03/25/2021	ISSUE FOR PERMIT



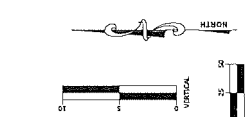
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 - THE CONTRACTOR SHALL VERIFY ALL ELEVATIONS AND LOCATIONS OF EXISTING UTILITIES AND STRUCTURES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FROM THE CITY OF HAM LAKE, MN.
 - ALL UTILITIES SHALL BE DEEPENED AND REINFORCED FOR ALL PLANNED SECTIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS.
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- STORM SEWER NOTES**
- STORM SEWER SHALL BE 18" DIA. POLYETHYLENE GLASS REINFORCED PIPE (PEGR) UNLESS OTHERWISE NOTED.
 - STORM SEWER SHALL BE 18" DIA. POLYETHYLENE GLASS REINFORCED PIPE (PEGR) UNLESS OTHERWISE NOTED.
 - STORM SEWER SHALL BE 18" DIA. POLYETHYLENE GLASS REINFORCED PIPE (PEGR) UNLESS OTHERWISE NOTED.
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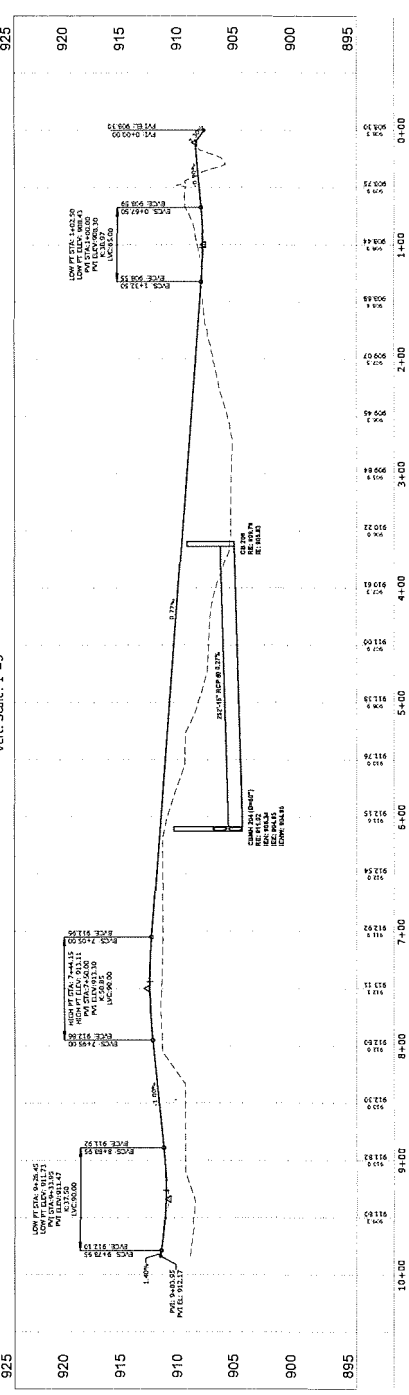
- CURB & BITUMINOUS NOTES**
- REQUIRE FOR CURB AND BITUMINOUS SHALL BE 4" CURB AND 4" BITUMINOUS UNLESS OTHERWISE NOTED.
 - REQUIRE FOR CURB AND BITUMINOUS SHALL BE 4" CURB AND 4" BITUMINOUS UNLESS OTHERWISE NOTED.
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 - REQUIRE FOR CURB AND BITUMINOUS SHALL BE 4" CURB AND 4" BITUMINOUS UNLESS OTHERWISE NOTED.



Know what's below.
Call before you dig.



176th Ln NE
Vert. Scale: 1"=50'
Horz. Scale: 1"=5'





Know what's below.
Call before you dig.

GENERAL NOTES

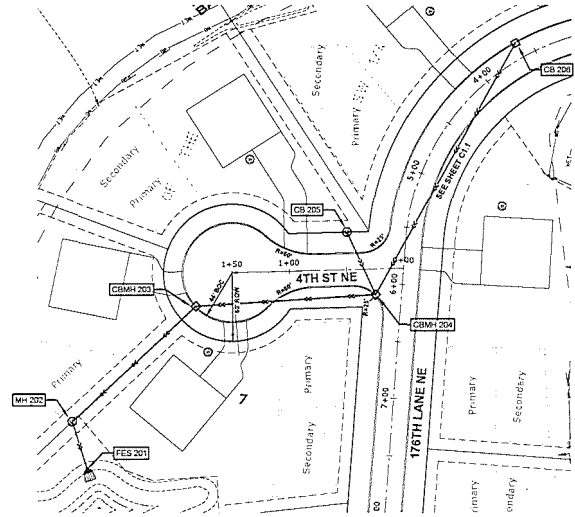
1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUDING. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATIONS AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.
2. CALL 811 FOR EXISTING UTILITIES LOCATION PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY ELEVATION AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF INSTALLATION.
4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARD SPECIFICATIONS AND ALL CITY ORDINANCES. ALL WATER STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR SIDEWAYS.
5. NOTIFY CITY AND COON CREEK WATERWED DISTRICT (COWD) A MEMBER 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

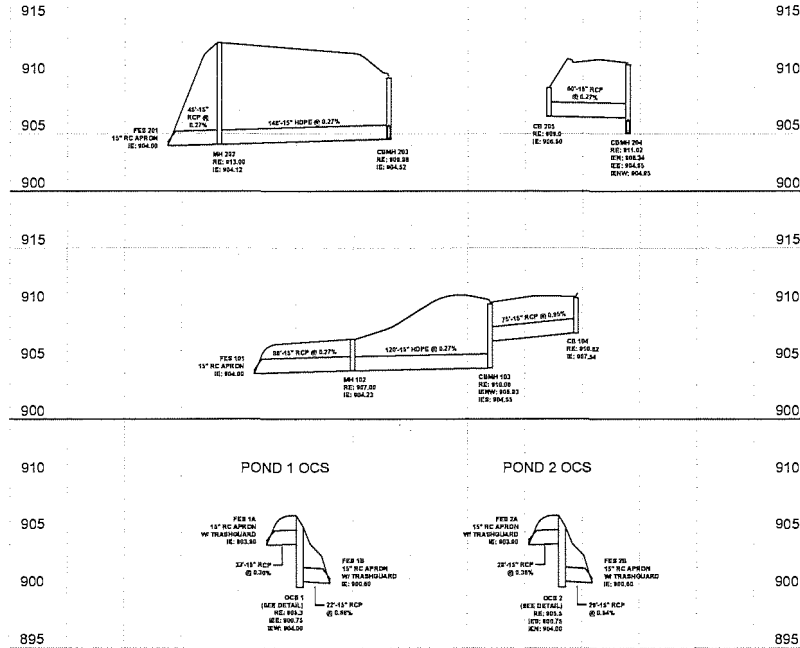
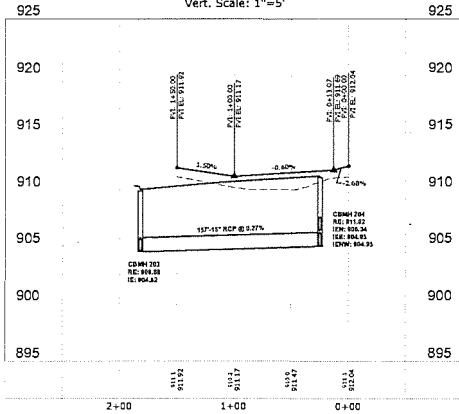
1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATION.
2. STORM SEWER SHALL BE:
 - (A) REINFORCED CONCRETE PIPE (RCP) ANSI C75 WITH 4" MANHOLE.
 - (B) HDPE PIPE SHALL MEET THE REQUIREMENTS OF ASTM D2001, TYPE B WITH WATER TIGHT CONNECTIONS. USE BARRICADES AT MANHOLES FOR BACKFILLING AND COMPACTION OF HDPE PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D2001.
3. DO NOT BACKFILL CATCH BASINS UNLESS FABRIC WRAP IS USED AS REQUIRED BY CITY.
4. TRASH GUARDS ARE REQUIRED FOR ALL FLARED END SECTIONS LESS THAN 4" IN DIAMETER.
5. PROVIDE CLASS B RIP-RAP W/ FILTER FABRIC AT ALL PIPE OUTLETS.
6. THE LAST THREE SECTIONS OF CONCRETE PIPE, INCLUDING APRON, FOR CONCRETE PIPE LESS THAN 4" 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. ANCHOR POINTS MUST BE WRAPPED WITH FABRIC OR OTHER PROTECTION TO PREVENT EROSION FROM ENTERING PIPE.
9. SEE SHEET C-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 SET-OUT AT FULL DEPTH.
3. SECTION INTERRUPTED STREET TO EXISTING OR BETTER SECTION. BACKFILLING OF CURB IS INCIDENTAL TO CURB INSTALLATION.



4th St NE
Horz. Scale: 1"=50'
Vert. Scale: 1"=5'



PLOWE
ENGINEERING, INC.

1778 LAKE DRIVE
SUITE 110
LANSING, MI 48204
PHONE: (313) 361-6210
FAX: (313) 361-6761

DRAWN BY: AD
CHECK BY: CVP
JOB NO: 19-1882
DATE: 7-15-20

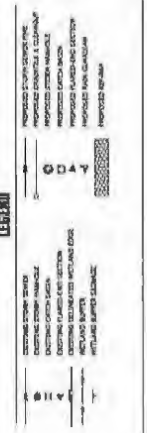
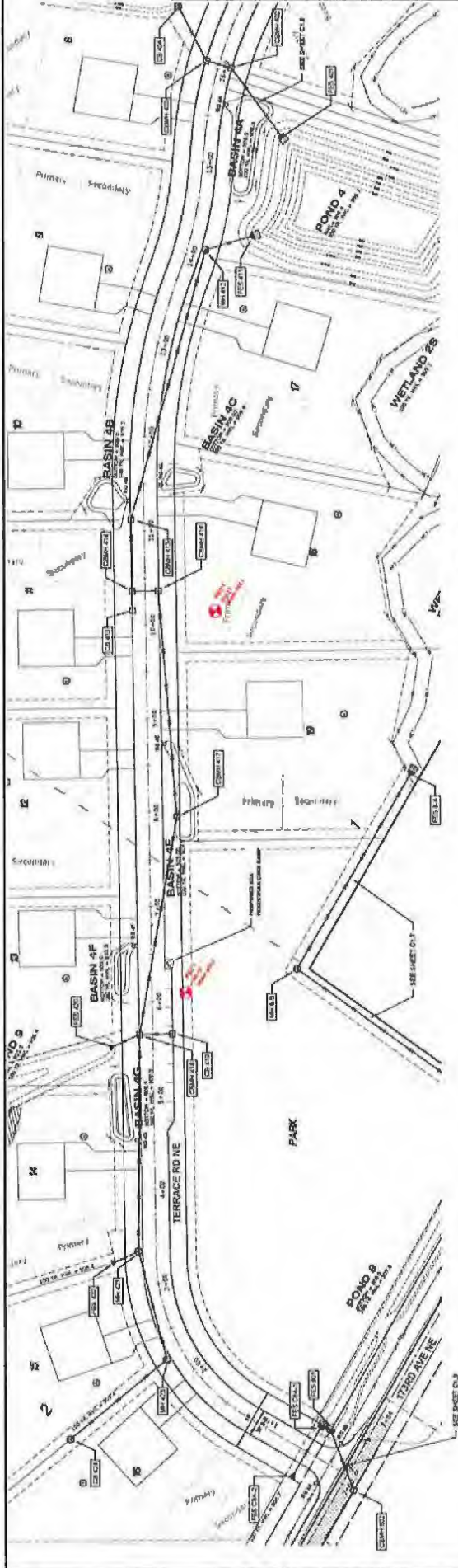
NO.	DATE	DESCRIPTION
1	11-20-20	COWD & CITY COMMENTS
2	1-13-21	COWD & CITY COMMENTS
3	1-28-21	COWD & CITY COMMENTS
4	2-25-21	CITY COMMENTS
5	3-1-21	CITY COMMENTS

RESERVED RIGHTS: THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MICHIGAN.

Adam J. Plowe
Professional Engineer
No. 0000000000
DATE: 03-25-2021 LIC. NO.: 41923

CROSSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAML LAKE, MI
PLAN PROFILE - 4TH ST NE
PREPARED FOR: CROSSTOWN DEVELOPMENT LLC

SHEET
C1.2



CURB & BITUMINOUS NOTES

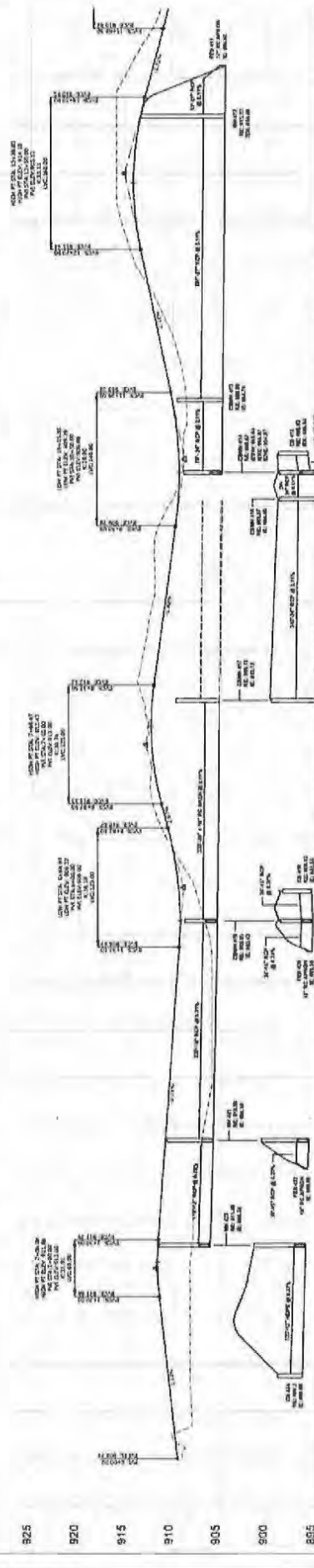
1. GENERAL AND LAYOUT OF BITUMINOUS PAVEMENT SHALL BE AS SHOWN ON THE PLAN.
2. ALL BITUMINOUS PAVEMENT SHALL BE PLACED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MUTCD AND THE STATE SPECIFICATIONS.
3. THE SURFACE SHALL BE FINISHED TO THE FINISHED GRADE SHOWN ON THE PLAN.
4. THE SURFACE SHALL BE FINISHED TO THE FINISHED GRADE SHOWN ON THE PLAN.

STORM SEWER NOTES

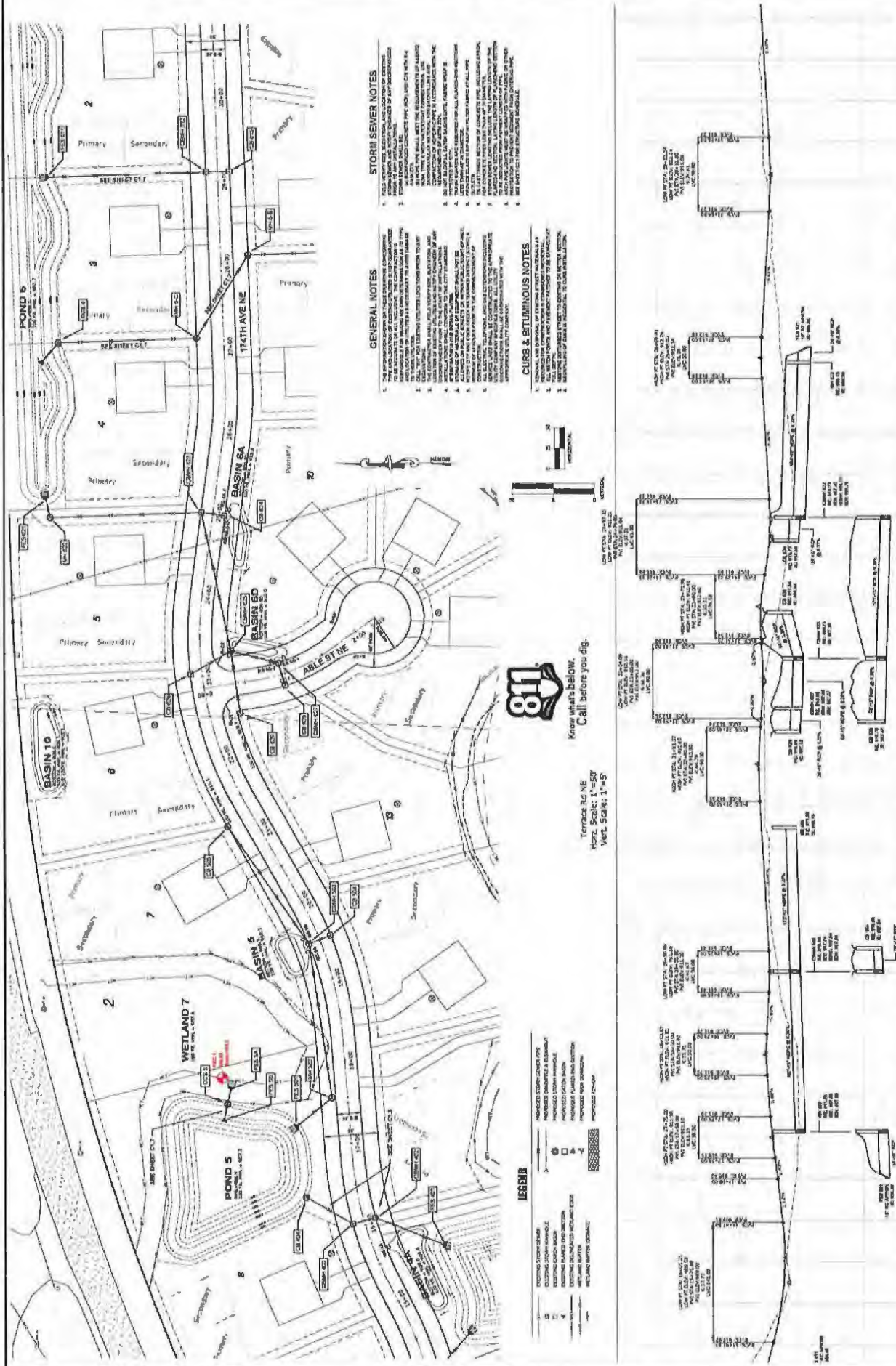
1. THE STORM SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MUTCD AND THE STATE SPECIFICATIONS.
2. THE STORM SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MUTCD AND THE STATE SPECIFICATIONS.
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5. THE STORM SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MUTCD AND THE STATE SPECIFICATIONS.

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF HALL LAKE AND THE STATE OF NEW JERSEY.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF HALL LAKE AND THE STATE OF NEW JERSEY.
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5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF HALL LAKE AND THE STATE OF NEW JERSEY.



Station	Elevation
6+00	885
6+10	890
6+20	895
6+30	900
6+40	905
6+50	910
6+60	915
6+70	920
6+80	925
6+90	920
7+00	915
7+10	910
7+20	905
7+30	900
7+40	895
7+50	890
7+60	885
7+70	880
7+80	875
7+90	870
8+00	865
8+10	860
8+20	855
8+30	850
8+40	845
8+50	840
8+60	835
8+70	830
8+80	825
8+90	820
9+00	815
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9+20	805
9+30	800
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9+50	790
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14+20	555
14+30	550
14+40	545
14+50	540
14+60	535
14+70	530
14+80	525
14+90	520
15+00	515



STORM SEWER NOTES

1. ALL STORM SEWER INSTALLATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION (DOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE CITY OF HAM LAKE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. ALL STORM SEWER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF HAM LAKE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
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10. ALL STORM SEWER SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF HAM LAKE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

GENERAL NOTES

1. THE INFORMATION ON THESE DRAWINGS IS BASED ON THE INFORMATION PROVIDED BY THE CLIENT AND THE DESIGNER HAS CONDUCTED VISUAL GENERAL VERIFICATION ONLY. THE DESIGNER HAS NOT CONDUCTED ANY SURVEYING OR FIELD VERIFICATION.
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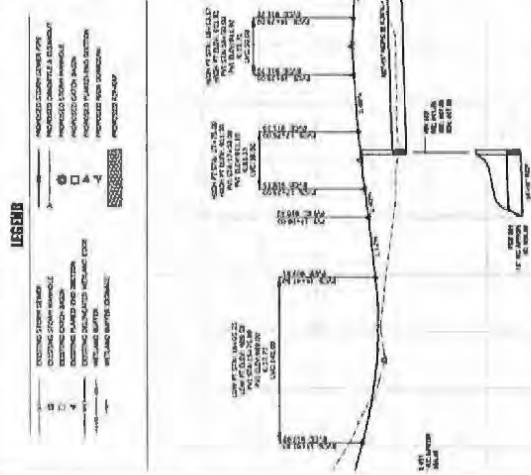
CURBS & RETAINMENT NOTES

1. CURBS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF HAM LAKE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
2. CURBS SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF HAM LAKE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
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Know what's below.
Call before you dig.

Terrace St NE
Horz. Scale: 1"=50'
Vert. Scale: 1"=5'





PLowe
ENGINEERING, INC.

4015 LANE DRIVE
SUITE 100
WINDY HILL, NORTH CAROLINA 27154
PHONE: 919.487.1111
FAX: 919.487.1112

NO.	DATE	DESCRIPTION
1	08/28/2011	ISSUED FOR PERMIT
2	08/28/2011	ISSUED FOR PERMIT
3	08/28/2011	ISSUED FOR PERMIT
4	08/28/2011	ISSUED FOR PERMIT
5	08/28/2011	ISSUED FOR PERMIT
6	08/28/2011	ISSUED FOR PERMIT
7	08/28/2011	ISSUED FOR PERMIT
8	08/28/2011	ISSUED FOR PERMIT
9	08/28/2011	ISSUED FOR PERMIT
10	08/28/2011	ISSUED FOR PERMIT

MEANS CLIENT THAT THE PLAN HAS BEEN PREPARED BY A LICENSED PROFESSIONAL ENGINEER AND THAT THE ENGINEER HAS REVIEWED THE PLAN FOR CONFORMANCE WITH THE RULES AND REGULATIONS OF THE BOARD OF ENGINEERING AND SURVEYING OF THE STATE OF NORTH CAROLINA.

David R. Plowe
REGISTERED PROFESSIONAL ENGINEER
NO. 14787

CROSSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAMLAKE, NH
PLAN PROFILE - MISC. STORM SEWER
PREPARED FOR: CROSSTOWN DEVELOPMENT LLC

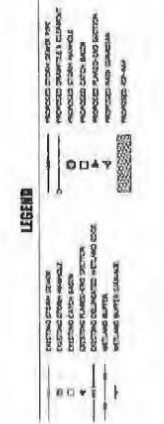
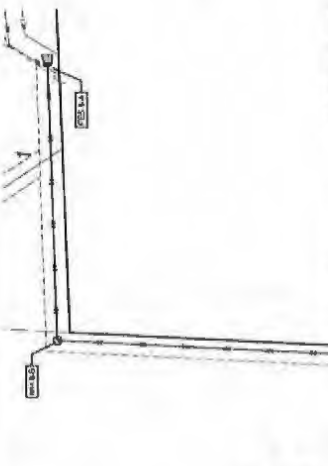
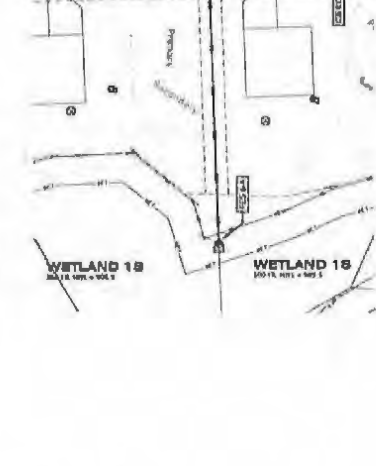
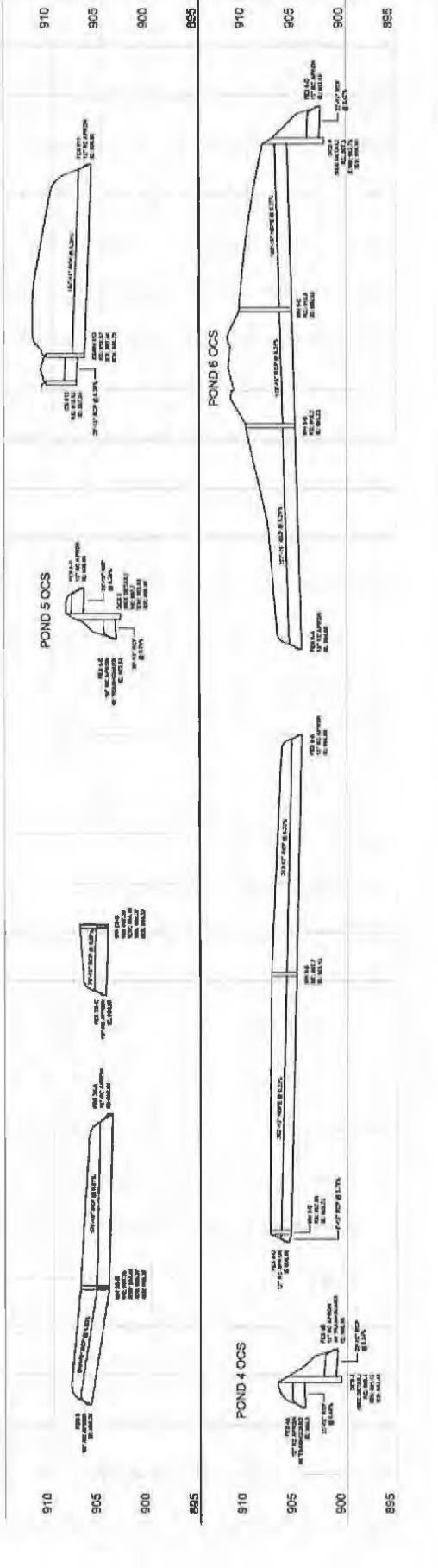
SHEET
C1.7

15-1-882

- GENERAL NOTES**
1. THE PROPOSED STORM SEWER SYSTEM IS SHOWN IN RED.
 2. THE PROPOSED STORM SEWER SYSTEM IS TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF HAMLAKE, NH, DEPARTMENT OF PUBLIC WORKS, STORM SEWER DESIGN MANUAL.
 3. THE PROPOSED STORM SEWER SYSTEM IS TO BE INSTALLED IN ACCORDANCE WITH THE CITY OF HAMLAKE, NH, DEPARTMENT OF PUBLIC WORKS, STORM SEWER DESIGN MANUAL.
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- CURB & BITUMINOUS NOTES**
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More what's below. Call before you dig.



GENERAL NOTES

1. THE PROPOSED STORM SEWER SYSTEM IS SHOWN IN RED ON THIS PLAN. THE EXISTING STORM SEWER SYSTEM IS SHOWN IN BLACK. THE EXISTING STORM SEWER SYSTEM IS SHOWN IN BLACK. THE EXISTING STORM SEWER SYSTEM IS SHOWN IN BLACK.
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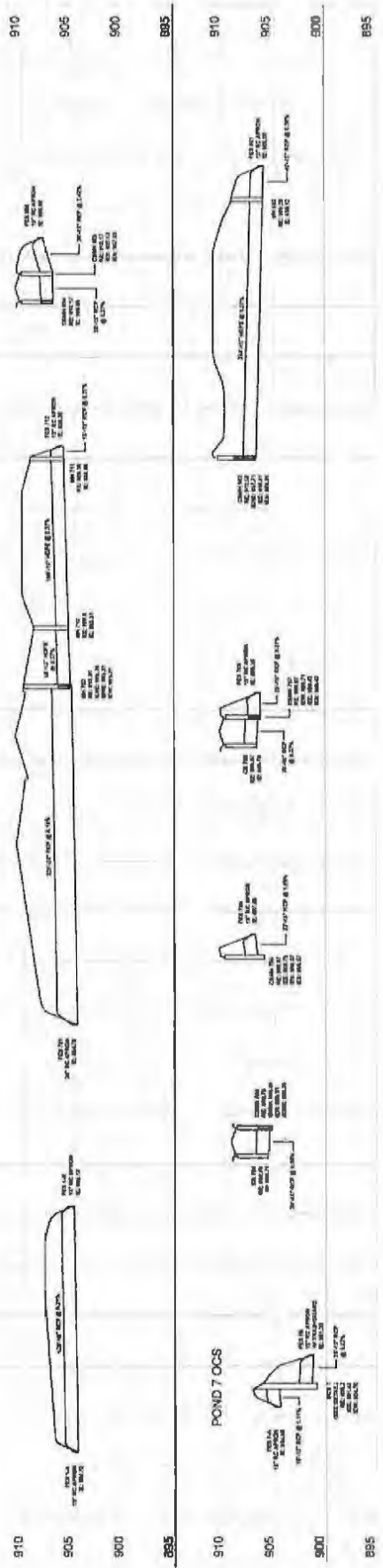
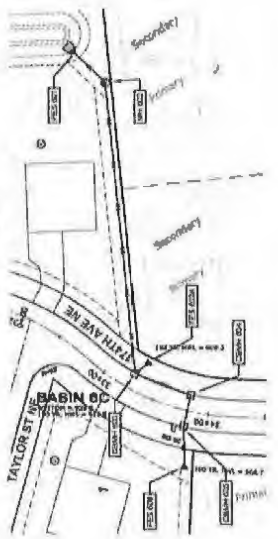
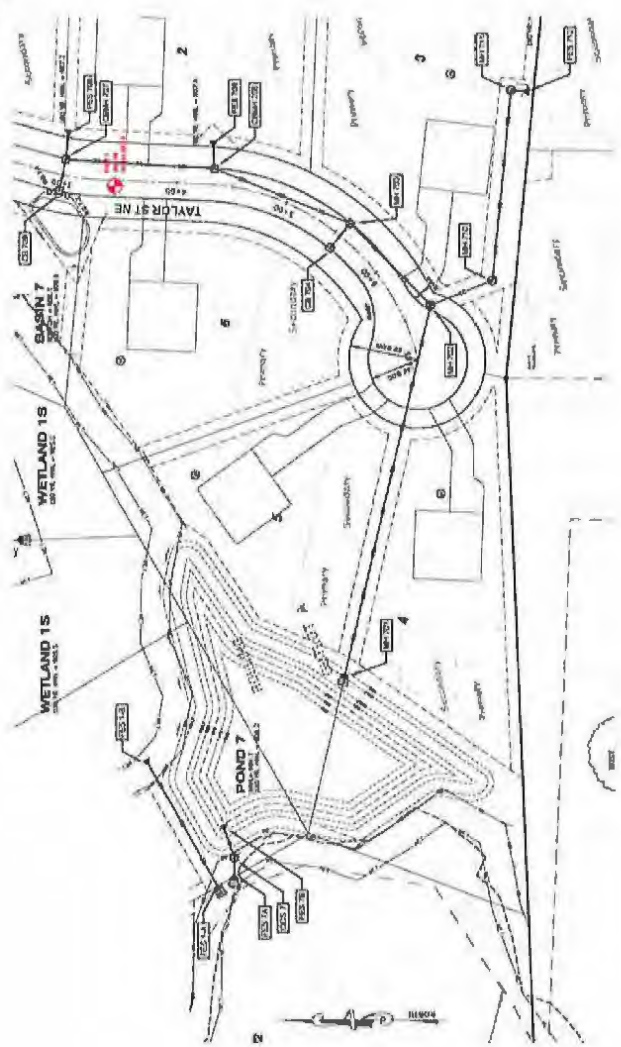
STORM SEWER NOTES

1. THE PROPOSED STORM SEWER SYSTEM IS SHOWN IN RED ON THIS PLAN. THE EXISTING STORM SEWER SYSTEM IS SHOWN IN BLACK. THE EXISTING STORM SEWER SYSTEM IS SHOWN IN BLACK.
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CURBS & BITUMINOUS NOTES

1. THE PROPOSED CURBS AND BITUMINOUS ARE SHOWN IN RED ON THIS PLAN. THE EXISTING CURBS AND BITUMINOUS ARE SHOWN IN BLACK. THE EXISTING CURBS AND BITUMINOUS ARE SHOWN IN BLACK.
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LEGEND



GENERAL NOTES

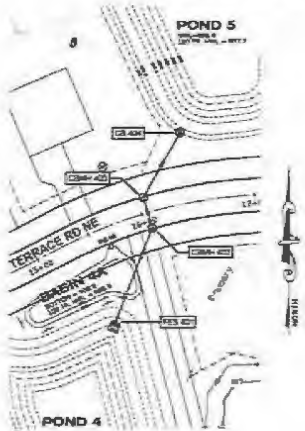
1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR COMPLETE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO TYPE AND LOCATION OF UTILITIES AS NECESSARY TO AVOID DAMAGES TO THESE UTILITIES.
2. CALL "811" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATIONS.
3. THE CONTRACTOR SHALL FIELD VERIFY PIPE SIZE, DEPTH AND LOCATION OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATION.
4. ALL MATERIALS SHALL CONFORM TO THE CITY SPECIFICATIONS AND DETAIL PLATES.
5. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC EGRESS OR RETURN PUBLIC HIGHWAYS.
6. NOTIFY CITY AND COORDINATE WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
7. ALL EXISTING, TEMPORARY, AND NEW UTILITIES INCLUDING SERVICE LINES SHALL BE CONFORMED TO THE APPROPRIATE CITY ENGINEER SPECIFICATIONS. ALL UTILITIES DISCONNECTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

STORM SEWER NOTES

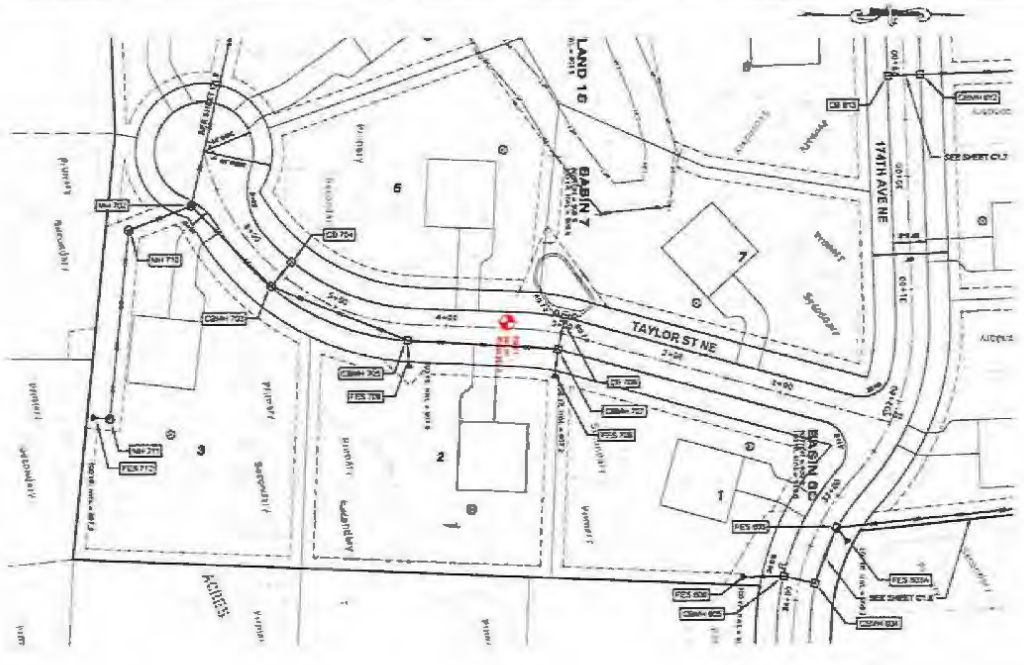
1. FIELD VERIFY PIPE SIZE, DEPTH AND LOCATION OF EXISTING STORM SEWERS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO ANY INSTALLATION.
2. STORM SEWERS SHALL BE:
 - a. 18" DIA. CONCRETE PIPE FOR ALL MAINS AND MANHOLE BRANCHES.
 - b. 18" DIA. PIPE SHALL MEET THE REQUIREMENTS OF AASHTO ROAD TYPE 1 WITH 1/4" TO 1/2" THICK CONNECTIONS AND SANDWICHED IN AN INVERT FOR MANHOLES AND CONNECTIONS OF ADJACENT PIPES IN ACCORDANCE WITH THE REQUIREMENTS OF AASHTO.
3. THE CONTRACTOR SHALL MAINTAIN 1/4" MINIMUM CLEARANCE FROM ALL EXISTING UTILITIES.
4. THE CONTRACTOR SHALL MAINTAIN 1/4" MINIMUM CLEARANCE FROM ALL EXISTING UTILITIES.
5. THE CONTRACTOR SHALL MAINTAIN 1/4" MINIMUM CLEARANCE FROM ALL EXISTING UTILITIES.
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9. THE CONTRACTOR SHALL MAINTAIN 1/4" MINIMUM CLEARANCE FROM ALL EXISTING UTILITIES.
10. THE CONTRACTOR SHALL MAINTAIN 1/4" MINIMUM CLEARANCE FROM ALL EXISTING UTILITIES.

CURB & BITUMINOUS NOTES

1. REMOVAL AND DISPOSAL OF EXISTING PAVEMENT IN TERRACE AS REQUIRED FOR CONSTRUCTION IS CONSIDERED INCIDENTAL.
2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SHOWN AT ALL CORNERS.
3. MATCHES BETWEEN STREET TO EXISTING ON SECTION SECTION.
4. REPAIRS OF CURB IS INCIDENTAL TO CURB INSTALLATION.

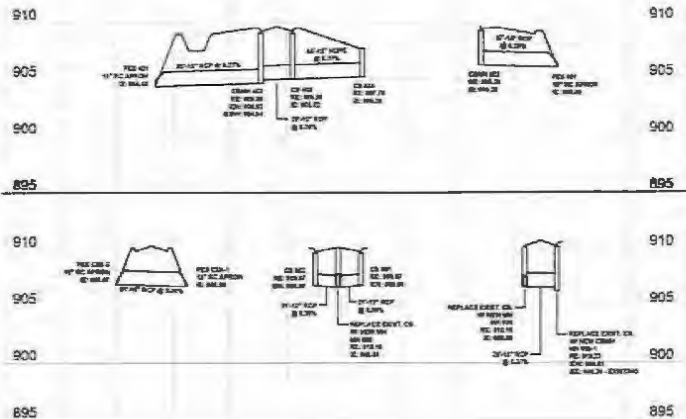
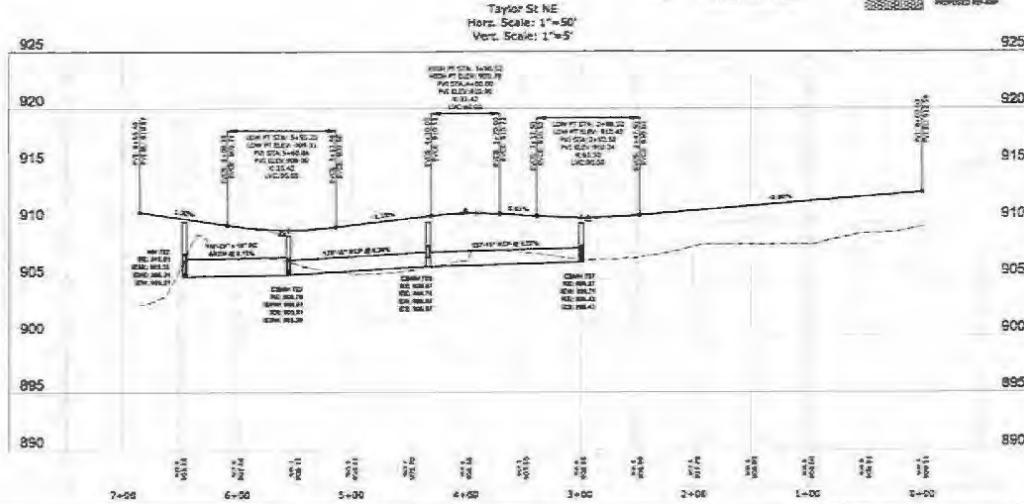


Know what's below.
Call before you dig.



LEGEND

- EXISTING STORM SEWER
- EXISTING STORM MANHOLE
- EXISTING DATCH BASIN
- EXISTING PLACED AND SECTION
- EXISTING UNPLACED WETLAND USE
- WETLAND BUFFER
- WETLAND BUFFER SERVICE
- PROPOSED STORM SEWER PIPE
- PROPOSED MANHOLE & CLEANOUT
- PROPOSED STORM MANHOLE
- PROPOSED DATCH BASIN
- PROPOSED PLACED AND SECTION
- PROPOSED UNPLACED WETLAND USE
- PROPOSED WASH BASIN
- PROPOSED PAVEMENT



4075 LAKE DRIVE
SUITE 100
LONG BEACH, WA 98040

PHONE: 360.536.9600
FAX: 360.536.9670

DRAWN BY: CHECK BY:
A.S. C.M.

JOB NO: DATE:
15-1882 11-20

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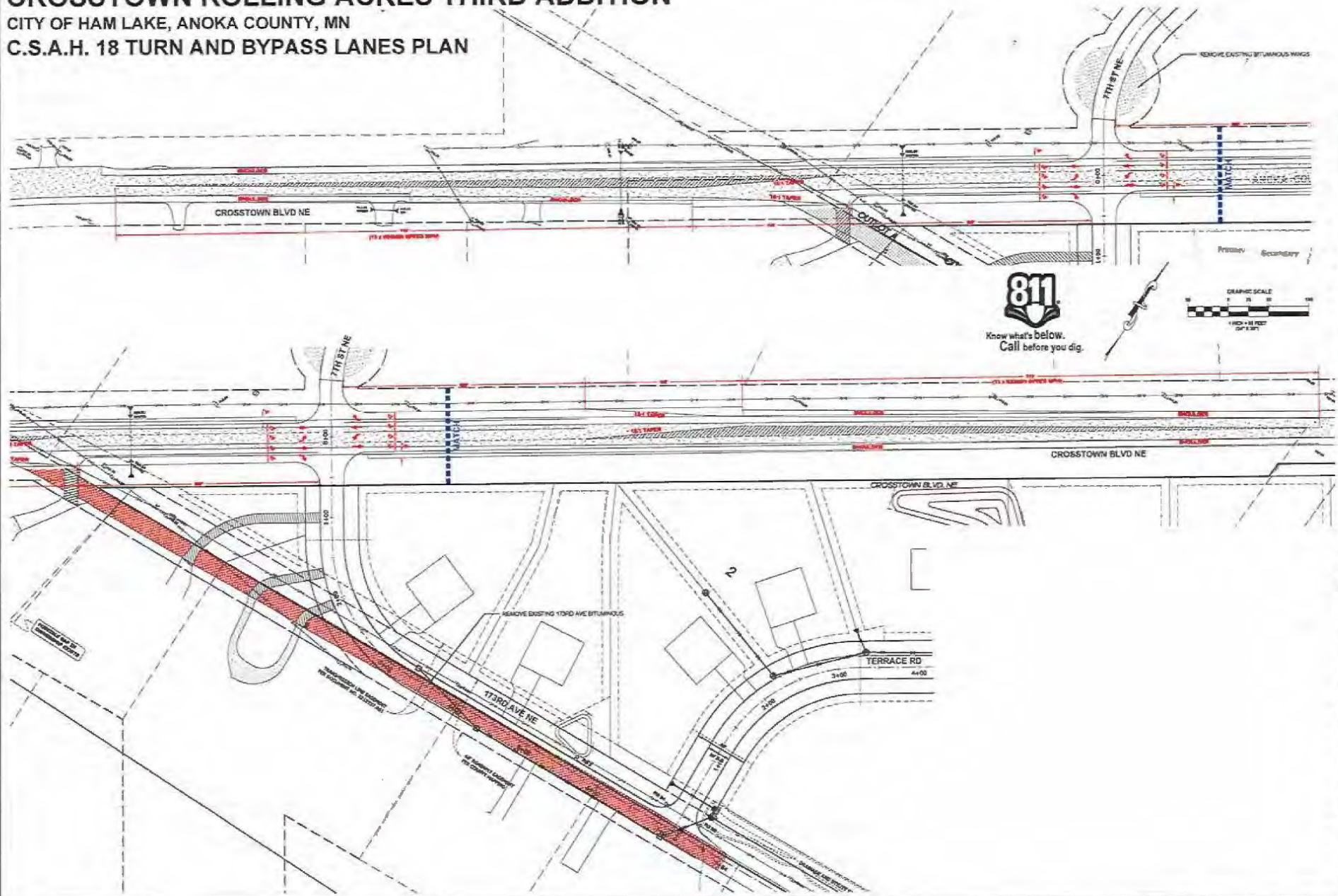
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**CROSSSTOWN ROLLING ACRES
THIRD ADDITION**
CITY OF HAWAII, HI
PLAN PROFILE - TAYLOR ST NE & MISC. STORM
PREPARED FOR: CROSSSTOWN DEVELOPMENT LLC

SHEET
C1.9

CROSTOWN ROLLING ACRES THIRD ADDITION

CITY OF HAM LAKE, ANOKA COUNTY, MN
C.S.A.H. 18 TURN AND BYPASS LANES PLAN



PLOWE ENGINEERING, INC.
1575 LAKE DRIVE
SUITE 200
HAM LAKE, MN 55029
PHONE: 952-354-7272
FAX: 952-354-7271

DRAWN BY: CHECK BY:
J.S. J.S.
DATE: 7/23/18

JOB NO. 18-1882

DATE: 03/28/2018

U.S. 101 41153

**CROSTOWN ROLLING ACRES
THIRD ADDITION**
CITY OF HAM LAKE, MN
PREPARED FOR: CROSTOWN DEVELOPMENT LLC

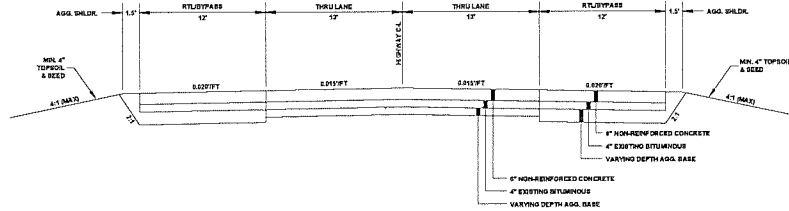
**SHEET
C2.1**

CROSTOWN ROLLING ACRES THIRD ADDITION

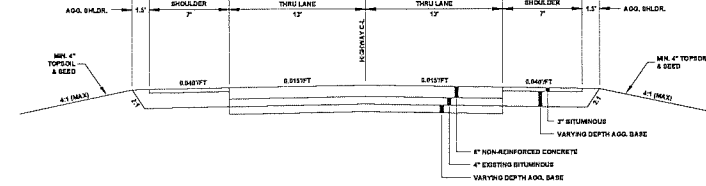
CITY OF HAM LAKE, ANOKA COUNTY, MN

C.S.A.H. 18 TURN AND BYPASS LANE DETAILS

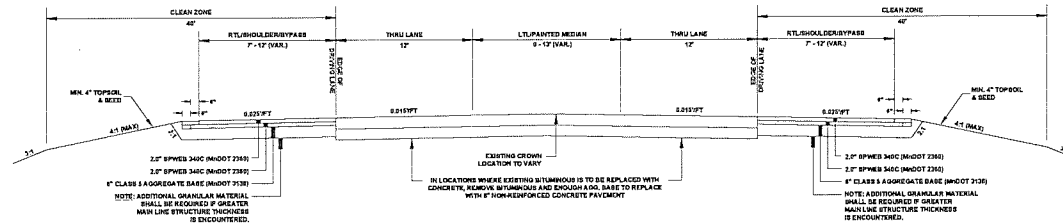
C.S.A.H. 18 (CROSTOWN BLVD.) EXISTING TYP. SECTION
RTL / BYPASS LANES



C.S.A.H. 18 (CROSTOWN BLVD.) EXISTING TYP. SECTION
BITUMINOUS SHOULDER



C.S.A.H. 18 (CROSTOWN BLVD.) PROPOSED TYP. SECTION
RTL / BYPASS LANES



- NOTES:
1. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH MNDOT SPECIFICATIONS LATEST EDITION.
 2. ALL DRILL AND SOLE MUST BE EXISTING MNDOT 25-(A1), M-1007 (TYPE 1, DISC ANCHORED).
 3. USE ALL STRIPING BLANKET FOR 12" AND ON ALL SCOPES.
 4. PAVEMENT MARKINGS SHALL BE EPOXY.



PLOWE
ENGINEERING, INC.

6776 LAKE CREVE
SUITE 110
LINO LAKE, MN 55014

PHONE: (954) 364-8210
FAX: (954) 364-8751

DRAWN BY: CWP
CHECK BY: CWP

JOB NO: 18-1882
DATE: 7-15-20

NO.	DATE	DESCRIPTION
1	7-15-20	ISSUE FOR PERMIT
2	7-15-20	ISSUE FOR CONSTRUCTION
3	7-15-20	ISSUE FOR CITY COMMENTS
4	7-15-20	ISSUE FOR CITY COMMENTS
5	7-15-20	ISSUE FOR CITY COMMENTS
6	7-15-20	ISSUE FOR CITY COMMENTS
7	7-15-20	ISSUE FOR CITY COMMENTS
8	7-15-20	ISSUE FOR CITY COMMENTS

WE HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY
A LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF MINNESOTA.
Adam J. Plowe
ADAM J. PLOWE
DATE: 03/28/2021 LSC NO: 41953

CROSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAM LAKE, MN
C.S.A.H. TURN AND BYPASS LANES DETAILS
PREPARED FOR: CROSTOWN DEVELOPMENT LLC

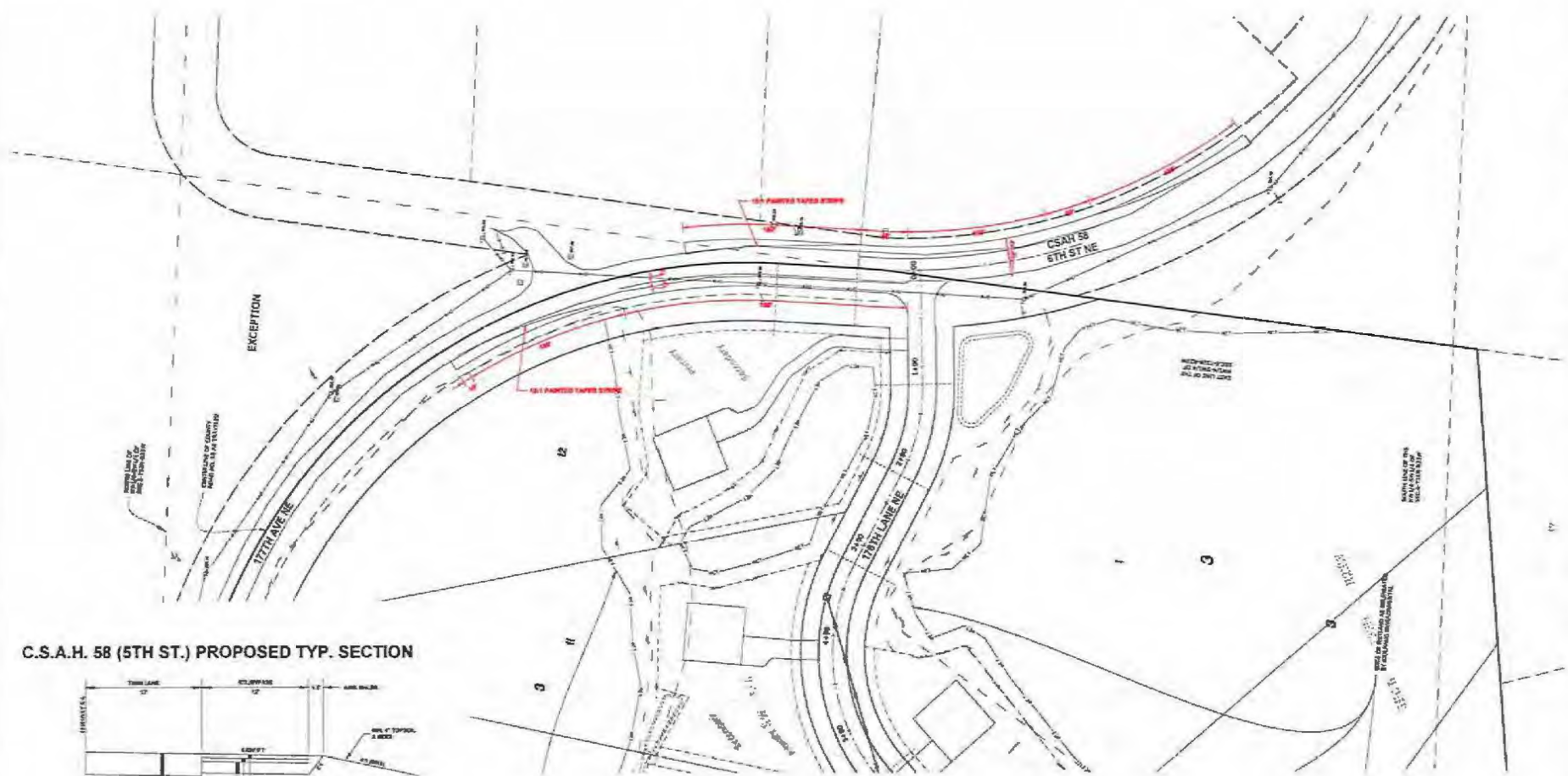
SHEET
C2.2

CROSTOWN ROLLING ACRES THIRD ADDITION

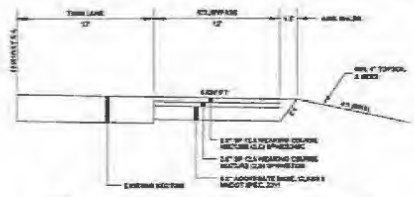
CITY OF HAM LAKE, ANOKA COUNTY, MN
C.S.A.H. 58 TURN LANE PLAN



Know what's below.
Call before you dig.



C.S.A.H. 58 (5TH ST.) PROPOSED TYP. SECTION



- NOTES
1. ALL INSTALLATIONS SHALL BE IN ACCORDANCE WITH MOST RECENT EDITIONS OF THE MNCSSD SPECIFICATIONS.
 2. ALL NEW PAVED AREAS SHALL BE CONSTRUCTED TO A 1/4" INCH TYPICAL CROSS SLOPE.
 3. SEE ALL SURVEYING PLANS FOR SPOT ELEVATIONS ON ALL SLOPES.
 4. PREPARED FOR: CROSTOWN DEVELOPMENT LLC



Plowe
ENGINEERING, INC.

575 LAKE DRIVE
SUITE 102
LONG LAKE, MN 55344
PHONE: (952) 344-4200
FAX: (952) 344-4271

DRAWN BY: GREEN EV
JOB NO.: 14-002 DATE: 7-15-20

NO.	DATE	DESCRIPTION
1	7-15-20	ISSUE FOR PERMIT
2	7-15-20	ISSUE FOR PERMIT
3	7-15-20	ISSUE FOR PERMIT
4	7-15-20	ISSUE FOR PERMIT
5	7-15-20	ISSUE FOR PERMIT
6	7-15-20	ISSUE FOR PERMIT
7	7-15-20	ISSUE FOR PERMIT
8	7-15-20	ISSUE FOR PERMIT
9	7-15-20	ISSUE FOR PERMIT
10	7-15-20	ISSUE FOR PERMIT
11	7-15-20	ISSUE FOR PERMIT
12	7-15-20	ISSUE FOR PERMIT
13	7-15-20	ISSUE FOR PERMIT

CROSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAM LAKE, MN
C.S.A.H. 58 TURN LANE PLAN
PREPARED FOR: CROSTOWN DEVELOPMENT LLC

SHEET
C2.3

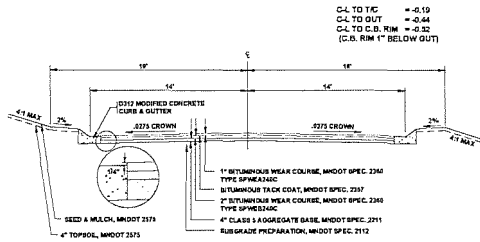
CROSTOWN ROLLING ACRES THIRD ADDITION

CITY OF HAM LAKE, ANOKA COUNTY, MN

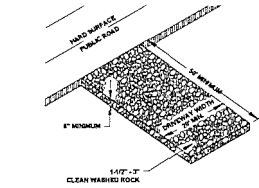
DETAILS



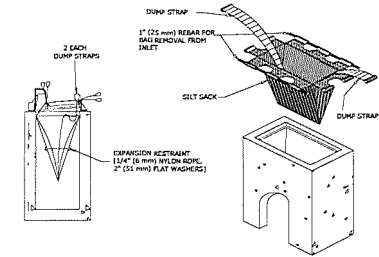
Know what's below.
Call before you dig.



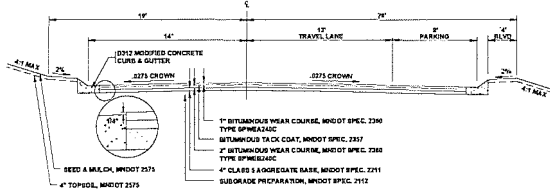
TYPICAL STREET SECTION (7-TON)
N.T.S.



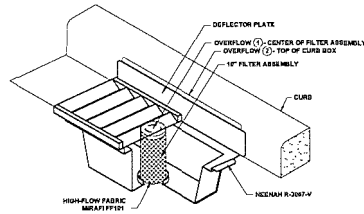
ROCK CONSTRUCTION ENTRANCE
N.T.S.



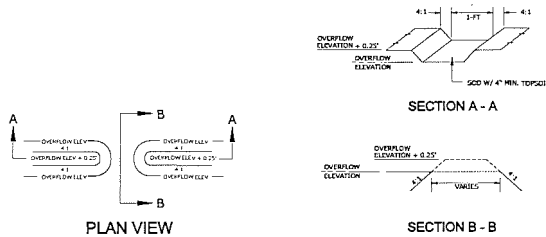
SILT SACK
N.T.S.



TYPICAL STREET SECTION (7-TON)
AT PARALLEL PARKING STALLS
N.T.S.



WIMCO INLET PROTECTION
N.T.S.



RATE CONTROL BASIN OVERFLOW
N.T.S.

STORM SEWER STRUCTURE SCHEDULE					
#	SIZE	CASTING	#	SIZE	CASTING
102	48" DIA.	NEENAH R-1733	612	48" DIA.	NEENAH R-3246-C
103	48" DIA.	NEENAH R-3246-C	613	2' x 3'	NEENAH R-3248-C
104	2' x 3'	NEENAH R-3246-C	622	48" DIA.	NEENAH R-1733
202	48" DIA.	NEENAH R-1733	623	48" DIA.	NEENAH R-3246-C
203	48" DIA.	NEENAH R-3246-C	624	2' x 3'	NEENAH R-3246-C
204	60" DIA.	NEENAH R-3246-C	625	60" DIA.	NEENAH R-3241
205	MNDOT DES. G	NEENAH R-4341	626	2' x 3'	NEENAH R-3246-C
206	2' x 3'	NEENAH R-3246-C	627	48" DIA.	NEENAH R-3246-C
402	48" DIA.	NEENAH R-3246-C	628	2' x 3'	NEENAH R-3246-C
403	2' x 3'	NEENAH R-3246-C	629	MNDOT DES. G	NEENAH R-4341
404	48" DIA.	NEENAH R-4341	702	48" DIA.	NEENAH R-1733
412	60" DIA.	NEENAH R-1733	703	60" DIA.	NEENAH R-3246-C
413	72" DIA.	NEENAH R-3246-C	704	2' x 3'	NEENAH R-3246-C
414	84" DIA.	NEENAH R-3246-C	705	48" DIA.	NEENAH R-3246-C
415	2' x 3'	NEENAH R-3246-C	707	48" DIA.	NEENAH R-3246-C
416	72" DIA.	NEENAH R-3246-C	709	2' x 3'	NEENAH R-3246-C
417	48" DIA.	NEENAH R-4341	710	48" DIA.	NEENAH R-1733
418	60" DIA.	NEENAH R-3246-C	711	48" DIA.	NEENAH R-1733
419	2' x 3'	NEENAH R-3246-C	802	48" DIA.	NEENAH R-3246-C
421	48" DIA.	NEENAH R-1733	803	48" DIA.	NEENAH R-3246-C
423	48" DIA.	NEENAH R-1733	804	2' x 3'	NEENAH R-3246-C
424	MNDOT DES. G	NEENAH R-4341	808	48" DIA.	NEENAH R-1733
502	48" DIA.	NEENAH R-1733	809	2' x 3'	NEENAH R-3246-C
503	48" DIA.	NEENAH R-3246-C	802	2' x 3'	NEENAH R-3246-C
504	2' x 3'	NEENAH R-3246-C	808	48" DIA.	NEENAH R-1733
505	MNDOT DES. G	NEENAH R-4341	809	48" DIA.	NEENAH R-1733
C4B-2	48" DIA.	NEENAH R-1733	8-B	48" DIA.	NEENAH R-1733
C4B-3	48" DIA.	NEENAH R-1733	8-C	48" DIA.	NEENAH R-1733
602	48" DIA.	NEENAH R-1733	8-B	48" DIA.	NEENAH R-1733
603	60" DIA.	NEENAH R-3246-C	8-C	48" DIA.	NEENAH R-1733
604	48" DIA.	NEENAH R-3246-C	25-B	48" DIA.	NEENAH R-1733
605	48" DIA.	NEENAH R-3246-C			

PLOWE ENGINEERING, INC.
4776 LAKE DRIVE SUITE 110
LINO LAKE, MN 56214
PHONE: (855) 365-6710
FAX: (855) 365-6701

DATE: 7-15-20
JOB NO: 19-1882

DESIGNED BY: [Signature]
CHECKED BY: [Signature]
DATE: 03/28/2021

CROSS TOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAM LAKE, MN
DETAILS
PREPARED FOR: CROSS TOWN DEVELOPMENT LLC

SHEET
C3.1

CROSTOWN ROLLING ACRES THIRD ADDITION

CITY OF HAM LAKE, ANOKA COUNTY, MN

DETAILS



Know what's below.
Call before you dig.



875 LAKE DRIVE
HAM LAKE, MN 55434

PH: 763-885-3475
FAX: 763-885-3475

STATE REG. NO. 150000000001
STATE REG. DATE 10/15/19

PROJ. NO. 2019-0001
DATE: 7/23/20

SCALE: AS SHOWN

DESIGNED BY: J. H. JOHNSON
CHECKED BY: J. H. JOHNSON

DRAWN BY: J. H. JOHNSON

DATE: 7/23/20

SCALE: AS SHOWN

DATE: 7/23/20

SCALE: AS SHOWN

DATE: 7/23/20

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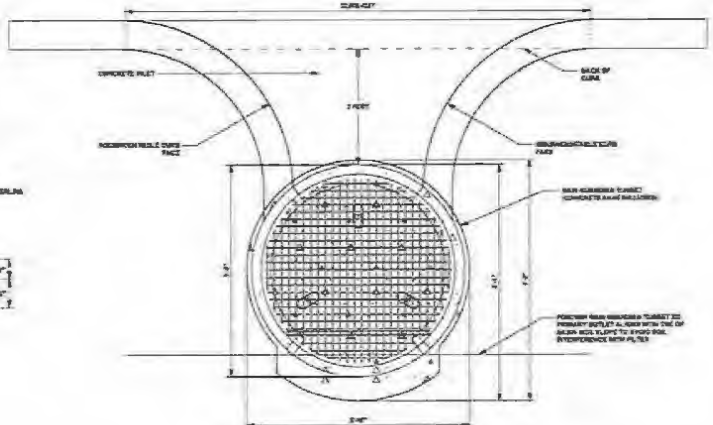
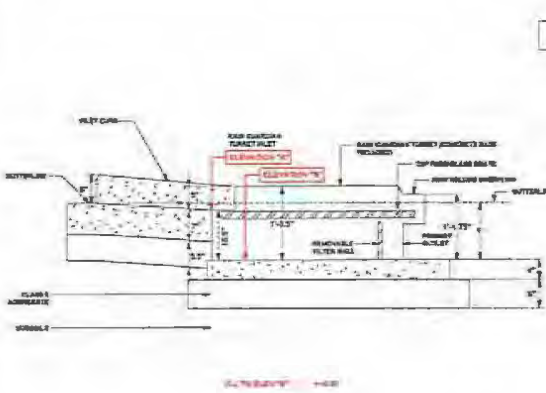
DATE: 7/23/20

SCALE: AS SHOWN

DATE: 7/23/20

SCALE: AS SHOWN

DATE: 7/23/20



BASIN #	STREET	C.E. STN	C.E. ELEV.	INVERT	NO. OF	BASIN
SOUTH OF CROSTOWN						
AA	TERACE	2502	908.79	908.79	4	100.0
AB	TERACE	1532	908.53	908.53	4	100.0
AC	TERACE	1048	908.47	908.34	4	100.0
AD	TERACE	971	908.29	908.05	4	100.0
AE	TERACE	838	907.86	908.00	4	100.0
AF	TERACE	434	908.22	908.02	4	100.0
NORTH OF CROSTOWN						
GA	TERACE	2792	912.44	912.41	4	100.0
GB	TERACE	2580	912.44	912.32	4	100.0
GC	TERACE	2404	912.52	912.03	4	100.0
GD	TERACE	2343	912.06	909.52	4	100.0
GE	TERACE	1878	912.71	909.03	4	100.0
GF	TRAIL	148	912.72	909.06	4	100.0
GH	TRAIL	47	912.49	909.19	4	100.0
NORTH OF CROSTOWN						
HA	TAYLOR	291	912.49	912.37	4	100.0
HB	TAYLOR	168	912.42	912.12	4	100.0
HC	TRAIL	181	912.66	912.17	4	100.0
HD	STYERDALE	N/A	N/A	919.03	4	100.0
HE	STYERDALE	N/A	N/A	918.76	4	100.0
HF	TRAIL	253	912.49	912.38	4	100.0

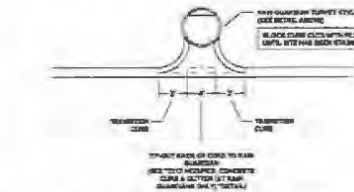
C.E. STA. = CENTERLINE ELEVATION AT RAIN GUARDIAN
C.E. STN. = CENTERLINE ELEVATION AT POLE GUARDIAN
NO. OF = VELOCITIES 'A'
INVERT = VELOCITIES 'B'
NO. OF BOTTOM = VELOCITIES 'C'
BASIN BOTTOM = BOTTOM OF INFILTRATION BASIN

RAIN GARDEN - TURRET STYLE

N.T.S.

RAIN GUARDIAN ELEVATIONS

N.T.S.



CURB CUTS @ RAIN GUARDIAN

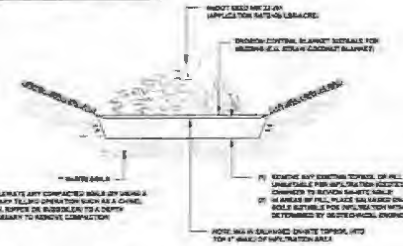
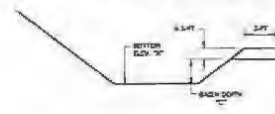
N.T.S.

FOR INFILTRATION APPLICATIONS, REVISIONS TO THIS PLAN SHALL BE MADE IN ACCORDANCE WITH THE FOLLOWING: CONTRACT SHALL BE REVIEWED PRIOR TO ANY WORK BEING PERFORMED.

1. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
2. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
3. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
4. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
5. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
7. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
8. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
9. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.
10. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.

DO NOT EXPOSE CURB TO FINAL GRADE OR REMOVE CURB PRIOR TO FINAL GRADE. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL UTILITIES AND ADJACENT PROPERTIES AT ALL TIMES.

INFILTRATION BASIN OVERFLOW DETAIL



INFILTRATION BASINS

N.T.S.



D312 MODIFIED CONCRETE CURB & GUTTER

(AT RAIN GUARDIANS ONLY)

N.T.S.

INFILTRATION BASIN NUMBER												
	AA	AB	AC	AD	AE	AF	GA	GB	GC	GD	GE	GF
BASIN BOTTOM ELEV. "A"	908.00	909.00	909.00	909.00	909.00	908.00	909.00	909.00	909.00	908.00	909.00	909.00
OUTLET ELEV. "B"	908.50	909.50	909.50	909.50	909.50	908.50	909.50	909.50	909.50	908.50	909.50	909.50
DEPTH (FT)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50

CROSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAM LAKE, MN
DETAILS

SHEET
C3.2

PREPARED FOR: CROSTOWN DEVELOPMENT LLC

CROSTOWN ROLLING ACRES THIRD ADDITION

CITY OF HAM LAKE, ANOKA COUNTY, MN

DETAILS



Know what's below.
Call before you dig.



PLOWE
ENGINEERING, INC.

8778 LAKE DRIVE
SUITE 102
HAM LAKE, MN 55414

PHONE: (651) 361-4110
FAX: (651) 361-4791

DRAWN BY: CHECK BY:
A.G. CWP

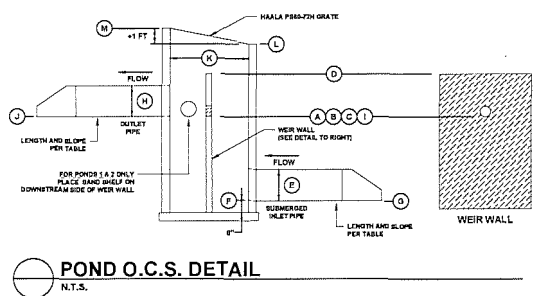
JOB NO: 15-1882 DATE: 7-15-20

NO.	DATE	DESCRIPTION
1		
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10		

WHEREBY IT IS CERTIFIED THAT THESE PLANS WERE PREPARED BY
A PROFESSIONAL ENGINEER OR ARCHITECT REGISTERED IN THE
STATE OF MINNESOTA.
DATE: 03/28/2021 U.S. NO. 41563

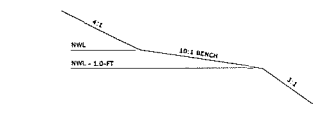
CROSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAM LAKE, MN
DETAILS
PREPARED FOR: CROSTOWN DEVELOPMENT LLC

SHEET
C3.3

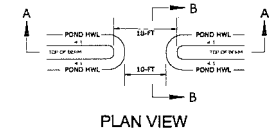


POND O.C.S. DETAIL
N.T.S.

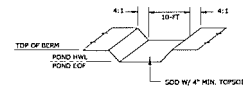
	POND NUMBER					
	1	2	4	5	6	7
NWL	904.0	904.0	904.4	906.0	906.0	904.7
HWL	905.7	906.0	906.3	907.7	907.7	906.2
WEIR WALL						
ORIFICE TYPE	A	ROUND	ROUND	ROUND	ROUND	ROUND
ORIFICE INVERT	B	904.60	904.30	904.60	906.90	906.00
ORIFICE DIAMETER (INCHES)	C	6.0	8.0	8.0	4.0	4.0
TOP OF WEIR WALL	D	905.7	906.0	906.3	907.7	906.2
SUBMERGED INLET PIPE						
DIAMETER (INCHES)	E	15	15	15	15	15
INVERT @ MANHOLE	F	902.75	900.75	901.15	903.45	902.75
INVERT @ SUBM. APRON	G	903.60	900.60	901.00	903.50	902.60
LENGTH		32	26	28	20	28
SLOPE		0.68%	26.00%	0.54%	0.75%	0.47%
OUTLET PIPE						
DIAMETER (INCHES)	H	15	15	15	15	15
INVERT @ MANHOLE	I	904.00	904.00	904.40	906.90	906.00
INVERT @ DOWNSTREAM END	J	903.90	903.90	904.30	906.84	905.55
LENGTH		33	28	25	20	18
SLOPE		0.30%	0.30%	0.40%	0.30%	0.27%
MANHOLE						
DIAMETER	K	60	60	60	60	60
RIM (LOW)	L	905.7	906.0	906.3	907.7	906.2
RIM (HIGH)	M	906.7	907.0	907.3	908.7	907.3



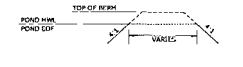
TYPICAL POND SECTION
N.T.S.



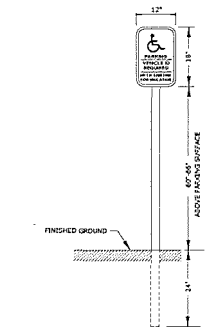
POND SODDED OVERFLOWS
N.T.S.



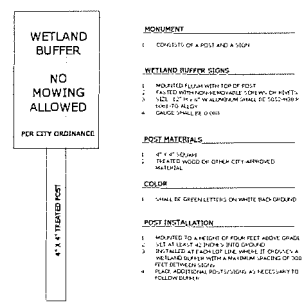
SECTION A - A



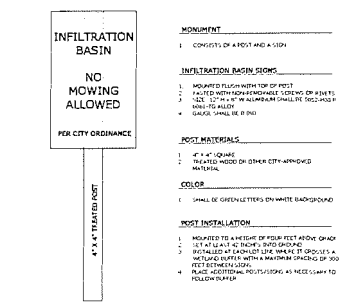
SECTION B - B



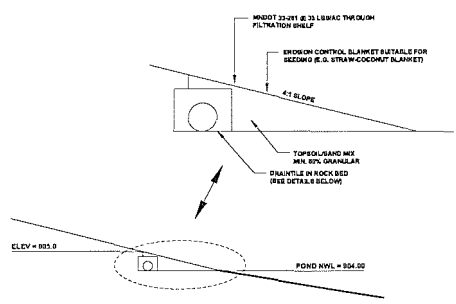
HANDICAP PARKING SIGN
N.T.S.



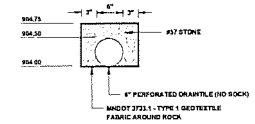
WETLAND BUFFER SIGNAGE
N.T.S.



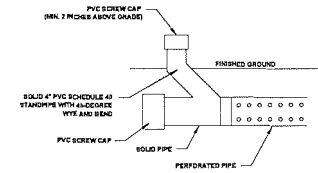
INFILTRATION BASIN SIGNAGE
N.T.S.



FILTRATION SHELF - PONDS 1 AND 2
N.T.S.



DRAINTILE IN ROCK BED
N.T.S.



CLEAN-OUT
N.T.S.

CROSTOWN ROLLING ACRES THIRD ADDITION

CITY OF HAM LAKE, ANOKA COUNTY, MN

DETAILS



Know what's below.
Call before you dig.



PLOWE
ENGINEERING, INC.

8778 LAKE DRIVE
SUITE 110
HAM LAKE, MN 55044

PHONE: (612) 364-6410
FAX: (612) 364-6161

DRAWN BY: CWP
JOB NO: 18-1802

DATE: 7-15-20

NO. DATE DESCRIPTION

1 11/20/20 CADD COMMENTS

2 1/15/21 CADD COMMENTS

3 1/15/21 CADD COMMENTS

4 3/15/21 CITY COMMENTS

5 3/15/21 CITY COMMENTS

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64 3/15/21 CITY COMMENTS

D312 MODIFIED CONCRETE CURB AND GUTTER HL-355A
NOT TO SCALE

FOR PIPE DIAMETERS 30" AND SMALLER RCP TRASH GUARD HL-466B
NOT TO SCALE

RIPRAP AT RCP OUTLETS HL-480A1
NOT TO SCALE

RECTANGULAR CATCH BASIN HL-459B
NOT TO SCALE

ROUND MANHOLE HL-465C
NOT TO SCALE

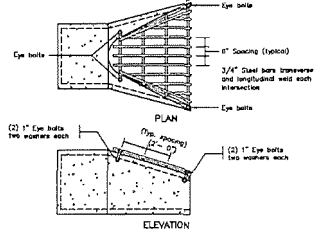
CLASS B or FIRST CLASS BEDDING
CLASS B MODIFIED BEDDING
CLASS C or ORDINARY BEDDING
PIPE BEDDING EXCEPT PVC PIPE HL-652C
NOT TO SCALE

FABRIC AROUND CATCH BASIN HL-463A1
NOT TO SCALE

RECTANGULAR INLET FOR ROUND MANHOLE HL-485A2
NOT TO SCALE

CURB END DETAIL HL-380A
NOT TO SCALE

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



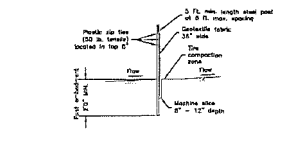
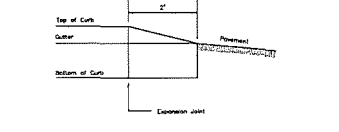
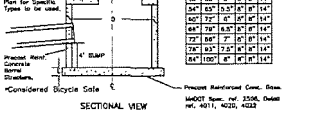
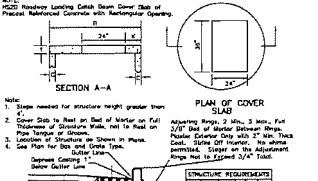
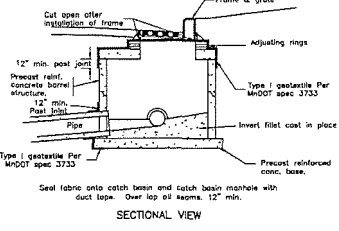
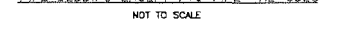
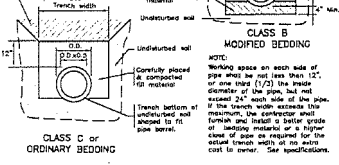
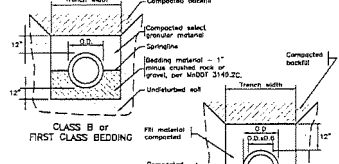
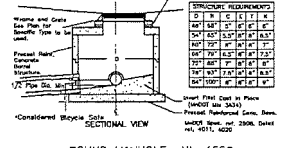
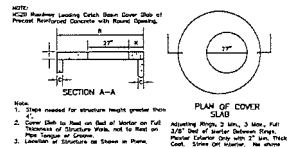
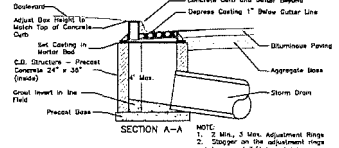
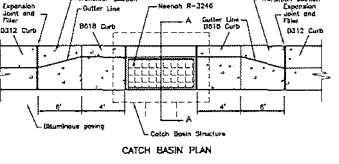
- Note:
- 1) Trash guard to be fabricated after fabrication
 - 2) The edge of ash-trash guard will vary to fit the corner well.
 - 3) All bolts to be non-rusting stainless steel.
 - 4) Hold all bolts to prevent entry after final storm sewer slopping.
 - 5) Round off steel bars such that ends are smooth and free of burrs.

TABLE OF QUANTITIES
Name of RCP Outlet

Outlet No.	1	2	3	4	5	6	7
Qty (ft)	0.71	1.00	1.00	1.00	1.00	1.00	1.00
12" dia	0.71	1.00	1.00	1.00	1.00	1.00	1.00
18" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TABLE OF QUANTITIES
Name of RCP Outlet

Outlet No.	1	2	3	4	5	6	7
Qty (ft)	0.71	1.00	1.00	1.00	1.00	1.00	1.00
12" dia	0.71	1.00	1.00	1.00	1.00	1.00	1.00
18" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00
48" dia	0.00	0.00	0.00	0.00	0.00	0.00	0.00



GENERAL SILT FENCE NOTES:
Refer to MNDOT specs 2073 & 2086
Silt fence shall be installed using the standard (or a field fabricated) panel.
During the end of the silt fence installation so that it remains the steady state.
Minimum anchoring area shall be one acre.
No slope fencing unit should exceed 300 feet.
Follow slope ground/terrain guidelines.

STAKE SPACING	MAX LENGTH
10' - 12'	50'
12' - 15'	75'
15' - 20'	100'
20' - 30'	150'

CROSTOWN ROLLING ACRES
THIRD ADDITION
CITY OF HAM LAKE, MN
PREPARED FOR: CROSTOWN DEVELOPMENT LLC

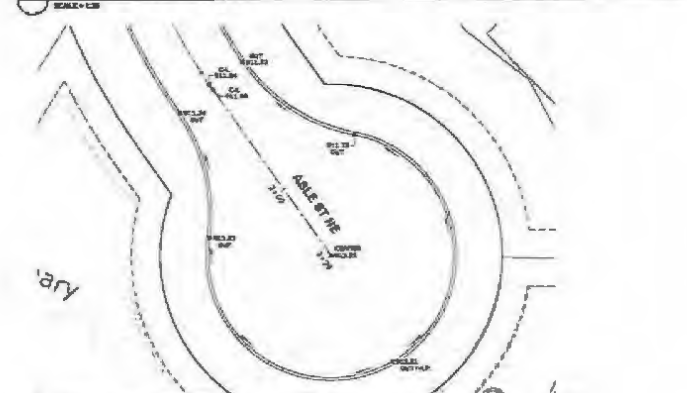
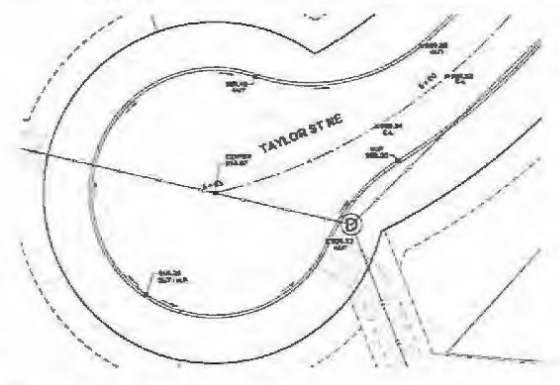
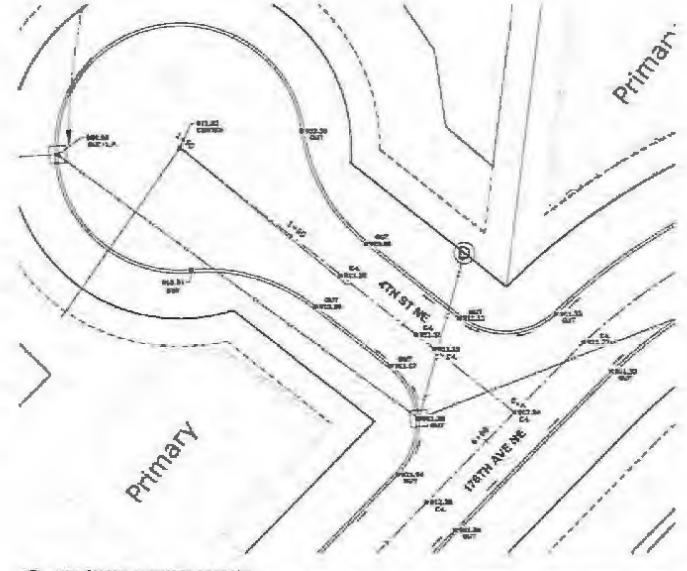
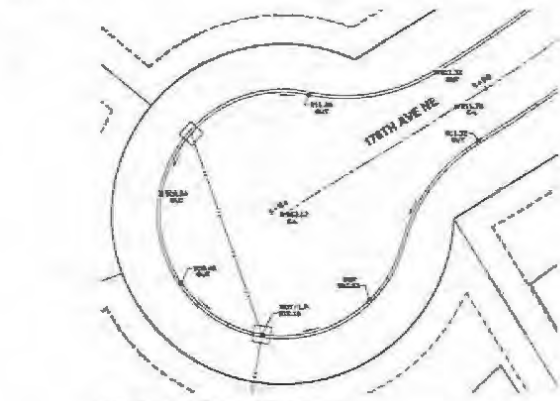
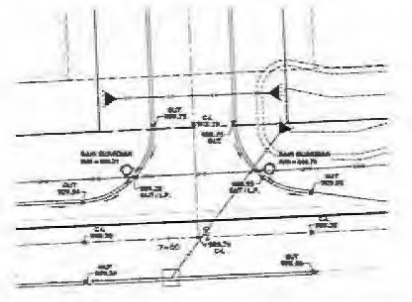
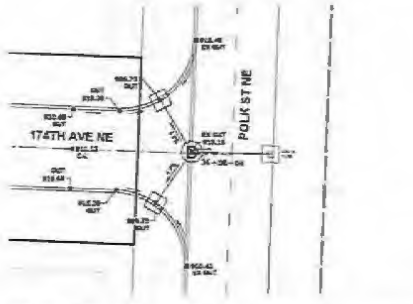
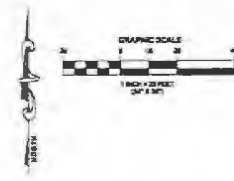
SHEET
C3.4

CROSTOWN ROLLING ACRES THIRD ADDITION

CITY OF HAM LAKE, ANOKA COUNTY, MN
 DETAILS



Know what's below.
 Call before you dig.



Plowe
 ENGINEERING, INC.

575 LAKE DRIVE
 SUITE 100
 HAM LAKE, MN 55124
 PHONE: (612) 542-2116
 FAX: (612) 542-2111

DRAWN BY: CHUCK ST
 JAC CWP
 JOB NO: 19-1002 DATE: 7-15-20

NO.	DATE	DESCRIPTION
1	7-15-20	ISSUE FOR PERMIT
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CROSTOWN ROLLING ACRES
 THIRD ADDITION
 CITY OF HAM LAKE, MN
 DETAILS
 PREPARED FOR: CROSTOWN DEVELOPMENT LLC

SHEET
C3.5

PRELIMINARY PLAT

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

PROPERTY DESCRIPTION

Corner A, CROSSTOWN ROLLING ACRES, Anoka County, Minnesota.
 AND
 Corner A, CROSSTOWN ROLLING ACRES SECOND ADDITION, Anoka County, Minnesota.
 AND
 That part of the Northwest Quarter of Southwest Quarter of Section 6, Township 33, Range 23, Anoka County, Minnesota, lying westerly and southerly of the southeast of the westerly right of way line of C.C.A.A. No. 23 (A.A. Crossroad Improvement N.E.L.).
 AND
 That part of the South Half of the Southeast Quarter of Section 6, Township 33, Range 23, Anoka County, Minnesota, lying westerly and southerly of the westerly right of way line of C.C.A.A. No. 23 (A.A. Crossroad Improvement N.E.L.).
 EXCEPT THAT PART OF THE SOUTHWEST QUARTER OF SAID SECTION 6 DESCRIBED AS FOLLOWS:
 Commencing at the Southeast corner of the Southeast Quarter of the Southeast Quarter of said Section 6; thence north along the West line of said Southeast Quarter of Southeast Quarter a distance of 300 feet; thence East and parallel with the South line of said Southeast Quarter of Southeast Quarter a distance of 300 feet; thence South and parallel with the West line of said Southeast Quarter of Southeast Quarter a distance of 300 feet; to the South line of said Southeast Quarter of Southeast Quarter; thence West along said South line to the point of beginning.

DEVELOPMENT DATA

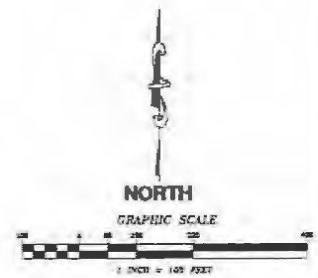
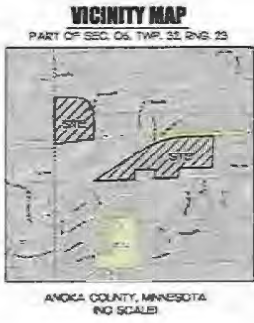
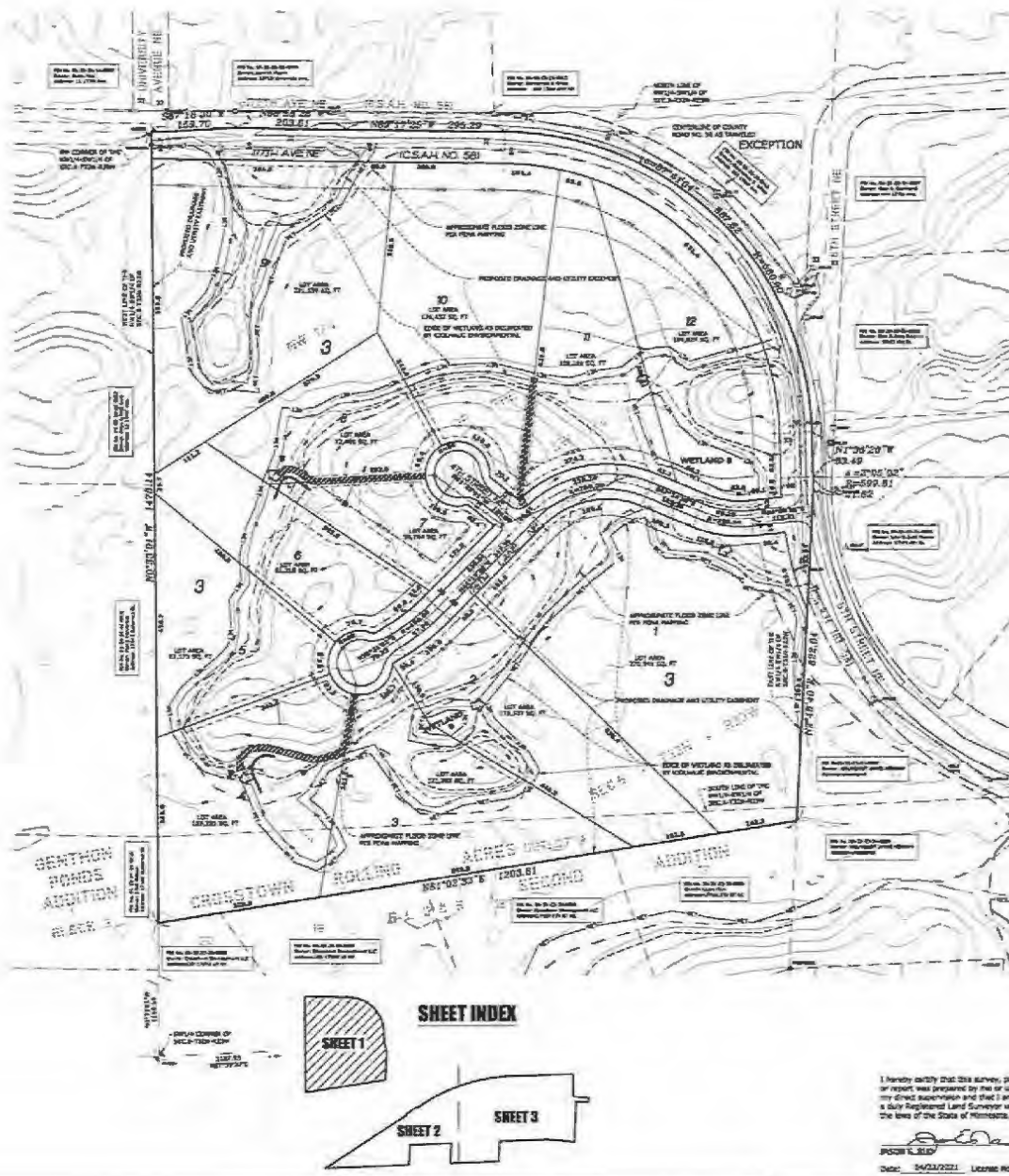
TOTAL SITE AREA = 122.844 ACRES
 41 PROPOSED SINGLE FAMILY LOTS
 PARK DESIGNATION = 4.544 ACRES
 OUTLOT AREA = 2.474 ACRES
 AVERAGE LOT SIZE = 2.996 ACRES
 MINIMUM STREET FRONTAGE = 200 FEET
 MINIMUM LOT SIZE = 1.80 ACRES (INCLUDING HALF OF STREET ROW)
 PROPOSED ZONING = R-1
 BUILDING SETBACK FRONT = 30 FEET
 SIDE = 15 FEET
 REAR = 25 FEET
 CORNER SETBACK = 35 FEET

EXISTING ZONING

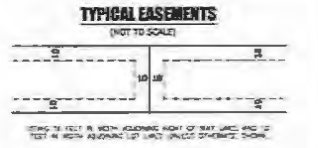
R-1 - (Single Single Family Residential)

NOTES

- Boundary shown are an Anoka County Jurisdiction.
- Contours shown are per PROSLO LIGHTS distribution and four vertical feet.
- Total lot areas are calculated to include concrete per driveway. Areas of lots adjacent to Crossroad Improvement P.L.C. were calculated to the right of way line.
- Plat is submitted to Anoka County Assessor's Office per Ord. No. 22-2527-091 and 22-2527-092.
- Notes 25: A/C: 06-10-23-04-001
 06-20-03-10-001
 06-20-03-10-002
 06-21-03-03-001
 06-22-03-10-001
 06-22-03-10-002



- ### LEGEND
- DENOTES EDGE OF WETLAND AS DETERMINED BY GEOLOGICAL ENVIRONMENTAL SERVICES, INC. (UNLESS OTHERWISE NOTED)
 - DENOTES AREA 1" ABOVE MOTTLES
 - DENOTES PHASE LINE
 - DENOTES EXISTING 2 FOOT CONTOUR
 - DENOTES PROPOSED 2 FOOT CONTOUR
 - DENOTES EASEMENT LINE
 - DENOTES BUILDING SETBACK LINE
 - DENOTES WETLAND VEGETATIVE BUFFER
 - DENOTES APPROXIMATE FLOOD ZONE & LINE



DATE	BY	JOB NO.	REVISION	DESCRIPTION
06-10-23-04-001	JK	2023-04-001	1	ISSUED FOR PERMITS
06-20-03-10-001	JK	2023-10-001	1	ISSUED FOR PERMITS
06-20-03-10-002	JK	2023-10-002	1	ISSUED FOR PERMITS
06-21-03-03-001	JK	2023-03-001	1	ISSUED FOR PERMITS
06-22-03-10-001	JK	2023-10-001	1	ISSUED FOR PERMITS
06-22-03-10-002	JK	2023-10-002	1	ISSUED FOR PERMITS

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.
 JOHN K. RUD
 Date: 04/23/2023 License No. 41579

PRELIMINARY PLAT

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

DEVELOPMENT DATA

TOTAL SITE AREA = 103.644 ACRES
 49 PROPOSED SINGLE FAMILY LOTS
 PARK DEDICATION = 4.044 ACRES
 OUTLOT AREA = 0.474 ACRES
 AVERAGE LOT SIZE = 2.094 ACRES
 MINIMUM STREET FRONTAGE = 200 FEET
 MINIMUM LOT SIZE = 1.52 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

EXISTING ZONING

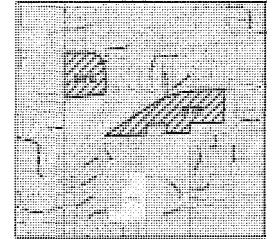
R-1A - (Rural Single Family Residential)

NOTES

- Boundaries shown are on Anoka County datum.
- Contours shown are per MGR20 LIDAR distribution and field verification.
- Total lot areas are calculated to street centerline per ordinance. Areas of lots adjacent to Crossstown Boulevard N.E. were calculated to the right of way line.
- Permit is subject to Electrical Transmission Easement per Doc. No. 2212537.001 and 2212537.002.
- Parcel ID #s: 08-32-33-32-0002
 08-32-33-34-0004
 08-32-33-34-0002
 08-32-33-43-0002
 08-32-32-43-0006
 08-32-33-44-0011

VICINITY MAP

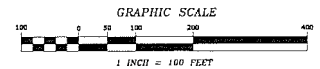
PART OF SEC. 06, TWP. 32, RNG. 23



ANOKA COUNTY, MINNESOTA
 (NO SCALE)



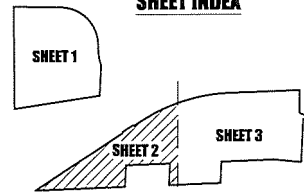
NORTH



LEGEND

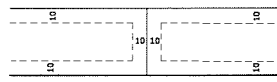
- DENOTES EDGE OF WETLAND AS DELINEATED BY SOILBAG ENVIRONMENTAL SERVICES, INC. (UNLESS OTHERWISE NOTED)
- DENOTES AREA 1' ABOVE HOUSTLES
- DENOTES PHASE LINE
- DENOTES EXISTING 3 FOOT CONTOUR
- DENOTES PROPOSED 3 FOOT CONTOUR
- DENOTES EASEMENT LINE
- DENOTES BUILDING SETBACK LINE
- DENOTES WETLANDS VEGETATIVE BUFFER
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE

SHEET INDEX



TYPICAL EASEMENTS

(NOT TO SCALE)



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

E. G. RUD & SONS, INC.
 EST. 1877 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.

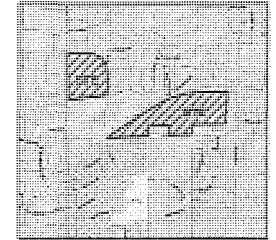
JASON W. RUD
 Date: 03/26/2021 License No. 41578

DRAWN BY:	JEM	JOB NO.:	173739P	DATE:	03/15/2020
CHECK BY:	JWR	SCANNED	[]		
1	11/22/20	CITY / WATERSHED COMMENTS	NMS		
2	01/13/21	CITY / WATERSHED COMMENTS	NMS		
3	02/26/21	CITY / WATERSHED COMMENTS	NMS		
4	03/26/21	CITY / WATERSHED COMMENTS	PHD		
NO.	DATE	DESCRIPTION	BY		

PRELIMINARY PLAT

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

VICINITY MAP
 PART OF SEC. 06, TWP. 32, RNG. 23



ANOKA COUNTY, MINNESOTA
 (NO SCALE)

DEVELOPMENT DATA

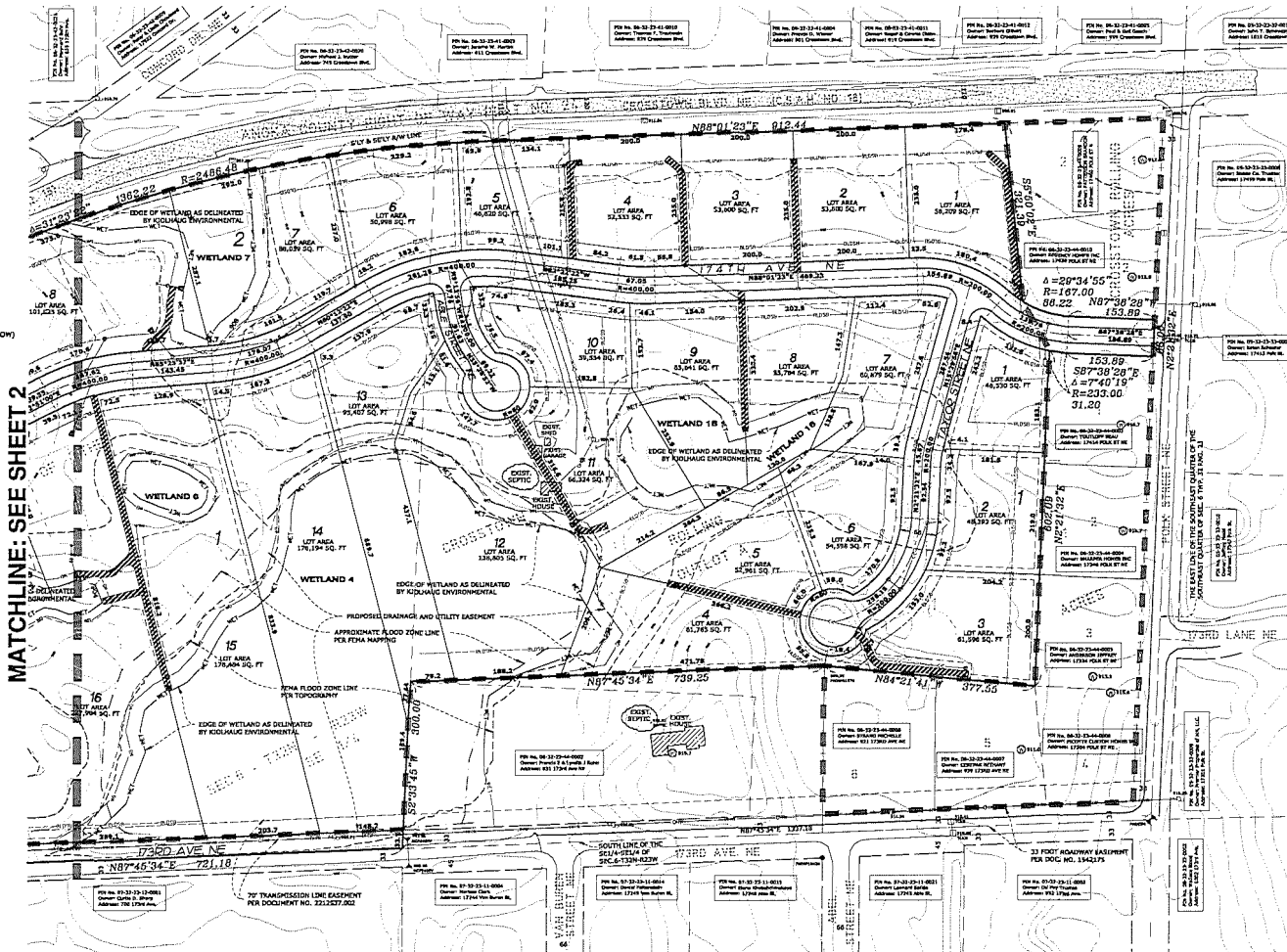
TOTAL SITE AREA = 302.644 ACRES
 49 PROPOSED SINGLE FAMILY LOTS
 PARK DESIGNATION = 4.0M+ ACRES
 OUTLET AREA = 0.476 ACRES
 AVERAGE LOT SIZE = 2.284 ACRES
 MINIMUM STREET FRONTAGE = 200 FEET
 MINIMUM LOT SIZE = 1.00 ACRES (INCLUDING HALF OF STREET ROW)
 PROPOSED ZONING = R-1
 BUILDING DIMENSIONS FRONT = 30 FEET
 SIDE = 10 FEET
 REAR = 50 FEET
 COUNTY ROAD = 50 FEET

EXISTING ZONING

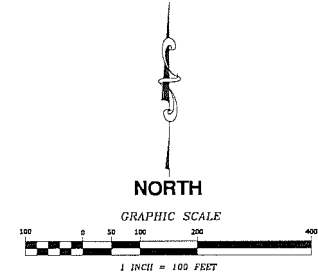
R-1 (Rural Single Family Residential)

NOTES

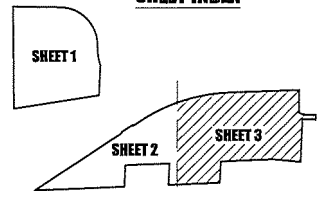
- Bearings shown are on Anoka County datum.
- Contours shown are per MNCED LIDAR distribution and field verification.
- Total lot areas are calculated to street centerline per ordinance. Areas of lots adjacent to Conservation Easement N.E. were calculated to the right of way line.
- Parcel is subject to Electrical Transmission Easement per Doc. No. 221527.001 and 221527.002.
- Parcel ID #: 06-22-23-31-0001
 06-22-23-34-0004
 06-22-23-34-0003
 06-22-23-43-0002
 06-22-23-43-0006
 06-22-23-44-0011



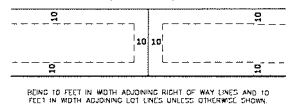
MATCHLINE: SEE SHEET 2



SHEET INDEX



TYPICAL EASEMENTS (NOT TO SCALE)



LEGEND

- WETLAND AS DELINEATED BY ECOLOGICAL ENVIRONMENTAL SERVICES, INC. (UNLESS OTHERWISE NOTED)
- DENOTES AREA 1' ABOVE NOTICES
- DENOTES PHASE LINE
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- DENOTES EASEMENT LINE
- DENOTES BUILDING SETBACK LINE
- DENOTES WETLAND/VEGETATIVE BUFFER
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE

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.

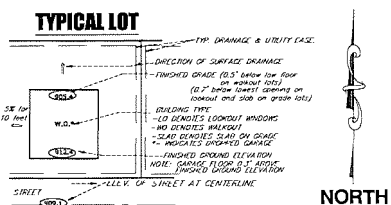
JASON W. RUD License No. 41578
 Date: 03/26/2021

NO.	DATE	DESCRIPTION	BY
1	03/26/2021	CITY / WATERSHED COMMENTS	MPD
2	03/26/2021	CITY / WATERSHED COMMENTS	MPD
3	03/26/2021	CITY / WATERSHED COMMENTS	MPD
4	03/26/2021	CITY / WATERSHED COMMENTS	MPD

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 EST. 1887 Professional Land Surveyors
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 Lino Lakes, MN 55014
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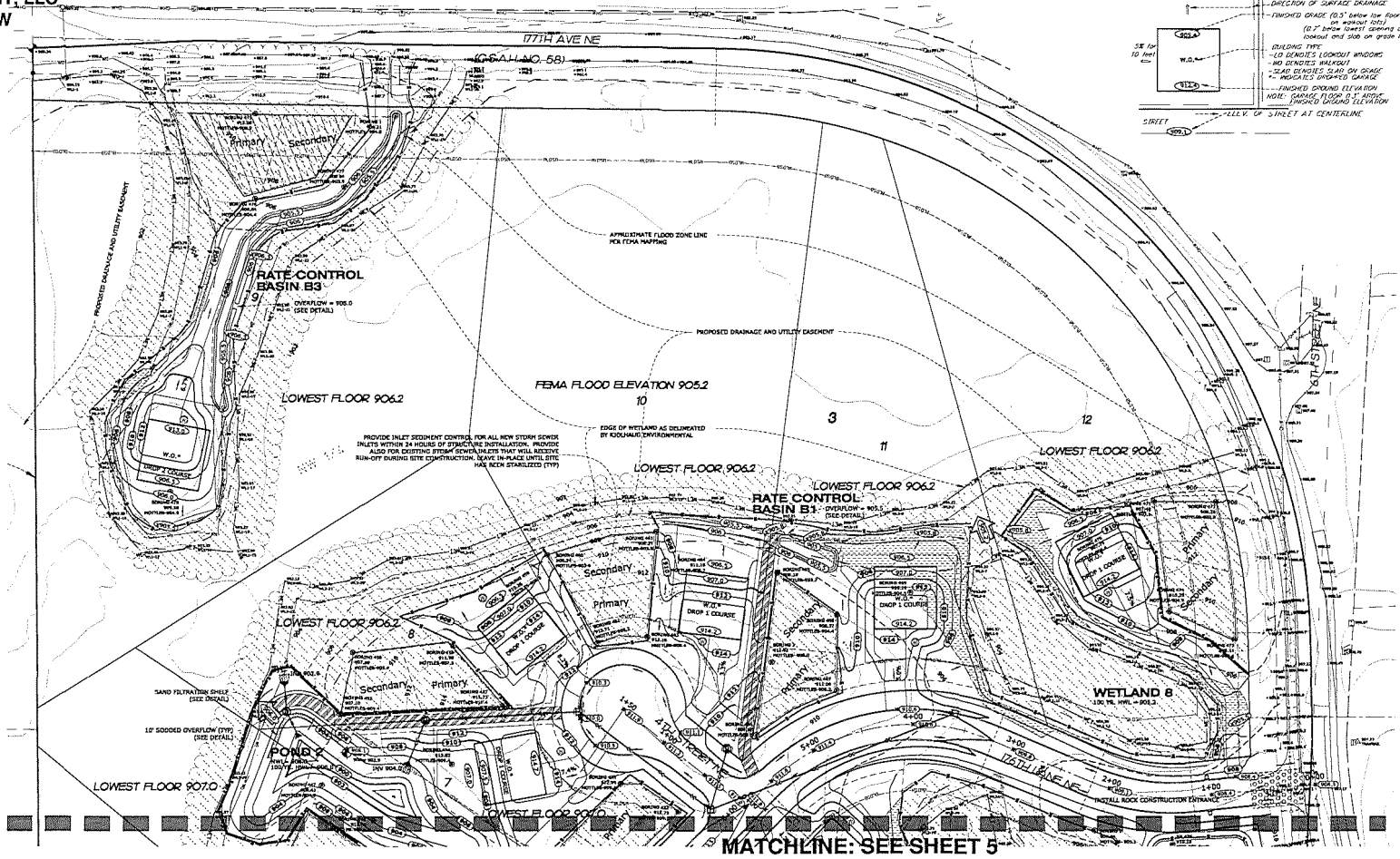
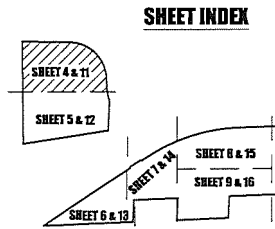
GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471



NORTH

- ### LEGEND
- DENOTES SEAL MARKED BY TRACKWELL SOIL TESTING
 - DENOTES PHOTOLOG ON PENETRATION TESTING BY BEAUM INTERACT, INC.
 - DENOTES EMERGENCY OVERFLOW ELEVATION
 - DENOTES EXISTING SPOT ELEVATION
 - DENOTES WET LAND
 - DENOTES EXISTING 2 FOOT CONTOUR
 - DENOTES PROPOSED 2 FOOT CONTOUR
 - DENOTES WETLAND DELINEATED BY KOLLMANN ENVIRONMENTAL SERVICES COMPANY
 - DENOTES EASEMENT LINE
 - DENOTES SETBACK LINE
 - DENOTES PROPOSED STORM SEWER
 - DENOTES PROPOSED SILT TREE PROTECTION FENCE
 - DENOTES BID ROLL TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
 - DENOTES DIRECTION OF CHANNEL
 - DENOTES PROPOSED SPOT ELEVATION
 - DENOTES PROPOSED CENTERLINE ELEVATION
 - DENOTES PROPOSED WELL LOCATION
 - DENOTES AREA 1' ABOVE MOTILES
 - 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
 - DENOTES TREE PRESERVATION AREA
 - DENOTES 12' POND ACCESS
 - DENOTES FLOODPLAIN FILL



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

PLOWE ENGINEERING, INC.
 6778 LAKE DRIVE
 SUITE 110
 LINO LAKES, MN 55014
 PHONE: (651) 261-8210
 FAX: (651) 261-8701

SITE PLANNING & ENGINEERING

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 Quinzel
 ADAM QUINZEL
 DATE: 04/22/2021 LIO. NO. 43963

EROSION CONTROL / REVEGETATION SPECS.

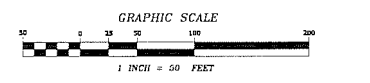
1. POND TO RECEIVE GRADING. INSTALL SILT STOP FENCE IN LOCATIONS SHOWN. ADDITIONAL SILT STOP FENCE WILL BE REQUIRED WHERE LOCAL CONDITIONS REQUIRE. INSTALL THIS PROTECTION AS DEEMED NECESSARY BY THE CITY ENGINEER PRIOR TO ANY GRADING.
2. ANY GRADING SHALL PROCEED ON AN AREA BY AREA BASIS TO MINIMIZE UNPROTECTED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH ANCHORED WITH A STRAIGHT SET POST WITH SPACER BARS AT REGULAR GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SOIL) UNTIL VEGETATION IS ESTABLISHED.
5. AREAS IN BUFFER THAT HAVE VEGETATION REMOVED DURING CONSTRUCTION MUST BE RESEEDED WITH NATIVE MIX AND BE MONITORED AND MAINTAINED FOR 3 YEARS.
6. SEE "STORM WATER POLLUTION PREVENTION PLAN FOR APPROXIMATE 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
 JASON E. RUD
 Date: 04/22/2021 License No. 41578

NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTROLS INTERNAL (DASH 80).
- CONTROLS SHOWN ARE FOR APPROX. IDEAL DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND INVERT PATCHES TO BE SHOWN AT FULL DEPTH.
- SURF AREA TO BE GRADED WITHIN 7 DAYS AFTER COMPLETION OF FINISH GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER RINGS, INVERTS, AND SIZES.
- ALL PIPE AREAS PROTECTED WITH TRUCK 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 WOOD 30-30-1.
- IF DEMATERIALING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MIN. DMR DEMATERIALING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, WATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CITY PRIOR TO ANY DEMATERIALING OPERATIONS.



FLOODPLAIN FILL NOTES

UPPER RIM SEWER FLOODPLAIN FILL
 FILL FLOODPLAIN FILL VOLUME = 36,484 CU-YD
 COMPENSATORY STORAGE VOLUME = 29,000 CU-YD
 COMPENSATORY STORAGE PROVIDED BY POND 1 AND POND 2 BETWEEN W/L# 8 AND 9(3).

LOT GRADING NOTES

• FAD 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 MAN LAKE.
 SILT FENCE TO BE INSTALLED BY BUILDERS PRIOR TO HOUSE CONSTRUCTION.
 THERE IS TO BE NO GRADING WITHIN 5' OF AREAS

TREE PROTECTION NOTES

• TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
 • SILT TREE PROTECTION FENCE TO BE INSTALLED AT CONSTRUCTION LIMIT LINE.
 • CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY OR CONSTRUCTION VEHICLE TRAFFIC WITHIN THE 50' 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.

BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.17 FEET (NAVD88)

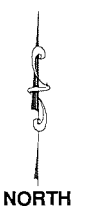
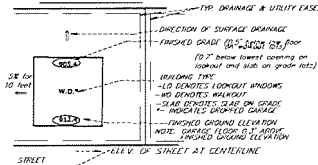
DRAWN BY:	CHKD BY:	DATE:	DESCRIPTION
01/22/20	01/22/20	01/22/20	CITY / WATERSHED COMMENTS
01/22/20	01/22/20	01/22/20	CITY / WATERSHED COMMENTS
01/22/20	01/22/20	01/22/20	CITY / WATERSHED COMMENTS
01/22/20	01/22/20	01/22/20	CITY / WATERSHED COMMENTS
01/22/20	01/22/20	01/22/20	CITY / WATERSHED COMMENTS

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

GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

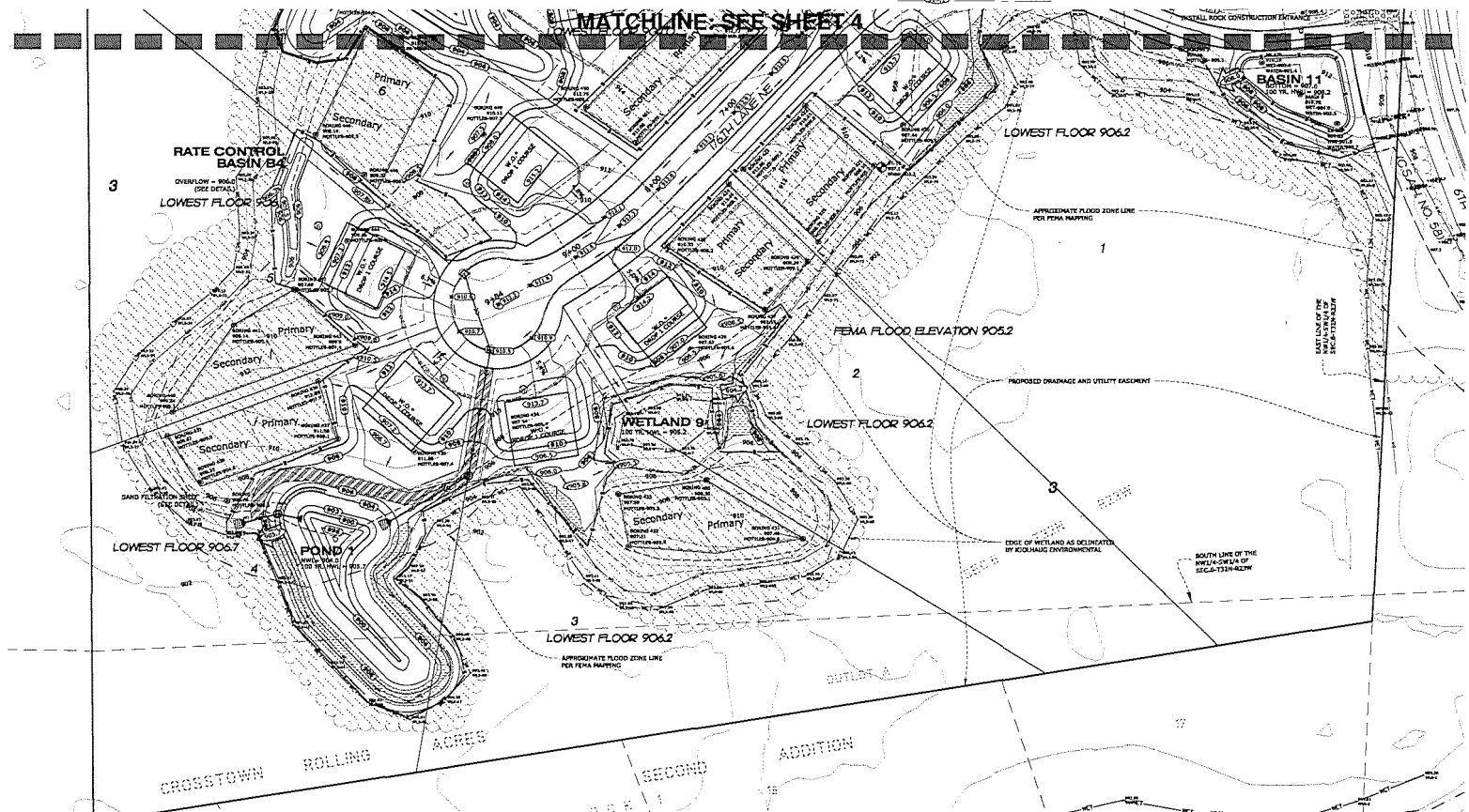
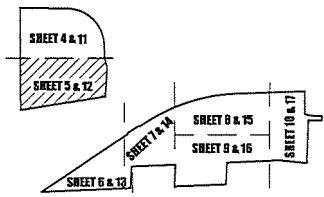
TYPICAL LOT



LEGEND

- DENOTES SOIL BORING BY TRANEWELL COR. TESTING
- DENOTES PROTECTIVE OR PROTECTIVE BORING BY BRAUN INTEREST, INC.
- DENOTES EMERGENCY OVERLAY ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- DENOTES PROPOSED 3 FOOT CONTOUR
- DENOTES WETLAND DELINEATED BY KOLHAGEN ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES RED FLAG TO BE INSTALLED INSIDE CURB PRICING ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTERLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE HOTSPOTS
- DENOTES WETLANDS VEGETATIVE BUFFER
- DENOTES WETLANDS 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
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES FLOODPLAIN FILL

SHEET INDEX



EROSION CONTROL / REVEGETATION SPECS.

1. PRIOR TO BEGIN 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 OF AREA BASED TO MINIMIZE UNCOVERED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH AND COVERED WITH A STRAIGHT SET DOG WITHIN SEVEN DAYS AFTER HOUGH GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SILT) UNTIL VEGETATION IS ESTABLISHED.
5. AREAS IN BUFFER THAT HAVE VEGETATION REMOVED DURING CONSTRUCTION MUST BE RESEEDED WITH NATIVE MIX AND BE MAINTAINED AND MANAGED FOR 3 YEARS.
6. SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL, NOTICE AND SITE SIGNAGE.

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 R. RUD
 Date: 04/22/2021 License No. 41578

NOTES

- SEARCHES SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE FOR GRADING.
- 4 FOOT CONTIGUOUS INTERNAL (CROSS 80)
- CONTIGUOUS SHOWN ARE PER FINISHED LEASAL DISTRIBUTION AND FIELD VERIFICATION
- ALL WETLAND PROTECT AND MAINTENANCE PATCHES TO BE SAVED AT ALL COSTS.
- TOP AREA TO BE SEEDED WITHIN 7 DAYS PER COMPLETION OF GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR LOTION CENTER PINS, INVERTS, AND SIZES.
- ALL PIPE APPROX. PROVIDED WITH TYPICAL COUPLERS
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFER AND SEAL WITH 200# 100 WHEAT 24.381.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A PERM DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATION, DATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CHOW PRIOR TO ANY DEWATERING OPERATIONS.

LOT GRADING NOTES

- PAD CONTIGUOUS SHOWN ARE FOR DEWATERATION PURPOSES.
- HOUSE TYPED AND GRADING THAT VARY FROM WHAT IS PROPOSED ON THE GRADING PLAN REQUIRES A PLAN REVIEW BY THE CITY OF WAIN LAKE.
- SILT FENCE TO BE INSTALLED BY BUILDERS PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN ITS AREAS

TREE PROTECTION NOTES

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

FLOODPLAIN FILL NOTES

- UNDER SOIL BURN FLOODPLAIN FILL
- FEMA FLOODPLAIN FILL VOLUME - 19,466 CU YD
- COMPLEMENTARY STORAGE WETLAND - 7% SLO CHUFF
- COMPLEMENTARY STORAGE PROVIDED IN POND 1 AND POND 2 BETWEEN RWL AND 905.2

BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3208
 ELEVATION = 908.17 FEET (NAVD83)

DRAWN BY:	WJD	JOB NO.:	177377P	DATE:	03/16/2020
CHECK BY:	JCR	SCANNED	<input type="checkbox"/>		
1	11/02/20	CITY / WATERSHED COMMENTS			
2	01/23/21	CITY / WATERSHED COMMENTS			
3	02/26/21	CITY / WATERSHED COMMENTS			
4	03/26/21	CITY / WATERSHED COMMENTS			
5	04/22/21	CITY COMMENTS			
NO.	DATE	DESCRIPTION			

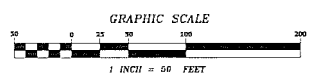
PONDING CALCULATIONS AND STORM SEWER DESIGN BY PLOWE ENGINEERING, INC.

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

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 Dunkel
 ADAM DUNKEL
 DATE: 04-22-2021 LIC. NO. 43903

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



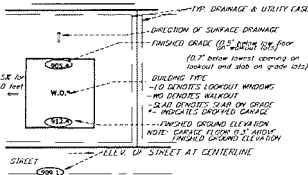
GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

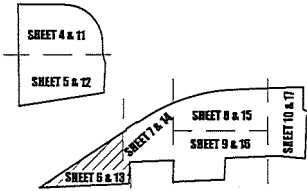
- DENOTES SOIL BORINGS BY WILLOWVILLE SOIL TESTING
- DENOTES PNEUMATIC DRILL PENETRATION BORING BY BRAUN INTEREST, INC.
- DENOTES EMERGENCY OVEFLOW ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- DENOTES WETLAND DELINEATED BY KOUHAUS ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED 1/2" TREE PROTECTION FENCE
- DENOTES 80% FILL TO BE INSTALLED INSIDE GUT FENCE ADJACENT TO WETLAND
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTRALLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 1' ABOVE HOUSTLES
- DENOTES WETLAND/VEGETATIVE BUFFER
- DENOTES WETLAND/VEGETATIVE BUFFER EIGH
- DENOTES RIPRAP (RIPRAP TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER SILT PROTECTION
- DENOTES APPROXIMATE FLOOD ZONING A LINE
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES PROPOSED WETLAND FILL

TYPICAL LOT



NORTH

SHEET INDEX



PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 8778 LAKE DRIVE
 SUITE 110
 LINO LAKES, MN 55014
 PHONE: (651) 361-8210
 FAX: (651) 361-8701

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
 DATE: 03/26/2021 U.I. NO. 43863

F. 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

EROSION CONTROL / REVEGETATION SPECS.

1. PRIOR TO BEGIN GRADING, INSTALL SILT STOP FENCE IN LOCATIONS SHOWN. ADDITIONAL SILT STOP FENCE WILL BE REQUIRED WHERE LOCAL CONDITIONS REQUIRE. INSTALL TREE PROTECTION AS EXTENDED NECESSARY BY THE CITY FORESTER PRIOR TO ANY GRADING.
2. ANY GRADING SHALL PROCEED ON AN AREA OR AREA BASIS TO MINIMIZE UNCOVERED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH AND/ORERED WITH A STRAWMULCH SET SIDE WITHIN 30 DAYS AFTER REGION GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES INCLUDING REMOVAL OF ACCUMULATED SOILS UNTIL VEGETATION IS ESTABLISHED.
5. AREAS IN BUFFER THAT HAVE VEGETATION REMOVED DURING CONSTRUCTION MUST BE RESEED WITH NATIVE MIX AND BE MAINTAINED AND WATERED FOR 3 YEARS.
6. SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE SEQUENCING.

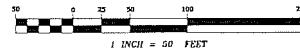
I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

JASON E. RUD
 Date: 03/26/2021 License No. 41578

NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE FOR OCCUPANCY.
- 2 FOOT CONTOUR INTERVAL (TWO FEET).
- CONTOURS SHOWN ARE THE FINISHED GRADE DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SMOOTH AT FULL DEPTH.
- TOP AREA TO BE SMOOTH WITHIN 7 DAYS AFTER COMPLETION OF ALL GRADING OR DRAINAGE.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER LINES, INVERTS, AND SIZES.
- ALL PIPE SPANS PROVIDED WITH TRAP GUARDS.
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SIDE WITH USED TREE WOOD (3:1:1).
- IF DEMONSTRATED IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MINOR DEMONSTRATED PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, MAPS, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COME PRIOR TO ANY DEMONSTRATED OPERATIONS.

GRAPHIC SCALE



LOT GRADING NOTES

- POND ELEVATIONS SHOWN ARE FOR DEMONSTRATION PURPOSES.
- HOUSE TIES AND GRADING THAT VARY FROM WHAT IS PROPOSED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF WAR LAKE.
- SILT FENCES TO BE INSTALLED BY BUILDERS PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN 10' AREAS.

TREE PROTECTION NOTES

- TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
- SILT TREE PROTECTION FENCE TO BE INSTALLED BY CONSTRUCTION LIMIT LINE.
- CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY OR CONSTRUCTION VEHICLE TRAFFIC WITHIN THE PERIMETER 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. THEY MAY BE CLEARED PRIOR TO INSTALLATION OF SILT TREE PROTECTION FENCE. GRADING OF STUMPS WILL OCCUR AFTER EROSION CONTROL MEASURES ARE INSTALLED.

FLOODPLAIN FILL NOTES

- (CROSS CREEK WATERSHED FLOODPLAIN FILL)
- FEMA FLOODPLAIN FILL VOLUME = 3,370 CU YD
- COMPENSATORY STORAGE VOLUME = 15,827 CU YD (COMPENSATORY STORAGE PROVIDED IN POND 4 AND POND 7 BETWEEN W14 AND 904.3)

BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.17 FEET (NAVD83)

NO.	DATE	DESCRIPTION	BY
1	11/29/20	CITY / WATERSHED COMMENTS	MND
2	01/21/21	CITY / WATERSHED COMMENTS	MND
3	02/24/21	CITY / WATERSHED COMMENTS	MND
4	03/24/21	CITY / WATERSHED COMMENTS	MND
5			
6			

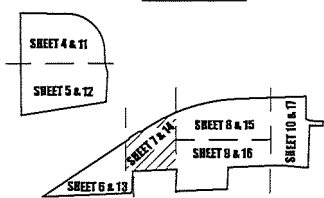
GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

- ⊙ DENOTES SOIL BORING BY TRACWELL SOIL TESTING
- ⊙ DENOTES FROZENEARTH PENETRATION BORING BY BRAUN INTEREST, INC.
- ⊙ DENOTES EMERGENCY OVERFLOW ELEVATION
- ⊙ DENOTES EXISTING SPOT ELEVATION
- ⊙ DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- DENOTES WETLAND DELINEATED BY KOSMAK ENVIRONMENTAL SERVICES COMPANY
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED 5' TREE PROTECTION FENCE
- DENOTES BID 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 HOUSTLES
- DENOTES WETLAND/VEGETATIVE BUFFER
- DENOTES WETLAND/VEGETATIVE BUFFER SIGN
- DENOTES RMP/R (RMP/R TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER INLET PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' ROAD ACCESS

SHEET INDEX



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

PLOWE ENGINEERING, INC.
 8778 LAKE DRIVE
 SUITE 110
 LINO LAKES, MN 55014

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

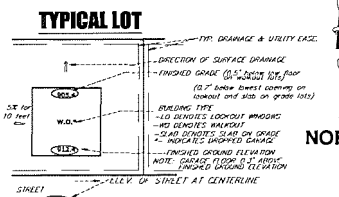
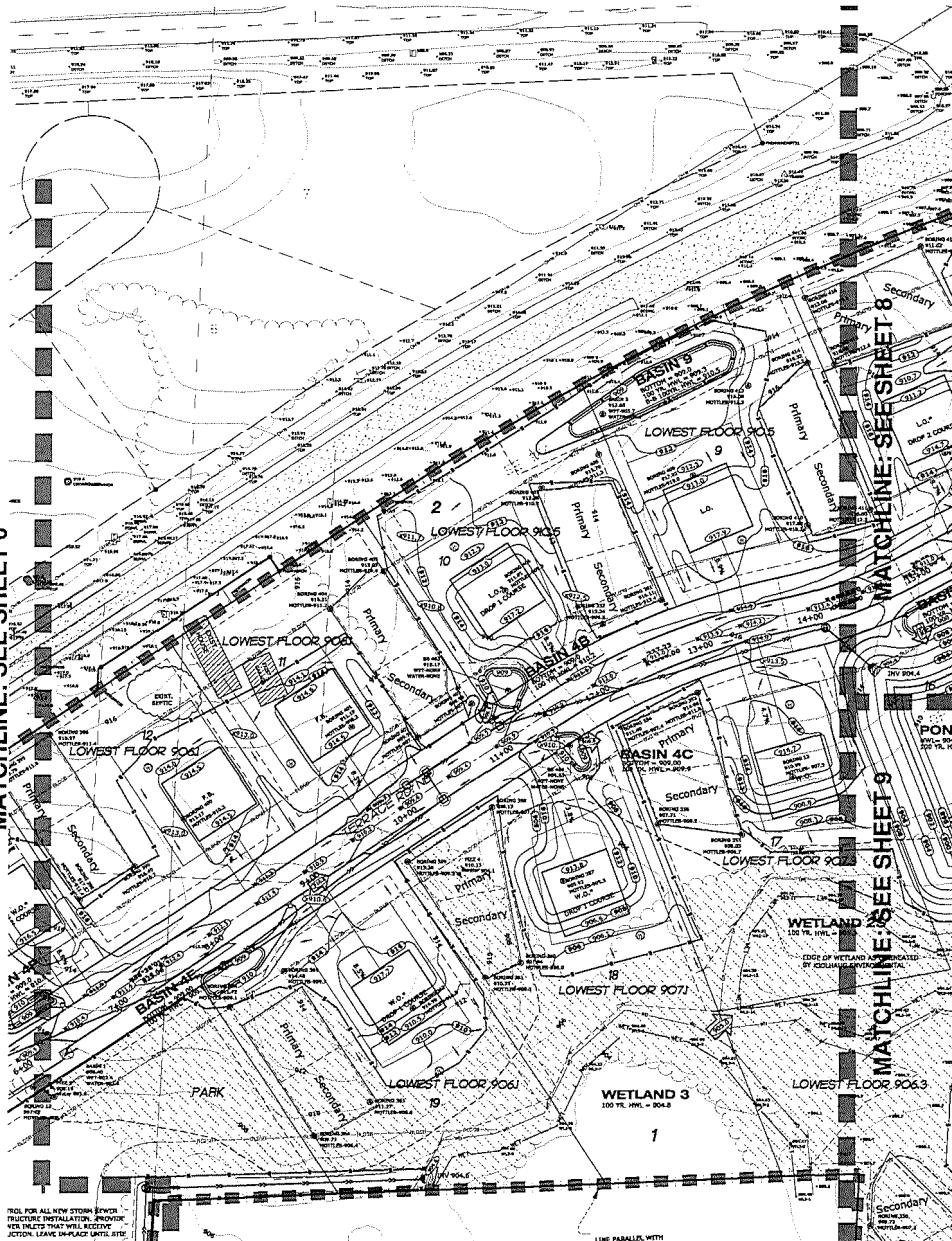
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Adam Orinckel
 ADAM ORINCKEL
 DATE: 03.28.2021 LIC. NO. 43963

FLOODPLAIN FILL NOTES

(FROM CREEK WATERSHED FLOODPLAIN FILL) FLOOD FLOODPLAIN FILL VOLUME = 3,782 CU YD COMPENSATORY STORAGE VOLUME = 19,827 CU YD (COMPENSATORY STORAGE PROVIDED IN POND 4 AND POND 7 BETWEEN WPL AND 904.5)

NOT FOR ALL NEW STORM SEWER ELECTRIC INSTALLATION. PROVIDER VETS INSTALL THAT WILL RECEIVE SECTION LEAVE SURFACE UNTIL LOTS



EROSION CONTROL / REVEGETATION SPECS.

1. PRIOR TO ROUGH GRADING, INSTALL 2' STOP FENCE IN LOCATIONS SHOWN. ADDITIONAL 5' 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 AND/OR WITH A STRAIGHT SILT BLOC WITHIN SEVEN DAYS AFTER ROUGH GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED DIRT) UNTIL VEGETATION IS ESTABLISHED.
5. AREAS IN BUFFER THAT HAVE VEGETATION REMOVED DURING CONSTRUCTION MUST BE RESEEDED WITH NATIVE MIX AND BE MAINTAINED AND WATERED FOR 3 YEARS.
6. SEE "WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE SEQUENCING.

NOTES

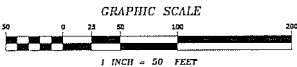
- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREA ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERNAL DRAINAGE
- CONTOURS SHOWN ARE PER PRINCE LINE DISTRIBUTION AND FIELD VERIFICATION
- ALL MATCH POINTS AND PAVEMENT PATTERNS TO BE SHOWN AT ALL SECTIONS.
- TRAP AREA TO BE SITED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER SIZES, INVERTS, AND DEEPS
- ALL PIPE AREAS PROVIDED WITH TRUCK GUARDS
- PROVIDE CLAS 2 SURF WITH FLEET FENCES FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON ROADWAY IN WETLAND BUFFER AND SEED WITH GOOD MIX HAYD 20-20.
- IF DRAINAGE IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MIN DOWNSLOPE PERMIT AND WILL PROVIDE THE FILL LOCATION, SIZES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CDM PRIOR TO ANY DRAINAGE OPERATIONS.

LOT GRADING NOTES

- PWD CONTOURS SHOWN ARE FOR CONSTRUCTION PURPOSES.
- HOUSE TYPES AND GRADING THAT VARY FROM WHAT IS REFLECTED IN PLAN REQUIRE A PLAN REVIEW BY THE CITY OF MAP LAZ.
- SILT FENCE TO BE INSTALLED BY BUILDER PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN SETBACK AREAS

TREE PROTECTION NOTES

- TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
- SILT / TREE PROTECTION FENCE TO BE INSTALLED AT CONSTRUCTION LIMIT LINE.
- CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY OR CONSTRUCTION VEHICLE TRAFFIC WITHIN THE 50' LINE OF TREES IN TREE PROTECTION ZONE.
- FIELD OPERATIONS WILL BE MARKED ON LOCATION OF TREE PROTECTION LIMITS TO PRESERVE SIGNIFICANT TREES AND DEAD FALL ARE TO BE CLEARED. THIS MAY BE DEPT PRIOR TO INSTALLATION OF SILT / TREE PROTECTION FENCE. CAUTIONING OF STUMPS WILL OCCUR AFTER DESIGN, PLANS, AND PERMITS ARE INSTALLED.



BENCHMARK

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.

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.17 FEET (NAVD85)

DATE: 03/25/2021 License No. 41278

NO.	DATE	DESCRIPTION	BY
1	11/25/20	CITY / WATERSHED COMMENTS	JMD
2	01/24/21	CITY / WATERSHED COMMENTS	JMD
3	02/26/21	CITY / WATERSHED COMMENTS	JMD
4	03/24/21	CITY / WATERSHED COMMENTS	JMD

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

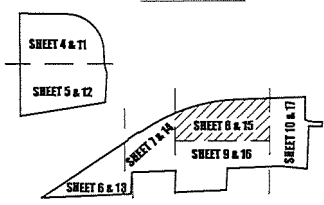
GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

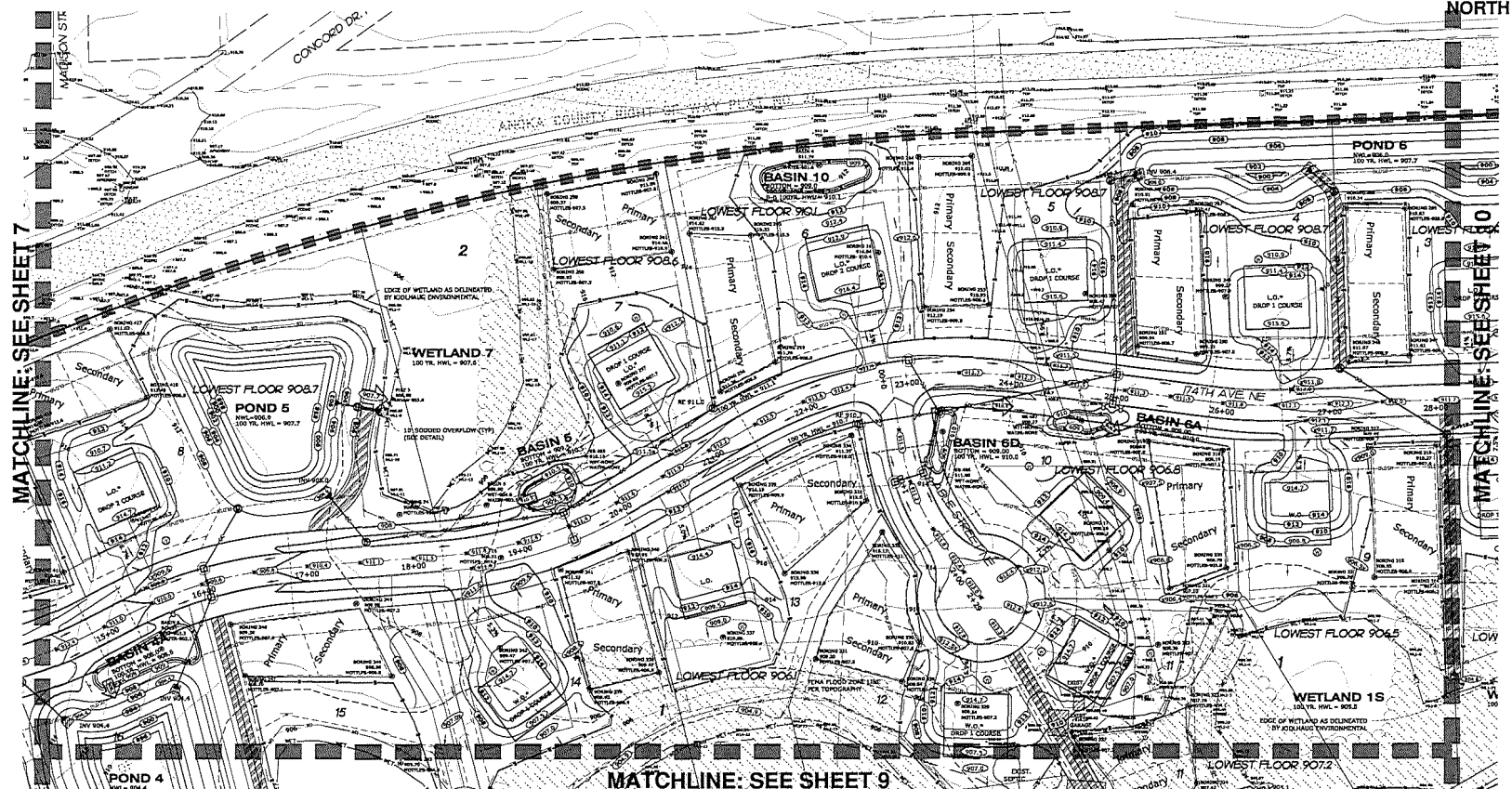
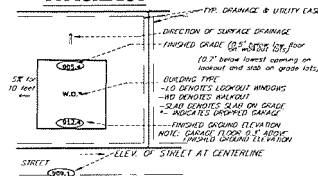
LEGEND

- DENOTES SOIL BOUNDS BY TRAVELER SOIL TESTING
- DENOTES HYDROLOGICAL OR PENETRATION BOUNDS BY BRAUN INTEREST, INC.
- DENOTES EMERGENCY OVERTFLOW ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2' FOOT CONTOUR
- DENOTES PROPOSED 2' FOOT CONTOUR
- DENOTES WETLAND DELINEATED BY KOLLAUING ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TREE PROTECTION FENCE
- DENOTES BID BOLL TO BE INSTALLED INSIDE DIRT FENCE ADJACENT TO WETLAND
- DENOTES DIRECTION OF CHANNEL
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTRALLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 2' ABOVE HOUSTLES
- DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SIGN
- DENOTES AIRRAIP (BIRAP) TO BE VEGETATED IN WETLAND BUFFER)
- DENOTES PROPOSED STORM SEWER INLET PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS

SHEET INDEX



TYPICAL LOT



EROSION CONTROL / REVEGETATION SPECS.

1. FROM TO BENCH MARK, 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 UNCONNECTED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH AND/OR WITH A STRAIGHT SET BACK WITHIN SEVEN DAYS AFTER ROUGH GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SOIL) UNTIL VEGETATION IS ESTABLISHED.
5. AREAS IN BUFFER THAT HAVE VEGETATION REMOVED DURING CONSTRUCTION MUST BE RESEEDED WITH NATIVE MIX AND BE MAINTAINED AND WATERED FOR 3 YEARS.
6. 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: 03/26/2021 License No. 41578

NOTES

- BENCHMARKS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 3 FOOT CONTOUR INTERVAL (UNLESS NOTED).
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SMOOTH AT FULL DEPTH.
- CONTROLS SHOWN ARE THE MINIMUM CLEAR DISTRIBUTION AND FIELD VEGETATION.
- TOP AREA TO BE GRADED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER MAINS, INVERTS, AND SIZES.
- PROVIDE CLASS III ASPHALT WITH FLAYER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON BIRAP IN WETLAND BUFFERS AND SIZES WITHIN SEVEN (7) DAYS.
- ALL PIPE AREAS TO BE PROTECTED WITH TRUCK GUARDS.
- IF DOWNSIZING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MINOR DOWNSIZING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, HAZARDOUS DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COMPLY WITH ANY DOWNSIZING REGULATIONS.

LOT GRADING NOTES

- PAD CENTERLINES SHOWN ARE FOR CONSTRUCTION PURPOSES.
- HOUSE TIES AND GRADING THAT MUST BE PROTECTED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF WARD LAKE.
- SILT FENCE TO BE INSTALLED BY BUILDER PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN 6' OF AREAS.

TREE PROTECTION NOTES

- TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
- SILT / TREE PROTECTION FENCE TO BE INSTALLED AT CONSTRUCTION LIMIT LINE.
- CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY OR CONSTRUCTION VEHICLE TRAFFIC WITHIN THE 50' BUFFER 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. GRADING OF STUMPS WILL OCCUR AFTER EROSION CONTROL MEASURES ARE INSTALLED.

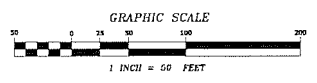
FLOODPLAIN FILL NOTES

(FROM CREEK WATERFLOOD FLOODPLAIN FILL)
 FEMA FLOODPLAIN FILL VOLUME = 3,200 CU YD
 COMPENSATORY STORAGE VOLUME = 15,827 CU YD
 (COMPENSATORY STORAGE PROVIDED BY POND 4 AND POND 7 BETWEEN HWL AND 904.3)

BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3208
 ELEVATION = 908.17 FEET (NAVD83)

NO.	DATE	DESCRIPTION	BY
1	11/22/20	CITY / WATERSHED COMMENTS	MND
2	12/22/20	CITY / WATERSHED COMMENTS	MND
3	02/24/21	CITY / WATERSHED COMMENTS	MND
4	03/24/21	CITY / WATERSHED COMMENTS	MND
5			



E. G. RUD & SONS, INC.
 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110
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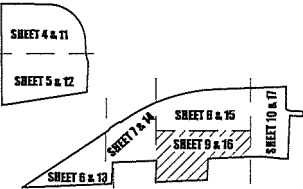
GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

-of- CROSSTOWN ROLLING ACRES THIRD ADDITION
 -for- CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

- DENOTES SOIL SAMPLING BY TRANSWELL SOIL TESTING
- DENOTES PEDESTALS ON INFILTRATION BODING BY BRAUN INTEREST, INC.
- DENOTES EMERGENCY OUVLAP ELEVATION
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- DENOTES WETLAND DELINEATED BY KOLHAG ENVIRONMENTAL SERVICES COMPANY
- DENOTES ENGAGEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SLOTTED CURB ADJACENT TO WETLAND
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED SPOT ELEVATION
- DENOTES PROPOSED CENTERLINE ELEVATION
- DENOTES PROPOSED WELL LOCATION
- DENOTES AREA 2' ABOVE HOTTLES
- DENOTES WETLAND VEGETATIVE BUFFER
- DENOTES WETLAND VEGETATIVE BUFFER SIGN
- DENOTES SUPPLY (DUMP) TO BE VEGETATED IN WETLAND BUFFER
- DENOTES PROPOSED STORM SEWER SILENT PROTECTION
- DENOTES APPROXIMATE FEMA FLOOD ZONE LINE
- DENOTES TREE PRESERVATION AREA
- DENOTES 12' POND ACCESS
- DENOTES FLOODPLAIN FILL

SHEET INDEX



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

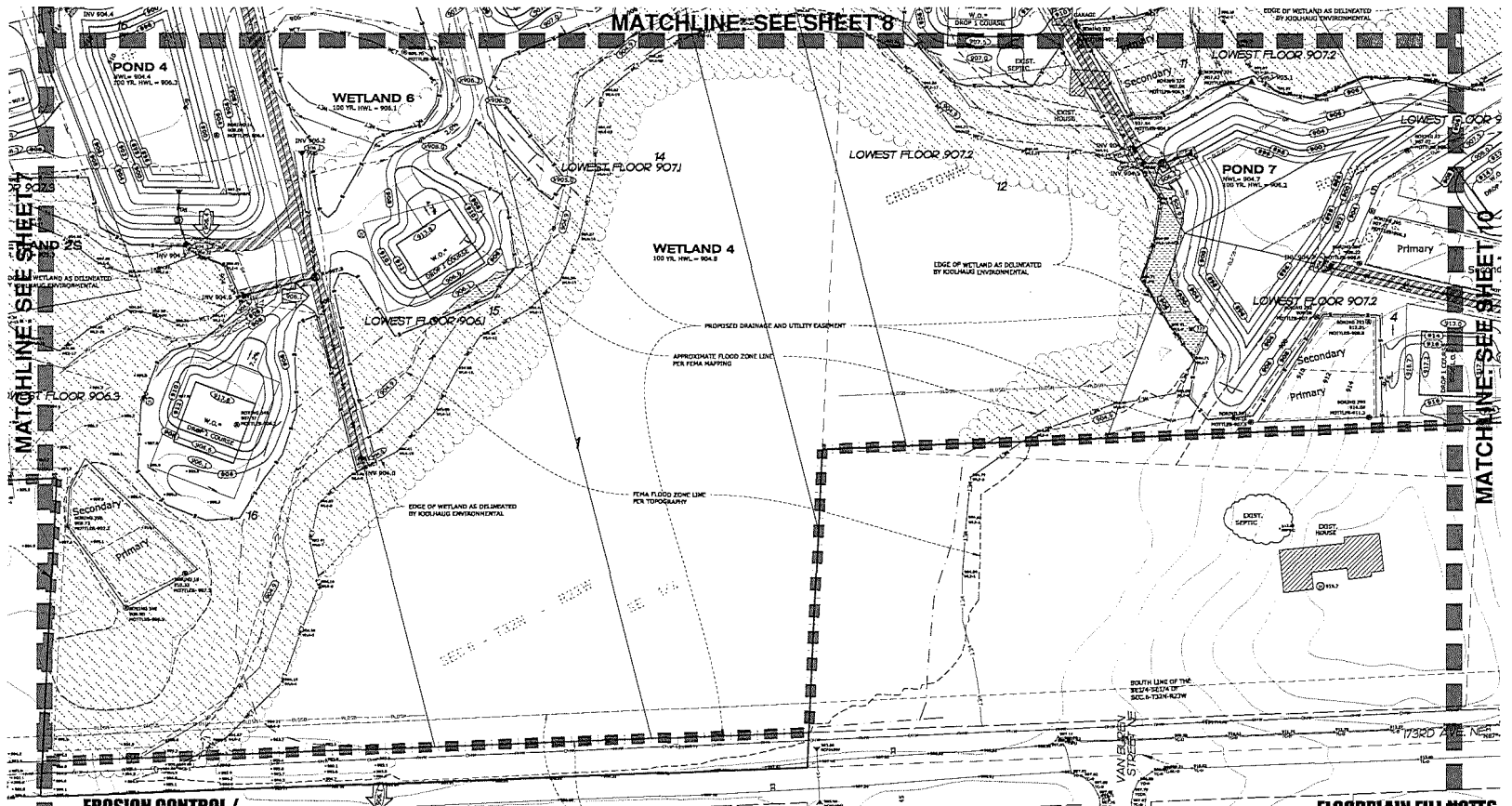
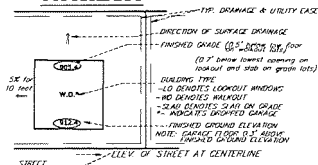
FLOW ENGINEERING, INC.
 8778 LAKE DRIVE
 SUITE 110
 LINO LAKES, MN 55014
 PHONE: (952) 361-8210
 FAX: (952) 361-8791

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 Dunkel
ADAM DUNKEL
 DATE: 03/26/2021 LIC. NO. 43903

F. 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

TYPICAL LOT



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 AVOID UNCOMPLETED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH ANCHORED WITH A STRAIGHT SET POST WITH SLOTTED DRIVE WHEELS PER GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SOIL) UNTIL VEGETATION IS ESTABLISHED.
5. AREAS IN BUFFER THAT HAVE VEGETATION REMOVED DURING CONSTRUCTION MUST BE RESEED, WITH NATIVE MIX AND ARE MONITORED AND MAINTAINED FOR 3 YEARS.
6. SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE SEQUENCING.

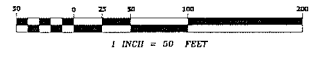
I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

Jason E. Rud
JASON E. RUD
 Date: 03/26/2021 License No. 41578

NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTIGUOUS INTERNAL (NAD 83)
- CONTIGUOUS SHOWN ARE FOR ANOKA COUNTY DISTRIBUTION AND FIELD VERIFICATION
- ALL WATER POINTS AND INVENTORY PATCHES TO BE SHOWN AT FULL DEPTH.
- TUNN AREA TO BE SAVED WITHIN 7 DAYS AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PREPARATORY UTILITY PLAN FOR STORM SEWER, SIGNS, DIVERTS, AND SIGNS.
- ALL PIPE APPROX PROVIDED WITH TRASH GUARDS
- PROVIDE CLASS III SUPPLY WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" DIA TOPSOIL OR MULCH IN WETLAND BUFFERS AND SEED WITH SEED PER PRODUCT 33 261.
- IF DEMONSTRATED IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A NW OR DENWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO OWNER PRIOR TO ANY CONSTRUCTION OPERATIONS.

GRAPHIC SCALE



LOT GRADING NOTES

- PAD CONTOURS SHOWN ARE FOR INFORMATION PURPOSES.
- HOUSE TYPES AND GRADING THAT HAVE NOT BEEN PROPOSED ON THE GRADING PLAN REQUIRE A PLAN REVIEW BY THE CITY OF ANOKA.
- SILENT FENCE TO BE INSTALLED BY RESIDENT PRIOR TO HOUSE CONSTRUCTION.
- THERE IS TO BE NO GRADING WITHIN 25' OF AREAS

TREE PROTECTION NOTES

- TREE PROTECTION LIMITS TO BE MARKED IN FIELD PRIOR TO ANY TREE CLEARING ACTIVITY.
- SILENT 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 SHIP LINE OF TREES IN THE TREE PROTECTION ZONE.
- FIELD OCCASIONS 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. GRADING OF STUMPS WILL OCCUR AFTER EROSION CONTROL MEASURES ARE INSTALLED.

FLOODPLAIN FILL NOTES

(COON CREEK WATERSHED FLOODPLAIN FILL)
 FEMA FLOODPLAIN FILL VOLUME = 2,780 CUFT
 COMPENSATORY STORAGE PROVIDED IN POND 4 AND POND 7 BETWEEN MPH AND RM-3

BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3298
 ELEVATION = 508.17 FEET (NAVD83)

NO.	DATE	DESCRIPTION	BY
1	11/21/20	CITY / WATERSHED COMMENTS	PHD
2	01/23/21	CITY / WATERSHED COMMENTS	PHD
3	02/02/21	CITY / WATERSHED COMMENTS	PHD
4	02/02/21	CITY / WATERSHED COMMENTS	PHD
5			

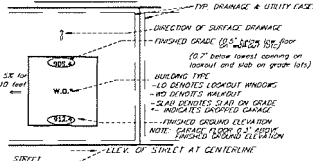
GRADING, EROSION CONTROL AND TREE PROTECTION PLAN

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

- ☉ DENOTES SOIL BORINGS BY FRANKMILL SOIL TESTING
- ☉ DENOTES PERIMETER OR PENETRATION TESTING BY BRAUN INTEREST, INC.
- ☉ DENOTES SPREADSHEET OVERFLOW ELEVATION
- ☉ DENOTES EXISTING SPOT ELEVATION
- ☉ DENOTES WET LAKE
- ☉ DENOTES EXISTING 2 FOOT CONTOUR
- ☉ DENOTES PROPOSED 2 FOOT CONTOUR
- ☉ DENOTES WETLAND DELINEATED BY SOILWAG ENGINEERING, SERVICES COMPANY.
- ☉ DENOTES EASEMENT LINE
- ☉ DENOTES SETBACK LINE
- ☉ DENOTES PROPOSED STORM SEWER
- ☉ DENOTES PROPOSED SILT TRAP PROTECTION FENCE
- ☉ DENOTES RED FLAG TO BE INSTALLED INSIDE SILT FENCE ADJACENT TO WETLAND
- ☉ DENOTES DIRECTION OF DRAINAGE
- ☉ DENOTES PROPOSED SPOT ELEVATION
- ☉ DENOTES PROPOSED CENTRALISE ELEVATION
- ☉ DENOTES PROPOSED WELL LOCATION
- ☉ DENOTES AREA 1' ABOVE HOTSPOTS
- ☉ DENOTES WETLAND VEGETATIVE BUFFER
- ☉ DENOTES WETLAND VEGETATIVE BUFFER SIGN
- ☉ DENOTES AIRSPRAY (BURNAP) TO BE VEGETATED IN WETLAND (BURNAP)
- ☉ DENOTES PROPOSED STORM SEWER DUCT PROTECTION
- ☉ DENOTES APPROXIMATE FEMA FLOOD ZONE A LINE
- ☉ DENOTES TREE PRESERVATION AREA
- ☉ DENOTES 12' POND ACCESS

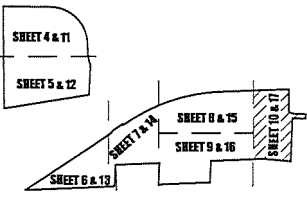
TYPICAL LOT



EROSION CONTROL / REVEGETATION SPECS.

1. PRIOR TO BEGIN 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 UNCOVERED AREAS.
3. AS EACH AREA OUTSIDE THE STREET IS GRADED, PROVIDE NATIVE TOPSOIL, SEED, AND MULCH AND/OR WITH A STRAIGHT SILT DUCT WITHIN 3 DAYS AFTER FINISH GRADING.
4. MAINTAIN AND REPAIR SILT STOP FENCES (INCLUDING REMOVAL OF ACCUMULATED SOIL) UNTIL VEGETATION IS ESTABLISHED.
5. AREAS IN BUFFER THAT HAVE VEGETATION REMOVED DURING CONSTRUCTION MUST BE REVEGETATED WITH NATIVE MIX AND BE MONITORED AND MAINTAINED FOR 3 YEARS.
6. SEE "STORM WATER POLLUTION PREVENTION PLAN" FOR ADDITIONAL EROSION CONTROL NOTES AND SITE DESIGNING.

SHEET INDEX



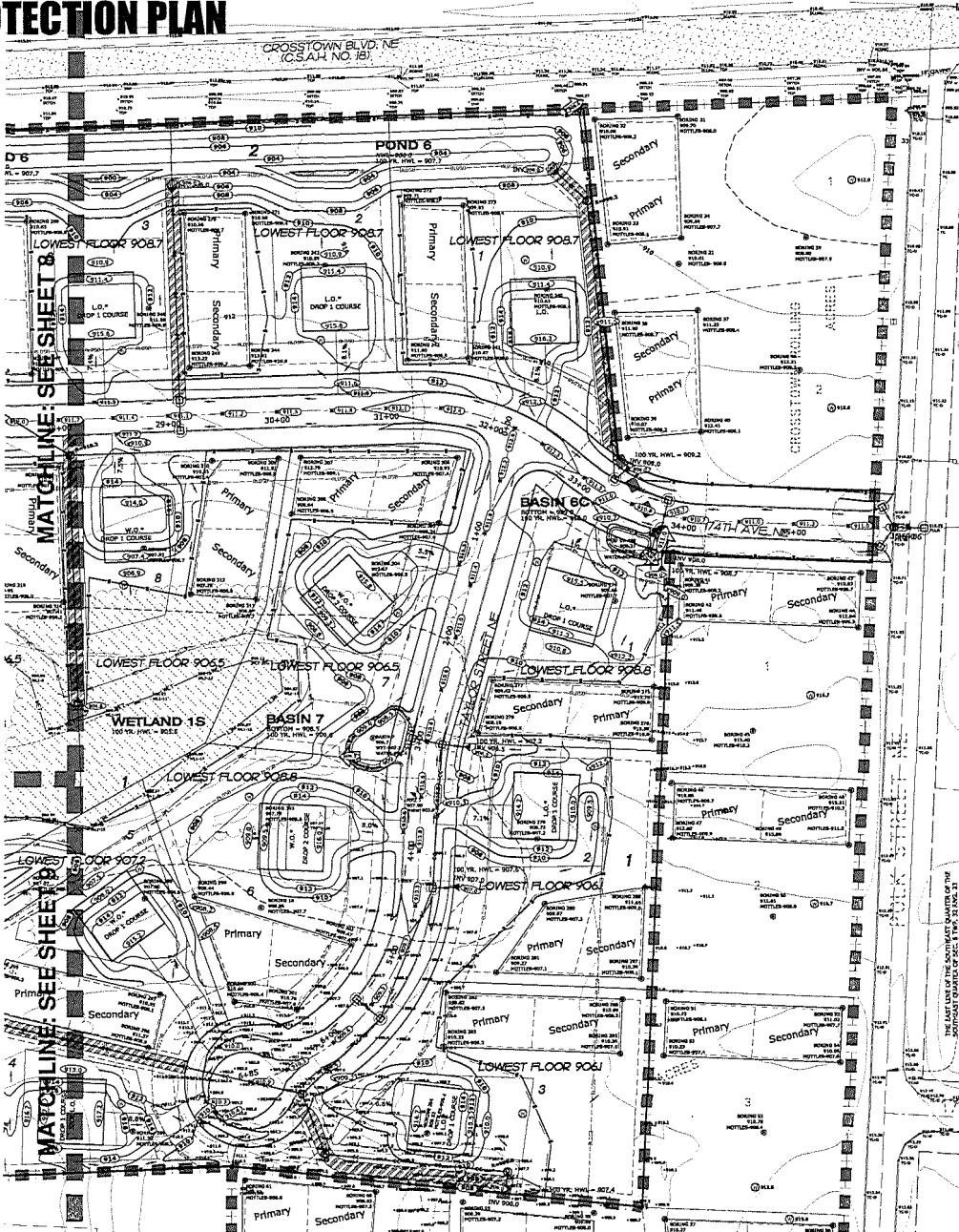
LOT GRADING NOTES

TREE PROTECTION NOTES

- TREE PROTECTION UNITS TO BE MAINTAINED IN FIELD PRIOR TO ANY TREE CLEANING ACTIVITY.
- SILT / TREE PROTECTION FENCE TO BE INSTALLED AT CONSTRUCTION LIMIT LINE.
- CARE IS TO BE TAKEN TO AVOID CONSTRUCTION ACTIVITY ON CONSTRUCTION VEHICLES TRAFFIC WITHIN THE DRIP LINE OF TREES IN THE TREE PROTECTION ZONE.
- FIELD DECISIONS WILL BE MADE ON LOCATION OF TREE PROTECTION UNITS 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. CANNING OF STUMPS WILL OCCUR AFTER EROSION CONTROL MEASURES ARE INSTALLED.

NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTRALISE PER ORDINANCE.
- 2 FOOT CONTOUR INTERNAL (POND 8)
- CONTOURS SHOWN ARE PER FINISHED GRADE DISTRIBUTION AND FIELD VEGETATION
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SCAWNT AT FULL DEPTH
- TUNE AREA TO BE SEEDED WITHIN 7 DAYS AFTER COMPLETION OF FINAL GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER SIZES, INVERTS, AND SIZES.
- ALL PIPE ARISING PROVIDED WITH TREE GUARDS
- PROVIDE CLASS II BURNAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 4" OF TOPSOIL OR AIRSPRAY IN WETLAND BUFFERS AND SEED WITH KEEP RICE POND 30.265
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR AN IN DARK DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CITY PRIOR TO ANY DEWATERING OPERATIONS.



FLOODPLAIN FILL NOTES

(LEWIS CREEK WATERSHED FLOODPLAIN FILL)
 FEMA FLOODPLAIN FILL VOLUME = 3,700 CU YD
 COMPENSATORY STORAGE VOLUME = 15,000 CU YD
 (COMPENSATORY STORAGE PROVIDED IN POND 4 AND POND 7 BETWEEN HWL AND 906.1)

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.

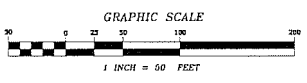
JASON E. RUD
 Date: 03/26/2021 License No. 415178

BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 928.17 FEET (NAVD88)

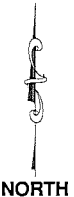
NO.	DATE	DESCRIPTION	BY
1	11/12/20	CITY / WATERSHED COMMENTS	RND
2	02/23/21	CITY / WATERSHED COMMENTS	RND
3	03/24/21	CITY / WATERSHED COMMENTS	RND
4	03/26/21	CITY / WATERSHED COMMENTS	RND
5			

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

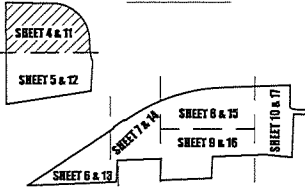
~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471



LEGEND

- ☉ DENOTES SOIL BORINGS BY TRANDEWELL SOIL TESTING
- ⊕ DENOTES PILEDRIVETS OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- 119.28 DENOTES EXISTING SPOT ELEVATION
- WETLAND DENOTES WETLAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- DENOTES WETLAND DELINEATED BY KODJAKOV ENVIRONMENTAL SERVICES COMPANY.
- DENOTES CASHEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILT / TRAP PROTECTION FENCE
- DENOTES DIRECTION OF DRAINAGE
- DENOTES PROPOSED WELL LOCATION
- DENOTES WETLAND/ VEGETATIVE BUFFER
- DENOTES WETLAND/ VEGETATIVE BUFFER SEEN
- ▨ DENOTES PROPOSED BUILDING PAD AREA
- ▨ DENOTES PROPOSED YARD AREA
- ▨ DENOTES PROPOSED DRIVEWAY AREA
- ▨ DENOTES 12' ROAD ACCESS

SHEET INDEX



FOUNDING CALCULATIONS
 AND STORM SEWER DESIGN BY
 FLOW ENGINEERING, INC.

FLOW ENGINEERING, INC.
 6778 LAKE DRIVE
 SUITE 110
 LINO LAKES, MN 56014

PHONE: (801) 361-8910
 FAX: (801) 361-8701

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 Dunkel
 ADAM DUNKEL

DATE: 03/26/2021 LJO, NO. 43903

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

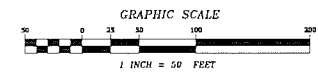
I hereby certify that this survey, plan
 or report was prepared by me or under
 my direct supervision and that I am
 a duly Registered Land Surveyor under
 the laws of the State of Minnesota.

Jason E. Rud
 JASON E. RUD

Date: 03/26/2021 License No. 41578

NOTES

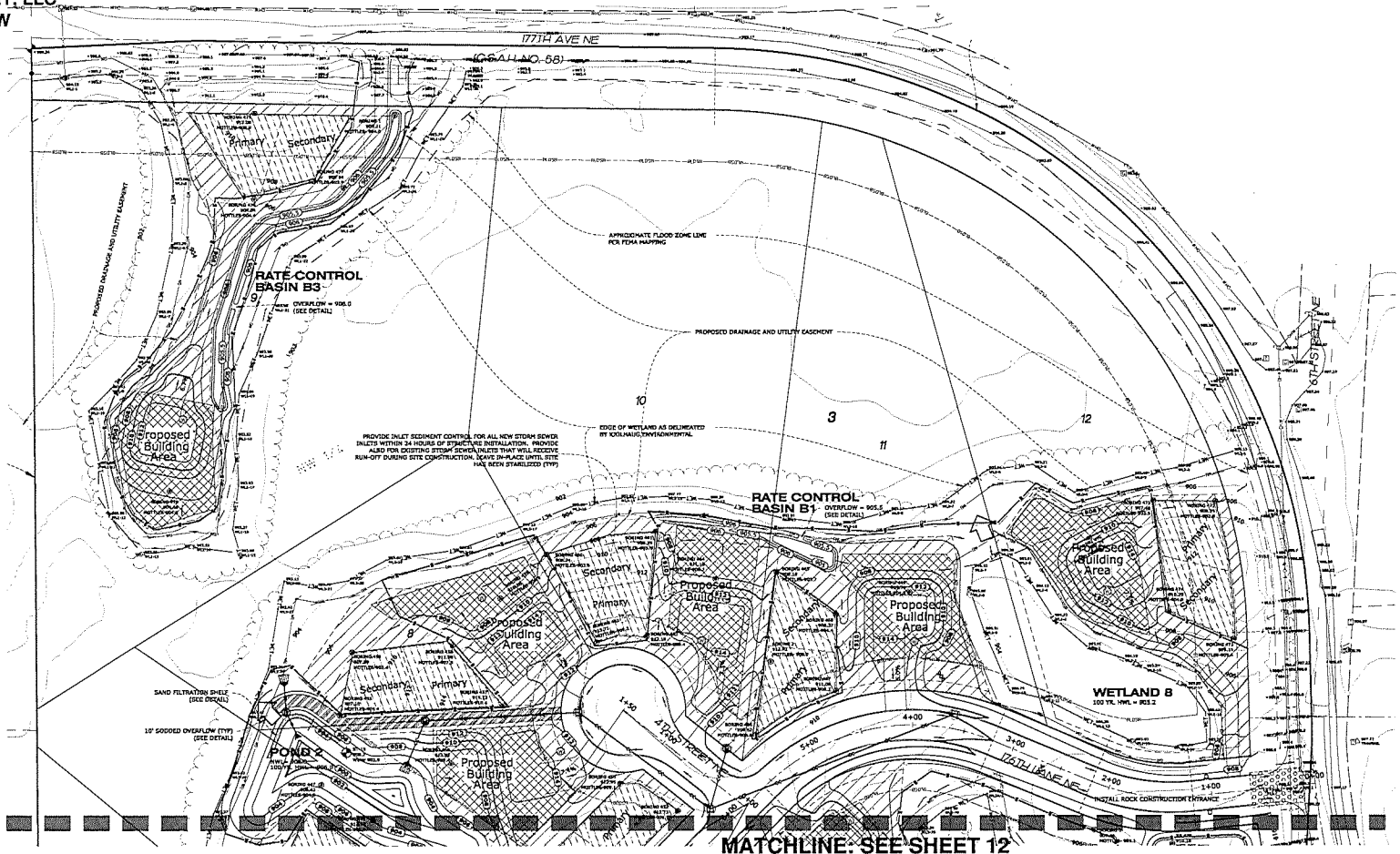
- READINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL CITY AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 88).
- CONTOURS SHOWN ARE HORIZONTAL LINE DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAWCUT AT FULL DEPTH.
- THIS AREA TO BE SEIZED WITHIN 7 DAYS AFTER COMPLETION OF ROAD CHANGING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER RISES, INVERTS, AND SIZES.
- ALL PIPES ARE PROVIDED WITH TRASH GUARDS.
- PROVIDE CLASS II RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 12" OF TOPSOIL ON RIPRAP BY WETLAND BUFFER AND SEED WITH RED HED HONEY-SUEDE.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A PERM DEWATERING PERMIT AND WELL PROVIDE WELL-FIELD LOCATIONS, INVERTS, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COME PRIOR TO ANY DEWATERING OPERATIONS.



BENCHMARK

ANDOKA COUNTY BENCHMARK NO. 3598
 ELEVATION = 908.17 FEET (NAVD88)

NO.	DATE	DESCRIPTION	BY
1	03/26/21	CITY / WATERSHED COMMENTS	PHD
2	03/26/21	CITY / WATERSHED COMMENTS	PHD
3	03/26/21	CITY / WATERSHED COMMENTS	PHD
4	03/26/21	CITY / WATERSHED COMMENTS	PHD
5			



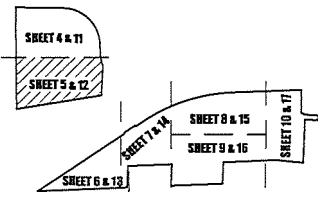
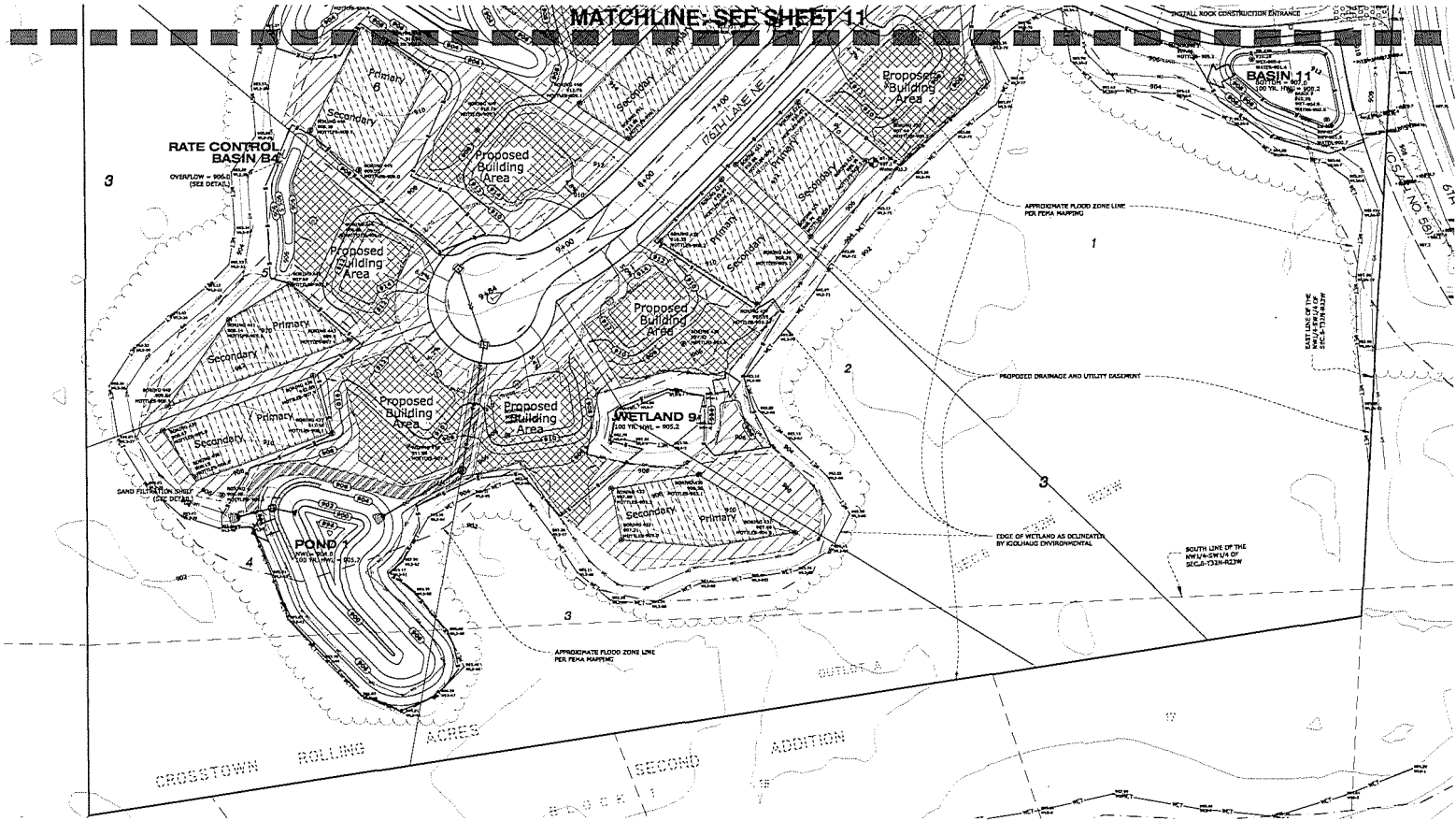
LIVABILITY PLAN

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471



LEGEND

- ☉ DENOTES SOIL BORING BY TRACWELL SOIL TESTING
- ⊕ DENOTES PNEUMATIC OR PENETRATION BORING BY BRAUN INSTRUMENT, INC.
- ± 1.00 ± DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY COOKAUG ENVIRONMENTAL SERVICES COMPANY.
- DENOTES CASHEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED SILV / TREE PROTECTION FENCE
- DENOTES DIRECTION OF DRAINAGE
- ⊕ DENOTES PROPOSED WELL LOCATION
- DENOTES WETLANDS/ VEGETATIVE BUFFER
- DENOTES WETLANDS/ VEGETATIVE BUFFER SIGN
- DENOTES PROPOSED BUILDING PAD AREA
- DENOTES PROPOSED YARD AREA
- DENOTES PROPOSED OPTIC AREA
- DENOTES 12' POND ACCESS



PONDING CALCULATIONS AND STORM SEWER DESIGN BY P.L.O.W.E. ENGINEERING, INC.

PLOWE
ENGINEERING, INC.
2776 LAKE DRIVE
SUITE 110
LINO LAKES, MN 55014

PHONE: (651) 361-4810
FAX: (651) 361-4791

SITE PLANNING & ENGINEERING

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 Gunkel
ADAM GUNKEL

DATE: 03/26/2021 LIC. NO. 43903

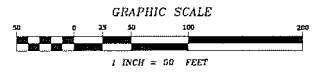
I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Registered Land Surveyor under the laws of the State of Minnesota.

Jason E. Rud
JASON E. RUD

Date: 03/26/2021 License No. 41576

NOTES

- BENCHMARKS SHOWN ARE ON ANOKA COUNTY DATUM.
- 2 FOOT CONTOUR INTERVAL SHOWN.
- TOTAL LOT AREA ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- CONTOURS SHOWN ARE PER WIGGS LIDAR DISTRIBUTION AND FIELD VERIFICATION.
- ALL PATCH HEIGHTS AND INVERT PATCHES TO BE SAMPLED AT FULL DEPTH.
- TURF AREA TO BE SEEDED WITHIN 7 DAYS AFTER COMPLETION OF ROAD GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER, INVERTS, AND SIZES.
- ALL PIPE ANKERS PROVIDED WITH TRASH GUARDS.
- PROVIDE CLASS II SURFAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON SURFAP OR WETLAND BUFFERING AND SEED WITH SLEED MIX #6007 21-261.
- IF OPERATING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A PAI DRIE DEWATERING PERMIT AND WILL PROVIDE WELL, FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COMPLY WITH ANY DOWNTOWN ORDINANCES.



BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.17 FEET (NAVD83)

DRAWN BY	HWJ	JOB NO.	172779	DATE	01/12/2020
CHECK BY	JER	ISSUING	13		
1	01/16/20	CITY / WATERSHED COMMENTS	HWJ		
2	01/16/21	CITY / WATERSHED COMMENTS	HWJ		
3	02/04/21	CITY / WATERSHED COMMENTS	HWJ		
4	03/24/21	CITY / WATERSHED COMMENTS	HWJ		
5					
NO.	DATE	DESCRIPTION	BY		

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

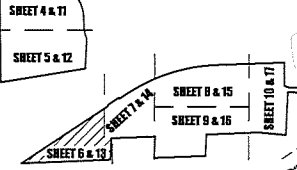
LIVABILITY PLAN

~of~ CROSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

- DENOTES SOIL BORING BY TRACWELL SOIL TESTING
- DENOTES WETLAND 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 KODIAK ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED BUILT / 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

SHEET INDEX



AND STORM SEWER DESIGN BY
 PLOWE ENGINEERING, INC.

 8778 LAKE DRIVE
 SUITE 115
 LINO LAKES, MN 55014
 PHONE: (651) 961-8701
 FAX: (651) 961-8701

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 Orszel
 ADAM ORSZEL
 DATE: 03/26/2021 LIC. NO. 43993

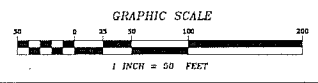
E.G. RUD & SONS, INC.
 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110
 Lino Lakes, MN 55014
 Tel. (651) 361-8200 Fax (651) 361-8701

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
 JASON E. RUD
 Date: 03/26/2021 License No. 41578

NOTES

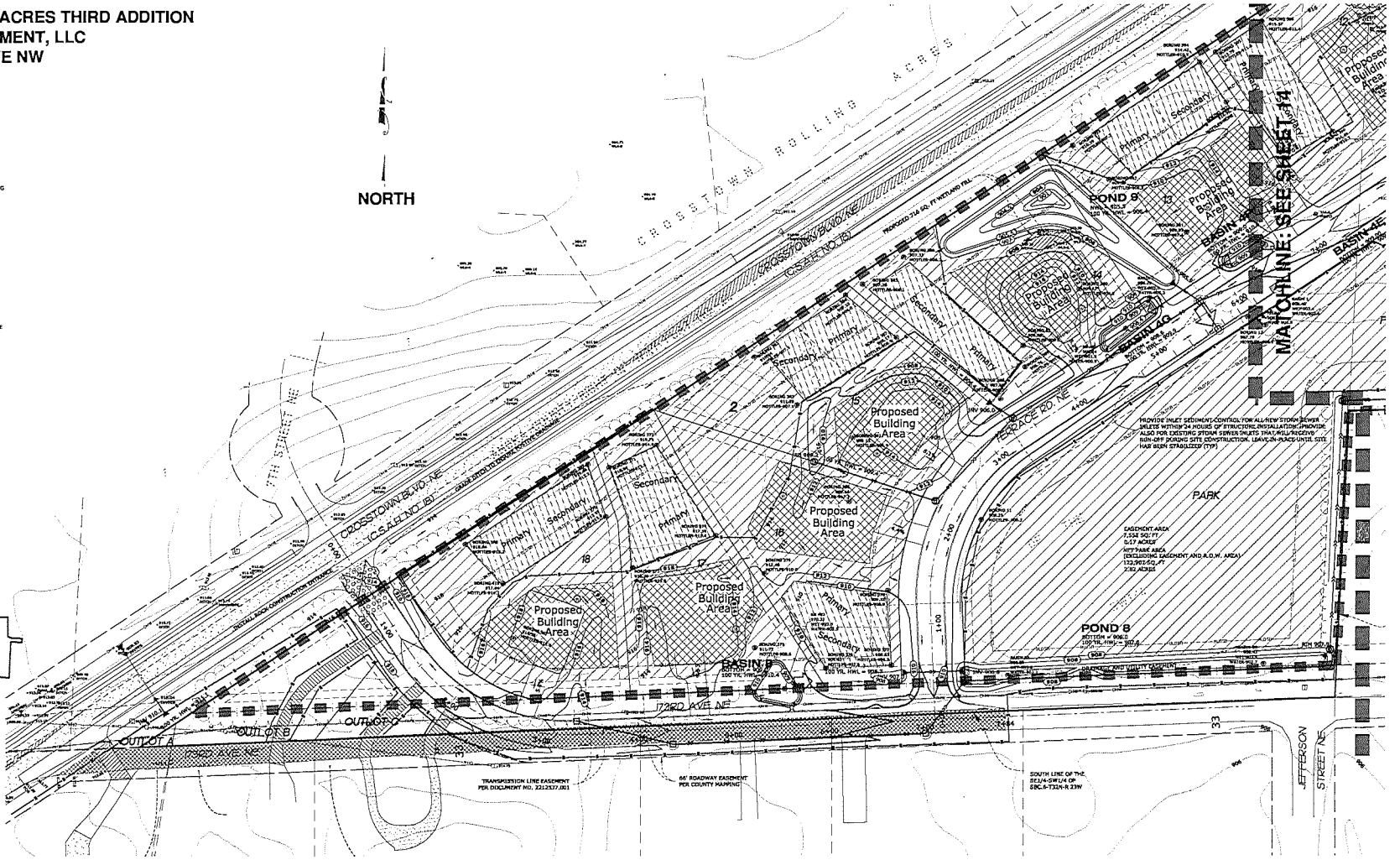
- DEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTROLS INTERVAL (NAVD 83).
- CONTOURS SHOWN ARE PER THREE FOOT DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAVED AT ALL DEPTH.
- THIS AREA TO BE SECURED WITHIN 7 DAYS AFTER COMPLETION OF PILING DRAINING OR DUCTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER RIGS, INVERTS, AND SIZES.
- ALL FIRE ARMS PROVIDED WITH TRASH GUARDS.
- PROVIDE CLASS III SPRINK WITH FILTER FABRIC FOR ALL FIRE OUTLETS. DETAIL 'C' OF TOPSOIL ON RUMPAK IN WETLAND BUFFERS AND FILL WITH 2000 PER INCH 30-363.
- IF DRAINAGE IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A HD DRAINAGE PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, DATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COME PRIOR TO ANY DRAINAGE OPERATIONS.



BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.17 FEET (NAVD83)

NO.	DATE	DESCRIPTION	BY
1	11/13/2020	CITY / WATERSHED COMMENTS	MWD
2	01/23/21	CITY / WATERSHED COMMENTS	MWD
3	02/26/21	CITY / WATERSHED COMMENTS	MWD
4	03/26/21	CITY / WATERSHED COMMENTS	MWD
5			



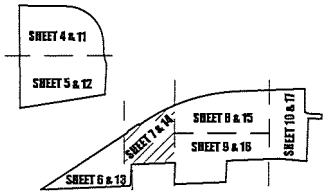
LIVABILITY PLAN

~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

- DENOTES SOIL BORING BY TRACSWELL SOIL TESTING
- DENOTES PIEZOMETER OR MONITORING BORING BY BRAUN INTECTEC, INC.
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WETLAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- DENOTES WETLAND DELINEATED BY AQUILA ENVIRONMENTAL SERVICES COMPANY
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED 6' 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' ROAD ACCESS

SHEET INDEX



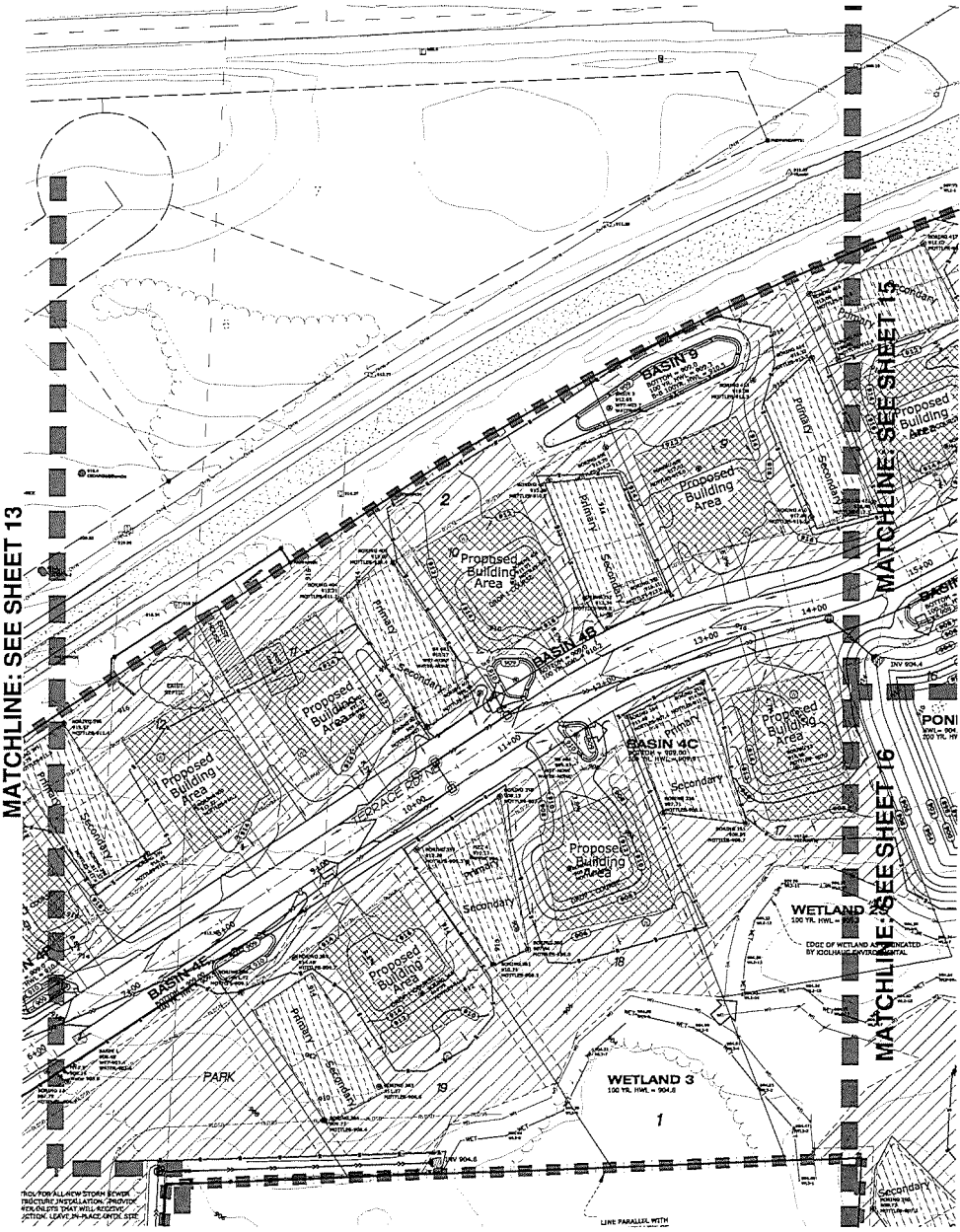
PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 8778 LAKE DRIVE
 LINO LAKES, MN 56014
 PHONE: (812) 361-8810
 FAX: (812) 361-8701

SITE PLANNING & ENGINEERING

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.

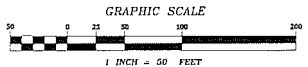
Adam Orszel
ADAM ORSZEL
 DATE: 03/26/2021 LIC. NO. 43903

F. G. RUD & SONS, INC.
 1871 1977
 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110
 Lino Lakes, MN 55014
 Tel. (651) 361-8200 Fax (651) 361-8701



NOTES

- BEAKINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 3 FOOT CONTIGUOUS SPREADS ARE REQUIRED.
- CONTOURS SHOWN ARE PER FINISHED GRADE DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND HAVEN'T POINTS TO BE SHOWN AT FULL DETAILED.
- TURN AREA TO BE SEED WITHIN 7 DAYS AFTER COMPLETION OF GRADE GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER SIZES, INVERTS, AND SIZES.
- ALL PIPE APRONS PROVIDED WITH TRASH GUARDS.
- PRECISE CLASS 125 RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED MIX INSIST 33-361.
- IF OBTAINING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A N.D. DR. WATERLETTING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO CEMD PRIOR TO ANY DRAINAGE OPERATIONS.



BENCHMARK

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.

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.27 FEET (NAVD88)

Jason E. Rud
JASON E. RUD
 Date: 03/26/2021 License No. 41578

NO.	DATE	DESCRIPTION	BY
1	11/22/20	CITY / WATERSHED COMMENTS	MHD
2	02/24/21	CITY / WATERSHED COMMENTS	MHD
3	02/24/21	CITY / WATERSHED COMMENTS	MHD
4	03/26/21	CITY / WATERSHED COMMENTS	MHD
5			

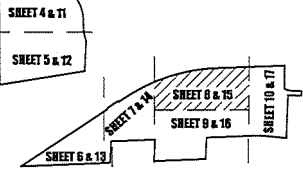
LIVABILITY PLAN

~of~ CROSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

- ⊛ DENOTES SILE, BORING BY TRACERWELL, SOIL TESTING
- ⊙ DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN INTERTEC, INC.
- ⊕ DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAWS
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- DENOTES WETLAND DELINEATED BY KOLHAGE ENVIRONMENTAL SERVICES COMPANY
- DENOTES EASEMENT LINE
- DENOTES SEWER LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED EILT / TREE PROTECTION FENCE
- DENOTES PROPOSED COLLECTION MAIN
- DENOTES PROPOSED WEL LOCATION
- DENOTES WETLAND VEGETATIVE BUFFER
- DENOTES WETLAND VEGETATIVE SUIPER SIGN
- ▨ DENOTES PROPOSED BUILDING PAD AREA
- ▨ DENOTES PROPOSED YARD AREA
- ▨ DENOTES PROPOSED SEPTIC AREA
- ▨ DENOTES 12' POND ACCESS

SHEET INDEX



PENDING CALCULATIONS AND STORM SCOUR DESIGN BY PLOWE ENGINEERING, INC.

PLOWE ENGINEERING, INC.
 6778 LAKE DRIVE
 SUITE 110
 LINO LAKE, MN 56014

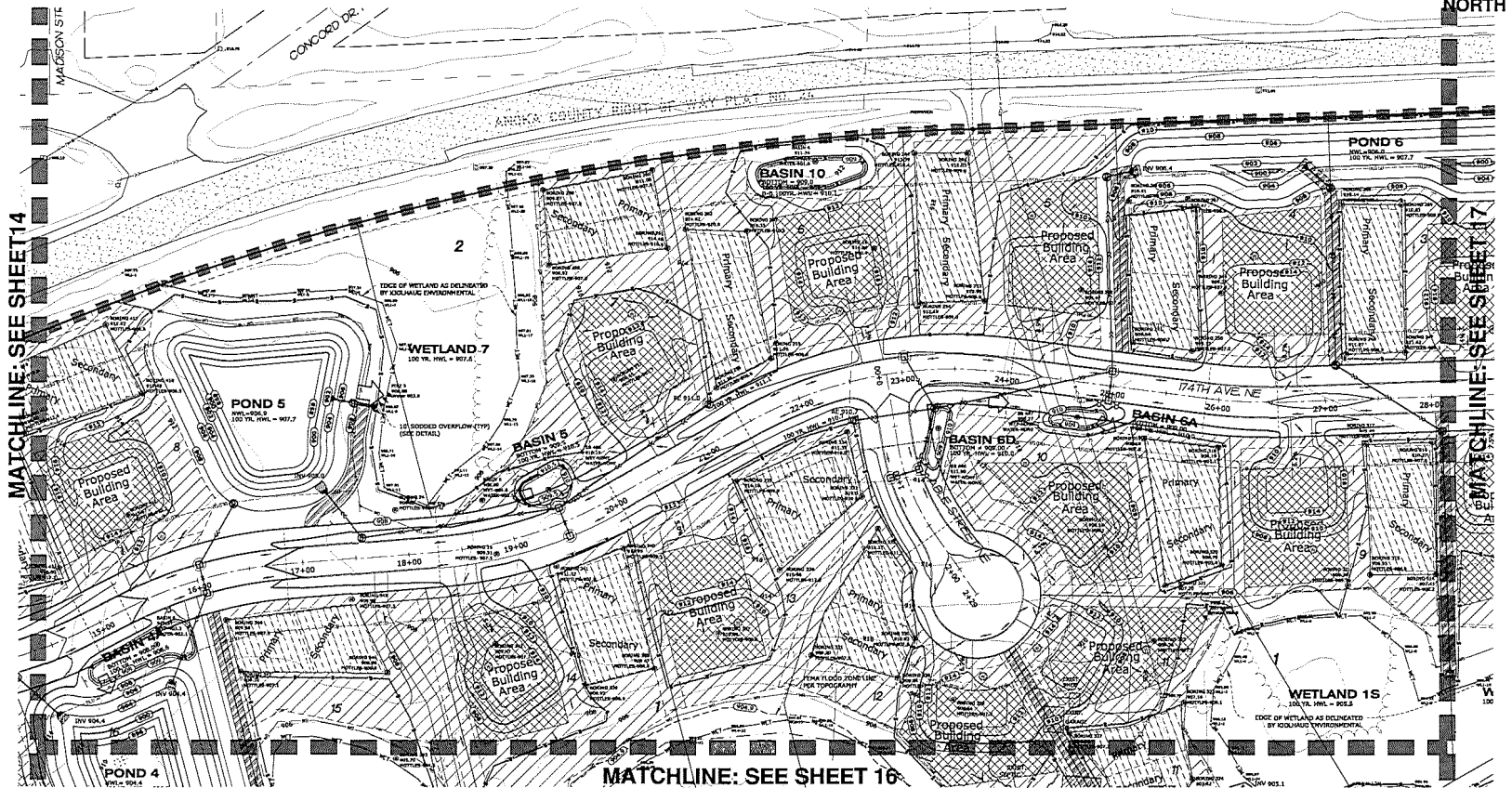
PHONE: (612) 261-8210
 FAX: (612) 261-8701

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 Dankel
 ADAM DANKEL

DATE: 03/26/2021 LIO. NO. 439003

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



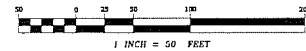
NOTES

- BEARINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD 80)
- CONTIGUOUS SHOWN AND PER HINGED LIDAR DISTRIBUTION AND FIELD VERIFICATION
- ALL MATCH POINTS AND INVERT PATCHES TO BE SMOOTH AT FINAL PROFILE.
- TREE AREA TO BE SAVED WITHIN 30 FEET AFTER COMPLETION OF ROUGH GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR SHOWER DRAIN, SINKS, AND SIZES.
- ALL PERMITS PROVIDED WITH PERMITS REQUIRED
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL FLOW OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED PER SHEET 23.341.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A MN DISE DOWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, WATER, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COME PRIOR TO ANY DEWATERING OPERATIONS.

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

JASON C. RUD
 Date: 03/26/2021 License No. 41578

GRAPHIC SCALE



BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.17 FEET (NAVD88)

NO.	DATE	DESCRIPTION	BY
1	11/02/20	CITY / WATERSHED COMMENTS	MKG
2	01/23/21	CITY / WATERSHED COMMENTS	MKG
3	02/26/21	CITY / WATERSHED COMMENTS	MKG
4	03/26/21	CITY / WATERSHED COMMENTS	MKG
5			

LIVABILITY PLAN

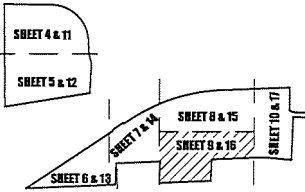
~of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~for~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

NORTH

LEGEND

- DENOTES SOIL BORING BY TRANSDUCER SCR. TESTING
- DENOTES PIEZOMETER OR PENETRATION BORING BY BRAUN ENGINEERING, INC.
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WETLAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOUR
- DENOTES WETLAND DELINEATED BY KOLUAGU ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED 1/2" FENCE PROTECTION FENCE
- 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

SHEET INDEX



PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 8778 LAKE DRIVE
 LINO LAKES, MN 56014
 PHONE: (861) 361-8210
 FAX: (861) 361-8701

SITE PLANNING & ENGINEERING

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 Gunkel
 ADAM GUNKEL
 DATE: 03/26/2021 LIC. NO. 43903

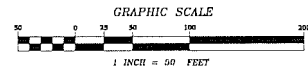
E. G. RUD & SONS, INC.
 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110
 Lino Lakes, MN 55014
 Tel. (651) 361-8200 Fax (651) 361-8701

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
 JASON E. RUD
 Date: 03/26/2021 License No. 41578

NOTES

- READINGS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE PER ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD83)
- CONTOURS SHOWN ARE PER FINISHED GRADE DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SAVED AT FINAL COSTS.
- TEMP AREA TO BE DECEP WITHIN 90 DAYS AFTER COMPLETION OF ROAD GRADING OR INACTIVITY.
- SEE PRELIMINARY UTILITY PLAN FOR STORM SEWER REPE, INVERTS, AND SIZES.
- ALL PIPE APPROX PROVIDED WITH TRASH GUARDS.
- PROVIDE CLASS II RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" TOPSOIL ON RIPRAP IN WETLAND BUFFERS AND SEED WITH SEED PER PARROT 34-364.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A PERMIL DEWATERING PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, DATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COMMUNICATE TO ANY DEWATERING OPERATIONS.



BENCHMARK

ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.17 FEET (NAVD83)

NO.	DATE	DESCRIPTION	BY
1	11/21/20	CITY / WATERSHED COMMENTS	MND
2	01/23/21	CITY / WATERSHED COMMENTS	MND
3	02/24/21	CITY / WATERSHED COMMENTS	MND
4	03/24/21	CITY / WATERSHED COMMENTS	MND
5			

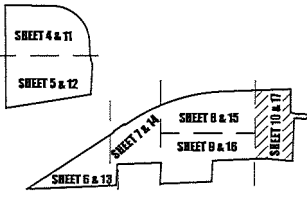
LIVABILITY PLAN

-of- CROSSTOWN ROLLING ACRES THIRD ADDITION
 -for- CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

LEGEND

- ✕ DENOTES SOIL BORING BY TRANSMILL SOIL TESTING
- ⊕ DENOTES PEG/DIAPHRAGM OR PENETRATION BORING BY BRAUN DIAPHRAGM, INC.
- X.X.X.X DENOTES EXISTING SPOT ELEVATION
- △ DENOTES WET LAND
- DENOTES EXISTING 2 FOOT CONTOUR
- DENOTES PROPOSED 2 FOOT CONTOURS
- WET DENOTES WETLAND DELINEATED BY KODIAK ENVIRONMENTAL SERVICES COMPANY.
- DENOTES EASEMENT LINE
- DENOTES SETBACK LINE
- DENOTES PROPOSED STORM SEWER
- DENOTES PROPOSED 3 FT. TREE PROTECTION FENCE
- DENOTES DIRECTION OF DRAINAGE
- ⊙ DENOTES PROPOSED WELL LOCATION
- DENOTES WETLANDS VEGETATIVE BUFFER
- DENOTES WETLANDS VEGETATIVE BUFFER SIGN
- ▨ DENOTES PROPOSED BUILDING PAD AREA
- ▨ DENOTES PROPOSED YARD AREA
- ▨ DENOTES PROPOSED SEPTIC AREA
- ▨ DENOTES 12' POND ACCESS

SHEET INDEX

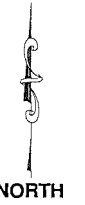
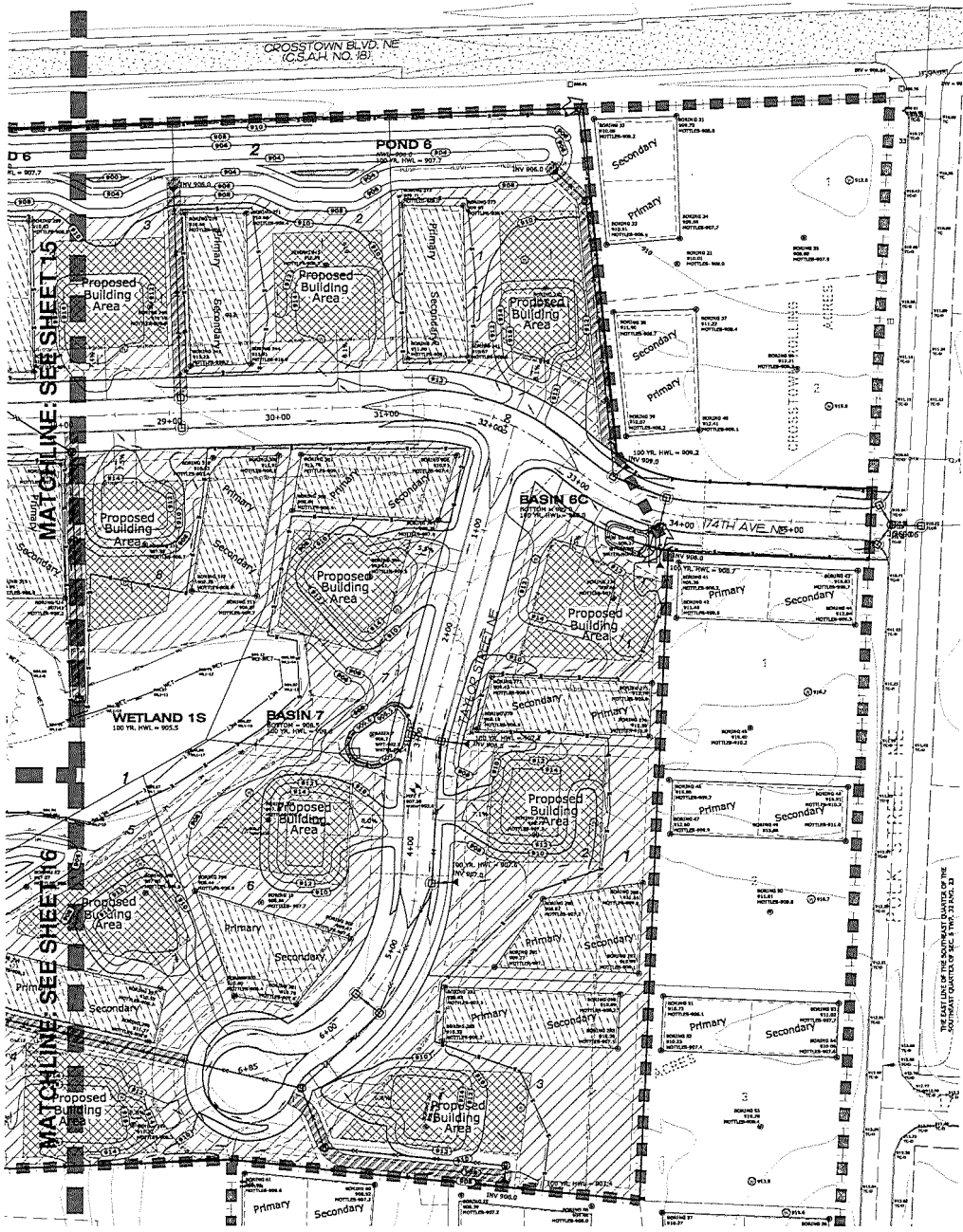


PONDING CALCULATIONS AND STORM SEWER DESIGN BY
PLOWE ENGINEERING, INC.
 8778 LAKE DRIVE SUITE 110 LINO LAKES, MN 55014
 PHONE: (651) 361-8210 FAX: (651) 361-8701

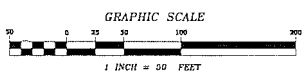
ADAM GUNDEL
 LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA
 DATE: 03.28.2021 L.I.C. NO. 43963

NOTES

- BENCHMARKS SHOWN ARE ON ANOKA COUNTY DATUM.
- TOTAL LOT AREAS ARE CALCULATED TO STREET CENTERLINE FOR ORDINANCE.
- 2 FOOT CONTOUR INTERVAL (NAVD83)
- CONTIGUOUS DESIGN AND PER. MAJOR LEGAL DISTRIBUTION AND FIELD VERIFICATION.
- ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SMOOTH AT FULL DEPTH.
- THIS AREA TO BE SECTED WITHIN 7 DAYS AFTER COMPLETION OF REFINISH GRADING OR INACTIVITY.
- SET PRELIMINARY UTILITY PLAN FOR STORM SEWER RINGS, INVERTS, AND SIZES.
- ALL PIPE ARE TO BE PROVIDED WITH TRASH GUARDS.
- PROVIDE CLASS III RIPRAP WITH FILTER FABRIC FOR ALL PIPE OUTLETS. INSTALL 6" OF TOPSOIL ON RIPRAP IN WETLANDS BUFFERS AND SEED WITH SEED PER MNDOT 23-365.
- IF DRAINAGING IS REQUIRED, THE CONTRACTOR SHALL APPLY FOR A WR DRAINAGE PERMIT AND WILL PROVIDE WELL-FIELD LOCATIONS, RATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES TO COMP. PRIOR TO ANY DRAINAGING OPERATIONS.



F. 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: 03/26/2021 License No. 41578

BENCHMARK
 ANOKA COUNTY BENCHMARK NO. 2008
 ELEVATION = 908.17 FEET (NAVD83)

NO.	DATE	DESCRIPTION	BY
1	11/22/20	CITY / WATERSHED COMMENTS	JHR
2	01/31/21	CITY / WATERSHED COMMENTS	JHR
3	02/02/21	CITY / WATERSHED COMMENTS	JHR
4	03/24/21	CITY / WATERSHED COMMENTS	JHR
5			

LIVABILITY CHART

~Of~ CROSSTOWN ROLLING ACRES THIRD ADDITION
 ~of~ CROSSTOWN DEVELOPMENT, LLC
 17404 WARD LAKE DRIVE NW
 ANDOVER, MN 55304
 (612) 799-1471

Lot	Block	Total Lot Area (sq. ft.)	Yard Area (sq. ft.)	Septic Area (sq. ft.)	Building Footprint (sq. ft.)	Proposed Building Footprint Above Usable (sq. ft.)	Garage Floor Elevation	Proposed Low Floor Elev.	Proposed Low Floor Opening	Lowest Floor Elevation	Highest Analogous Groundwater Elevation	Low Floor Determining Factor	Basing	Boring Elevation	Methods Elevation	Building Type	Custom Graded
18	1	78,569	27,063	7,882	10,074	7,047	914.1	907.1	907.1	907.1	904.1	BASIN AC INF. CALCS	337 356 360 341 344	905.93 907.1 907.36 909.0 910.35	905.3 907.1 907.36 909.0 909.33	W O DRCP COURSE	NO
19	1	62,363	28,449	7,817	10,084	7,330	918.0	911.0	911.0	908.1	904.1	GROUNDWATER	362 364 366 369	914.99 909.71 914.48 915.12	915.3 906.8 909.7 908.1	W O DRCP COURSE	NO
PARK	1	175,788	130,818	NA	NA	NA	NA	NA	NA	NA	904.1	NA	11 12 BASIN 1 BASIN 2A BASIN 2B	908.25 907.75 909.45 908.80 908.43	908.3 908.0 909.0 908.8 908.7	W O WET WAT WAT WAT	NO
1	2	30,208	17,312	7,831	10,840	5,827	918.8	908.9	912.1	908.7	904.1	POND B HWY	241 242 232 233 234	910.87 911.80 909.71 909.43 910.4	908.8 908.5 909.0 909.4	L O DRCP-1	NO
2	2	83,600	13,800	7,851	10,000	5,607	915.9	908.9	912.1	908.7	904.1	POND B HWY	244 245 230 231	913.99 913.0 910.27 910.88	910.0 909.7 909.7 908.4	L O DRCP-1 COURSE	NO
3	2	53,600	13,800	7,851	10,000	4,538	915.9	908.9	912.1	908.7	904.1	POND B HWY	246 247 248 249	911.39 909.1 911.87 910.14	909.5 909.1 908.9 908.8	L O DRCP-1 COURSE	NO
4	2	52,333	12,183	7,833	10,655	5,557	915.9	908.9	912.1	908.7	904.1	POND B HWY	250 251 246 247	909.27 909.13 909.04 910.47	907.9 907.6 908.7 908.8	L O DRCP-1 COURSE	NO
5	2	48,620	21,882	7,853	10,158	6,911	915.9	908.9	912.1	908.7	904.1	POND B HWY	252 253 254 255	909.42 910.83 910.18 909.0	907.4 908.0 909.5 908.8	L O DRCP-1 COURSE	NO
6	2	50,988	20,542	7,876	10,000	4,422	918.7	910.4	913.8	910.1	904.1	BASIN 10 INF. CALCS	16 205 206 207	914.01 912.03 911.38 912.5	910.4 910.5 908.8 910.3	L O DRCP-1 COURSE	NO
7	2	88,059	20,010	7,802	10,185	7,601	915.8	909.5	911.8	908.8	904.1	WETLAND 7 HWY	207 208 209 280 281	908.65 908.92 909.37 911.06 914.48	907.7 907.5 907.9 907.8 910.3	L O DRCP-1 COURSE	NO
8	2	101,825	17,128	7,768	10,898	5,171	919.8	904.7	911.9	908.7	904.1	POND 3 HWY	24 417 418 419 420	908.88 913.82 918.48 913.58 915.08	908.7 907.5 912.0 910.0 908.5	L O DRCP-2 COURSE	NO
9	2	52,414	20,552	7,568	10,308	3,370	918.2	919.5	913.7	910.5	904.1	BASIN 9 INF. CALCS	439 440 441 442 443	917.02 915.0 918.58 918.35 918.58	915.0 914.0 915.2 912.3 912.3	L O NO	NO
10	2	47,986	18,029	7,707	10,880	5,780	917.5	910.5	913.7	910.5	904.1	BASIN 8 INF. CALCS	331 332 333 334 335	916.11 913.34 915.0 915.21 913.67	914.1 909.8 910.3 910.2 911.2	L O DRCP-1 COURSE	NO
11	2	47,682	22,139	7,702	10,158	10,020	914.8	907.2	915.3	908.1	904.1	GROUNDWATER	447 448 449 450	911.19 908.33 908.98 915.21	908.7 907.9 909.0 915.4	FB NO	NO
12	2	47,603	22,223	7,747	10,030	4,701	914.8	907.1	915.2	908.1	904.1	GROUNDWATER	386 389 388 387 386	913.29 915.07 918.58 912.37 910.48	911.8 911.4 911.4 910.7 910.2	FB NO	NO
13	2	48,600	15,376	7,518	10,585	5,510	918.9	910.5	910.5	910.5	904.1	RIB OVERFLOW	381 382 383 384 385	908.83 908.18 910.29 914.42 916.96	907.4 907.1 907.3 910.0 909.0	SEDE BY O DRCP-2 COURSE	NO
													387 388 BASIN 2	916.96 916.96 908.29	909.0 909.0 908.3	WET WAT	NO

Livability Standards
 All residential lots shall contain at least 20,000 square feet of land which lies above the 100 year flood contour, or the 20,000 square feet, the following additional requirements shall be met:


- a. **Yard Area** - Yard area shall be defined as the area within the lot boundaries that is not occupied by a building, driveway, parking area, or other paved area. The yard area shall be measured as the area within the lot boundaries that is not occupied by a building, driveway, parking area, or other paved area. The yard area shall be measured as the area within the lot boundaries that is not occupied by a building, driveway, parking area, or other paved area.
- b. **Eligible Building Area** - Each lot shall contain at least 10,000 square feet of eligible building area which lies at an elevation of least four feet above the ultimate grade. The eligible building area may not be irregular in shape, and shall be generally rectangular or oval, with no protrusions, narrow necks or peninsulas. Eligible building areas may not encroach into any areas reserved by easement or otherwise for roadway, drainage or utility purposes. It may be used to create a yard area.

- c. **Yard Area** - Each lot shall contain at least 12,000 contiguous square feet which:
 - (1) lies above the 100 year flood contour; and
 - (2) lies at least one foot above the ultimate grade for the intended usage of the yard area.
- d. **Building Footprint Area** - The entire building footprint shall be within the eligible building area, and shall meet the separation requirements for the eligible building area.

- e. **Low Floor Elevation**
 - (1) For vertical design, the low floor elevation shall be at least one foot above the 100 year flood contour, but, notwithstanding the 100 year flood contour, not less than one foot above the ultimate grade, as determined by the City's engineer.
 - (2) For other criteria, the low floor elevation shall be at least one foot above the 100 year flood contour, but, notwithstanding the 100 year flood contour, not less than one foot above the ultimate grade, as determined by the City's engineer.

NOTES: * INDICATES PROPOSED CHANGE ELEVATIONS BASED UPON 12 COURSE BASEMENT
 LOW OFFERS LISTED ARE REFLECTING THE BEAM TANK LOW SPINNING
 WFT - INDICATES UNENCIPHERED WATERSHED ELEVATION ON INFILTRATION AREA BOUNDARY
 WFT - INDICATES WATER ELEVATION FOUND IN INFILTRATION BOUNDARY

LOADING CALCULATIONS AND STORM WATER DESIGN BY PLOWE ENGINEERING, INC.



PLOWE ENGINEERING, INC.
 8778 LAKE DRIVE
 SUITE 110
 LINO LAKES, MN 55014
 PHONE: (861) 361-8210
 FAX: (861) 361-8701

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 Dunkel
 ADAM DUNKEL
 DATE: 03/26/2021 L.I.D. NO. 43963

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

JASON E. RUD
 JASON E. RUD
 Date: 03/26/2021 License No. 41578

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

BENCHMARK
 ANOKA COUNTY BENCHMARK NO. 3098
 ELEVATION = 908.17 FEET (NAVD83)

DRAWN BY: MHD 308 NO: 1773797 DATE: 07/15/2020

CHECK BY:	REV	REASON	DATE
1	11/02/20	CITY / WATERSHED COMMENTS	MHD
2	02/20/21	CITY / WATERSHED COMMENTS	MHD
3	02/26/21	CITY / WATERSHED COMMENTS	MHD
4	03/26/21	CITY / WATERSHED COMMENTS	MHD

NO.	DATE	DESCRIPTION	BY
1			

SHEET 19



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 12-30-20

Date of Receipt 12-30-20

Receipt # _____

Meeting Appearance Dates:

Planning Commission 4-24-2021

City Council 5-3-2021

Please check request(s):

Metes & Bounds Conveyance

Commercial Building Permit

Sketch Plan

Certificate of Occupancy

Preliminary Plat Approval*

Home Occupation Permit

Final Plat Approval

Conditional Use Permit (New)*

Rezoning*

Conditional Use Permit (Renewal)

Multiple Dog License*

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: Edgewater Estates

Address/Location of property: 153rd Ave NE And Xylite, Northwest corner

Legal Description of property: See Public Hearing Notice

PIN # 21-32-23-11-0003 Current Zoning R-A Proposed Zoning R-1

Notes: 21-32-23-12-0003 21-32-23-13-0002 + 0003 + 21-32-23-14-0004

Applicant's Name: Jim Malvin, Tim Lang

Business Name: Timber Valley Development

Address 320 Circle Heights Dr.

City Circle Pines State MN Zip Code _____

Phone 763-780-9090 Cell Phone 612-859-2048 Fax _____

Email address Jim.Malvin@comcast.net

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 12-30-20

- FOR STAFF USE ONLY -

ACTION BY: Planning Commission 4-24-2021
City Council _____

PROPERTY TAXES CURRENT YES NO

ORDINANCE NO. 21-XX

AN ORDINANCE AMENDING A PORTION OF CHAPTER 9 OF THE CITY OF HAM LAKE, COUNTY OF ANOKA, STATE OF MINNESOTA.

The City Council of the City of Ham Lake does hereby ordain as follows, pursuant to Article 9 of the Ham Lake City Code.

That the zoning classification for the following described property situated in the City of Ham Lake, Anoka County, Minnesota is hereby designated R-1 (Single Family Residential) (Evergreen Estates).

The land referred to herein is situated in the State of Minnesota, Anoka County described as follows:

Parcel A:

The East Half of the Northeast Quarter, Section 21, Township 32, Range 23, Anoka County, Minnesota, except the following described parcels:

The South 363 feet of the East 363 feet of the Southeast Quarter of the Northeast Quarter of Section 21, Township 32, Range 23, Anoka County, Minnesota.

That part of the South Half of the Northeast Quarter of Section 21, Township 32, Range 23, Anoka County, Minnesota, described as follows:

Beginning at a point on the South line thereof, distant 1590.68 feet Westerly of the Southeast corner of said South Half of the Northeast Quarter; thence North 88 degrees 44 minutes 59 seconds West, assumed bearing along said South line a distance of 380.00 feet; thence North 01 degrees 15 minutes 01 seconds East, a distance of 60.00 feet; thence Northeasterly along a tangential curve, concave to the Southeast having a radius of 420.96 feet and a central angle of 53 degrees 55 minutes 59 seconds, a distance of 396.25 feet; thence North 55 degrees 11 minutes 00 seconds East, tangent to said curve, a distance of 151.88 feet; thence Northeasterly along a tangential curve, concave to the Northwest having a radius of 289.65 feet and a central angle of 22 degrees 44 minutes 54 seconds, a distance of 115.00 feet; thence South 59 degrees 02 minutes 45 seconds East, not tangent to said curve, a distance of 405.92 feet; thence South 58 degrees 44 minutes 22 seconds West, a distance of 410.00 feet to the intersection with a line which bears North 01 degrees 15 minutes 01 seconds East from the point of beginning; thence South 01 degrees 15 minutes 01 seconds West, along said line, a distance of 152.35 feet to the point of beginning, Anoka County, Minnesota.

That part of the North Half of the Northeast Quarter of Section 21, Township 32, Range 23, Anoka County, Minnesota, described as beginning at the Northeast corner of said Northeast Quarter; thence on an assumed bearing of South 0 degrees 21 minutes 16 seconds East along the East line thereof a distance of 1240.74 feet; thence South 87 degrees 38 minutes 10 seconds West 476.67 feet; thence South 75 degrees 28 minutes West 163.64 feet; thence North 85 degrees 10 minutes 27 seconds West 536.89 feet; thence North 70 degrees 25 minutes 49 seconds West 261.00 feet; thence North 88 degrees 02 minutes 11 seconds West 1057.63 feet; thence South 77 degrees 06 minutes West 88.96 feet to the West line of said Northeast Quarter; thence North 0 degrees 44 minutes 13 seconds East along said West line 1262.95 feet to the Northwest corner of said

Northeast Quarter; thence South 87 degrees 30 minutes 27 seconds East along the North line thereof 2537.79 feet to the point of beginning.

Parcel B:

That part of the West Half of the Northeast Quarter of Section 21, Township 32, Range 23, Anoka County, Minnesota, lying Southerly of the following described line:

Beginning at a point on the East line of said Northeast Quarter distant 1240.74 feet Southerly of the Northeast corner thereof, for the purpose of this description, said East line is assumed to bear South 00 degrees 21 minutes 16 seconds East; thence South 87 degrees 38 minutes 10 seconds West 476.67 feet; thence South 75 degrees 28 minutes West 163.64 feet; thence North 85 degrees 10 minutes 27 seconds West 536.89 feet; thence North 70 degrees 25 minutes 49 seconds West 261.00 feet; thence North 88 degrees 02 minutes 11 seconds West 1057.63 feet; thence South 77 degrees 05 minutes West 88.96 feet to the West line of said Northeast Quarter and there terminating.

Except the following described property:

That part of the South Half of said Northeast Quarter, described as follows:

Beginning at a point on the South line thereof, distant 1590.68 feet Westerly of the Southeast corner of said South Half of the Northeast Quarter; thence North 88 degrees 44 minutes 59 seconds West; assumed bearing along said South line, a distance of 380.00 feet; thence North 01 degrees 15 minutes 01 seconds East, a distance of 60.00 feet; thence Northeasterly along a tangential curve, concave to the Southeast, having a radius of 420.96 feet and a central angle of 53 degrees 55 minutes 59 seconds, a distance of 396.25 feet; thence North 55 degrees 11 minutes 00 seconds East, tangent to said curve, a distance of 151.88 feet; thence Northeasterly along a tangential curve, concave to the Northwest having a radius of 289.65 feet and a central angle of 22 degrees 44 minutes 54 seconds, a distance of 115.00 feet; thence South 59 degrees 02 minutes 45 seconds East, not tangent to said curve, a distance of 405.92 feet; thence South 58 degrees 44 minutes 22 seconds West, a distance of 410.00 feet to the intersection with a line which bears North 01 degrees 15 minutes 01 seconds East from the point of beginning; thence South 01 degrees 15 minutes 01 seconds West, along said line, a distance of 152.35 feet to the point of beginning.

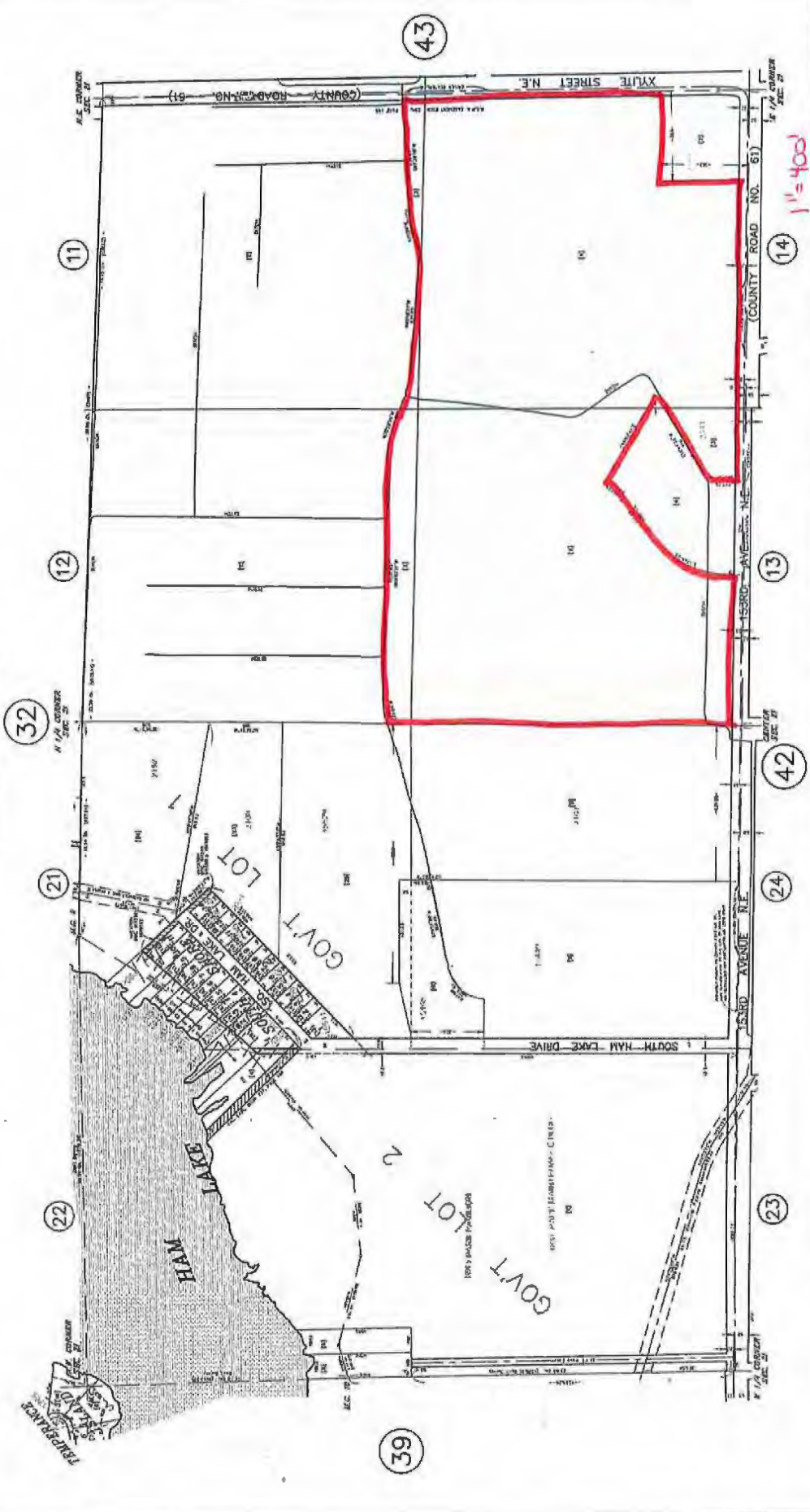
Presented to the Ham Lake City Council on May 3, 2021 and adopted by a unanimous vote this ____ day of ____, 2021.

Michael G. Van Kirk, Mayor

Denise Webster, City Clerk

N 1/2 SECTION 21, T. 32, R. 23

CITY OF HAM LAKE



THIS IS A COMBINATION OF RECORDS AS THEY APPEAR IN THE ANOKA COUNTY OFFICES AFFECTING THE AREA SHOWN. THIS DRAWING IS NOT TO BE USED AS A BASIS FOR ANY CLAIMS OR INTERESTS IN THE COUNTY RECORDS. THE SURVEYOR IS NOT RESPONSIBLE FOR ANY INACCURACIES HEREIN CONTAINED.

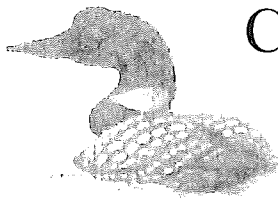
PROPERTY IDENTIFICATION NUMBER
 Section Township Range Quarter Specific
 XX XX XX XX XX
 SPECIFIC PARCEL NUMBERS ARE IN BRACKETS: [1]
 EXAMPLE OF P/P NUMBER: 2-03-21-1-000

QUARTER QUARTER INDEX

21	21	12	11	22	22	12	11
23	23	13	12	24	24	13	12
31	31	14	13	32	32	14	13
41	41	15	14	42	42	15	14
43	43	16	15	44	44	16	15

ANOKA COUNTY SURVEYOR'S OFFICE
 ROOM 204
 2100 WOOD AVENUE N.
 ANOKA, MN 55418
 (763) 423-5510





CITY OF HAM LAKE

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

NOTICE OF PUBLIC HEARING CITY OF HAM LAKE COUNTY OF ANOKA STATE OF MINNESOTA

TAKE NOTICE, that pursuant to the requirements of Minnesota Law, a public hearing shall be held before the Ham Lake Planning Commission on Monday, April 26, 2021 at 6:01 p.m. at the City Hall located at 15544 Central Avenue NE for the purpose of considering the application of Jim Malvin and Tim Lang, Timber Valley Development, requesting preliminary plat approval and rezoning to R-1 (single family residential) for the development of Evergreen Estates (36 residential single family lots) located in Section 21, a parcel of certain land situated in the City of Ham Lake, Anoka County, Minnesota and which is described as follows to wit:

Parcel A:

The East Half of the Northeast Quarter, Section 21, Township 32, Range 23, Anoka County, Minnesota, except the following described parcels:

The South 363 feet of the East 363 feet of the Southeast Quarter of the Northeast Quarter of Section 21, Township 32, Range 23, Anoka County, Minnesota.

That part of the South Half of the Northeast Quarter of Section 21, Township 32, Range 23, Anoka County, Minnesota, described as follows:

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That part of the North Half of the Northeast Quarter of Section 21, Township 32, Range 23, Anoka County, Minnesota, described as beginning at the Northeast corner of said Northeast Quarter; thence on an assumed bearing of South 0 degrees 21 minutes 16 seconds East along the East line thereof a distance of 1240.74 feet; thence South 87 degrees 38 minutes 10 seconds West 476.67 feet; thence South 75 degrees 28 minutes West 163.64 feet; thence North 85 degrees 10 minutes 27 seconds West 536.89 feet; thence North 70 degrees 25 minutes 49 seconds West 261.00 feet; thence North 88 degrees 02 minutes 11 seconds West 1057.63 feet; thence South 77 degrees 06 minutes West 88.96 feet to the West line of said Northeast Quarter; thence North 0 degrees 44 minutes 13 seconds East along said West line 1262.95 feet to the Northwest corner of said Northeast Quarter; thence South 87 degrees 30 minutes 27 seconds East along the North line thereof 2537.79 feet to the point of beginning.

Parcel B:

That part of the West Half of the Northeast Quarter of Section 21, Township 32, Range 23, Anoka County, Minnesota, lying Southerly of the following described line:

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Except the following described property:

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At such hearing both written and oral comments will be heard.

DATED: April 16, 2021

Jennifer Bohr
Zoning and Building Clerk
City of Ham Lake

Memorandum

Date: April 21, 2021
To: Planning Commissioners
From: Tom Collins, City Engineer *TPC*
Subject: Evergreen Estates

Introduction:

The Title Sheet, Preliminary Plat, Grading, Erosion Control and Tree Protection Plan, Livability Plan, Street and Storm Sewer Profiles, Stormwater Sizing & Location Plan, Details, Stormwater Drainage Report and Stormwater Pollution Prevention Plan were received April 20th for the proposed 36 lot residential development located on the 75.4 combined acres of parcels 21-32-23-11-0003, 21-32-23-12-0003, 21-32-23-13-0002, 21-32-23-13-0003 and 21-32-23-14-0004. The parcels are currently zoned Rural Single Family Residential (R-A) and will be zoned R-1. The project conforms to the Sketch Plan that was approved at the May 4, 2020 City Council meeting. All of the prior review comments have been addressed.

Discussion:

The plans include construction of a 10-foot-wide path on the north side of 153rd Avenue right-of-way from Quamba Street to the west. In addition, a 15-foot-wide path easement is included for the 4 lots adjacent to Xylite Street as per the May 20, 2020 Park and Tree Committee recommendation approved at the June 1, 2020 City Council meeting.

The Revised Braun Geotechnical Exploration Report, dated March 9th, adequately addressed prior review comments. The March 10th Tradewell septic certification certifies that each of the proposed lots will support two standard septic systems in accordance with Minnesota Rules 7080.

The Coon Creek Watershed District conditionally approved the development at the April 12th Board of Managers meeting. One condition is that documentation be provided from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

The initial Anoka County Transportation Division review letter, dated December 7, 2020, is attached, along with a follow-up letter dated April 20th. The County found that the northerly extension of Radisson Road into the plat was not feasible. The County is requiring that Quamba Street be constructed as right-in/right-out. This will require a revision to the plans, and potentially additional right-of-way dedication. The County is requiring construction of a west bound right turn lane at Quamba Street, a west bound right turn lane and east bound left turn lane at Urbank Street and a south bound right turn lane and a north bound left turn lane at 154th Lane. Per the attached April 20th email, the County is okay with the County Road 61 driveway access

for Lots 1, 2, 9 and 10 of Block 5. The County is requiring that the driveways be located directly adjacent to the side yard drainage and utility easements shared by Lot 1 and 2 and by Lots 9 and 10.

Recommendations:

It is recommended that the Preliminary Plat of Evergreen Estates be recommended for approval to the City Council, conditioned on the Plans being updated to meet the requirements of the Anoka County Transportation Division.

**Tradewell Soil Testing
18330 Dahlia Street NW
Cedar, MN 55011**

March 10th, 2021

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

Dear Mr. Collins:

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

Sincerely,

A handwritten signature in black ink that reads "Mark Tradewell". The signature is written in a cursive, flowing style.

Mark Tradewell
MPCA #307

NOTICE OF PERMIT APPLICATION STATUS

Project: Evergreen Estates

Date: April 13, 2021

Applicant: Timber Valley Development
620 Civic Heights Dr, Ste 100
Circle Pines, MN 55014

Permit Application#: 20-103

Purpose: Construction of 36 single family lots, residential streets, associated infiltration basins and NURP pond.

Location: 2341 153rd Ave NE, Ham Lake

At their meeting on April 12, 2021, the Board of Managers of the Coon Creek Watershed District **conditionally approved** the above referenced project with 5 conditions and 3 stipulations: **This is NOT a permit.**

ISSUES/CONCERNS:

ISSUE	NEED
Escrows: \$2,000 + (39.96 ac * \$500/ac = \$21,980.00	1. Receipt of escrows.
<p>Stormwater & Hydraulics: The applicant is not meeting the volume management requirement equivalent to infiltrating runoff from the first inch of precipitation; however, the applicant is infiltrating 72% of the requirement and is achieving the maximum extent practicable due to site constraints.</p> <ul style="list-style-type: none"> • The elevation for the internal weir and orifice of OCS D is inconsistent between detail and HydroCAD model. • Rain Gaurdians to Basin D are not labeled on sheet C2.2 of the Civil Plan set. • Drainage Narrative states that there are 6 proposed infiltration basins. Plans only show 5. 	<p>2. Update the elevation of the internal weir and orifice for the OCS D to be consistent between detail and HydroCAD model.</p> <p>3. Label Rain Gaurdians to Basin D on Sheet C2.2 of the Civil Plan set.</p> <p>4. Update Drainage Narrative to identify correct number of infiltration basins.</p>
Wildlife: The proposed project may include endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory	5. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial

waterfowl concentration areas, deer wintering areas or wildlife travel corridors.	waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.
---	--

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

Conditions:

1. Receipt of escrows.
2. Update the elevation of the internal weir and orifice for OCS D to be consistent between detail and HydroCAD model.
3. Label Rain Gaurdians to Basin D on Sheet C2.2 of the Civil Plan set.
4. Update Drainage Narrative to identify correct number of infiltration basins.
5. Provide documentation from the DNR if the proposed project includes endangered or threatened species, rare natural communities, colonial waterbird nesting sites, migratory waterfowl concentration areas, deer wintering areas or wildlife travel corridors.

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

Stipulations:

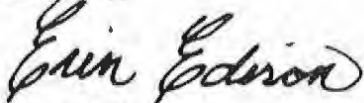
1. Submittal of as-builts for the following stormwater management practices, including volume and critical elevations:

Stormwater Treatment Practices	Number
Infiltration Basins	5
Wet Sedimentation Pond	5
RainGuardians	4
Outlet Control Structures	7
Catch Basin Sump	3
Sediment Forebay	3

2. Completion of post construction infiltration tests on Infiltration Basins 8, A, B, C, and D by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.
3. If dewatering becomes necessary, provide DNR dewatering permit and well-field location, rates, discharge location, schedule and quantities or dewatering plans must be submitting to the district 7 days prior to activity for review and approval.

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

Sincerely,



Erin Edison

Water Resource Regulation Coordinator

cc: File 20-103
Ed Matthiesen, Stantec
Eileen Weigel, Stantec
Tom Collins, Ham Lake

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



Anoka County
TRANSPORTATION DIVISION

Highway



Jennifer Bohr
City of Ham Lake
15544 Central Ave. NE
Ham Lake, MN 55304

December 7, 2020

RE: Sketch Plan – Evergreen Estates

Dear Jennifer,

We have reviewed the Sketch Plan for Evergreen Estates to be located north of CR 61 (153rd Avenue NE) and west of CR 61 (Xylite Street NE) within the City of Ham Lake, and I offer the following comments:

An additional 27 feet of right of way along CR 61 (153rd Ave. and Xylite St.) will be required for future reconstruction purposes (60 feet total right of way width north and west of CR 61 centerline). Any existing driveways or field entrances are to be removed and the ditch section restored to match existing depth, slope, and grades. Right of access should be dedicated to Anoka County along CR 61 (153rd Ave. and Xylite St.) with the exception for the approved street accesses. It is recommended that the sketch plan be reconfigured to eliminate the 4 direct residential access points onto county roads. Radisson Road NE should be extended north to accommodate accesses on 153rd Ave. and a CR 61 EB left turn lane and WB right turn lane will be required along 153rd Ave. at this extended Radisson Road NE. If a Radisson Road NE connection isn't feasible, a RI/RO at Quamba Street would be required as an EB left turn lane would not be feasible so close to Radisson Road NE. A WB right turn lane would then be required at Quamba Street. The centerlines for the 2 additional proposed accesses should be aligned directly across from Urbank Street NE and 154th Lane NE, respectively, to reduce the number of conflict points onto county roads. Urbank Street NE will require an EB CR 61 left turn lane and a WB CR 61 right turn lane. 154th Lane NE will require a NB CR 61 left turn lane and a SB CR 61 right turn lane. Please note that no plantings or private signs will be permitted within the county right of way and care must be exercised when locating private signs, buildings, structures, plantings, berms, etc. outside of the county right of way, so as not to create any new sight obstructions for this section of CR 61.

ACHD would like to work with local governments in promoting compatibility between land use and the county highway system. It should be recognized that residential land uses located adjacent to County highways often results in complaints about traffic noise. Existing and/or future traffic noise from CR 61 (153rd Ave./Xylite St.) could exceed noise standards established by the Minnesota Pollution Control Agency (MPCA), the U.S. Department of Housing and Urban Development, and the U.S. Department of Transportation. Minnesota Rule 7030.0030 states that municipalities are responsible for taking all reasonable measures to prevent land use activities listed in the MPCA's Noise Area Classification (NAC) where establishment of the land use would result in violations of established noise standards. It is advised that the City and the Developer assess the noise situation for this development as it is proposed to be located directly

Our Passion Is Your Safe Way Home

1440 Bunker Lake Boulevard N.W. • Andover, MN 55304-4005
Office: 763-321-3100 • Fax: 763-324-3020 • www.anokacounty.us/highway

Affirmative Action / Equal Opportunity Employer

adjacent to CR 61, and take the level of action deemed necessary to minimize the impact of any highway noise by incorporating the appropriate noise mitigation elements into the design and phasing of this plat as applicable.

The ACHD Engineering Plan Review process will apply to this site. Calculations must be submitted along with a grading and erosion control plan that delineates the drainage areas for this development. The post-developed rate/volume of runoff must not exceed the pre-developed rate/volume of runoff for the 10-year critical design storm. Contact Michelle Pritchard, Engineer II, via phone at 763.324.3162 or via email at Michelle.Pritchard@co.anoka.mn.us for further information and to coordinate the ACHD Engineering Plan Review Process. Please submit the drainage calculations, grading and erosion control plans, right and left turn lane construction plans, ACHD Design Requirements Checklist for County Highway Modifications (copy available via our website), and the applicable engineering plan review fee (estimated at \$1,500.00) to Ms. Pritchard for her review and approval.

Following completion of the ACHD Engineering Plan Review Process outlined above, the contractor(s) who will be completing any work within the county right of way must begin the ACHD Permit process. Two Permits for Work within the County Right of Way (\$150.00 each) and two Street Access permits (\$250.00 each) must be obtained prior to the commencement of any construction. License permit bonding, methods of construction, design details, work zone traffic control, restoration requirements and follow-up inspections are typical elements of the permitting process. Contact Sue Burgmeier via phone at 763.324.3142 or via email at Susan.Burgmeier@co.anoka.mn.us for further information and to coordinate the ACHD Permit process.

Thank you for the opportunity to comment. Feel free to contact me if you have any questions regarding this review.

Sincerely,



Logan Keehr
Traffic Engineering Technician

xc: CR61/Plats+Developments/2020
Jerry Auge, Assistant County Engineer
Jane Rose, Traffic Engineering Manager
Michelle Pritchard, Engineer II
Chuck Gitzen, County Surveyor
Sean Thiel, Graduate Engineer
Sue Burgmeier, Traffic Engineering Technician



Anoka County
TRANSPORTATION DIVISION

Highway

Jennifer Bohr
City of Ham Lake
15544 Central Ave. NE
Ham Lake, MN 55304

April 20, 2021

RE: UPDATE - Preliminary Plat – Evergreen Estates

Dear Jennifer,

We have reviewed the preliminary plat for Evergreen Estates, to be located north of CR 61 (153rd Avenue NE) and west of CR 61 (Xylite Street NE) within the City of Ham Lake, and I offer the following comments:

Our comments from the letter dated December 7, 2020 still apply. Since a Radisson Road NE connection isn't feasible, a RI/RO at Quamba Street will be required as an EB left turn lane would not be feasible so close to Radisson Road NE. It can be anticipated that a WB right turn lane would then be required at Quamba Street. It can also be anticipated that Urbank Street NE will require an EB CR 61 left turn lane and a WB CR 61 right turn lane along with 154th Lane NE requiring a NB CR 61 left turn lane and a SB CR 61 right turn lane in conjunction with this development, and the exact turn lane requirements and design details for construction will be determined through the ACHD Engineering Plan Review process.

The ACHD Engineering Plan Review process will apply to this site. Construction plans for the right turn lane at Quamba Street, right and left turn lanes at Urbank Street NE, right and left turn lanes at 154th Lane NE, and drainage calculations must be submitted, along with a grading and erosion control plan that delineates the drainage areas for this development. The post-developed rate/volume of runoff must not exceed the pre-developed rate/volume of runoff for the 10-year critical design storm. Contact Michelle Pritchard, Engineer II, via phone at 763.324.3162 or via email at Michelle.Pritchard@co.anoka.mn.us for further information and to coordinate the ACHD Engineering Plan Review Process. Please submit the drainage calculations, grading and erosion control plans, ACHD Design Requirements Checklist for County Highway Modifications (copy available via our website), turn lane construction plans and the applicable ACHD Engineering Plan Review fee (estimated at \$1250.00) to Ms. Pritchard for her review and approval.

Our Passion Is Your Safe Way Home

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

Affirmative Action / Equal Opportunity Employer

Following the completion of the ACHD Engineering Plan Review process outlined above, the contractor(s) who will be completing any work within the county right of way must begin the ACHD Permit process. Two Permits for Work within the County Right of Way (150.00 each) and three Street Access permits (250.00 each) must be obtained prior to the commencement of any construction. License permit bonding, methods of construction, design details, work zone traffic control, restoration requirements and follow-up inspections are typical elements of the permitting process. Contact Sue Burgmeier via phone at 763.324.3142 or via email at Susan.Burgmeier@co.anoka.mn.us for further information and to coordinate the ACHD Permit process.

Thank you for the opportunity to comment. Feel free to contact me if you have any questions regarding this review.

Sincerely,



Logan Keehr
Traffic Engineering Technician

xc: CR 61/Plats+Developments/2021
Jerry Auge, Assistant County Engineer
Jane Rose, Traffic Engineering Manager
Michelle Pritchard, Engineer II
Chuck Gitzen, County Surveyor
Sean Thiel, Graduate Engineer
Sue Burgmeier, Traffic Engineering Technician

Tom Collins

From: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Sent: Tuesday, April 20, 2021 10:26 AM
To: Tom Collins
Subject: RE: Evergreen Estates

Yes we are okay with them.

Logan

-----Original Message-----

From: Tom Collins <TCollins@rfcengineering.com>
Sent: Tuesday, April 20, 2021 10:23 AM
To: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Subject: RE: Evergreen Estates

The December letter had concerns with the 4 proposed driveways to CR60. This letter states that those comments still apply. So are the 4 driveways okay with the County?

-----Original Message-----

From: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Sent: Tuesday, April 20, 2021 10:11 AM
To: Tom Collins <TCollins@rfcengineering.com>
Subject: RE: Evergreen Estates

Here is a PDF of the letter.

Logan

-----Original Message-----

From: Tom Collins <TCollins@rfcengineering.com>
Sent: Tuesday, April 20, 2021 10:10 AM
To: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Subject: RE: Evergreen Estates

Can I get a pdf? I am preparing my recommendation memo for preliminary plat approval, and would like to include.

-----Original Message-----

From: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Sent: Tuesday, April 20, 2021 10:06 AM
To: Tom Collins <TCollins@rfcengineering.com>
Subject: RE: Evergreen Estates

Hi Tom,

I just sent out an updated letter. That should cover everything in the plat.

Logan

-----Original Message-----

From: Tom Collins <TCollins@rfcengineering.com>
Sent: Thursday, April 15, 2021 6:48 AM
To: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Subject: RE: Evergreen Estates

Hi Logan,

What is the status of review of the Evergreen Estates project with the Highway Department?

Has the County approved the street connections to CR 61? Has the developer shown that the extension of Radisson Road to within the plat is not feasible? If so, is the County still requiring that Quamba Street be a RI/RO?

The plans show that the proposed driveways for the lots that have direct access to CR 61 (Lots 1, 2, 9 and 10 of Block 5) is directly adjacent to the 10-foot drainage and utility easement. Based on the email below, my interpretation is that the County is okay with that. The plat does propose a total driveway opening of 50-feet for each driveway. The maximum driveway width is 30 feet, so with the 10-foot drainage and utility easement the County could require that the opening be reduced to 40-feet for each driveway.

Tom

-----Original Message-----

From: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Sent: Tuesday, December 29, 2020 10:46 AM
To: Tom Collins <TCollins@rfcengineering.com>
Subject: RE: Evergreen Estates

Hi Tom,

I just heard back from Joe and this is what he said:

It is our recommendation and preference to not have any additional residential access points on to the county roadways. However, if the city is going to approve the plat as shown then the driveways should be arranged so they are located along adjoining lot lines.

Let me know if you have any other questions.

Logan

-----Original Message-----

From: Tom Collins <TCollins@rfcengineering.com>
Sent: Tuesday, December 29, 2020 9:28 AM
To: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Subject: RE: Evergreen Estates

Thanks Logan. The sooner the better. I understand that the preliminary plat and calculations will be submitted to the City and the Coon Creek Watershed District tomorrow.

-----Original Message-----

From: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>
Sent: Monday, December 28, 2020 9:23 AM
To: Tom Collins <TCollins@rfcengineering.com>

Subject: RE: Evergreen Estates

Hi Tom,

I am still waiting to hear back on this. I sent out an email last Monday and have not heard back yet. I will let you know as soon as I find out.

Logan

-----Original Message-----

From: Tom Collins <TCollins@rfcengineering.com>

Sent: Monday, December 21, 2020 1:28 PM

To: Logan J. Keehr <Logan.Keehr@co.anoka.mn.us>

Subject: Evergreen Estates

****EXTERNAL EMAIL ALERT****

This email originated from outside the Anoka County email system. Use caution when clicking hyperlinks, downloading pictures or opening attachments.

****EXTERNAL EMAIL ALERT****

Logan,

So the County will allow the 4 proposed driveways onto both 153rd Avenue and Xylite Street?

Tom

NOTICE: Unless restricted by law, email correspondence to and from Anoka County government offices may be public data subject to the Minnesota Data Practices Act and/or may be disclosed to third parties.

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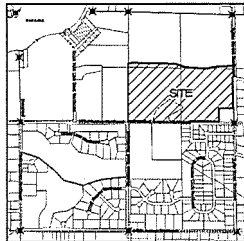
NOTICE: Unless restricted by law, email correspondence to and from Anoka County government offices may be public data subject to the Minnesota Data Practices Act and/or may be disclosed to third parties.

TITLE SHEET

~of~ EVERGREEN ESTATES
 ~for~ TIMBER VALLEY DEVELOPMENT
 620 CIVIC HEIGHTS DR # 100
 CIRCLE PINES, MN 55014
 (763) 780-9090

VICINITY MAP

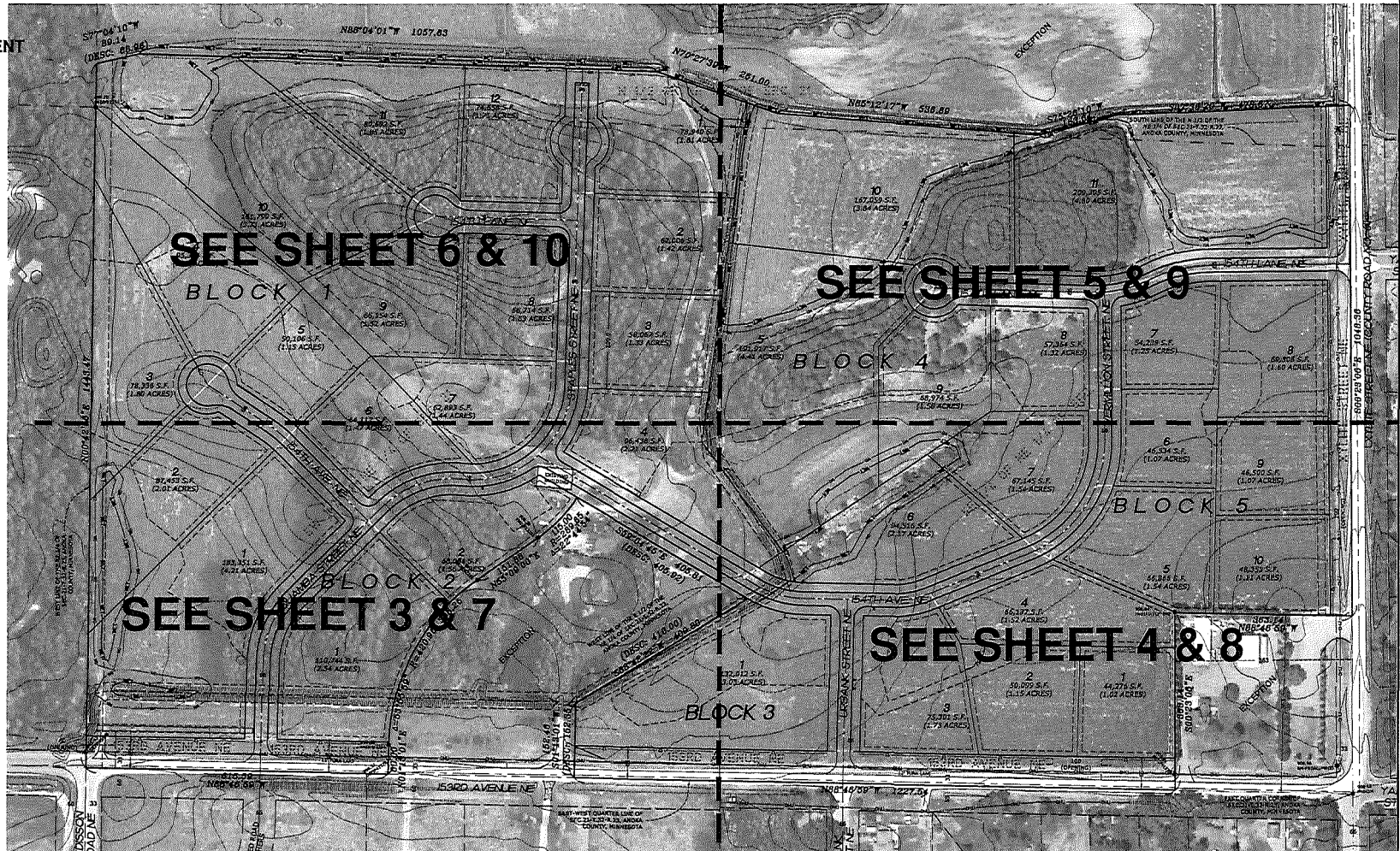
PART OF SEC. 2, TWP. 32, RING. 23



ANOKA COUNTY, MINNESOTA
 NO SCALE

SHEET INDEX

T1	TITLE SHEET
2	PRELIMINARY PLAN
3-6	GRADING PLAN
7-10	LIVABILITY PLAN
11-12	LIVABILITY CHART



POUND CALCULATIONS
 AND STORM SEWER DESIGN BY
PLOWE
 ENGINEERING, INC.
 6775 LAKE DRIVE
 LINO LAKES, MN 55014
 PHONE: (651) 361-8810
 & ENGINEERING FAX: (651) 361-8701

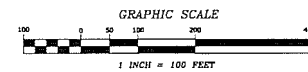
I HEREBY CERTIFY THAT THIS PLAN WAS
 PREPARED BY ME OR UNDER MY DIRECT
 SUPERVISION AND THAT I AM A DULY
 LICENSED PROFESSIONAL ENGINEER UNDER
 THE LAWS OF THE STATE OF MINNESOTA.

Charles W. Plowe
 CHARLES W. PLOWE
 DATE: 04/20/2021 LIC. NO. 18227

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: 04/20/2021 License No. 41578

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



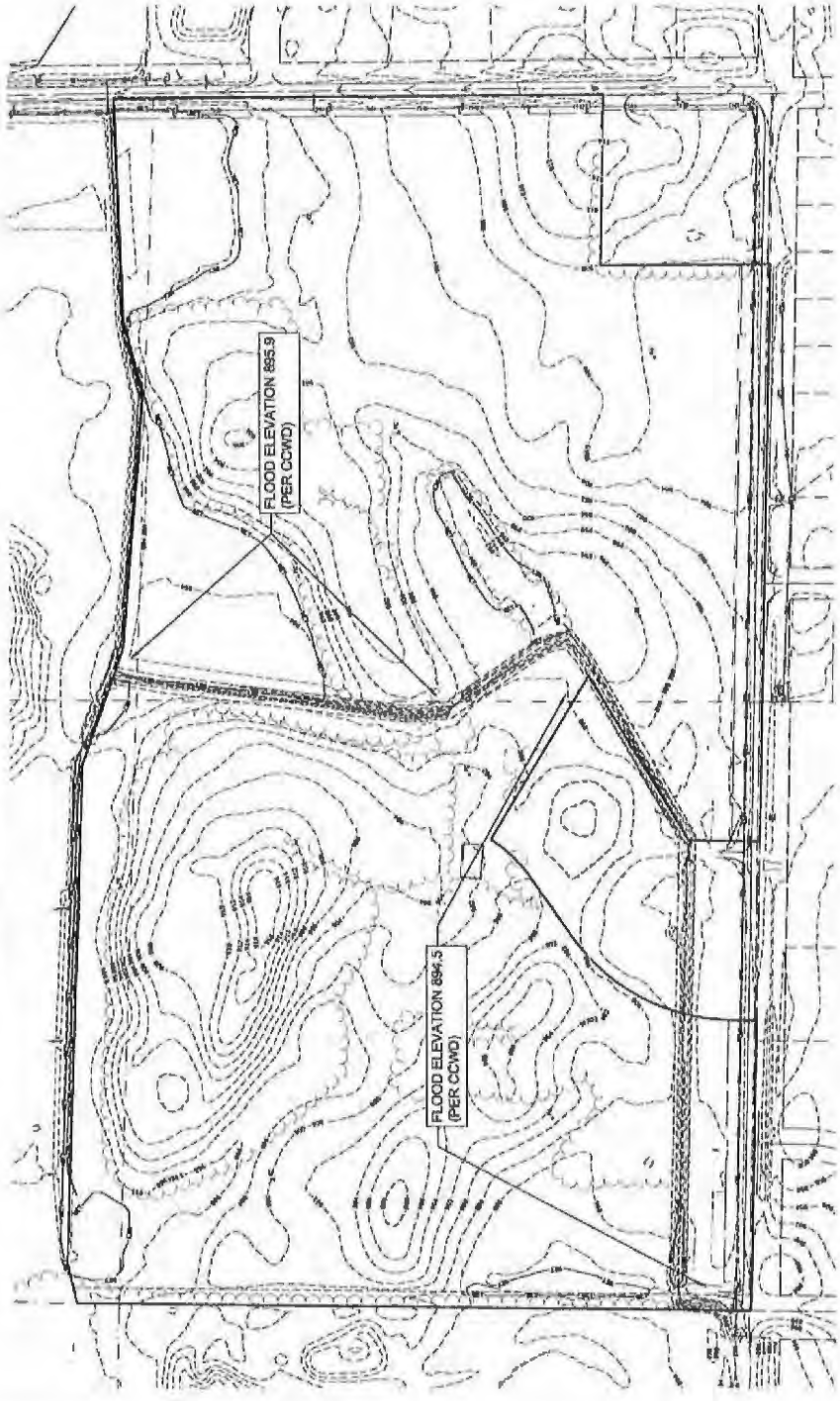
DRAWN BY:	CHB	JOB NO.:	200609P1	DATE:	12/28/20
CHECK BY:	JCR	FIELD CHECK BY / DO			
1	10/20/21	CITY WATERSEWER COMMENTS	NHD		
2	03/31/21	CITY WATERSEWER COMMENTS	NHD		
3	04/29/21	CITY COMMENTS	NHD		
NO.	DATE	DESCRIPTION	BY		

EVERGREEN ESTATES

HAM LAKE, MINNESOTA



NOT TO SCALE



LEGEND

1	EXISTING DRIVEWAY
2	EXISTING SIDEWALK
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100	EXISTING SIDEWALK

- GENERAL NOTES**
1. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING THE TYPE AND LOCATION OF EXISTING UTILITIES IS NOT GUARANTEED. THE CONTRACTOR SHALL VERIFY THE TYPE, LOCATION, AND DEPTH OF ALL UTILITIES PRIOR TO ANY EXCAVATION. RESPONSIBILITY FOR MARKING AND DETERMINATION AS TO TYPE, LOCATION, AND DEPTH OF UTILITIES NECESSARILY ALSO DAMAGE TO THESE UTILITIES.
 2. CALL "111" FOR EXISTING UTILITIES LOCATIONS PRIOR TO ANY EXCAVATION.
 3. THE CONTRACTOR SHALL VERIFY THE TYPE, LOCATION, AND DEPTH OF ALL UTILITIES PRIOR TO ANY EXCAVATION. RESPONSIBILITY FOR MARKING AND DETERMINATION AS TO TYPE, LOCATION, AND DEPTH OF UTILITIES NECESSARILY ALSO DAMAGE TO THESE UTILITIES.
 4. INSTALLATIONS SHALL CONFORM TO THE CITY STANDARDS.
 5. EXCAVATIONS SHALL BE PROTECTED BY SHIELDING OR BRACING. THE PROTECTION SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION OF THE WORK.
 6. ALL ELECTRICAL, TELEPHONE, AND GAS EXISTENCES INCLUDING SERVICES SHALL BE CONTRIBUTED TO THE APPROPRIATE AGENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.

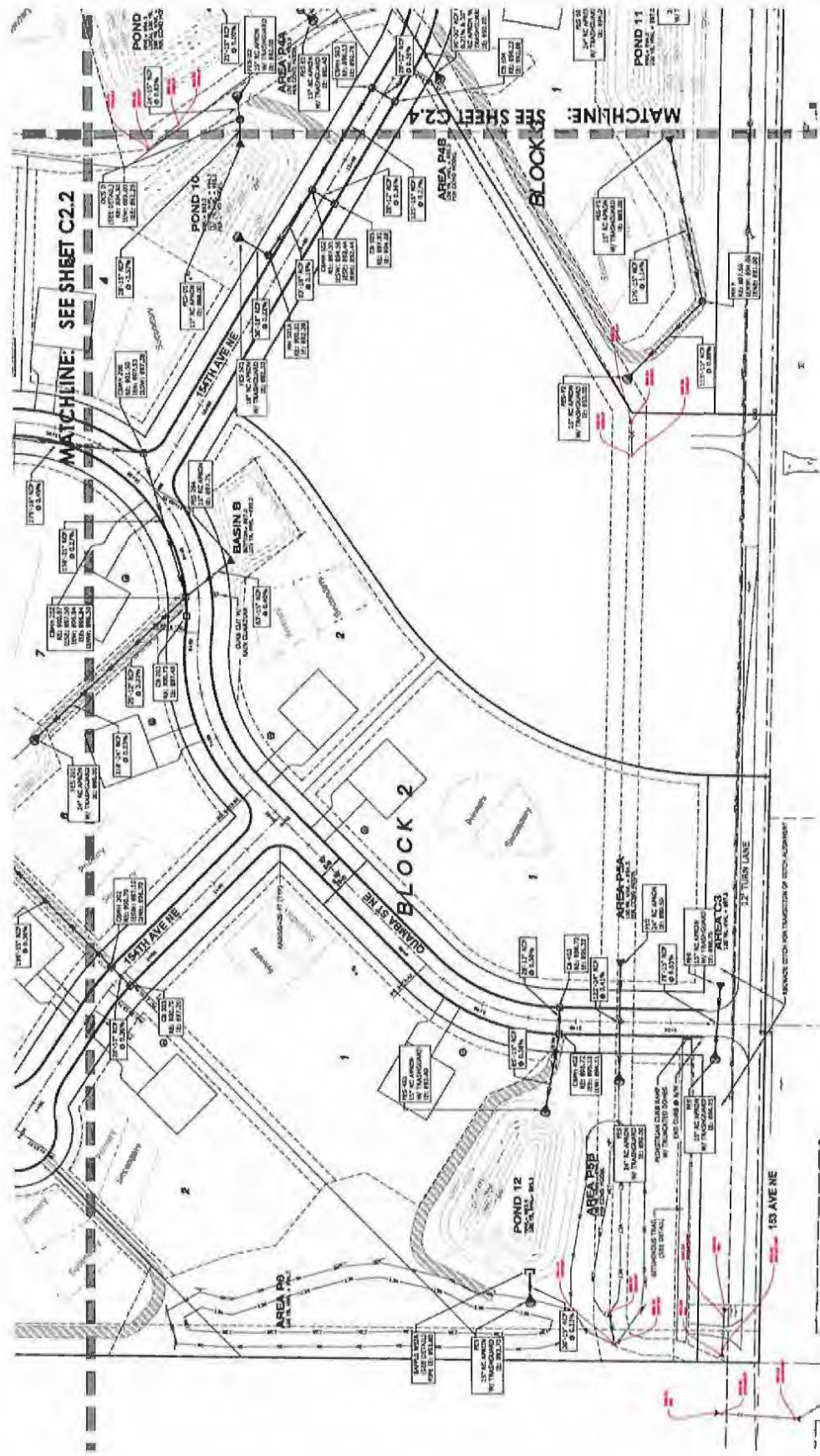
- STORM SEWER NOTES**
1. FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING STORM SEWER. THE CONTRACTOR SHALL VERIFY THE TYPE, LOCATION, AND DEPTH OF ALL EXISTING STORM SEWERS PRIOR TO ANY INSTALLATION.
 2. STORM SEWER SHALL BE 12" DIA. 15' SPAN CONCRETE PIPE (PCC) AND 24" DIA. 15' SPAN CONCRETE PIPE (PCC) AND 36" DIA. 15' SPAN CONCRETE PIPE (PCC) AND 48" DIA. 15' SPAN CONCRETE PIPE (PCC) SHALL MEET THE REQUIREMENTS OF SDOT. THE CONTRACTOR SHALL VERIFY THE TYPE, LOCATION, AND DEPTH OF ALL EXISTING STORM SEWERS PRIOR TO ANY INSTALLATION.
 3. DO NOT BACKFILL EXISTING BURNING JET, FIBERGLASS, OR OTHER MATERIALS INTO EXISTING STORM SEWERS WITH THE EXCEPTED MATERIALS FOR BACKFILLING AND RECONSTRUCTION OF EXISTING STORM SEWERS.
 4. TRASH GUARD RISE REQUIRED FOR ALL 12" DIA. EXISTING OUTLETS.
 5. TRASH GUARD RISE REQUIRED FOR ALL 24" DIA. EXISTING OUTLETS.
 6. TRASH GUARD RISE REQUIRED FOR ALL 36" DIA. EXISTING OUTLETS.
 7. TRASH GUARD RISE REQUIRED FOR ALL 48" DIA. EXISTING OUTLETS.
 8. TRASH GUARD RISE SHALL BE 18" HIGH AND SHALL BE TO BE DERIVED FROM PAVEMENT FINISH OF PIPE. THE CONTRACTOR SHALL VERIFY THE TYPE, LOCATION, AND DEPTH OF ALL EXISTING TRASH GUARD RISES PRIOR TO ANY INSTALLATION.
 9. SEE SHEET C3.1 FOR STRUCTURE SCHEDULE.

- CURB & BITUMINOUS NOTES**
1. REMOVAL AND DISPOSAL OF EXISTING STREET MATERIALS AS SHOWN ON THESE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 2. ALL MATCH POINTS AND PAVEMENT PATCHES TO BE SPAWCUT AT ALL CORNERS.
 3. THE CONTRACTOR SHALL VERIFY THE TYPE, LOCATION, AND DEPTH OF ALL EXISTING CURBS AND BITUMINOUS PRIOR TO ANY INSTALLATION.
 4. RECONSTRUCTION OF CURB IS NECESSARY TO CURB REPAIRS.

SHEET INDEX

C0	TITLE SHEET, EXISTING CONDITIONS & GENERAL NOTES
C1	UTILITY PLAN
C2.1 - 2.4	DETAILS
C3.1 - 3.3	DETAILS
C4.1 - 4.2	STORM WATER POLLUTION PREVENTION PLAN

EVERGREEN ESTATES
CITY OF HAM LAKE, MN
PREPARED FOR: THOMAS WALTER DEVELOPMENT
DATE: 05/20/2021
DRAWN BY: J. J. JENSEN
CHECKED BY: J. J. JENSEN
SCALE: AS SHOWN
SHEET: C0
PROJECT: EVERGREEN ESTATES
LOCATION: HAM LAKE, MN
DATE: 05/20/2021
DRAWN BY: J. J. JENSEN
CHECKED BY: J. J. JENSEN
SCALE: AS SHOWN
SHEET: C0
PROJECT: EVERGREEN ESTATES
LOCATION: HAM LAKE, MN

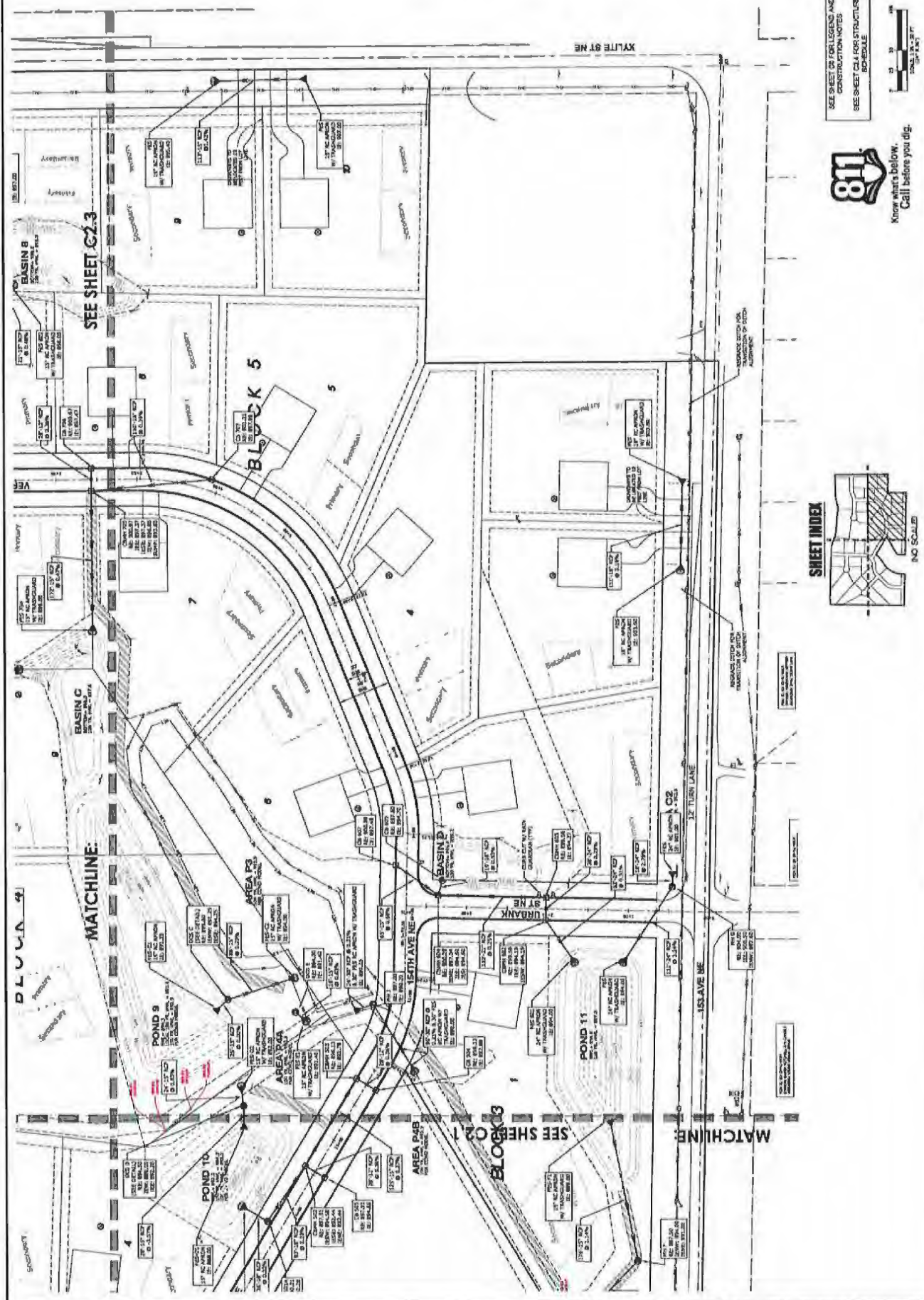


Know what's below.
 Call before you dig.

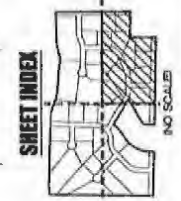
SEE SHEET C0 FOR LEGEND AND
 CONSTRUCTION NOTES
 SEE SHEET C01 FOR STRUCTURE
 SCHEDULE



NORTH



SEE SHEET FOR LEGEND AND CONSTRUCTION NOTES
SEE SHEET C41 FOR STRUCTURE SCHEDULE



SEE SHEET C2.3

BLOCK 5

SEE SHEET C2.1

BLOCK 3

BLOCK 4

MATCHLINE

MATCHLINE

15th AVE NE

16th AVE NE

17th AVE NE

18th AVE NE

19th AVE NE

20th AVE NE

21st AVE NE

22nd AVE NE

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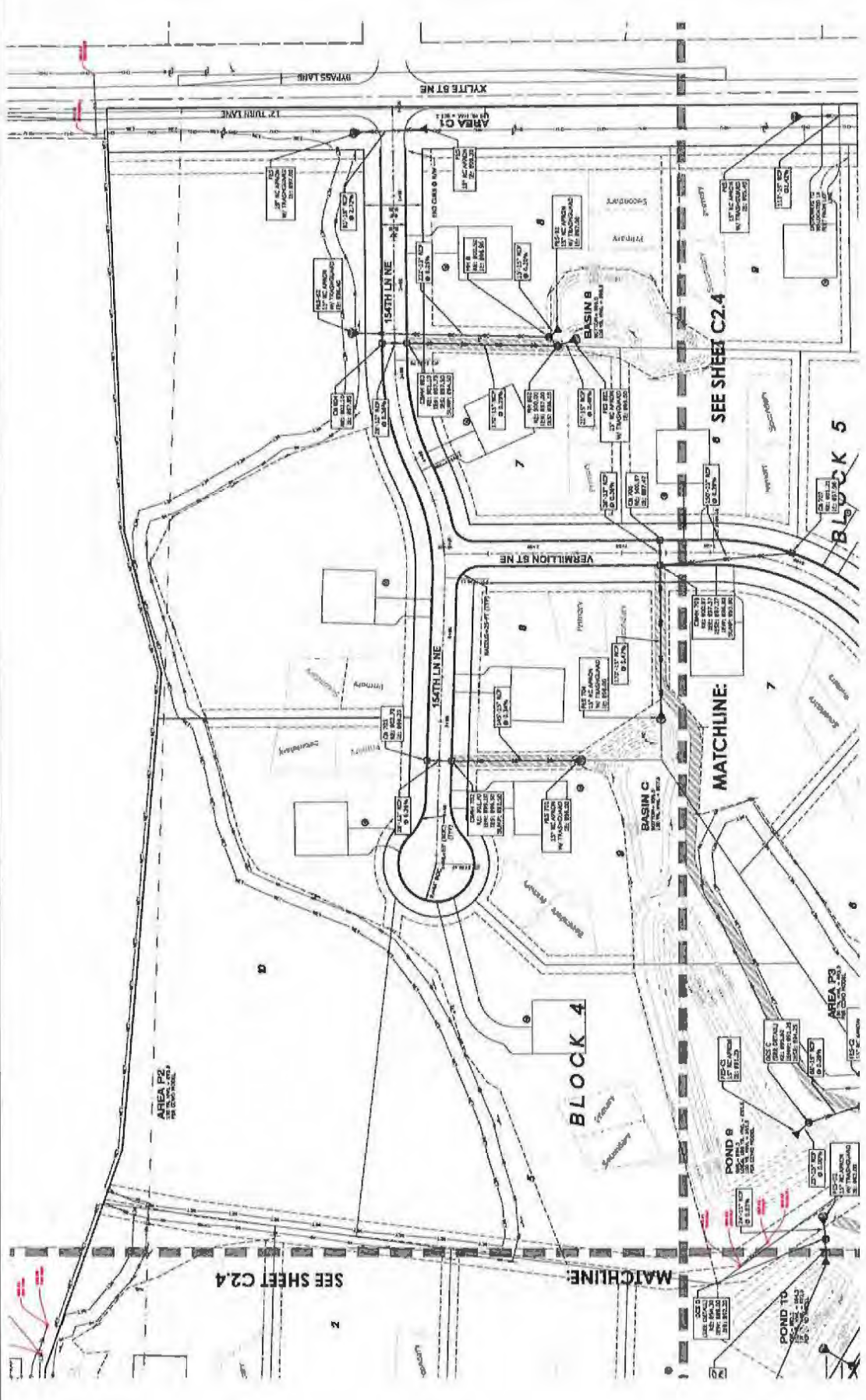
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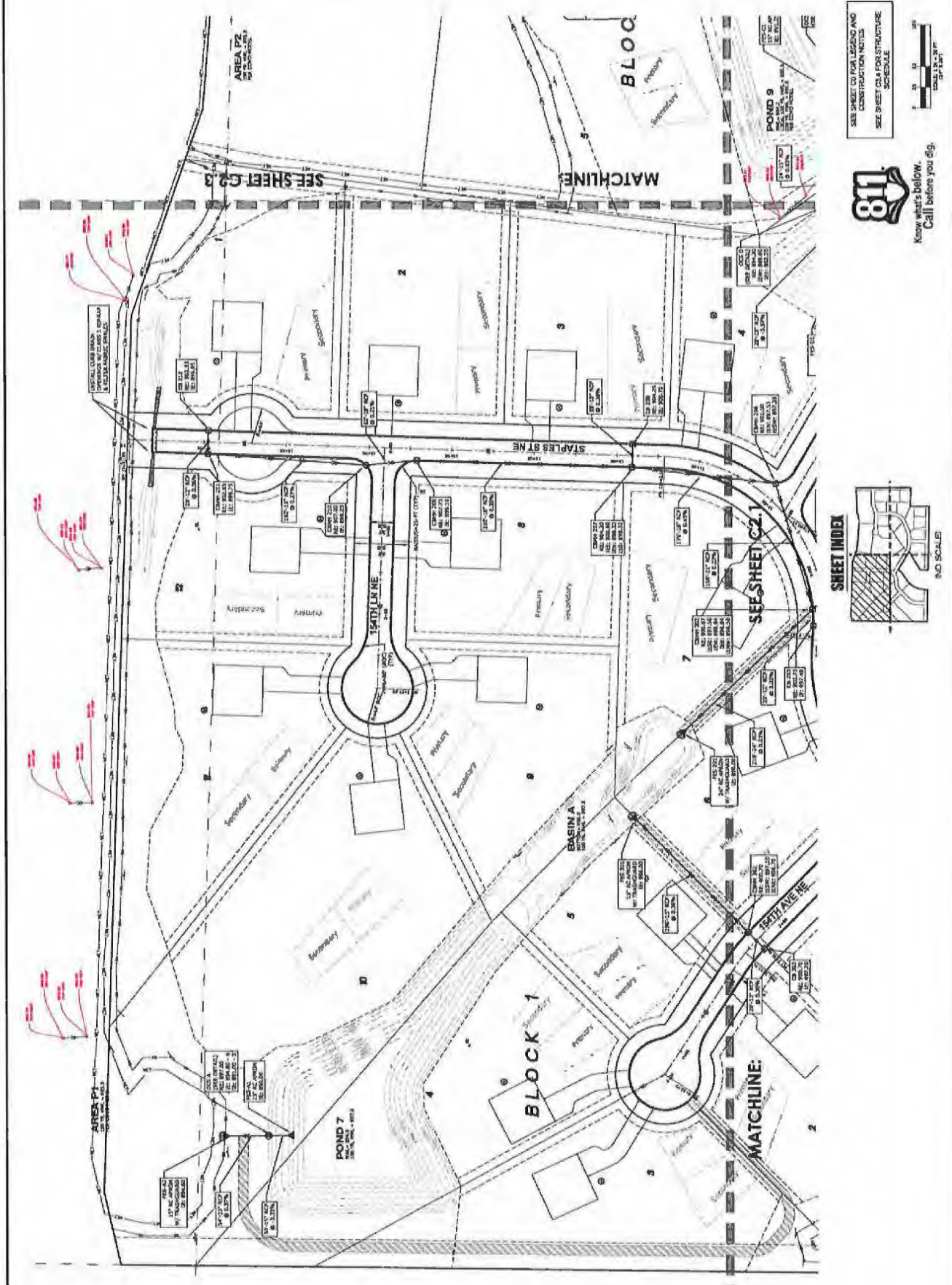


SEE SHEET C2.4 FOR LEGEND AND CONSTRUCTION NOTES
SEE SHEET C2.4 FOR STRUCTURE SCHEDULE

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

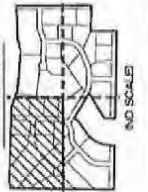
SHEET INDEX
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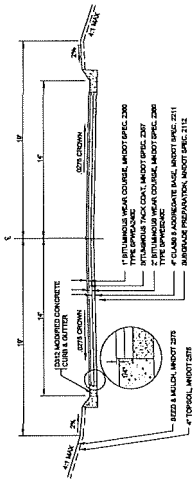
1" = 30'
1" = 100'



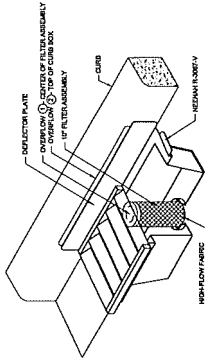
SEE SHEET C2.1
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811
Know what's below.
Call before you dig.

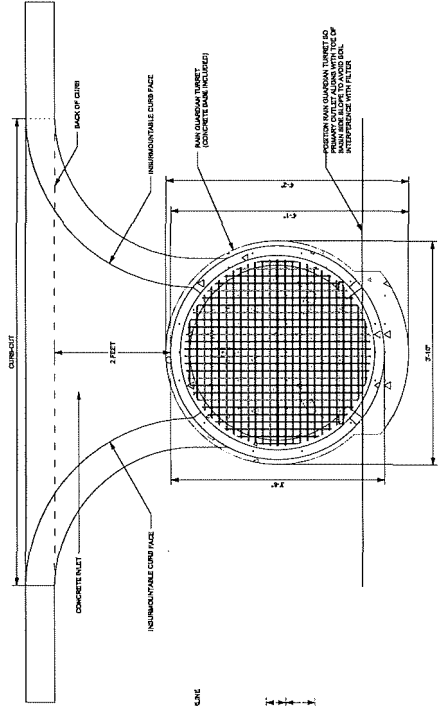




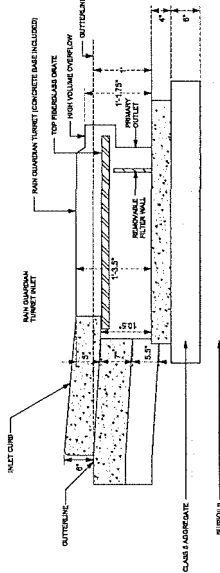
TYPICAL STREET SECTION (7-TON)
N.T.S.



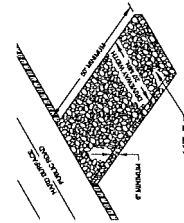
WIMCO INLET PROTECTION
N.T.S.



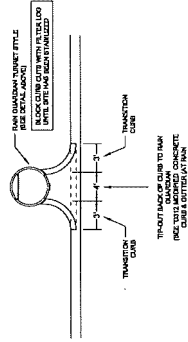
RAIN GARDEN - TURRET STYLE
N.T.S.




ROCK CONSTRUCTION
ENTRANCE
N.T.S.



CURB CUTS @ RAIN GUARDIAN
N.T.S.



D312 MODIFIED CONCRETE
CURB & GUTTER
(AT RAIN GUARDIANS ONLY)
N.T.S.



Plowe
ENGINEERING, INC.
A CORPORATION

575 LAKE DRIVE
SUITE 100, LAKES MINNETONKA
MINNETONKA, MN 55040
PHONE: (952) 234-2320
FAX: (952) 234-2321

DRAWN BY: [] CHECKED BY: []
APP. NO.: [] DATE: [] SCALE: []
SHEET NO.: [] TOTAL SHEETS: []

EVERGREEN ESTATES
CITY OF HAM LAKE, MN
PREPARED FOR: TIMBER VALLEY DEVELOPMENT
DETAILS

DATE: 04/20/2011
LDC NO. 18227

CHANGES FROM
[Signature]

EVERGREEN ESTATES
THE LAY OF THE STATE OF MINNESOTA
A DRAFT LICENSED PROFESSIONAL ENGINEER
REGISTERED IN THE STATE OF MINNESOTA
NO. 11234

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

1. 3.10.21 CIVIL & CITY COMMENTS

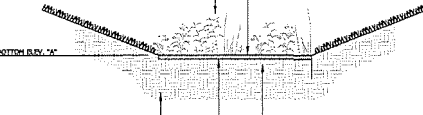
- NOTES**
1. MARKOFF BASIN AREA (E.G. FENCING, BICYCLE, ETC.) TO PREVENT CONSTRUCTION TRAFFIC FROM ENTERING BASIN AREA.
 2. USE CONFORMANCE WITH MOWING EQUIPMENT (WIDE TRACK OR MOWER TRACK EQUIPMENT) OR LIGHT EQUIPMENT WITH TURN-TYPE TIRES WITH SHARP.
 3. PROTECT BASIN FROM RUN-OFF DURING CONSTRUCTION ACTIVITIES.
 4. DO NOT EXCAVATE BASIN TO FINAL GRADE UNTIL UPSTREAM DRAINAGE AREAS HAVE BEEN STABILIZED.
 5. REMOVE ANY TOPSOIL AND/OR UNSTABLE SOILS WITH INFILTRATION BASIN FOOTPRINT. ANY SEDIMENT THAT IS WASHED INTO THE BASIN SHALL BE REMOVED.
 6. NO MOUND OR COMPACTED SOILS FOR INFILTRATION BASIN.
 7. BASIN BOTTOM TO BE GRADED FLAT.
 8. ALLOCATE BASIN TO FINAL GRADE ONLY UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREAS. ALLOCATE ANY COMPACTED SOILS DUE TO FINAL GRADING OPERATIONS PRIOR TO SEEDING.



POST CONSTRUCTION INFILTRATION TESTING IS REQUIRED. POTENTIAL TEST BY FILLING BASIN WITH 80% INCHES OF WATER AND INSTALLED DRAINAGE TUBES. CONTACT COON CREEK WATERSHED DISTRICT AT LEAST 24 HOURS PRIOR TO WRECK TEST.

PROVIDE NATIVE SEED MIX (E.G. MANDOC 33-261 @ 35 LBS/AC) OR PLANTING SUGGESTIONS (SHADE TOLERANT).

EROSION CONTROL BLANKET (SUITABLE FOR SEEDING) (E.G. STRAW COCOON BLANKET) (SHADE TOLERANT).



INSTALL SOILS
ALLOCATE ANY COMPACTED SOILS BY USING A PRIMARY TILLING OPERATION SUCH AS A DISK PLOW, DISK OR SUBSOILER TO A DEPTH NECESSARY TO ALLOCATE COMPACTED SOILS.

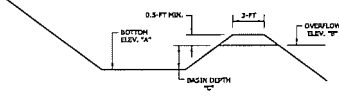
- 1) REMOVE ANY EXISTING TOPSOIL OR FILL DESIRED UNSTABLE FOR INFILTRATION (SEE TECHNICAL ENGINEER TO REVIEW ON-SITE SOILS)
- 2) IN AREAS OF FILL, PLACE SALVAGED CHASTE SANDY SOILS SUITABLE FOR INFILTRATION WITH 4% FINES (AS DETERMINED BY GEOTECHNICAL ENGINEER)

NOTE: MIX IN PLACED ON-SITE TOPSOIL INTO TOP 4" (MAX) TOP INFILTRATION AREA.

PLANTING SUGGESTIONS

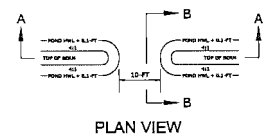
BOTTOM OF BASIN	SIDE SLOPES
NATIVE PLANTINGS GRASSY SUN-SEEDED WOOD GRASS SEED CLOVER GRASS BLUE PLUM BRUSH BRUSHY PLOWGESS TAMARACK 300-PINE WOOD NEW ENGLAND ASTER FRASER BLACKSPIDER BONSETT BLACK WILLOW	NATIVE PLANTINGS BIG BLUESTEM BLUE JOINT GRASS SPRIT GRASS BLUE VERNAL FRASER BLACKSPIDER TAMARACK NEW ENGLAND ASTER NEW-ENGLAND DOGWOOD SANDBAR WILLOW FRASER BLACKSPIDER BLACK CHUCKERRY BLACK WILLOW

INFILTRATION BASIN OVERFLOW DETAIL

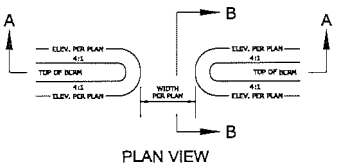
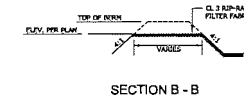
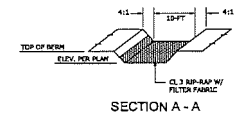
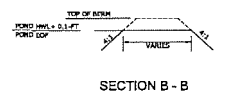
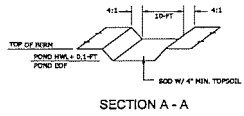


INFILTRATION BASIN NUMBER	PER			
	A	B	C	D
BASIN BOTTOM ELEV. "A"	888.00	886.00	887.00	886.00
OUTLET ELEV. "B"	897.00	897.00	897.75	897.00
DEPTH (FT)	3.00	1.00	0.75	1.00

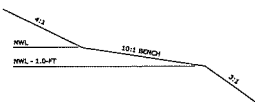
INFILTRATION BASIN
N.T.S.



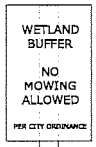
POND SODDED OVERFLOWS
N.T.S.



FOREBAY & INFILTRATION BASIN OVERFLOW
N.T.S.

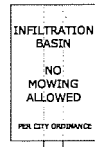


TYPICAL POND SECTION
N.T.S.



- WETLAND BUFFER**
- MOVEMENT**
1. COORDINATE WITH CITY OF HAM LAKE AND COON CREEK WATERSHED DISTRICT.
- WETLAND BUFFER SIGNS**
1. MOUNTED PLUSH WITH TOP OF POST
 2. PLUSH WITH NON-REFLECTIVE SURFACE OR SIGNS
 3. SIZE: 12" H x 8" W ALUMINUM SHALL BE 303-H38 A 303-T30 ALLOY
 4. GAUGE SHALL BE 0.060
- POST MATERIALS**
1. 4" x 4" SQUARE
 2. TREATED WOOD OR OTHER CITY-APPROVED MATERIAL
- COLOR**
1. SHALL BE GREEN LETTERS ON WHITE BACKGROUND
- POST INSTALLATION**
1. MOUNTED TO A HEIGHT OF FOUR FEET ABOVE GROUND
 2. SET AT LEAST 42 INCHES INTO GROUND
 3. DETAILS: 4" SIGN POST LARS WIPER TO COVERED A WETLAND BUFFER WITH A MAXIMUM SPACING OF 300 FEET BETWEEN SIGNS
 4. PLACE ADDITIONAL POSTS/STAKE AS NECESSARY TO FOLLOW BUFFER

WETLAND BUFFER SIGNAGE
N.T.S.



- INFILTRATION BASIN**
- MOVEMENT**
1. COORDINATE WITH CITY OF HAM LAKE AND COON CREEK WATERSHED DISTRICT.
- INFILTRATION BASIN SIGNS**
1. MOUNTED PLUSH WITH TOP OF POST
 2. PLUSH WITH NON-REFLECTIVE SURFACE OR SIGNS
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INFILTRATION BASIN SIGNAGE
N.T.S.



PLOWE ENGINEERING, INC.
7775 LARGE DRIVE
LUND LAKE, MN 55014
PHONE: (855) 361-4210
FAX: (855) 361-4701

DRAWN BY: CHECK BY:
MCA CWH
JOB NO: DATE:
20-1020 10-10-20

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		

EVERGREEN ESTATES
CITY OF HAM LAKE, MN
DATE: 06/22/2021

EVERGREEN ESTATES
CITY OF HAM LAKE, MN
PREPARED FOR: TIMBER VALLEY DEVELOPMENT

SHEET
C3.2

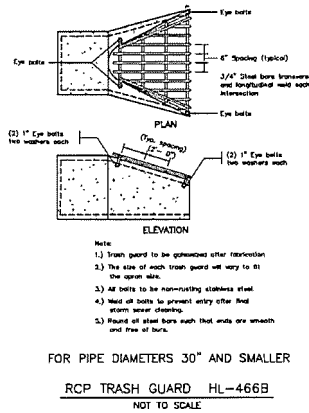
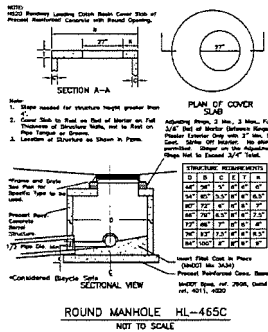
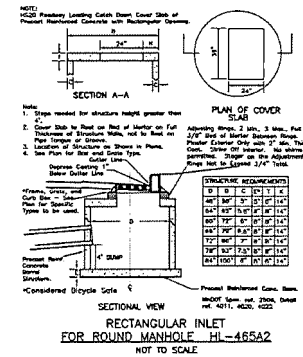
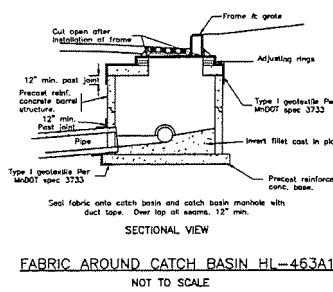
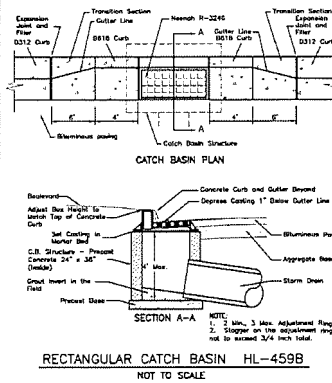
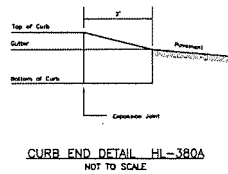
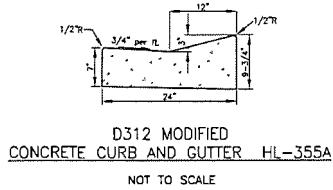
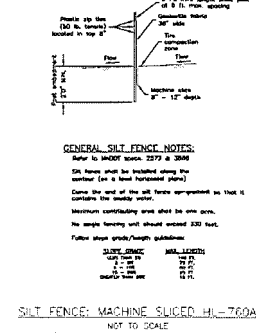
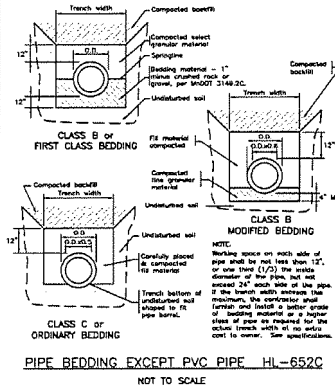


TABLE OF QUANTITIES

Item No.	Description	Unit	Quantity
12	8	12.0	4.4
13	8	12.0	4.4
14	10	10.0	6.8
15	10	10.0	6.8
16	12	12.0	9.2
17	12	12.0	9.2
18	14	14.0	12.3
19	14	14.0	12.3
20	16	16.0	15.8
21	16	16.0	15.8
22	18	18.0	18.2
23	18	18.0	18.2
24	20	20.0	22.2
25	20	20.0	22.2

RIPRAP AT RCP OUTLETS HL-480A1
NOT TO SCALE



EVERGREEN ESTATES
CITY OF HAW LAKE, MN
DETAILS
PREPARED FOR: TIMBER VALLEY DEVELOPMENT

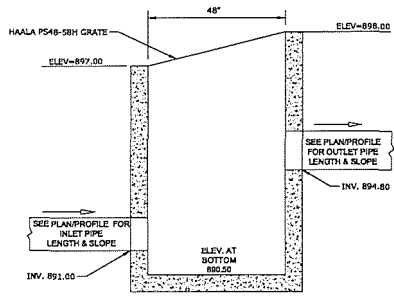
EVERGREEN ESTATES
DATE: 02/28/21

PLOWE ENGINEERING, INC.
DATE: 11/14/20
DATE: 10-12-20

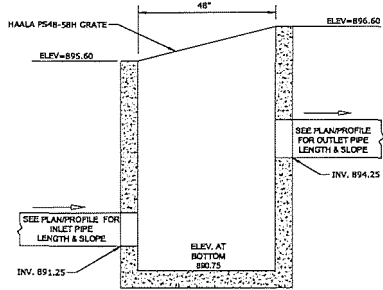
7775 LACE DRIVE
LINDA LAKE, MN 55124
PHONE: (651) 361-6210
FAX: (651) 361-6701

DESIGNED BY: MSA
CHECKED BY: CWP
JOB NO: 20-1003
DATE: 10-12-20

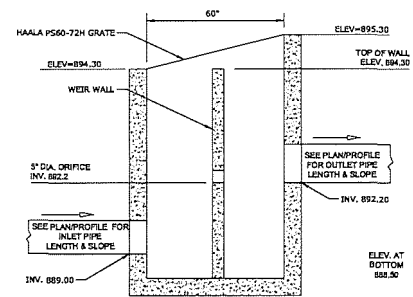
DATE: 02/28/21



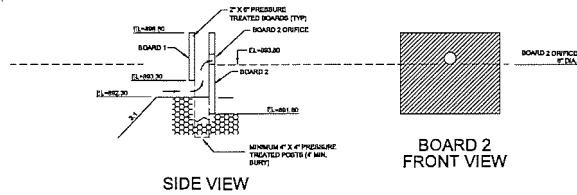
OUTLET CONTROL STRUCTURE "A" (POND 7)
N.T.S.



OUTLET CONTROL STRUCTURE "C" (POND 9)
N.T.S.

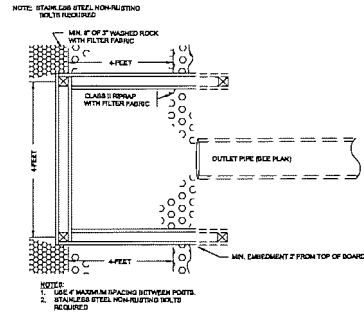


OUTLET CONTROL STRUCTURE "D" (POND 10)
N.T.S.

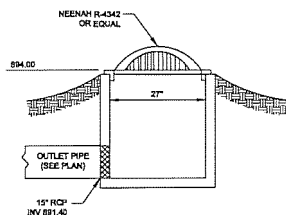


SIDE VIEW

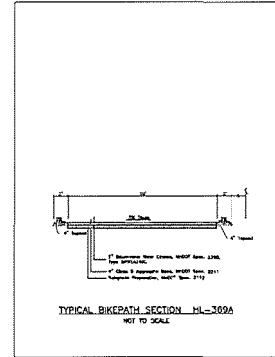
BOARD 2 FRONT VIEW



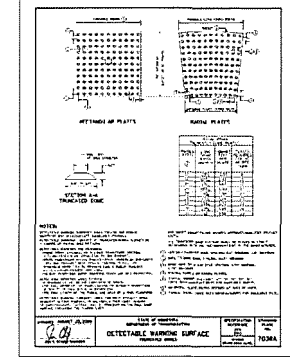
BAFFLE WEIR (WITH ORIFICE FOR RATE CONTROL) - POND 12
N.T.S.



OUTLET CONTROL STRUCTURE "E" (OUTSIDE P3 WETLAND)
N.T.S.



TYPICAL BIKEWAY SECTION - M-309A
NOT TO SCALE



STORM SEWER STRUCTURE SCHEDULE					
#	SIZE	CASTING	#	SIZE	CASTING
202	72" DIA.	NEENAH R-3246-C	602	48" DIA.	NEENAH R-3246-C
203	2 x 3'	NEENAH R-3246-C	603	60" DIA.	NEENAH R-3246-C
206	48" DIA.	NEENAH R-3246-C	604	60" DIA.	NEENAH R-3246-C
207	48" DIA.	NEENAH R-3246-C	607	2 x 3'	NEENAH R-3246-C
208	2 x 3'	NEENAH R-3246-C			
209	48" DIA.	NEENAH R-3246-C			
210	48" DIA.	NEENAH R-3246-C	732	48" DIA.	NEENAH R-3246-C
211	48" DIA.	NEENAH R-3246-C	733	2 x 3'	NEENAH R-3246-C
212	2 x 3'	NEENAH R-3246-C			
302	48" DIA.	NEENAH R-3246-C	735	48" DIA.	NEENAH R-3246-C
303	2 x 3'	NEENAH R-3246-C	736	2 x 3'	NEENAH R-3246-C
402	48" DIA.	NEENAH R-3246-C	737	2 x 3'	NEENAH R-3246-C
403	2 x 3'	NEENAH R-3246-C	802	48" DIA.	NEENAH R-1733
			803	48" DIA.	NEENAH R-3246-C
			804	2 x 3'	NEENAH R-3246-C
501A	48" DIA.	NEENAH R-1733			
502	48" DIA.	NEENAH R-3246-C	B	48" DIA.	NEENAH R-1733
503	48" DIA.	NEENAH R-3246-C	F	60" DIA.	NEENAH R-1733
504	2 x 3'	NEENAH R-3246-C	G	48" DIA.	NEENAH R-1733
505	2 x 3'	NEENAH R-3246-C	J	60" DIA.	NEENAH R-1733



PLOW
ENGINEERING, INC.

8776 LAKE DRIVE
SUITE 110
LINO LAKES, MN 55124

PHONE: (951) 361-4210
FAX: (951) 361-4781

DRAWN BY: CHE/CK BY: CWP

JOB NO: 20-1933 DATE: 10-12-20

NO.	DATE	DESCRIPTION
1	10/12/20	ISSUE FOR PERMITS
2	10/12/20	ISSUE FOR PERMITS
3	10/12/20	ISSUE FOR PERMITS
4	10/12/20	ISSUE FOR PERMITS
5	10/12/20	ISSUE FOR PERMITS
6	10/12/20	ISSUE FOR PERMITS
7	10/12/20	ISSUE FOR PERMITS
8	10/12/20	ISSUE FOR PERMITS
9	10/12/20	ISSUE FOR PERMITS
10	10/12/20	ISSUE FOR PERMITS

EVERGREEN ESTATES
CITY OF HAM LAKE, MN
PREPARED FOR: TIMBER VALLEY DEVELOPMENT

EVERGREEN ESTATES
CITY OF HAM LAKE, MN
PREPARED FOR: TIMBER VALLEY DEVELOPMENT

SHEET
C3.4

1. PURPOSE AND SCOPE
 The purpose of this document is to provide a detailed description of the proposed construction project and the associated stormwater management practices. The scope of this document includes the site plan, site plan notes, and the stormwater management plan. The site plan shows the location of the project, the proposed building footprint, and the proposed stormwater management practices. The site plan notes provide additional information about the project, including the proposed building footprint, the proposed stormwater management practices, and the proposed site plan notes. The stormwater management plan provides a detailed description of the proposed stormwater management practices, including the proposed stormwater management practices, the proposed stormwater management practices, and the proposed stormwater management practices.

2. SITE PLAN
 The site plan shows the location of the project, the proposed building footprint, and the proposed stormwater management practices. The site plan notes provide additional information about the project, including the proposed building footprint, the proposed stormwater management practices, and the proposed site plan notes. The stormwater management plan provides a detailed description of the proposed stormwater management practices, including the proposed stormwater management practices, the proposed stormwater management practices, and the proposed stormwater management practices.

3. STORMWATER MANAGEMENT PRACTICES
 The stormwater management plan provides a detailed description of the proposed stormwater management practices, including the proposed stormwater management practices, the proposed stormwater management practices, and the proposed stormwater management practices.

4. CONSTRUCTION SCHEDULE
 The construction schedule provides a detailed description of the proposed construction schedule, including the proposed construction schedule, the proposed construction schedule, and the proposed construction schedule.

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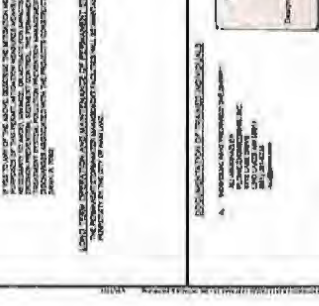
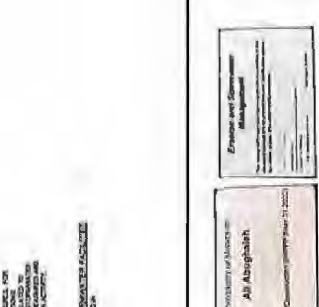
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14. CONSTRUCTION SCHEDULE
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15. CONSTRUCTION SCHEDULE
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16. CONSTRUCTION SCHEDULE
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18. CONSTRUCTION SCHEDULE
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CITY OF HAM LAKE

15544 Central Avenue NE

Ham Lake, MN 55304

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

PLANNING REQUEST

Date of Application 3/15/2021

Date of Receipt 3-15-2021
Receipt # 89419

Meeting Appearance Dates:
Planning Commission 4-24-2021 City Council 5-3-2021

Please check request(s):

- Metes & Bounds Conveyance
- Sketch Plan
- Preliminary Plat Approval*
- Final Plat Approval
- Rezoning*
- Private Kennel License*
- Commercial Building Permit
- Certificate of Occupancy
- Home Occupation Permit
- Conditional Use Permit (New)*
- Conditional Use Permit (Renewal)
- Other COMM SITE PLAN

**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: Growing Generation
 Address/Location of property: Bunker Lake Blv NE & Rainson
 Legal Description of property: Lot 9, Block 2 Bunker Rd NE
 PIN # 33-32-23-31-0006 Current Zoning PUD/RD-3 Proposed Zoning Meadows
 Notes: Construct a Daycare Facility

Applicant's Name: Classic Construction, Inc. Attn: Krishin

Business Name: CCI General Contractor

Address 10842 NE Ulysses St.

City East Bethel State MN Zip Code 55011

Phone 763 939 8871 Cell Phone _____ Fax 763 934

Email address Krishin@ClassicConstructionInc. 7120.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 3/15/2021

- FOR STAFF USE ONLY -

ACTION BY: Planning Commission 4-26-2021
City Council _____

PROPERTY TAXES CURRENT YES NO

At Growing Generations, we believe that quality childcare and educational learning in all age groups depends upon consistent caregiving in a home like atmosphere. Children grow and learn best in a safe environment that provides opportunities to explore, create, and communicate with other children and adults. These groups function independently but cooperatively while following routines appropriate to individual needs. Our program is designed to be inclusive of all children, including those with identified disabilities and special learning developmental needs.

At Growing Generations, children are given the opportunity to explore materials and participate in a variety of experiences. Activities are carefully planned and implemented in an open-classroom setting. Children are free to choose from age-appropriate activities including art, music, language development, pre-math skills, science and nature, and dramatic play.

Learning and playing are not limited to the classroom; children of all ages will participate in the outdoor environment each day. There are opportunities for water play, motor development, and large group activities. The center provides age-appropriate playgrounds with proper equipment. Infants are also taken outside for walks in a stroller or in the arms of a teacher.

Growing Generations will employ up to 30 staff members at full enrollment with an average of 20 staff at any given time throughout the day. Most staff work 8 to 10 hours shifts and leave as children leave to meet state ratios. We will serve up to 120 children in the community on a daily basis. Our age groups consist of 24 Infants, 36 Toddlers, and 60 Preschoolers. Our Hours of operation will be from 6:00am to 6:00pm Monday through Friday.

Memorandum

Date: April 21, 2021
To: Planning Commissioners
From: Tom Collins, City Engineer *TPC*
Subject: Growing Generations Daycare

Introduction:

The proposed 10,572 square foot building is located on the 3.07-acre Lot 9, Block 2 of the 1998 Planned Unit Development (PUD) plat of Bunker Meadows (parcel ID 33-32-23-31-0006). A 200-scale half-section map, a 200-scale aerial photo and a 400-scale zoning map are attached. The underlying zoning of this parcel is Commercial Development Tier 3 (CD-3).

Discussion:

The Certificate of Survey received April 20th, the Title Sheet, Legend, Existing Conditions & Removal Plan, Grading, Drainage, and Erosion Control Plan, Utility Plan, Details & Notes, Stormwater Pollution Prevention Plan and the Turn Lane Plan received April 14th and the Landscape Plan received April 15th address the prior review comments. Per 11-1853 - where property lines are adjacent to residential areas, a planting screen of conifers or opaque fencing is required. The proposed screening to the south and west is shown on the Landscape Plan.

The proposed access to the parcel is off of Radisson Road, which is under the jurisdiction of Anoka County. Per the attached April 16th letter, the Anoka County Transportation Division has approved the plans. A right-of-way permit will need to be obtained prior to construction.

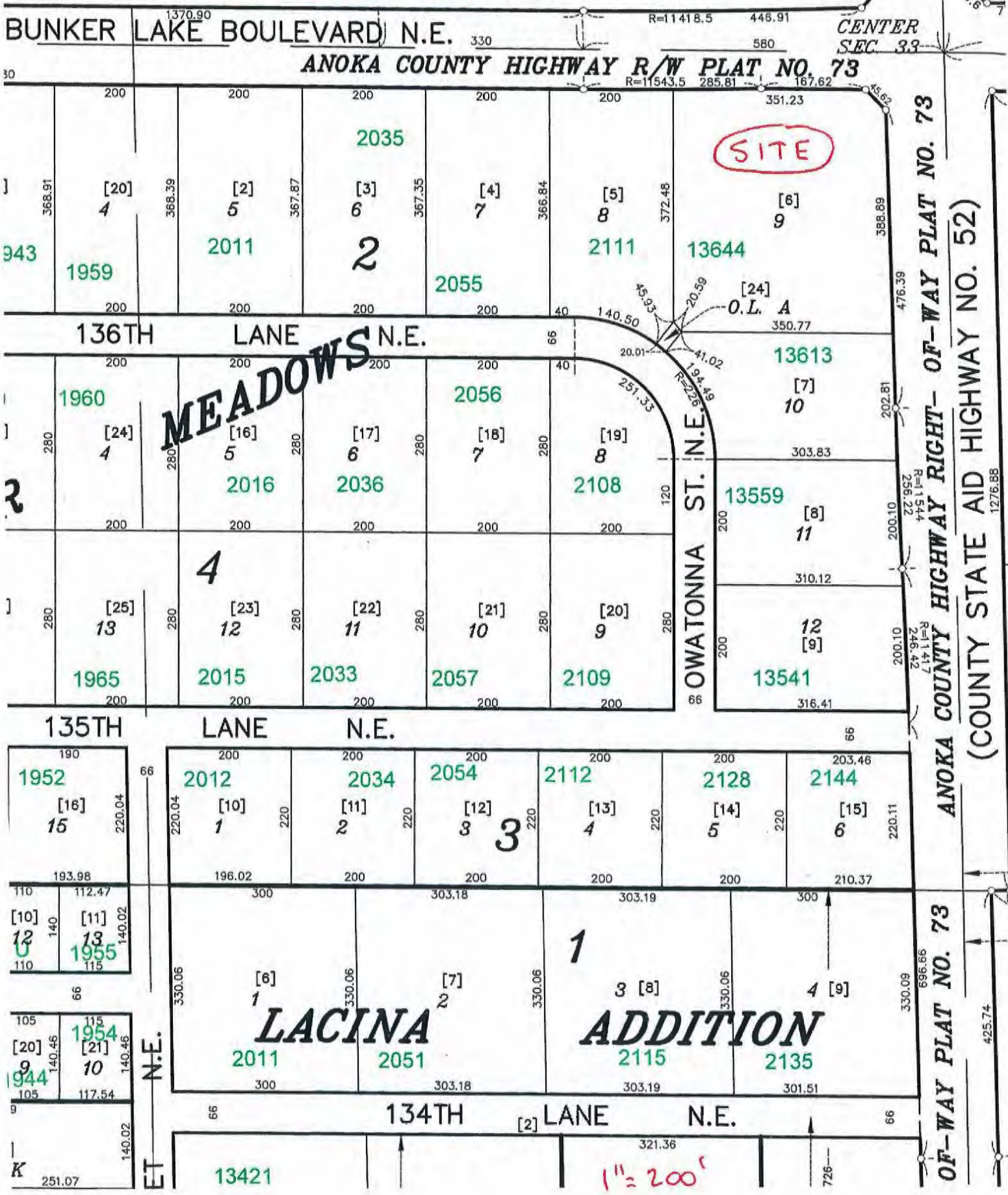
Growing Generations Daycare was approved by the Coon Creek Watershed District (CCWD) Board of Managers at their March 22nd meeting. The April 9th Notice of Permit Application Status is attached. An Operations and Maintenance Agreement for Stormwater Facilities needs to be executed between Growing Generations Daycare and CCWD for on-site stormwater treatment. Grading cannot commence until the CCWD issues a permit.

Recommendation:

It is recommended that the Growing Generations Daycare plans be recommended for approval.

HALF-SECTION MAP

(31)



BUNKER LAKE BOULEVARD N.E. 1370.90

30

943

1959

2011

2

2055

2111

13644

1960

2016

2036

4

1965

2015

2033

2057

2109

1952

1955

1944

1954

1944

13421

200 200 200 200 200 200 351.23

368.91 [20] 368.39 [2] 367.87 [3] 367.35 [4] 366.84 [5] 372.48 [6]

4 5 6 7 8 9

200 200 200 200 200 200

136TH LANE N.E. 66 140.50 45.93 20.59 41.02 194.48 13613

20.01 251.33 350.77 [24] O.L. A

280 [24] 280 [16] 280 [17] 280 [18] 280 [19] 202.81

4 5 6 7 8 9

200 200 200 200 200 200

135TH LANE N.E. 66 200.10 200.10 200.10 200.10 200.10 200.10

[25] [23] [22] [21] [20]

13 12 11 10 9

200 200 200 200 200 200

13541

190 [16] 220.04 203.46

15 1 2 3 4 5 6

193.98 196.02 200 200 200 200 210.37

110 [10] 110 [11] 110 [12] 110 [13] 110 [14] 110 [15]

12 13 14 15

66 330.06 330.06 330.06 330.06 330.06 696.66

1 [6] 1 [7] 3 [8] 4 [9]

LACINA ADDITION

2011 2051 2115 2135

300 303.18 303.18 303.19 300 301.51

134TH LANE N.E. 66 321.36 66

13421

CENTER SEC 33

ANOKA COUNTY HIGHWAY R/W PLAT NO. 73

OWATONNA ST. N.E.

ANOKA COUNTY HIGHWAY RIGHT-OF-WAY PLAT NO. 73

(COUNTY STATE AID HIGHWAY NO. 52)

1276.88

425.74

OF-WAY PLAT NO. 73

726

1" = 200'



13734

13737

2065

2215

CSAH 116)

2035

L9

BUNKER MEADOWS

13644

B2

L8

2055

2111

2036

2056

2108

L10

13613

L8

13559

B4

L11

L11

L10

L9

13541

L12

2033

2057

2109

13507

TH LN

OWATONNA ST.

RADISSON RD. (CSAH 52)

2034

2054

2112

2128

2144

L2

L3

L4

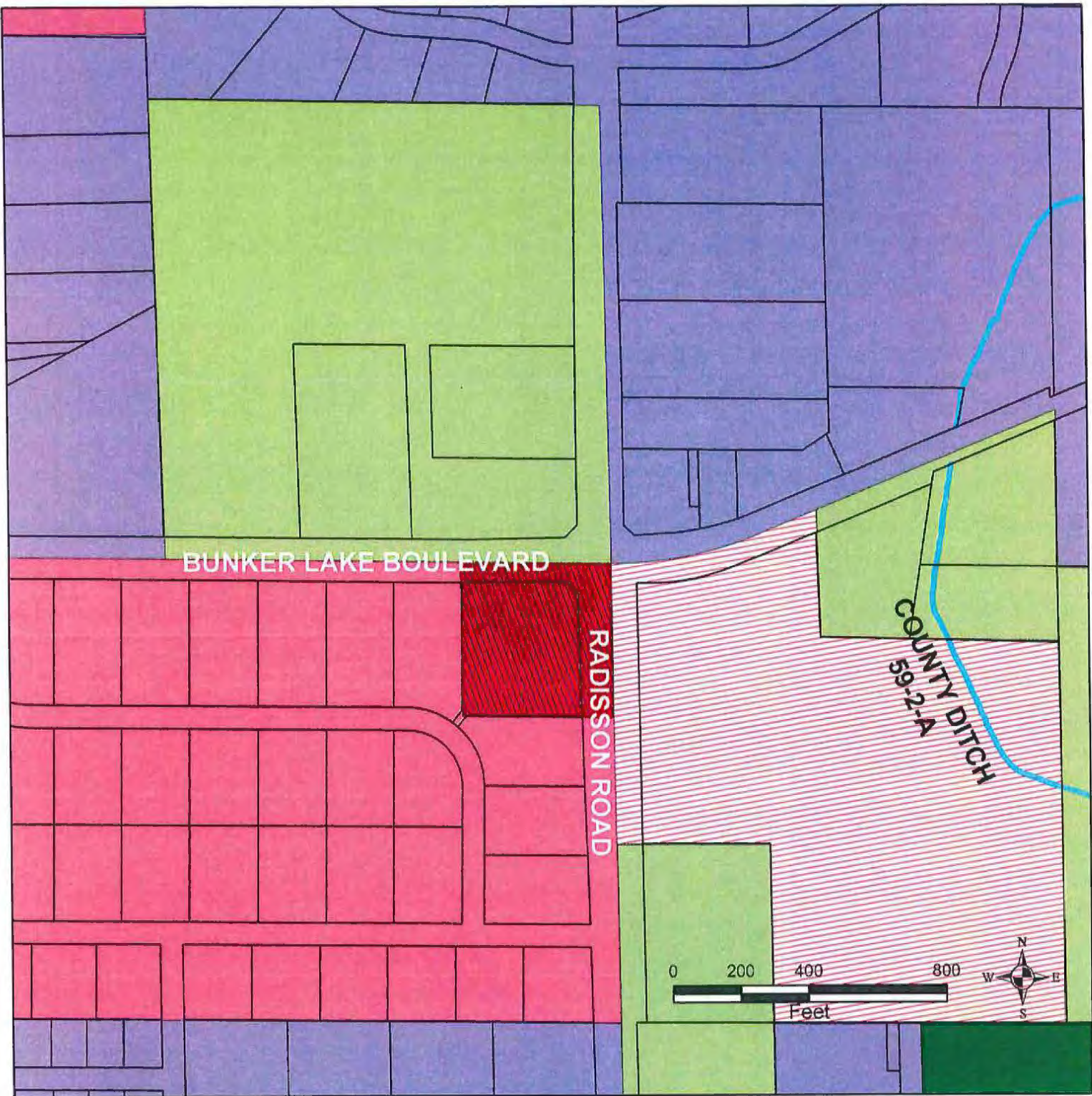
L5

L6

B3

LACINA D1 ADDN.

1" = 200'



- R-A Rural Single Family Residential
- R-1 Single Family Residential
- PUD Planned Unit Development
- PUD - CD-3 Underlying Use
- CD-3 Commercial Development Tier 3
- Park
- Ditches

Sheet Title:
ZONING MAP

Drawn By:
EMP

Date:
4/19/2021

Project No.
2102.037

Project:
GROWING GENERATIONS DAYCARE

13635 Johnson Street
Ham Lake, MN 55304
Telephone (763) 862-8000
Fax (763) 862-8042



- E. Other areas where other than natural wooded vegetation is to be used as ground cover, identifying the ground cover to be used;
- F. Locations, trunk size, height and species of all trees to be planted;
- G. Locations where existing natural wooded vegetation will remain undisturbed;
- H. All other landscaping features to be used.

11-1850 MINIMUM LANDSCAPING REQUIREMENTS

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

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

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



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

- A. Where property lines are adjacent to residential areas, a planting screen of conifers shall be required, of sufficient size and proximity to provide an intermingled screen within five years;
- B. Decorative trees shall be planted along the right of way lines of adjacent public roadways;

- C. The use of conifers shall be encouraged and preferred.
- D. Whenever possible, an attempt will be made to preserve stands of existing vegetation, particularly treed or wooded areas.

11-1860 Case by Case Evaluation

Recognizing that the City contains a wide variety of commercial land, the landscape approval process shall be on a case by case basis. Where wetlands are present, or where large distances separate a commercial lot from adjacent lands, for example, strict adherence to screening requirements may be unnecessary. Likewise, strict adherence to the remaining provisions of Article 11-1800 may be unnecessary where size, spatial relationships, topography or other physical features render a given landscaping plan aesthetically acceptable, and departures from the strict observance of the elements of Article 11-1800 shall not be considered variances requiring a showing of physical hardship. Conversely, an applicant shall be expected to meet the general spirit of this article in establishing an aesthetically pleasing landscaping plan.

11-1900 ILLICIT DISCHARGES AND CONNECTIONS TO STORM DRAINAGE SYSTEM

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Ham Lake through the regulation of non-storm water discharges to the storm sewer drainage system to the maximum extent practicable as required by federal and state law. This ordinance establishes methods for controlling the introduction of pollutants into the Municipal Separate Storm Sewer System (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this ordinance are:

1. To regulate and minimize the contribution of pollutants to the municipal separate storm sewer system (MS4) by stormwater discharges by any user.
2. To prohibit Illicit Connections and Discharges to the municipal separate storm sewer system.
3. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this ordinance.

11-1900.10 DEFINITIONS

For the purposes of this Code, the following shall mean:

- a) **Authorized Enforcement Agency:** employees or designees of the Administrator of the City of Ham Lake designated to enforce this Ordinance.
- b) **Best Management Practices (BMPs):** schedules of activities, prohibitions of practices, general good house keeping practices, pollution prevention and educational practices, maintenance procedures and other management practices to prevent or reduce the



Anoka County
TRANSPORTATION DIVISION

Highway

Joseph J. MacPherson, PE
County Engineer

April 16, 2021

Kristin Erickson
Classic Construction, Inc.
18542 NE Ulysses Street
East Bethel, MN 55011

Re: Growing Generations Daycare
Anoka County Plan Approval

Dear Ms. Erickson,

Anoka County has reviewed the Growing Generations Daycare plan and has no further comments. You can contact our permits section at 763-324-3176 to obtain the right of way permit.

Sincerely,

Michelle Pritchard
Design Engineer

cc: File (Ham Lake).
Joe MacPherson, ACHD
Jerry Auge, ACHD
Jane Rose, ACHD
Sue Burgmeier, ACHD
I:\Eng\Plan Reviews\Ham Lake\2021\Growing Generations
Daycare\Resubmittal 4-7-21\Approval.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



NOTICE OF PERMIT APPLICATION STATUS

Project: Growing Generations Daycare

Date: April 09, 2021

Applicant: Classic Construction
18542 Ulysses St NE
East Bethel MN 55011

Permit Application#: 21-028

Purpose: Construction of a daycare facility, parking lot, and associated stormwater infrastructure

Location: SW corner at the intersection of Bunker Lake Blvd and Radisson Road NE

At their meeting on March 22, 2021 the Board of Managers of the Coon Creek Watershed District **conditionally approved** the above referenced project with 6 conditions and 2 stipulations. **This is NOT a permit.**

Since your last submittal on 3/31/2021, the following 3 conditions remain which must be addressed before permit issuance (please see note below on how to address conditions).

1. Receipt of escrows.
2. Provide proof of recording for O&M Agreement that meets District requirements.
3. TEP approval of the wetland delineation is required.

Please note that there are also 2 stipulations.

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

Sincerely,

Erin Edison
Water Resource Regulation Coordinator

cc: File 21-028
Ed Matthiesen, Stantec
Danielle Tourtillott, Stantec
Tom Collins, City of Ham Lake

Note: Please respond to each of these items in writing when resubmitting the revised

plans to the District. Resubmittals must include two hard copies and/or an electronic version sent to permitsubmittals@cooncreekwd.org. **Please submit written responses below the original typed comments, using extra sheets as necessary, addressing comments from the District.** If you have any questions, feel free to contact Erin Edison at (763) 755-0975. Pursuant to Coon Creek rule 7.3 deficiencies must be addressed and resubmitted within 60 days. Failure to do so shall be deemed a withdrawal of the permit application.

4/9/2021

To: Erin Edison, Tim Kelly From: Brady Schmitz, Stantec Consulting Services Inc.
Coon Creek Watershed Copy: Ed Matthiesen, P.E., Stantec Consulting Services Inc.
District
PAN: 21-028 Date: April 9, 2021

Reference: Growing Generations Daycare Update

Exhibits:

1. Construction Plans (9 sheets); by Plowe, dated 03/30/2021, received 03/31/2021.
2. Drainage Report; by Plowe, dated 03/31/2021, received 03/31/2021.
3. Response Letter; by Plowe, dated 03/30/2021, received 03/31/2021.

In Response to the Coon Creek Watershed District "Notice of Permit Application Status" dated March 23, 2021:

1. Receipt of escrows. **NO**
2. Update construction plans to include the following:
 - a. Provide erosion control measures to protect adjacent properties and stormwater ponds from construction activities. Double row of perimeter control at waterbodies/creeks/wetlands with a natural buffer < 50 feet. **YES**
 - b. Provide construction detail for stabilization at the outlets of all storm sewer pipes. **YES**
 - c. Provide inlet protection at all storm sewer inlets during construction. **YES**
3. Provide statement whether dewatering will be required for the construction of the proposed project. If yes, provide DNR dewatering permit and well-field location, rates, discharge location, schedule and quantities and a note on plans stating dewatering plans must be submitted to the district 7 days prior to activity for review and approval. **YES**
4. Provide a construction detail for Rain Gaurdians. **YES**
5. Provide an O&M Agreement that meets District requirements. **NO**
6. Provide TEP approval of wetland delineation. **NO**

Findings: The infiltration basin was updated to be slightly smaller due to City comments. This resulted in a slight increase in the HWL and rates out of the basin. The HWL is still contained within the basin, rate control is met, and the basin provides more than the required water quality volume.

Recommendation: Approval with 3 Conditions and 2 Stipulations:

Conditions:

1. Receipt of escrows.
2. Provide proof of recording of an O&M Agreement that meets District requirements.
3. Provide TEP approval of wetland delineation.

Stipulations:

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

Stormwater Treatment Practices	Number
Infiltration Basin	1
RainGaurdians	2
Outlet Control Structure	1

2. Completion of a post construction infiltration test on Infiltration Basin (P1) by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to

drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.

Rosa
Architectural
Group
Inc.

1084 Sterling Street
St. Paul, Minnesota 55119
tel: 651-739-7988
fax: 651-739-3165

GROWING
GENERATIONS

HAM LAKE, MN

CLASSIC
CONSTRUCTION

PH: 763-434-8870
18542 ULYSSES ST. NE
EAST BETHEL, MN

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR
REPORT WAS PREPARED BY ME OR UNDER MY DIRECT
SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT
UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: _____
SIGNED: _____
DATE: _____ REG. NO. _____

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REPORT WAS PREPARED BY ME OR UNDER MY DIRECT
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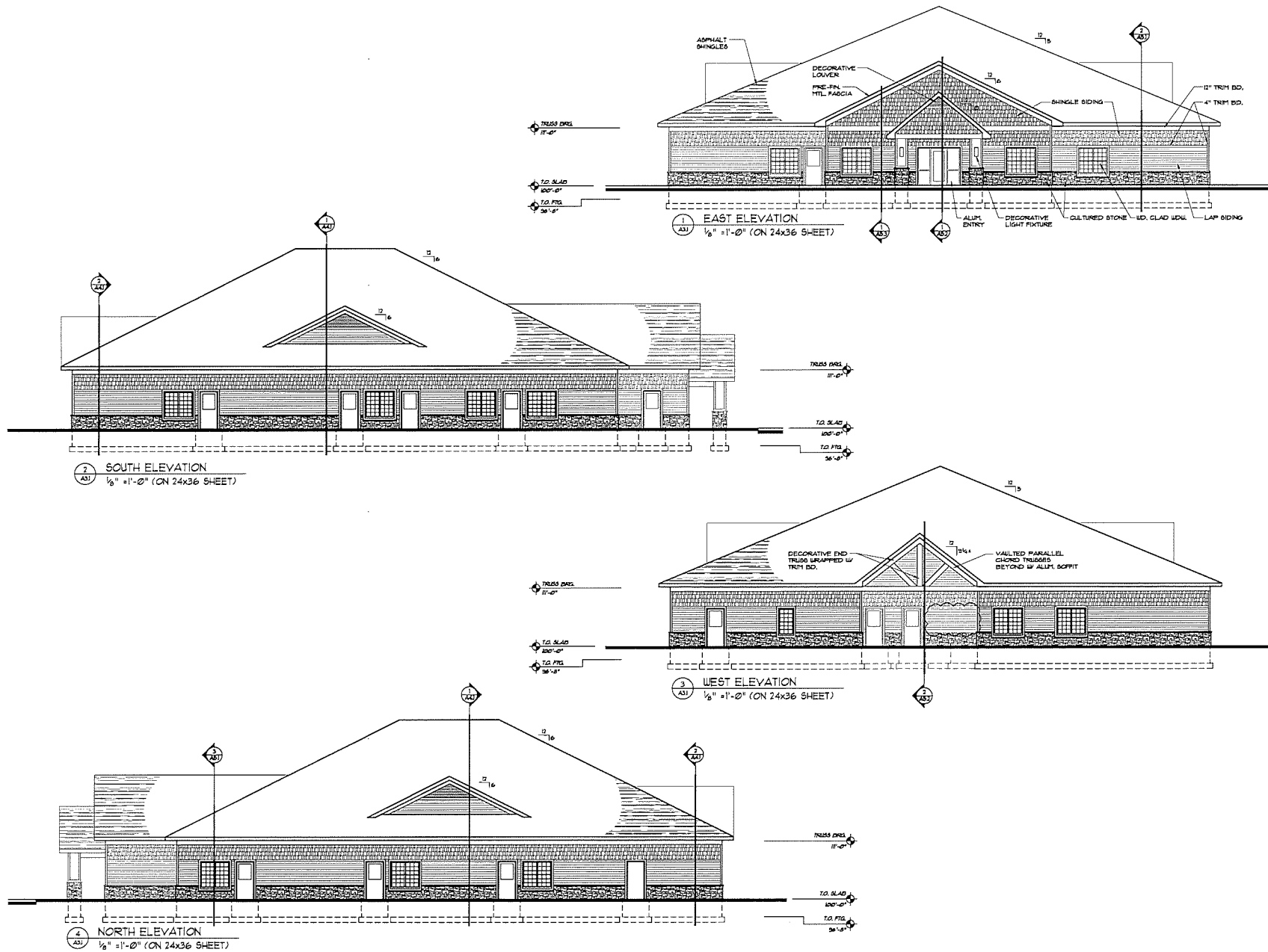
PRINT NAME: RUSSELL R ROSA
SIGNED: Rosa
DATE: 4/9/21 REG. NO. 18039

PROJECT NUMBER: 22103
DATE: APRIL 5, 2021
DRAWN BY: KF
CHECKED BY: RR
REVISIONS: 4/15/21

ELEVATIONS

A3.1

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Rosa
Architectural
Group
Inc.

1084 Sterling Street
St. Paul, Minnesota 55119
tel: 651-739-7988
fax: 651-739-3165

GROWING
GENERATIONS

RADISSON RD. NE &
BUNKER LAKE
BLVD. NE
HAM LAKE, MN

CLASSIC
CONSTRUCTION

PH: 763-434-8870
18542 ULYSSES ST. NE
EAST BETHEL, MN

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DATE: _____

NO: _____

PROJECT: _____

DATE: _____

BY: RUSSELL R ROSA

DATE: 4/9/21

NO: 8039

PROJECT NUMBER: 22103

DATE: APRIL 5, 2021

DRAWN BY: JL

CHECKED BY: RR

REVISIONS: 4/15/21

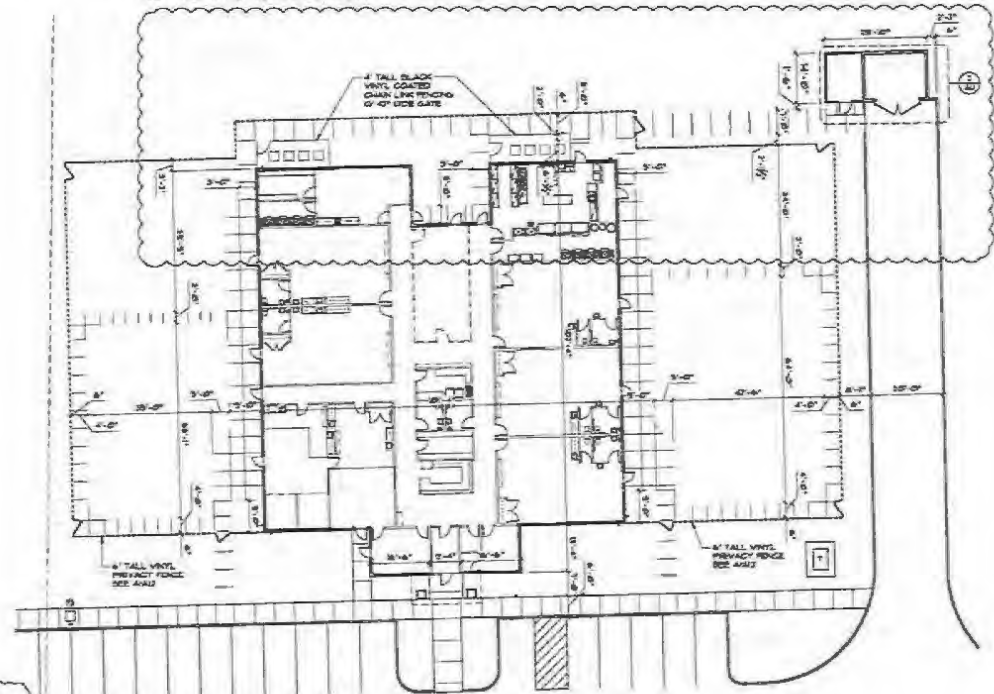
SIDEWALK DIMENSION PLAN
AND DETAILS

A1.2

© COPYRIGHT 2021 ROSA ARCHITECTURAL GROUP



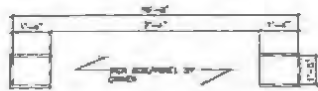
1 ALTERNATE SIDEWALK PLAN FOR WEST SIDE OF BLDG.
1/8" = 1'-0" (ON 24x36 SHEET)



1 SIDEWALK DIMENSION PLAN
1/8" = 1'-0" (ON 24x36 SHEET)



2 EXTERIOR FENCING ELEVATION
N.T.S.



3 MONUMENT SIGN PLAN
1/2" = 1'-0" (ON 24x36 SHEET)



4 MONUMENT SIGN ELEVATION
1/4" = 1'-0" (ON 24x36 SHEET)

Rosa
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St. Paul, Minnesota 55119
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GROWING
GENERATIONS

RADISSON RD. NE &
BUNKER LAKE
BLVD. NE
HAM LAKE, MN

CLASSIC
CONSTRUCTION

PH: 763-434-8870
18542 ULYSSES ST. NE
EAST BETHEL, MN

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PRINT NAME: _____
SIGNED: _____
DATE: _____ REG. NO. _____

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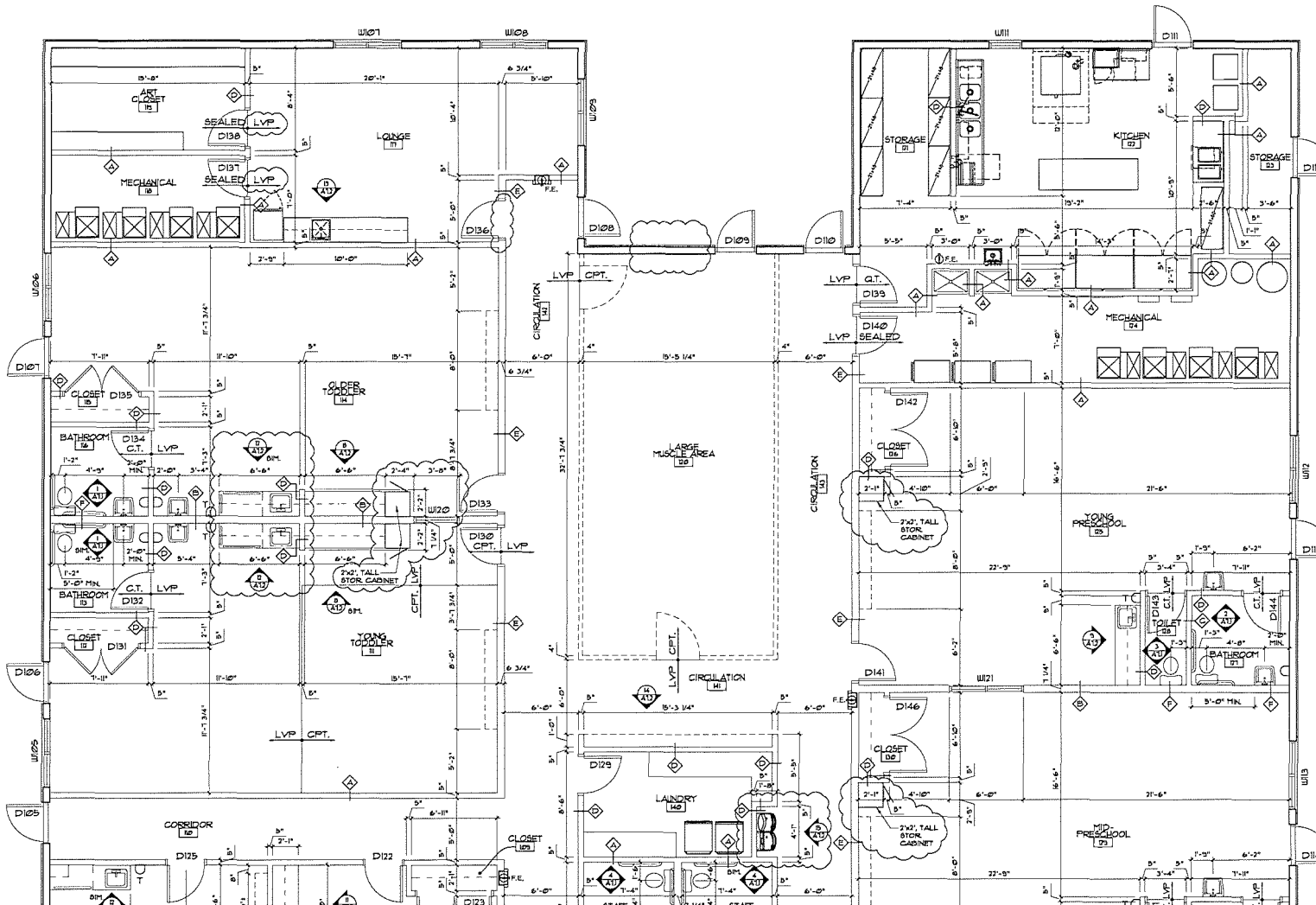
PRINT NAME: RUSSELL R ROSA
SIGNED: Rosa
DATE: 4/9/21 REG. NO. 180239

PROJECT NUMBER: 22103
DATE: APRIL 5, 2021
DRAWN BY: KF
CHECKED BY: RR
REVISIONS: 4/15/21

ENLARGED FLOOR PLAN

A2.2

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1 ENLARGED FLOOR PLAN
1/4" = 1'-0" (ON 24x36 SHEET)



Rosa
Architectural
Group
Inc.

1084 Sterling Street
St. Paul, Minnesota 55119
tel: 651-739-7988
fax: 651-739-3165

GROWING
GENERATIONS

RADISSON RD. NE &
BUNKER LAKE
BLVD. NE
HAM LAKE, MN

CLASSIC
CONSTRUCTION

PH: 763-434-8870
18542 ULYSSES ST. NE
EAST BETHEL, MN

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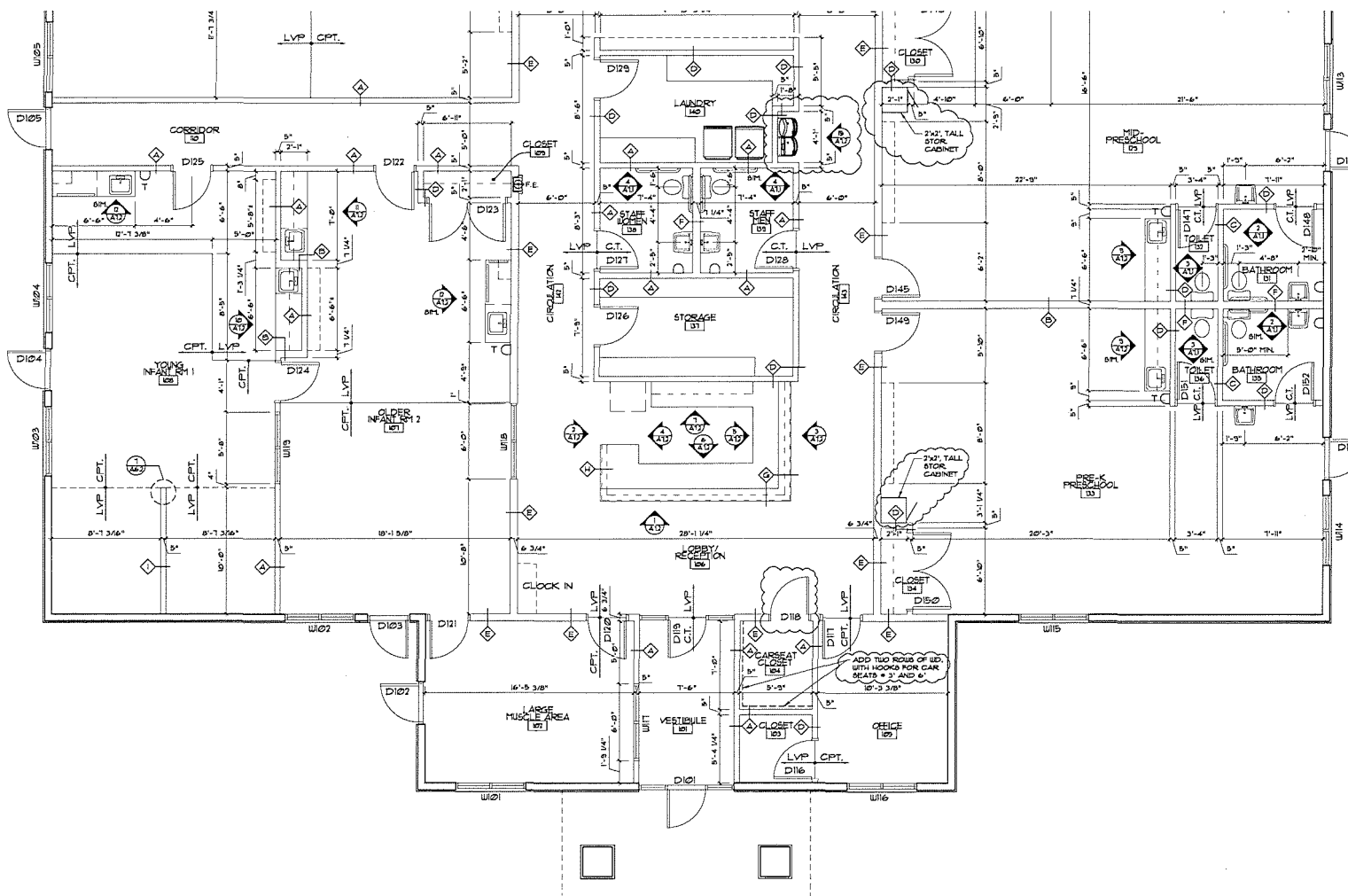
PRINT NAME: RUSSELL R ROSA
SIGNATURE: Rosa
DATE: 4/9/21 REG. NO.: 180339

PROJECT NUMBER: 22103
DATE: APRIL 5, 2021
DRAWN BY: KF
CHECKED BY: RR
REVISIONS: 4/15/21

ENLARGED FLOOR PLAN

A2.3

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1 ENLARGED FLOOR PLAN
4/1 1/4" = 1'-0" (ON 24x36 SHEET)

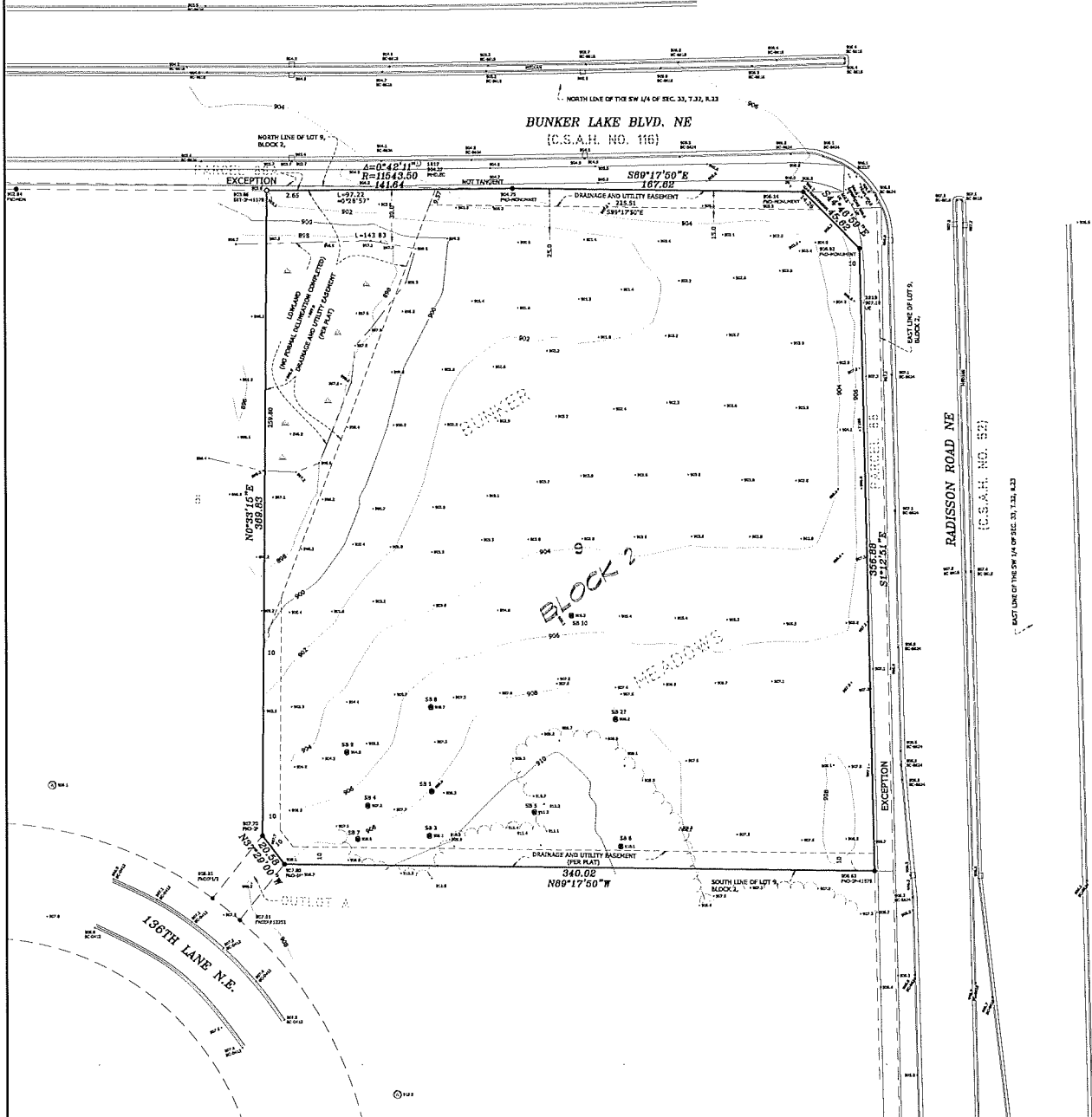


CERTIFICATE OF SURVEY

~for~ CLASSIC CONSTRUCTION
 ~of~ GROWING GENERATIONS
 HAM LAKE, MN

LEGAL DESCRIPTION

Lot 9, Block 2, BUNKER MEADOWS, EXCEPT any portions thereof contained within Parcels 88 and 88A, Anoka County Highway Right-of-Way Plat No. 73, Anoka County, Minnesota.



LEGEND

- DENOTES IRON MONUMENT FOUND AS LABELED
- DENOTES IRON MONUMENT SET, MARKED RLS# 41578
- DENOTES CATCH BASIN
- DENOTES ELECTRICAL MAHBOLE
- DENOTES EXISTING SPOT ELEVATION
- DENOTES WET LAKE
- DENOTES SOIL BORING
- DENOTES WELL
- DENOTES EXISTING CONTOURS
- DENOTES TREE LINE
- DENOTES BITUMINOUS SURFACE
- DENOTES CONCRETE SURFACE

NOTES

- Field survey was completed by E.G. Rud and Sons, Inc. on 01/27/21 and 04/16/21.
- Bearings shown are on Anoka County datum.
- Parcel ID Number: 33-32-23-31-0006.
- Curb shots are taken at the top and back of curb.
- This survey was prepared without the benefit of title work. Additional easements, restrictions and/or encumbrances may exist other than those shown hereon. Survey subject to revision upon receipt of a current title commitment or an attorney's title opinion.
- Due to field work being completed during the winter season there may be improvements in addition to those shown that were not visible due to snow and ice conditions characteristic of Minnesota winters.

BENCHMARK

PINPOINT GSD STATION #569 NGS NAME 0206K
 ELEVATION: 904.693
 DATUM: (NAVD88)

GRAPHIC SCALE



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.

DATE: 04/20/2021 License No. 41578

NO.	DATE	DESCRIPTION	BY
1	04/20/21	ADDED RLS# 41578 WILL DPO	ACD
2	04/20/21	CLIENT COMMENT	ACD
3			

E.G. RUD & SONS, INC.
 Professional Land Surveyors
 6776 Lake Drive NE, Suite 110
 Lino Lakes, MN 55014
 Tel. (651) 361-0200 Fax (651) 361-0701

GROWING GENERATIONS DAYCARE

TITLE SHEET, LEGEND, EXISTING CONDITIONS & REMOVAL PLAN

HAM LAKE, MINNESOTA

LEGEND *

GENERAL NOTES

* NOT ALL SERVICES ARE APPLICABLE.

THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING THE 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 THE TYPE, LOCATION OR UTILITIES AS NECESSARY TO AVOID DAMAGE TO THESE UTILITIES.

CALL 811 FOR EXISTING UTILITIES LOCATING PRIOR TO ANY EXCAVATING.

ALL WORK UNDER MINNESOTA COUNTY NORTH-SOUTH SHALL CONFORM TO THE SPECIFICATIONS OF THE MOST RECENTLY ISSUED SPECIFICATIONS FOR CONSTRUCTION.

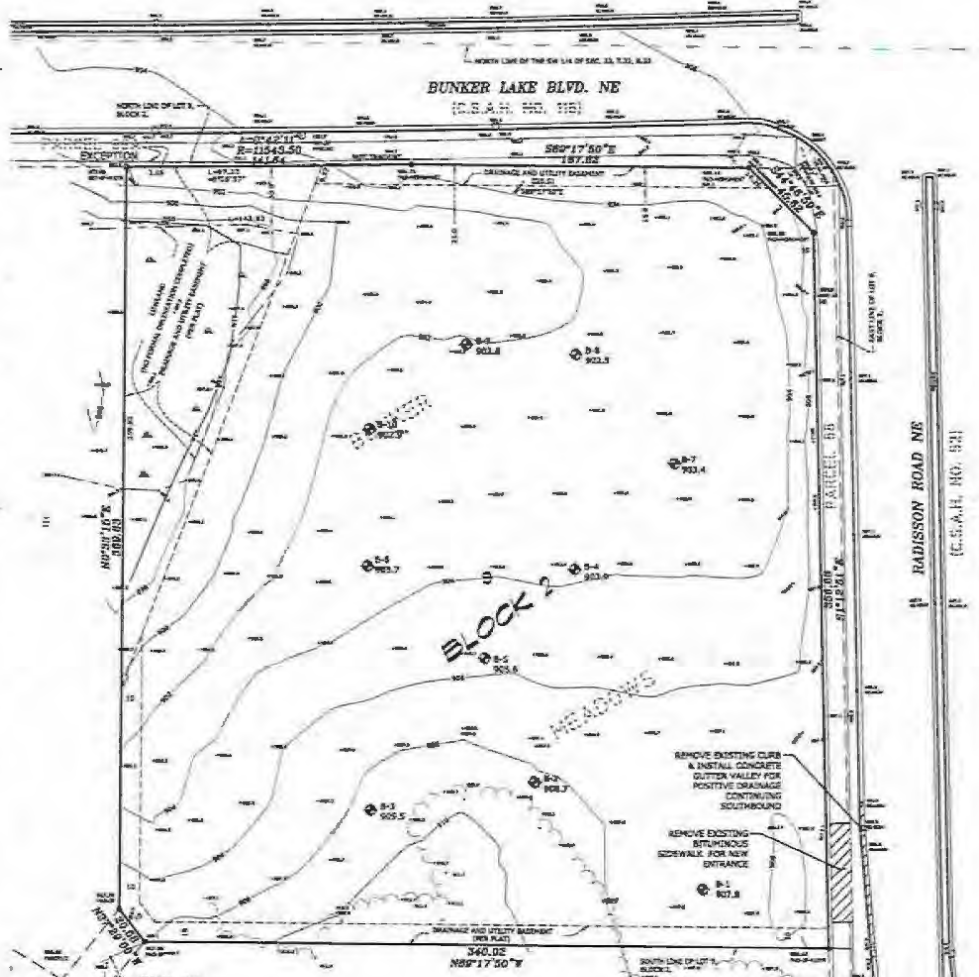
THE CONTRACTOR SHALL FIELD VERIFY SIZE, ELEVATION, AND LOCATION OF EXISTING SANITARY SEWERS, STORM SEWERS, AND WATER MAINS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO THE START OF INSTALLATION. INSTALLATIONS SHALL CONFORM TO THE CITY ENGINEER'S SPECIFICATIONS AND DETAIL PLANS.

ALL UTILITIES THAT WILL BE DAMAGED AND MAINTAINED BY THE CITY AFTER CONSTRUCTION SHALL BE REBUILT TO CITY SPECIFICATIONS.

THE CONTRACTOR SHALL NOTIFY CITY PUBLIC WORKS DEPARTMENT A MINIMUM OF 24 HOURS PRIOR TO THE DISRUPTION OF ANY TRUNK OR MAINS SERVICES TO EXISTING POWER OR BUSINESS.

THE CONTRACTOR SHALL DETOUR A MINIMUM OF 100 FEET FROM THE CITY ROAD TO ANY WORK. STORAGE OF MATERIALS OR EQUIPMENT SHALL NOT BE ALLOWED ON PUBLIC STREETS OR IN OTHER PUBLIC RIGHT-OF-WAY. NOTIFY CITY A MINIMUM OF 48 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

ALL ELECTRICAL, TELEPHONE, AND GAS SERVICES INCLUDING SERVICE LINES SHALL BE DISRUPTED TO THE APPROPRIATE UTILITY COMPANY SPECIFICATIONS. ALL UTILITY DISRUPTIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANY.



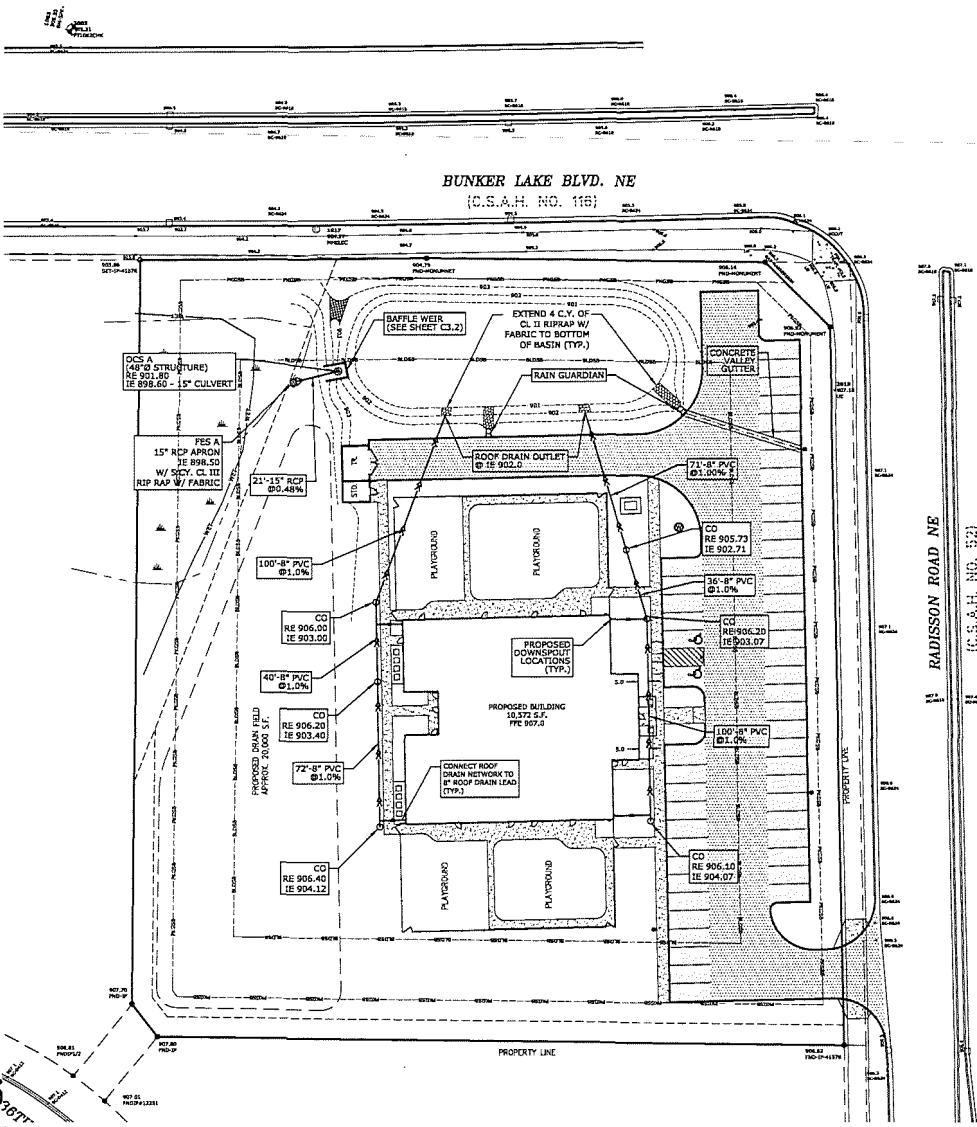
SHEET INDEX

CS	TITLE SHEET, LEGEND & EXISTING CONDITIONS
CS	GRADING, DRAINAGE & EROSION CONTROL PLAN
CS	UTILITY PLAN
CS-1-3.2	DETAILS
CS-1-4.2	STORM WATER POLLUTION PREVENTION PLAN



TITLE SHEET, LEGEND, EXISTING CONDITIONS, & REMOVAL PLAN BUNKER LAKE BLVD NE & RADISSON ROAD NE

DRAWN BY: M.G.A.	DESIGN BY: C.W.P.
CHECK BY: M.G.A.	FIELD NO. 214/058
ORIGINAL DATE: JANUARY 28, 2021	
DATE: _____	
REVISIONS DESCRIPTION:	
DATE: _____	BY: _____
I hereby certify that this plan was prepared by me or under my supervision and that I am a duly Licensed Professional Engineer in the State of Minnesota. CHARLES W. PLOW, P.E. DATE: 04/19/2021	
GROWING GENERATIONS DAYCARE HAM LAKE, MINNESOTA TITLE SHEET, LEGEND, EXISTING CONDITIONS & REMOVAL PLAN	
PREPARED FOR: CLASSIC CONSTRUCTION	
SITE PLANNING & ENGINEERING PLOW ENGINEERS, INC. 815 LAKE DRIVE SUITE 118 LONG LAKE, MN 55244 PHONE: (952) 942-2070 FAX: (952) 942-2079	
NORTH 	
1" = 40' SCALE	



STORM SEWER NOTES

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

WHEN CALLED OUT AS PIPE, STORM SEWER SHALL BE REINFORCED CONCRETE PIPE (RCP) AND CTS WITH 4\"/>

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

ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MINNESOTA RULES, PART 4715.2620.

STORM SEWER PIPES TO BE JOINED TO THE DRAIN MAIN MANHOLES W/ APPROVED RECEPTIBLE RUBBER JOINTS TO MAKE TIGHT GASIGHT OR WATERIGHT. GROUT MORTAR JOINTS ARE PERMITTED ONLY FOR REPAIRS AND CONNECTIONS OF EXISTING LINES CONSTRUCTED WITH SUCH JOINTS.

DRAWN BY: M.O.A. DESIGN BY: C.W.P.
 CHECKED BY: P.M.S. PROJECT NO.: 21-1956
 M.O.A. ORIGINAL DATE: JANUARY 28, 2021

REVISION DESCRIPTION	DATE
REVISED TO ADD STORM SEWER CO. DISTANCES	4/16/21

This plan was prepared by the undersigned on the 28th day of January, 2021, at Minneapolis, Minnesota, and I am a duly Licensed Professional Engineer in the State of Minnesota.

Charles W. Plowe
 CHARLES W. PLOWE, P.E.
 DATE: 01/28/2021 L.C. NO. 13227

GROWING GENERATIONS DAYCARE
 240 LAKE, MINNETONKA, MN
 UTILITY PLAN

PREPARED FOR:
CLASSIC CONSTRUCTION

PLOWE ENGINEERING, INC.
 8776 LAKE DRIVE, SUITE 110
 LINDEN LAKE, MN 55014
 PHONE: (651) 301-4210
 FAX: (651) 361-8751



C2

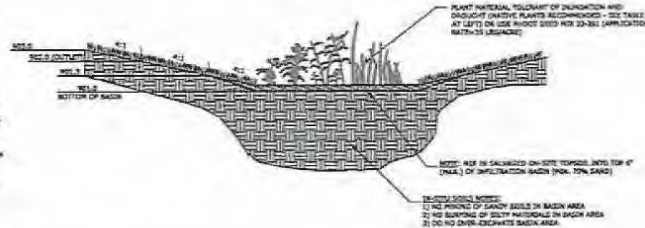
ALL WORK WITHIN ANOKA COUNTY RIGHT-OF-WAY SHALL CONFORM TO THE 2018 EDITION OF THE MNSDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.

**UTILITY PLAN
 BUNKER LAKE BLVD NE & RADISSON ROAD NE**



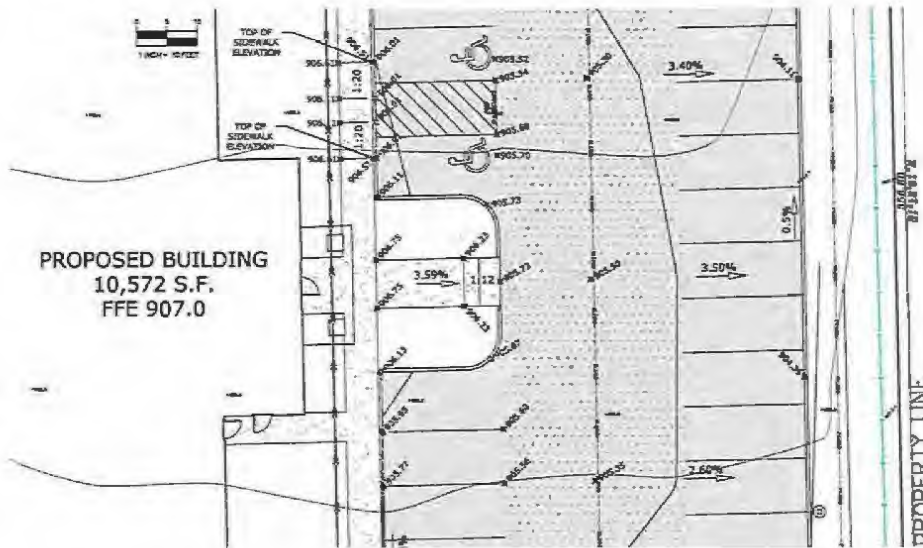
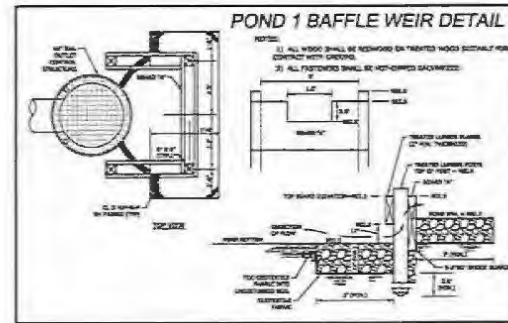
PLANTING SUGGESTIONS	
BOTTOM OF BASIN	SIDE SLOPES
NATIVE PLANTINGS	NATIVE PLANTINGS
SMART BUR-NWOOD	BIG BUCKLEBUSH
WIND, GRAVES SEEDS	BLUE JOINT BROOM
OSMO DRAG	BUTTON GRASS
BLUE PLAN IRE	BLUE VERONICA
DRIFT HYDRANGEA	PRAIRIE BLACKGRASS
DWARF HYDRANGEA	THORNAPPLE
SEDFE WOOD	NEW ENGLAND ASTER
NEW ENGLAND ASTER	RED-STEM DOGWOOD
PRAIRIE BLACKGRASS	SANDBAR WILLOW
SEDFE WOOD	BLACK CHERRYBERRY
BLACK WILLOW	BLACK WILLOW

- NOTES:**
- WELLS-BLENDED FILTRATION MEDIA TO BE COMPOSED OF 75% VOLCANIC TUFF, CLEAN CONSTRUCTION SAND AND 25% SOIL ON SITE TOPSOIL.
 - CONTRACTOR TO MAKE OFF INFILTRATION BASIN AREA WITH SILT TRAP OR OTHER VISIBLE MEANS.
 - USE LOW IMPACT, LEAKY HOVING EQUIPMENT SUCH AS WIDE TRACKS OR WALKER TRACK EQUIPMENT, OR OTHER LEAKY EQUIPMENT WITH TIRE-TYPE TREADS IN INFILTRATION BASIN AREA.
 - NO DRIVING OR OVER-EXCAVATION IN INFILTRATION BASIN.
 - NO BURNING OF MATERIALS IN INFILTRATION BASIN.
 - FINAL GRADE ONLY UPON ESTABLISHMENT OF IMMEDIATE AREAS.
 - BASEIN BOTTOM TO BE GRADED FLAT.
 - ALWAYS WEAR COMPACTED SOILS PRIOR TO SEEDING.
 - INFILTRATION BASIN TO REMAIN UNLINED.
 - PROTECT INFILTRATION BASIN FROM RUNOFF DURING CONSTRUCTION ACTIVITIES. EXCAVATE TO FINAL GRADE ONLY UPON ESTABLISHMENT OF CONTROLLING DRAINAGE AREA.

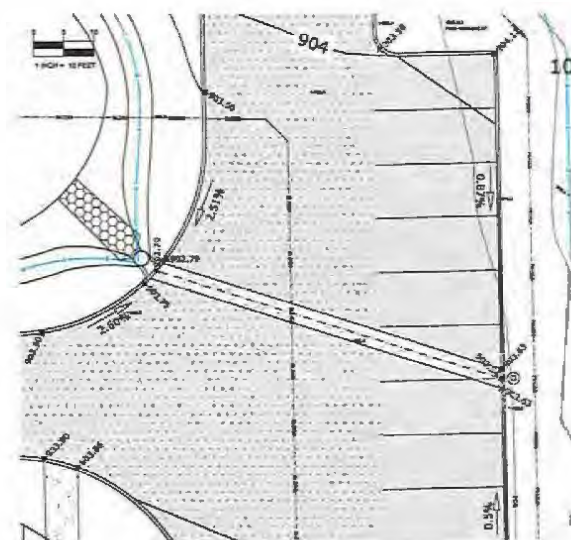


INFILTRATION BASIN (9'x1)
NOT TO SCALE

- POST-CONSTRUCTION INFILTRATION TESTING IS REQUIRED. PROVIDE TEST BY FILLING BASIN WITH 25.000 GALLONS OF WATER AND MONITORING SEEP-DOWN TIME.**
- CONTACT OWNER OR ASSESSOR FOR TESTING AT LEAST 3 HOURS PRIOR TO EFFLUENT TEST.**
- DO NOT EXCAVATE BASIN TO FINAL GRADE OR WITHIN THREE (3) FEET OF FINAL GRADE UNTIL THE CONTROLLING DRAINAGE AREA HAS BEEN CONSTRUCTED AND FULLY OPERATIONAL. ONLY PROVIDE MINOR SCOUR PROTECTION AND SEEDING CORRECTIONS TO DRAINAGE CHANNELS TO KEEP SEDIMENT AND DEBRIS COMPLETELY AWAY FROM THE INFILTRATION AREA.



BARRICADE ACCESS DETAIL



CONCRETE CROSS GUTTER DETAIL

DETAILS & NOTES
BUNKER LAKE BLVD NE & RADISSON ROAD NE

DRAWN BY: M.O.A. DESIGN BY: C.W.P.
CHECK BY: M.O.A. PROJ. NO: 21-1562
ORIGINAL DATE: JANUARY 28, 2021
DATE: 04-26-2021 I.S.C. NO. 16577

REVISIONS:

NO.	DESCRIPTION
1	REVISIONS
2	REVISIONS
3	REVISIONS
4	REVISIONS
5	REVISIONS
6	REVISIONS
7	REVISIONS
8	REVISIONS
9	REVISIONS
10	REVISIONS

DATE: 04-26-2021 I.S.C. NO. 16577

PROJECT: GROWING GENERATIONS DAYCARE - BUNKER LAKE, MINNESOTA
OWNER: DAYCARE - BUNKER LAKE, MINNESOTA

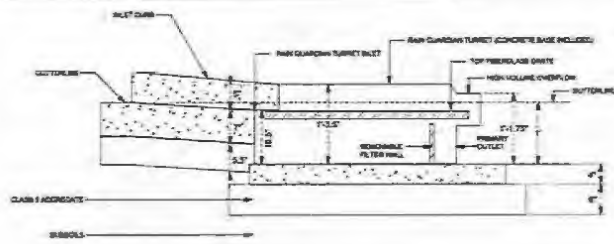
PREPARED FOR: CLASSIC CONSTRUCTION

PLANNING & ENGINEERING
PLOWE ENGINEERING, INC.
8575 LAKE DRIVE
LINO LAKES, MN 55074
PHONE: (763) 548-0510
FAX: (763) 548-8777

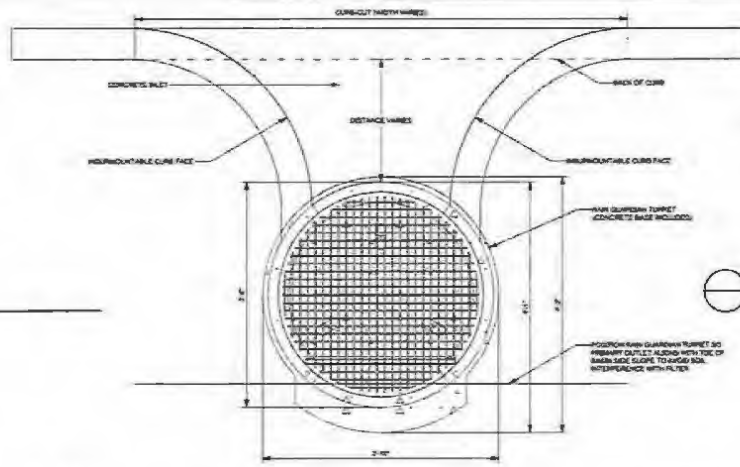
NORTH

1" = 10 FEET

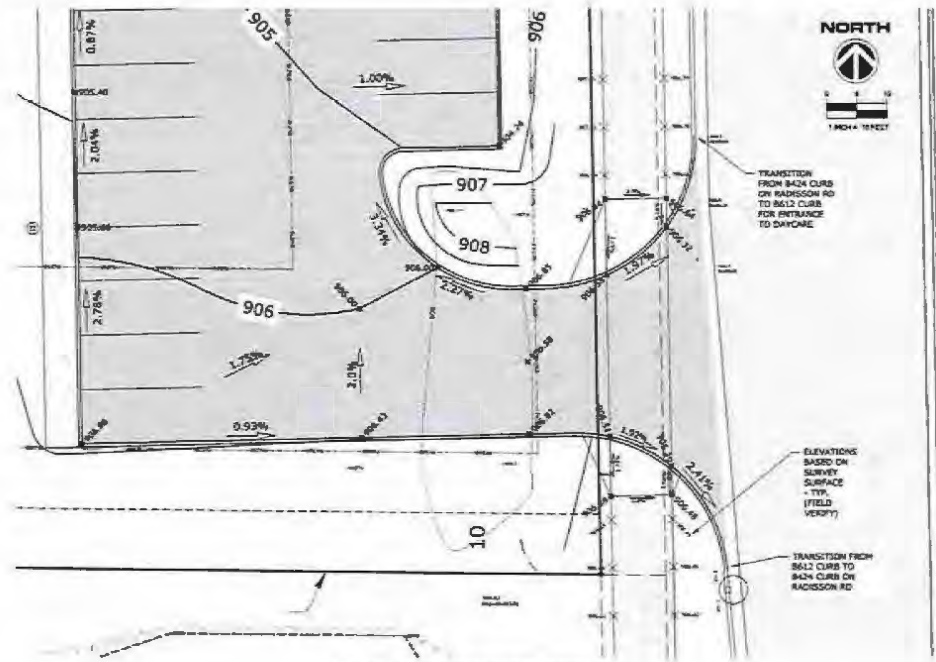
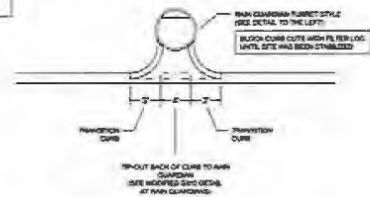
C3.2



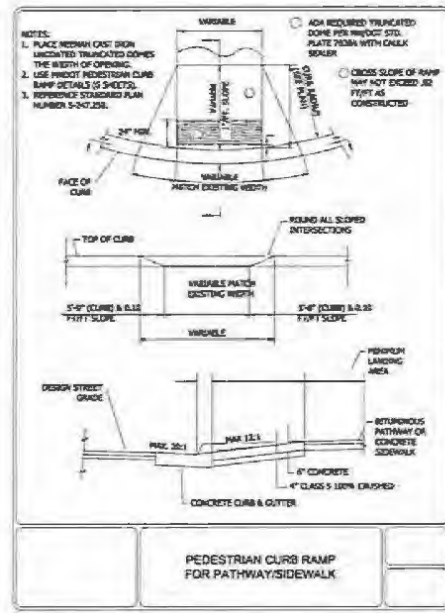
RAIN GARDEN - TURRET STYLE
N.T.S.



CURB CUTS @ RAIN GUARDIAN
N.T.S.



TRAIL AT ENTRANCE DETAIL



- NOTES:**
1. PLACE MEDIUM GAST IRON UNCOATED TRUNCATED CONES THE WIDTH OF OPENING.
 2. USE FINEST REDISTON CURB RAMP DETAILS (5 SHEETS).
 3. REFERENCE STANDARD PLAN NUMBER S-200.22B.
- ADH REQUIRED: VULCANIZED DOME PER RW/DC/ STD. PLATE 200A WITH GASKET SEALER
 - CROSS SLOPE OF RAMP MAY NOT EXCEED 3% IF NOT AS CONSTRUCTED

NOTES:

THE EXISTING CURB ALONG RADISSON ROAD SHALL BE REMOVED AND REPLACED WITH A CONCRETE VALLEY CUTTER TO MAINTAIN DRAINAGE FLOW.

THE CONTRACTOR SHALL SAWCUT BETWEEN THE CURB AND THE EXISTING BITUMINOUS ROADWAY WHEN CONSTRUCTING THE ENTRANCE AND CONCRETE VALLEY CUTTER. ANY DAMAGE TO THE PAVEMENT IS INCIDENTAL AND SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE COUNTY OR CITY.

DETAILS & NOTES
BUNKER LAKE BLVD NE & RADISSON ROAD NE

DRAWN BY: M.G.A. DESIGN BY: C.W.P.
CHECKED BY: P.H.L. REVISED: P.H.L. NO. 25-1556
M.G.A.

ORIGINAL DATE: JANUARY 22, 2021

DATE	DESCRIPTION
4/1/22	REVISIONS

THIS PROJECT HAS BEEN PREPARED BY AN ENGINEER REGISTERED IN THE STATE OF MINNESOTA. THE ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR THIS PROJECT TO BE LEGALLY VALID.

Professional Engineer
MINNESOTA
COURTESY W. PLOWE, INC.

GROWING GENERATIONS DAYCARE
HAW LAKE, MINNESOTA
DETAILS & NOTES

PREPARED FOR: CLASSIC CONSTRUCTION

Plowe Engineering, Inc.
SITE PLANNING & ENGINEERING
8276 LAKE DRIVE
SUITE 110
LAKE LAVER, MN 55854
PHONE: (612) 304-4276
FAX: (612) 304-4278

NORTH
1" = 10' FEET

C3.3

2.1 TERMINATION OF CONTRACTS. MINN. R. 2302

2.1.1. The contractor shall be responsible for the termination of any contract entered into by the contractor for the purpose of this project. The contractor shall be responsible for the termination of any contract entered into by the contractor for the purpose of this project. The contractor shall be responsible for the termination of any contract entered into by the contractor for the purpose of this project.

2.2. STORMWATER POLLUTION PREVENTION PLAN (SWPPP). MINN. R. 2303

2.2.1. The contractor shall be responsible for the implementation of the stormwater pollution prevention plan (SWPPP) for this project. The contractor shall be responsible for the implementation of the stormwater pollution prevention plan (SWPPP) for this project. The contractor shall be responsible for the implementation of the stormwater pollution prevention plan (SWPPP) for this project.

2.3. EROSION CONTROL MEASURES. MINN. R. 2304

2.3.1. The contractor shall be responsible for the implementation of erosion control measures for this project. The contractor shall be responsible for the implementation of erosion control measures for this project. The contractor shall be responsible for the implementation of erosion control measures for this project.

2.4. SLOPE STABILIZATION. MINN. R. 2305

2.4.1. The contractor shall be responsible for the implementation of slope stabilization measures for this project. The contractor shall be responsible for the implementation of slope stabilization measures for this project. The contractor shall be responsible for the implementation of slope stabilization measures for this project.

2.5. INSPECTIONS AND MAINTENANCE. MINN. R. 2306

2.5.1. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project.

2.6. POLLUTION PREVENTION MANAGEMENT PLAN (PPMP). MINN. R. 2307

2.6.1. The contractor shall be responsible for the implementation of the pollution prevention management plan (PPMP) for this project. The contractor shall be responsible for the implementation of the pollution prevention management plan (PPMP) for this project. The contractor shall be responsible for the implementation of the pollution prevention management plan (PPMP) for this project.

2.7. POLLUTION PREVENTION MEASURES. MINN. R. 2308

2.7.1. The contractor shall be responsible for the implementation of pollution prevention measures for this project. The contractor shall be responsible for the implementation of pollution prevention measures for this project. The contractor shall be responsible for the implementation of pollution prevention measures for this project.

2.8. EROSION CONTROL MEASURES. MINN. R. 2309

2.8.1. The contractor shall be responsible for the implementation of erosion control measures for this project. The contractor shall be responsible for the implementation of erosion control measures for this project. The contractor shall be responsible for the implementation of erosion control measures for this project.

2.9. SLOPE STABILIZATION. MINN. R. 2310

2.9.1. The contractor shall be responsible for the implementation of slope stabilization measures for this project. The contractor shall be responsible for the implementation of slope stabilization measures for this project. The contractor shall be responsible for the implementation of slope stabilization measures for this project.

2.10. INSPECTIONS AND MAINTENANCE. MINN. R. 2311

2.10.1. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project.

2.11. POLLUTION PREVENTION MEASURES. MINN. R. 2312

2.11.1. The contractor shall be responsible for the implementation of pollution prevention measures for this project. The contractor shall be responsible for the implementation of pollution prevention measures for this project. The contractor shall be responsible for the implementation of pollution prevention measures for this project.

2.12. POLLUTION PREVENTION MANAGEMENT PLAN (PPMP). MINN. R. 2313

2.12.1. The contractor shall be responsible for the implementation of the pollution prevention management plan (PPMP) for this project. The contractor shall be responsible for the implementation of the pollution prevention management plan (PPMP) for this project. The contractor shall be responsible for the implementation of the pollution prevention management plan (PPMP) for this project.

2.13. POLLUTION PREVENTION MEASURES. MINN. R. 2314

2.13.1. The contractor shall be responsible for the implementation of pollution prevention measures for this project. The contractor shall be responsible for the implementation of pollution prevention measures for this project. The contractor shall be responsible for the implementation of pollution prevention measures for this project.

2.14. EROSION CONTROL MEASURES. MINN. R. 2315

2.14.1. The contractor shall be responsible for the implementation of erosion control measures for this project. The contractor shall be responsible for the implementation of erosion control measures for this project. The contractor shall be responsible for the implementation of erosion control measures for this project.

2.15. SLOPE STABILIZATION. MINN. R. 2316

2.15.1. The contractor shall be responsible for the implementation of slope stabilization measures for this project. The contractor shall be responsible for the implementation of slope stabilization measures for this project. The contractor shall be responsible for the implementation of slope stabilization measures for this project.

2.16. INSPECTIONS AND MAINTENANCE. MINN. R. 2317

2.16.1. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project.

2.17. POLLUTION PREVENTION MEASURES. MINN. R. 2318

2.17.1. The contractor shall be responsible for the implementation of pollution prevention measures for this project. The contractor shall be responsible for the implementation of pollution prevention measures for this project. The contractor shall be responsible for the implementation of pollution prevention measures for this project.

2.18. EROSION CONTROL MEASURES. MINN. R. 2319

2.18.1. The contractor shall be responsible for the implementation of erosion control measures for this project. The contractor shall be responsible for the implementation of erosion control measures for this project. The contractor shall be responsible for the implementation of erosion control measures for this project.

2.19. SLOPE STABILIZATION. MINN. R. 2320

2.19.1. The contractor shall be responsible for the implementation of slope stabilization measures for this project. The contractor shall be responsible for the implementation of slope stabilization measures for this project. The contractor shall be responsible for the implementation of slope stabilization measures for this project.

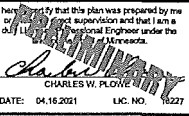
2.20. INSPECTIONS AND MAINTENANCE. MINN. R. 2321

2.20.1. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project. The contractor shall be responsible for the implementation of inspection and maintenance measures for this project.

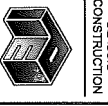
STORM WATER POLLUTION PREVENTION PLAN BUNKER LAKE BLVD NE & RADISSON ROAD NE

CA.1

Table with columns: Date, Revision, Description. Includes project name, date (04.16.2021), and license number (LIC. NO. 8227).



GROWING GENERATIONS DAYCARE KAM LAKE, MINNESOTA STORM WATER POLLUTION PREVENTION PLAN



Site Planning & Engineering Plow Engineering, Inc. Storm Water Pollution Prevention Plan

DRAWN BY: M.S.A. CHECKED BY: M.S.A.
 DESIGNED BY: C.M.P. M.O.A.
 ORIGINAL DATE: JANUARY 25, 2007

DATE	REVISION DESCRIPTION

This project was prepared by the
 staff of the Planning & Engineering
 Department of the City of
PLOWE ENGINEERING, INC.
 CHARLES W. PLOWE, P.E.
 DATE: 04/18/2007 LIC. NO. 1927

GROWING GENERATIONS
 DAYCARE
 BUNKER LAKE, MINNESOTA
 TOWNLAKE PLAZA

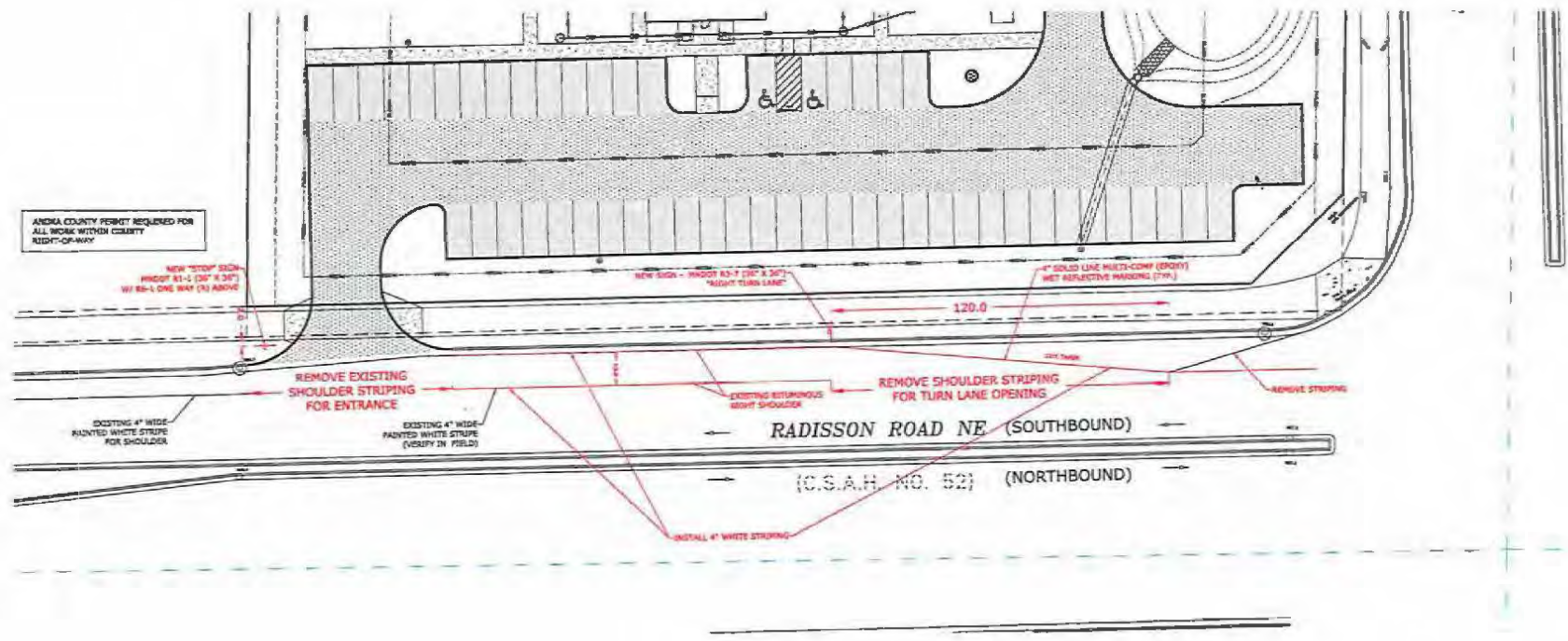
PREPARED FOR:
CLASSIC CONSTRUCTION


PLOWE ENGINEERING, INC.
 SITE PLANNING & ENGINEERING
 8716 LAKE DRIVE
 SUITE 100
 LONG LAKE, MN 55824
 PHONE: (952) 329-0470
 FAX: (952) 321-4007

NORTH



C5



ANOKA COUNTY PERMIT REQUIRED FOR ALL WORK WITHIN COUNTY RIGHT-OF-WAY

NEW "STOP" SIGN MNDOT R1-1 (36" X 36") W/ 80-1 ONE WAY (N) ABOVE

NEW SIGN - MNDOT R3-7 (36" X 36") "RIGHT TURN LANE"

4" SOLID LINE MULTI-COMP (800FT) WET REFLECTIVE PAVERS (779')

REMOVE EXISTING SHOULDER STRIPING FOR ENTRANCE

EXISTING HETEROGENEOUS SHOULDER

REMOVE SHOULDER STRIPING FOR TURN LANE OPENING

REMOVE STRIPING

EXISTING 4" WIDE PAINTED WHITE STRIPE FOR SHOULDER

EXISTING 4" WIDE PAINTED WHITE STRIPE (VERIFY IN FIELD)

RADISSON ROAD NE (SOUTHBOUND)

(C.S.A.H. NO. 52) (NORTHBOUND)

INSTALL 4" WHITE STRIPING

NOTES:-
 STRIPING PRACTICE:
 AT THE TIME OF APPLYING THE MARKING MATERIAL, THE APPLICATION AREA SHALL BE FREE OF CONTAMINANTS. THE CONTRACTOR SHALL CLEAN THE ROADWAY SURFACE PRIOR TO THE LINE APPLICATION IN A MANNER AND TO THE EXTENT REQUIRED BY THE SPECIFICATIONS.
 EXCEPT WHEN USED AS A TEMPORARY MARKING, PAVEMENT MARKINGS SHALL ONLY BE APPLIED IN SATISFACTORY WEATHER WHEN AIR TEMPERATURE IS 50°F OR HIGHER AND SHALL NOT BE APPLIED WHEN THE WIND OR OTHER CONTAMINATING CAUSE A RISK OF DUST TO BE DEPOSITED ON THE PAVEMENT SURFACE AFTER CLEANING AND BEFORE THE MARKING MATERIAL CAN BE APPLIED.
 THE FILLING OF TRENCH, POVERTING OF MATERIALS OR CLEANING OF EQUIPMENT SHALL NOT BE PERMITTED ON UNPREPARED PAVEMENT SURFACES UNLESS ADEQUATE PROTECTIVE MEASURES ARE MADE TO PREVENT DAMAGE TO MATERIALS.

- NOTES:**
1. ALL NEW LANE LINE MARKINGS SHALL BE MULTI-COMP GRIFF MATERIAL.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INCORPORATING THE COST AND REPLACING ANY EXISTING PAVEMENT MARKINGS THAT HAVE BEEN DAMAGED FROM CONSTRUCTION ACTIVITIES AS DETERMINED BY THE PROJECT ENGINEER.
 3. THE CONTRACTOR SHALL EXECUTE ANY PAVEMENT MARKING FIELD CHANGES THAT ARE DEEMED NECESSARY BY THE PROJECT ENGINEER.
 4. ALL STRIPING AND STRIPING SHALL MEET ANOKA COUNTY SPECIFICATIONS AND SPECIFICATIONS.

CONTRACTOR SHALL FOLLOW MNDOT'S TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS FIELD MANUAL 2004* FOR TRAFFIC CONTROL.

ALL WORK WITHIN ANOKA COUNTY RIGHT-OF-WAY SHALL CONFORM TO THE 2018 EDITION OF THE MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION.



Know what's below.
 Call before you dig.

**TURN LANE PLAN
 BUNKER LAKE BLVD NE & RADISSON ROAD NE**

Rosa
Architectural
Group
Inc.

1084 Sterling Street
St. Paul, Minnesota 55119
tel: 651-739-7988
fax: 651-739-3165

GROWING
GENERATIONS

RADISSON RD. NE &
BUNKER LAKE
BLVD. NE
HAM LAKE, MN

CLASSIC
CONSTRUCTION

PH: 763-434-8870
18542 ULYSSES ST. NE
EAST BETHEL, MN

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

DATE: _____

SCALE: _____

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

DATE: _____

SCALE: _____

DATE: 4/8/21

PROJECT NUMBER: 22103

DATE: APRIL 5, 2021

DRAWN BY: KF

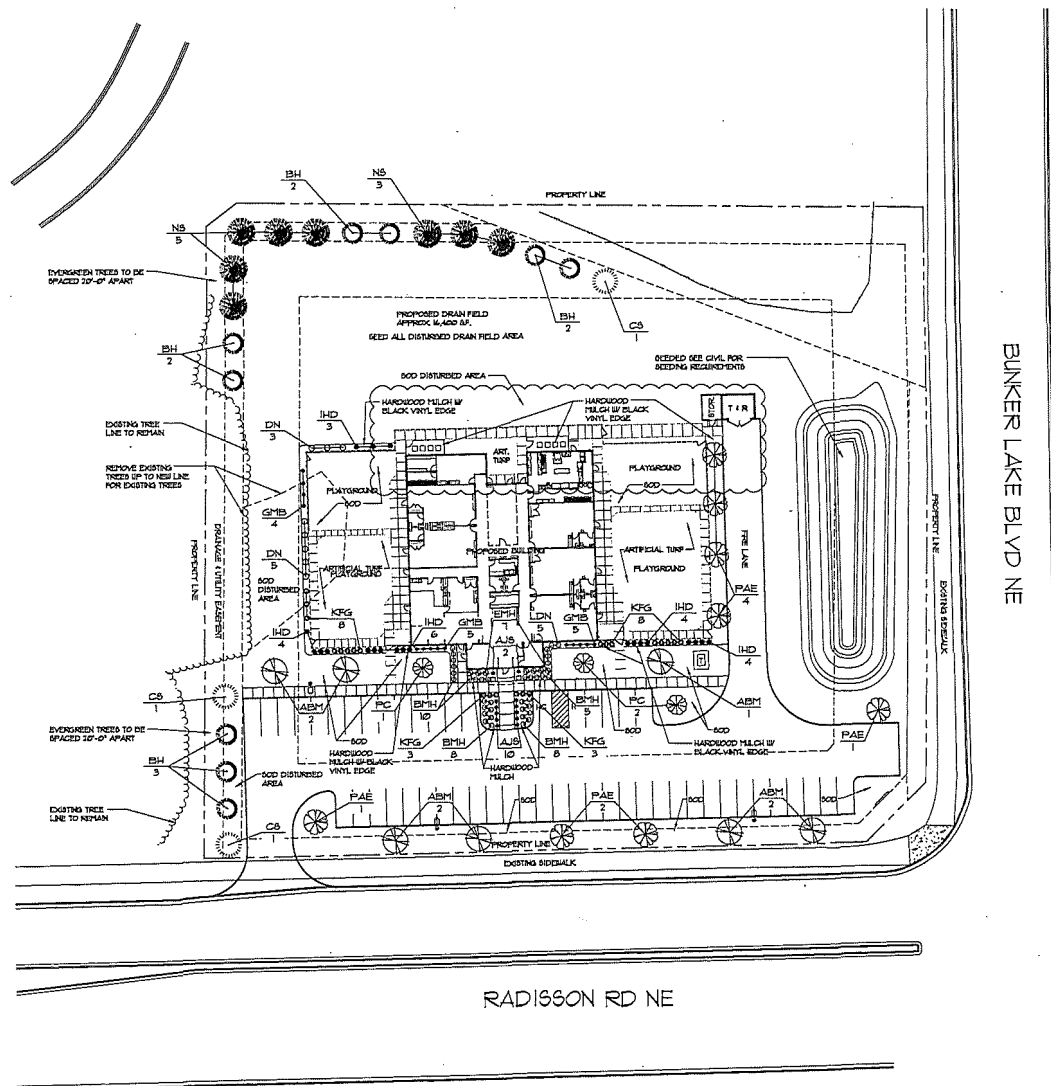
CHECKED BY: RR

REVISIONS: 4/15/21

LANDSCAPE PLAN

L1.1

© COPYRIGHT 2021 ROSA ARCHITECTURAL GROUP



PLANT LIST: Site Plantings

QTY.	KEY	BOTANICAL NAME	COMMON NAME	SIZE/ROOT
TREES				
7	AM	Acacia freemontii	Autumn Blaze Maple	2-1/2" DBH
12	PAE	Ulmus americanae 'Princeton'	Princeton American Elm	2-1/2" DBH
3	PC	Molue 'Proletaire'	Proletaire Crabapple	1-1/2" DBH
6	BH	Picea glauca 'Densata'	Black Hills Spruce	6" DBH
3	CS	Picea pungens	Colorado Spruce	6" DBH
8	NS	Picea abies	Norway Spruce	6" DBH
TOTAL 43				
SHRUBS				
8	DN	Physocarpus opulifolius 'Nivola'	Dolobol Nivabark	5 GAL. Pot
17	HD	Cornus alba 'Balthus'	Very Hole Dogwood	5 GAL. Pot
5	LDN	Physocarpus opulifolius 'Dennis May'	LDN Dead Nivabark	5 GAL. Pot
14	QNS	Buxus 'Green Mountain'	Green Mountain Boxwood	5 GAL. Pot
7	DNI	Lonicera xylosteum 'Emerald Mound'	Emerald Mound Honeycreeper	2 GAL. Pot
TOTAL 55				
ORNAMENTAL GRASSES & PERENNIALS				
22	KFC	Colosmeopsis caudata 'Karl Forester'	Karl Forester Feather Reed Grass	5 Gal. Pot
12	AJS	Sedum spectabile 'Herbsttraud'	Autumn Joy Sedum	1 Gal. Pot
31	BMH	Hosta 'Dunbar Muffin'	Dunbar Muffin Hosta	1 Gal. Pot
TOTAL 65				

PLANTING NOTES:

Contractor shall provide one year guarantee of all plant materials. The guarantee begins on the date of the Landscape Architect's written acceptance of the final planting. Replacement plant materials shall also have a one year guarantee commencing upon planting.

All plants to be north-facing green and hardy. Plants to be installed as per standard AIA planting practices. Use minimum 12" stem planting soil on trees and 6" on shrubs.

Contractor shall verify locations with all utilities prior to installation of plants.

Staking of trees optional: reposition if not plants after one year.

Wrap all smooth-barked lower-trunk lap and bottom. Remove by April 1.

Open top of burlap on all materials; remove pot on potted plants; split and break apart pot soil.

Prune plants as necessary - per standard nursery practices.

Owner shall be responsible for maintenance after acceptance of the work by the Owner.

Plants shall be immediately staked upon arrival at site. Property hard-in materials if necessary.

All disturbed areas to be seeded unless otherwise noted.

Planting beds for shrubs shall have 3" - 4" of 1-1/2" washed filter rock mulch. No weed barrier fabric to be used. Substrate of stone mulch top and shall be 4" vertical (unimproved grade) black poly edge. Edging shall be placed and staked with smooth curves and straight lines.

All planting beds shall be prepared using freeze or an approved seed weed preventative.

Grass black layers shall be spread over site where landscaping or sod to be placed, or as per City code.

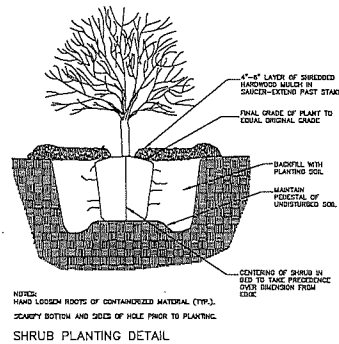
Double shredded dark brown hardwood mulch 4" deep shall be provided around all new trees.

Field offset trees and shrub locations to fit site and avoid utility locations and any changes that may have occurred to the building exterior and/or site in general.

Construction and soil types to be determined by the site Engineer.

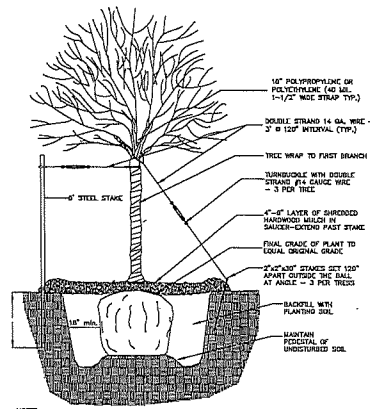
Contractor to field offset foundation shrubs to least soil space and building's architecture.

LANDSCAPE PLAN
1" = 30'-0" (ON 24x36 SHEET)
NORTH



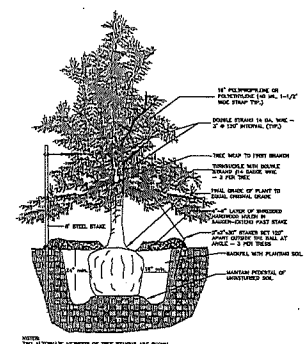
NOTES:
 1. HAND LOOSEN ROOTS OF CONTAMINATED MATERIAL (TYP.).
 2. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING.
 3. CENTERING OF SHRUB IN HOLE TO TAKE PRECEDENCE OVER DISCREPANCY FROM EDGE.

SHRUB PLANTING DETAIL



NOTES:
 1. TWO ALTERNATE METHODS OF TREE STAKING ARE SHOWN.
 2. IT IS THE CONTRACTOR'S OPTION TO STAKE TREES; HOWEVER, THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE TREES IN A PLANT POSITION THROUGHOUT THE GUARANTEE PERIOD.
 3. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING.
 4. DECIIDUOUS TREE PLANTING DETAIL

DECIDUOUS TREE PLANTING DETAIL



NOTES:
 1. TWO ALTERNATE METHODS OF TREE STAKING ARE SHOWN.
 2. IT IS THE CONTRACTOR'S OPTION TO STAKE TREES; HOWEVER, THE CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE TREES IN A PLANT POSITION THROUGHOUT THE GUARANTEE PERIOD.
 3. SCARIFY BOTTOM AND SIDES OF HOLE PRIOR TO PLANTING.
 4. CONIFEROUS TREE PLANTING DETAIL

CONIFEROUS TREE PLANTING DETAIL

Rosa
 Architectural
 Group
 Inc.

1084 Sterling Street
 St. Paul, Minnesota 55119
 tel: 651-739-7888
 fax: 651-739-3165

GROWING
 GENERATIONS

RADISSON RD. NE &
 BUNKER LAKE
 BLVD. NE
 HAM LAKE, MN

CLASSIC
 CONSTRUCTION

PH: 763-434-8870
 18542 ULYSSES ST. NE
 EAST BETHEL, MN

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

PROJ NAME: _____
 DRAWN BY: _____
 DATE: _____ NO. _____
 I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PROJ NAME: RUSSELL R. ROSA
 SIGNED: Russ Rosa
 DATE: 4/28/21 REG. NO. 180339

PROJECT NUMBER: 22103
 DATE: APRIL 5, 2021
 DRAWN BY: KF
 CHECKED BY: RR
 REVISIONS: _____

LANDSCAPE DETAILS

L1.2



**CITY OF HAM LAKE
STAFF REPORT**

To: Mayor and Councilmembers
From: Andrea Worcester, Finance Director
Item/Title/Subject: 2021 1st Quarter Financials

INTRODUCTION/DISCUSSION:

Bank accounts have been reconciled through March 31st, 2021 as well as a review of all activity in all funds has been performed. The following is a summary of my observations on the City's financial position at the end of the 1st Quarter of 2021. All information presented is unaudited.

Cash and Investments

The City's cash and investment balances are as follows:

	03/31/2021	12/31/2020	Increase/ (Decrease)
Checking	\$ 546,719	\$ 1,025,369	\$ (478,712)
Investments (at Market Value)	9,899,155	10,266,600	(367,444)
Total Cash and Investments	\$ 10,445,875	\$ 11,291,969	\$ (846,156)

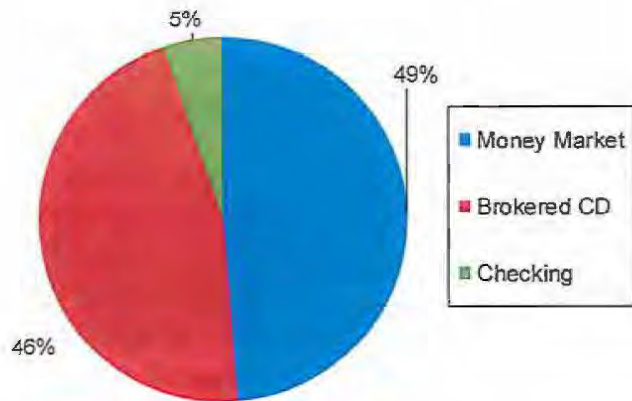
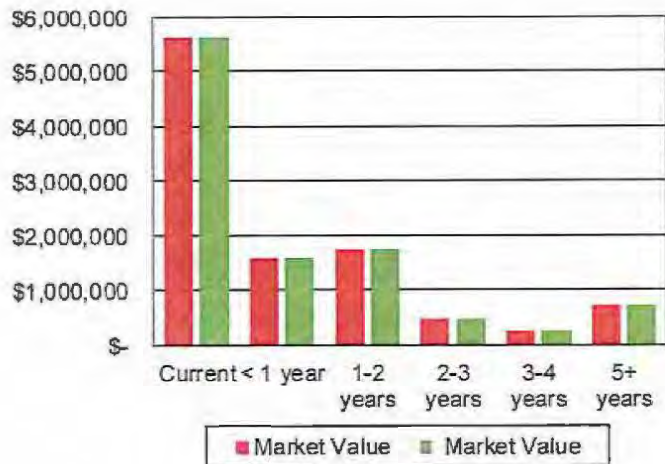
Investment Type	03/31/2021	12/31/2020	Increase/ (Decrease)
Checking	\$ 546,719	\$ 1,025,369	\$ (478,712)
Money Market	5,091,016	6,299,433	(1,208,417)
Negotiable CDs	4,808,140	3,474,283	1,333,857
Municipal Bond	-	-	-
Government Agency Securities	-	492,884	(492,884)
Total Cash and Investments	\$ 10,445,875	\$ 11,291,969	\$ (846,156)

Investment Summary
As of 3/31/2021 (unaudited)

Institution	Description	Type	Market Value 1/1/2021	Market Value 1/1/2021	Deposits - Purchases	Expenditures - Sales	Transfers	Interest	Unadjusted Market Value 3/31/2021	Market Value 3/31/2021	Unrealized gain / loss
RBC	RBC	Money Market	-	-	-	-	-	-	-	-	-
RBC	Enerbank USA Salt Lake City	Brokered CD	249,264.99	249,264.99	-	-	(1,461.69)	1,461.69	249,264.99	247,805.22	(1,459.77)
RBC	Morgan Stanley PVT BK	Brokered CD	254,041.74	254,041.74	-	-	-	-	254,041.74	252,452.58	(1,589.16)
RBC	Sallie Mae BK Murray Utah	Brokered CD	254,041.74	254,041.74	-	-	-	-	254,041.74	252,452.58	(1,589.16)
RBC	Wells Fargo Bank Natl Assn	Brokered CD	257,139.81	257,139.81	-	-	(1,565.62)	1,565.62	257,139.81	255,531.27	(1,608.54)
RBC	Ally Bank Midvale Utah	Brokered CD	254,582.94	254,582.94	-	-	(2,232.20)	2,232.20	254,582.94	253,380.00	(1,202.94)
RBC	Bank Hapoalim New York	Brokered CD	250,993.05	250,993.05	-	-	(3,321.97)	3,321.97	250,993.05	248,793.93	(2,199.12)
RBC	Goldman Sachs BK USA New York	Brokered CD	231,244.44	231,244.44	-	-	-	-	231,244.44	230,264.04	(980.40)
RBC	BMO Harris BK NATL ASSN	Brokered CD	249,271.41	249,271.41	-	-	(306.99)	306.99	249,271.41	248,937.75	(333.66)
RBC	Memick BK South Jordan Utah	Brokered CD	248,718.63	248,718.63	-	-	(245.59)	245.59	248,718.63	248,096.66	(621.97)
RBC	Texas Exchange Bk Crowley	Brokered CD	249,204.18	249,204.18	-	-	(429.79)	429.79	249,204.18	245,835.21	(3,368.97)
RBC	Malaga BK Palos Verdes Calif	Brokered CD	246,592.17	246,592.17	-	-	(306.99)	306.99	246,592.17	238,484.73	(8,107.44)
RBC	Freddie Mac	Brokered CD	246,014.76	246,014.76	-	-	-	-	246,014.76	245,736.78	(277.98)
			2,991,109.86	2,991,109.86	-	-	(9,870.84)	9,870.84	2,991,109.86	2,965,770.75	(25,339.11)
Falcon National Bank	Community Pride Bank	Money Market	65,744.59	65,744.59	-	-	586.80	40.69	66,372.08	66,372.08	-
Falcon National Bank	CD 89417 (renewed)	Brokered CD	300,000.00	300,000.00	-	-	(290.96)	290.96	300,000.00	300,000.00	-
Falcon National Bank	CD 88834 (renewed)	Brokered CD	200,000.00	200,000.00	-	-	(295.84)	295.84	200,000.00	200,000.00	-
Falcon National Bank	CD 90376 (renewed)	Brokered CD	531,083.70	531,083.70	-	-	-	785.24	531,868.94	531,868.94	-
Falcon National Bank	CD 90484 (renewed)	Brokered CD	100,500.00	100,500.00	-	-	-	-	100,500.00	100,500.00	-
			1,197,328.29	1,197,328.29	-	-	(0.00)	1,412.73	1,198,741.02	1,198,741.02	-
21st CENTURY BANK	Money Market	Money Market	501,603.40	501,603.40	-	(501,698.23)	-	94.83	0.00	-	(0.00)
21st CENTURY BANK	ICS	Money Market	-	-	501,698.23	-	-	241.93	501,940.16	501,940.16	(0.00)
21st CENTURY BANK	CD 3507 (Renewed)	Brokered CD	90,000.00	90,000.00	-	-	(133.15)	133.15	90,000.00	90,000.00	-
21st CENTURY BANK	CD 2 3508 (Renewed)	Brokered CD	90,000.00	90,000.00	-	-	(133.15)	133.15	90,000.00	90,000.00	-
21st CENTURY BANK	CD 3509 (Renewed)	Brokered CD	90,000.00	90,000.00	-	-	(133.15)	133.15	90,000.00	90,000.00	-
21st CENTURY BANK	CD 3510 (Renewed)	Brokered CD	90,000.00	90,000.00	-	-	(133.15)	133.15	90,000.00	90,000.00	-
21st CENTURY BANK	CD 3511 (Renewed)	Brokered CD	90,000.00	90,000.00	-	-	(133.15)	133.15	90,000.00	90,000.00	-
21st CENTURY BANK	CD 3512 (Renewed)	Brokered CD	50,000.00	50,000.00	-	-	(73.97)	73.97	50,000.00	50,000.00	-
21st CENTURY BANK	CD 3735 (Renewed)	Brokered CD	210,000.00	210,000.00	-	-	(344.06)	344.06	210,000.00	210,000.00	-
			1,211,603.40	1,211,603.40	501,698.23	(501,698.23)	(1,083.78)	1,420.54	1,211,940.16	1,211,940.16	(0.00)
4 M	4M Liquid Assets-101	Money Market	9.48	9.48	-	-	-	-	9.48	9.48	-
4 M	4M Plus Fund-101	Money Market	5,214,632.11	5,214,632.11	285,480.57	(1,200,000.00)	9,870.84	567.21	4,310,550.73	4,310,550.73	-
4 M	4M Plus Fund-103 Trust Investment	Money Market	212,117.77	212,117.77	-	-	-	25.56	212,143.33	212,143.33	-
			5,426,759.36	5,426,759.36	285,480.57	(1,200,000.00)	9,870.84	592.77	4,522,703.54	4,522,703.54	-
21st CENTURY BANK	Trust	Checking	317,365.68	317,365.68	145,987.77	(150.00)	-	236.67	463,440.12	463,440.12	-
21st CENTURY BANK	General/Checking	Checking	177,759.87	177,759.87	1,519,254.13	(1,613,514.75)	1,083.78	123.98	84,707.01	84,707.01	-
			495,125.55	495,125.55	1,665,241.90	(1,613,664.75)	1,083.78	360.65	548,147.13	548,147.13	-
			\$ 11,321,926.46	\$ 11,321,926.46	\$ 2,452,420.70	\$ (3,315,362.98)	\$ (0.00)	\$ 13,657.53	\$ 10,472,641.71	\$ 10,447,302.60	\$ (25,339.11)

Investment Summary (continued)
As of 3/31/2021 (unaudited)

Maturities



Maturity	Unadjusted Market Value 3/31/2021	Market Value 3/31/2021	Variance 3/31/2021
Current	\$ 5,639,162.91	\$ 5,639,162.91	\$ -
< 1 year	1,591,009.43	1,588,569.26	(2,440.17)
1-2 years	1,751,675.17	1,745,685.37	(5,989.80)
2-3 years	497,007.81	494,530.71	(2,477.10)
3-4 years	249,271.41	248,937.75	(333.66)
5+ years	744,514.98	730,416.60	(14,098.38)
	<u>\$ 10,472,641.71</u>	<u>\$ 10,447,302.60</u>	<u>\$ (25,339.11)</u>

Weighted average Rate of return	0.68%	3/31/2021
Average Maturity (years)	0.46	3/31/2021

Investment Type	Market Value 3/31/2021
Money Market	\$ 5,091,015.78
Brokered CD	4,808,139.69
Savings	-
Government Securities	-
Municipal Securities	-
Checking	548,147.13
	<u>\$ 10,447,302.60</u>

Operating Account	
O/S Deposits	\$ 7,726.35
O/S Checks	(9,154.44)
	<u>\$ 10,445,874.51</u>

Investment Summary (continued)

Current short-term rates being offered by financial institutions are very low as evidenced by the table of U.S. Treasury rates below. The U.S. Treasury rates provide a benchmark perspective for rate of return.

Treasury Yields									
Date	1 mo	3 mo	6 mo	1 yr	2 yr	3 yr	5 yr	7 yr	10 yr
12/31/2015	0.14	0.16	0.49	0.65	1.06	1.31	1.76	2.09	2.27
06/30/2016	0.20	0.26	0.36	0.45	0.58	0.71	1.01	1.29	1.49
09/30/2016	0.20	0.29	0.45	0.59	0.77	0.88	1.14	1.42	1.60
12/31/2016	0.44	0.51	0.62	0.85	1.20	1.47	1.93	2.25	2.45
03/31/2017	0.74	0.76	0.91	1.03	1.27	1.50	1.93	2.22	2.40
06/30/2017	0.84	1.03	1.14	1.24	1.38	1.55	1.89	2.14	2.31
09/30/2017	0.96	1.06	1.20	1.31	1.47	1.62	1.92	2.16	2.33
12/31/2017	1.28	1.39	1.53	1.76	1.89	1.98	2.20	2.33	2.40
03/31/2018	1.63	1.73	1.93	2.09	2.27	2.39	2.56	2.68	2.74
06/30/2018	1.77	1.93	2.11	2.33	2.52	2.63	2.73	2.81	2.85
09/30/2018	2.12	2.19	2.36	2.59	2.81	2.88	2.94	3.01	3.05
12/31/2018	2.44	2.45	2.45	2.56	2.63	2.48	2.46	2.51	2.59
03/29/2019	2.43	2.44	2.40	2.44	2.40	2.27	2.21	2.23	2.31
06/28/2019	2.18	2.12	2.09	1.92	1.75	1.71	1.76	1.87	2.00
09/30/2019	1.91	1.88	1.83	1.75	1.63	1.56	1.55	1.62	2.12
12/31/2019	1.48	1.55	1.60	1.59	1.58	1.62	1.69	1.83	1.92
03/31/2020	0.05	0.11	0.15	0.17	0.23	0.29	0.37	0.55	0.70
06/30/2020	0.13	0.16	0.18	0.16	0.16	0.18	0.29	0.49	0.66
09/30/2020	0.08	0.10	0.11	0.12	0.13	0.16	0.28	0.47	0.69
12/31/2020	0.08	0.09	0.09	0.10	0.13	0.17	0.36	0.65	0.93
03/31/2021	0.01	0.03	0.05	0.07	0.16	0.35	0.92	1.40	1.74

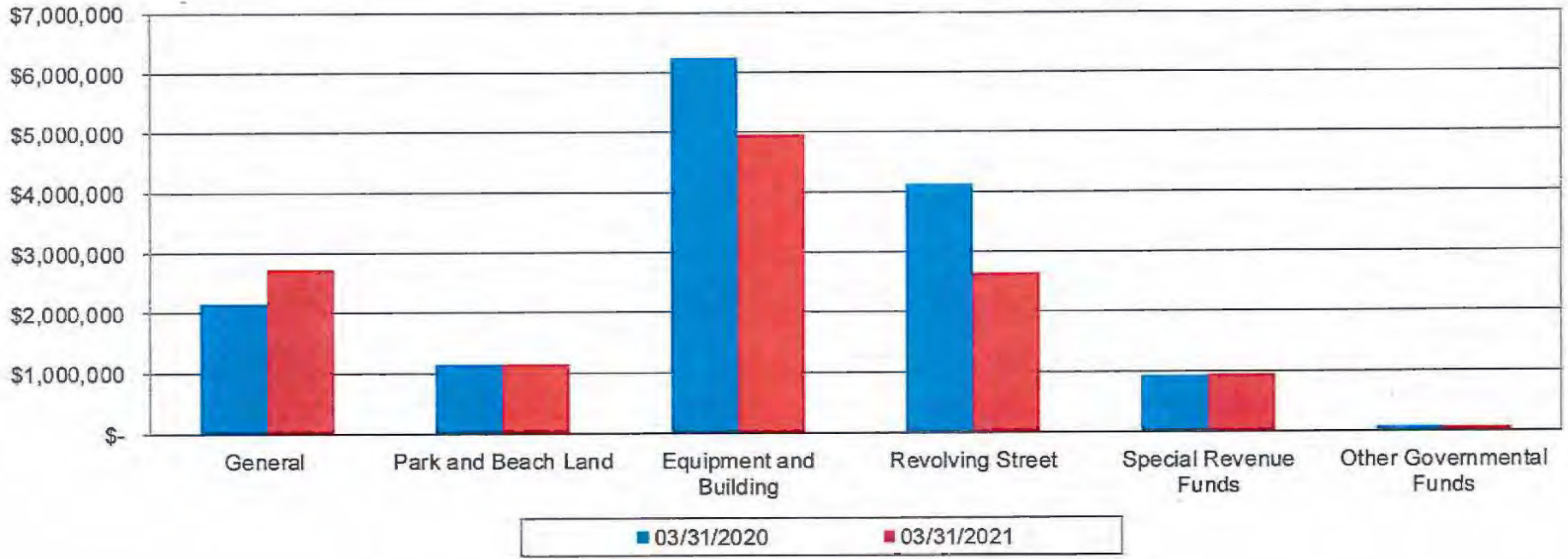
Cash Balance Summary by Fund
As of 3/31/2020, 12/31/2020, and 3/31/2021 (unaudited)

	Balance 03/31/2020	Balance 12/31/2020	Balance 03/31/2021	YTD Change From 12/31/2020
100 General Fund	\$ 2,155,058	\$ 3,699,874	\$ 2,727,601	\$ (972,274) ⁽¹⁾
210 Cable TV Fund	357,474	359,980	414,090	54,110 ⁽²⁾
211 Ham Laker Fund	(22,756)	(41,710)	(49,632)	(7,923)
212 Lawful Gambling Contributions Fund	52,652	73,116	56,444	(16,672)
217 CARES Act Grant	-	-	-	-
230 Future Drainage Fund	96,166	108,512	106,921	(1,591)
231 Recycling Fund	74,216	53,782	66,742	12,960
232 Street Light Fund	151,778	164,548	165,769	1,221
250 Oakwilt Fund	11,346	11,409	11,394	(15)
261 Economic Development Fund	17,321	1,642	1,646	4
262 Ham Lake EDA Fund	166,007	167,396	167,172	(224)
263 Lodging Tax Fund	2,015	2,913	3,131	218
370 2010 Cip Bond Debt Service Fund	77,518	265,264	83,878	(181,386) ⁽³⁾
371 2016 Go Capital Note Debt Service Fund-Nmtc	-	26	26	-
410 General Govt Equipment Fund	59,790	62,026	63,213	1,187
411 Election Equipment Fund	2,782	1,809	2,805	996
412 Building Fund	281,737	269,370	257,390	(11,980)
420 Fire Department Equipment Fund	1,198,847	1,328,071	1,383,707	55,636 ⁽⁴⁾
421 Emergency Operations Center Fund	33,793	35,990	35,942	(48)
422 Siren Replacement Fund	35,093	35,394	35,845	452
428 Building Inspection Equipment Fund	63,914	56,474	58,806	2,332
430 Public Works Equipment Fund	327,383	381,197	418,038	36,841
431 Revolving Street Fund	4,121,341	2,629,088	2,651,203	22,115
440 Park And Beach Land Fund	1,145,363	1,129,983	1,155,815	25,832
441 Parks Equipment Fund	109,175	42,015	51,866	9,851
890 Trust	346,304	453,799	576,063.42	122,264 ⁽⁵⁾
Total	<u>\$ 10,864,317</u>	<u>\$ 11,291,969</u>	<u>\$ 10,445,875</u>	<u>\$ (846,094)</u>

- Item Explanation of changes greater than \$50,000.
- ⁽¹⁾ See rev/exp for the General Fund for further explanation.
- ⁽²⁾ Franchise Fees from North Metro Communciation.
- ⁽³⁾ Principal and interest payment on bond.
- ⁽⁴⁾ Cash increased due to budgeted transfers from General Fund.
- ⁽⁵⁾ Increased Trust activity.

Cash Balance Summary by Fund
As of 3/31/2020, 12/31/2020, and 3/31/2021 (unaudited)

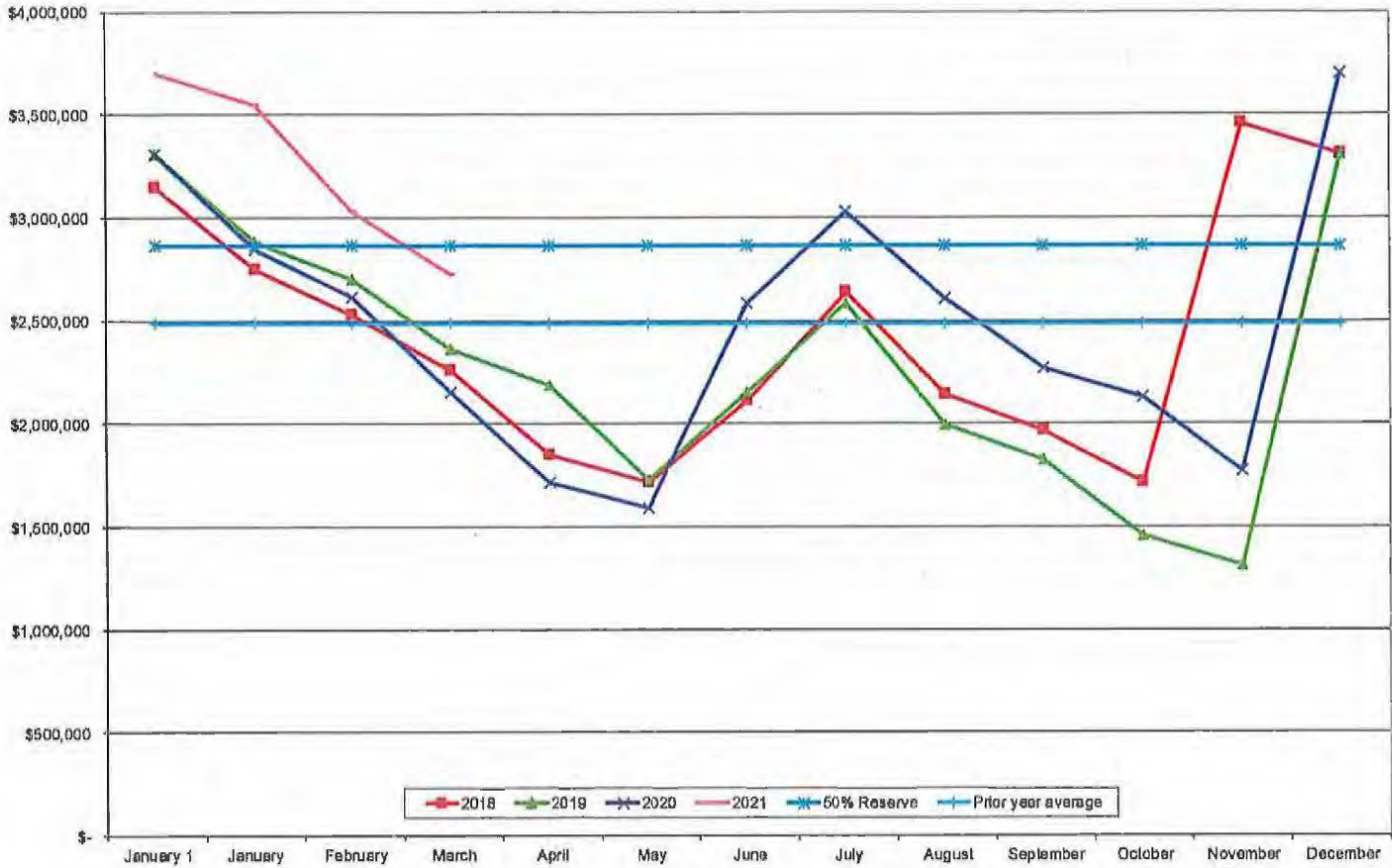
Cash Balance by Fund Compared to Prior Year



Fund	Key
General	Balance increased by more than 10% over prior year
Park and Beach Land	Balance decreased by more than 10% over prior year
Equipment and Building	Balance within 10% of prior year
Revolving Street	Balance increased by more than 10% over prior year
Special Revenue Funds	Balance within 10% of prior year
Other Governmental Funds	Balance within 10% of prior year

General Fund Budget Cash Summary (unaudited)

General Fund Cash Balances 2017 -2021



General Fund

Receipts	YTD Budget	YTD Actual	Percent of YTD Budget		Disbursements	YTD Budget	YTD Actual	Percent of YTD Budget	
Taxes	\$ 1,259,018	\$ -	- %	■	Council	\$ 21,488	\$ 25,070	116.7 %	■
Special Assessments	-	-	-	■	Administration/Clerk	70,179	64,288	77.4 %	■
Licenses and permits	112,063	92,577	82.6 %	■	Finance	82,129	65,201	79.4 %	■
Intergovernmental	37,750	1,000	2.6 %	■	Planning & Zoning	22,923	18,407	80.7 %	■
Charges for services	31,573	46,456	147.1 %	■	General Government	32,464	25,015	77.1 %	■
Fines and forfeitures	7,500	4,760	63.7 %	■	Information Technology	10,815	10,489	97.1 %	■
Interest on investments	2,500	(5,928)	(237.1) %	■	Public Safety	462,480	425,966	92.1 %	■
Miscellaneous	6,551	321	4.9 %	■	Building Department	75,661	68,712	90.8 %	■
Transfers in	300	-	-	■	Public Works	253,086	231,603	91.5 %	■
	<u>\$ 1,457,255</u>	<u>\$ 139,206</u>	<u>9.6 %</u>	■	Parks and recreation	72,796	20,631	28.3 %	■
					Senior Center	3,385	2,629	77.7 %	■
					Transfers Out	326,260	325,250	100.0 %	■
						<u>\$ 1,432,555</u>	<u>\$ 1,273,272</u>	<u>88.9 %</u>	

Key

- Varies more than 10% than budget positively
- Varies more than 10% than budget negatively
- Within 10% of budget

General Fund Budget Summary
As of 3/31/2021 (unaudited)

	Annual Budget	Budget Thru 3/31/2021 25%	Actual Thru 3/31/2021	Variance - Favorable (Unfavorable)	Percent Received or Expended Based on Budget thru 3/31/2021
Revenues					
Taxes	\$ 5,036,071	\$ 1,259,018	\$ -	\$ (1,259,018) ^{¶(1)}	0.00 %
Special Assessments	-	-	-	-	N/A
Licenses and permits	448,250	112,063	92,577	(19,485)	82.61
Intergovernmental	151,000	37,750	1,000	(36,750) ^{¶(2)}	2.65
Charges for services	126,293	31,573	46,456	14,883	147.14
Fines and forfeitures	30,000	7,500	4,780	(2,720)	63.74
Interest on investments	10,000	2,500	(5,928)	(8,428) ^{¶(3)}	(237.12)
Miscellaneous	26,205	6,551	321	(6,230)	4.90
Total Revenues	5,827,819	1,456,955	139,206	(1,317,748)	
Expenditures					
Council	\$ 85,952	\$ 21,488	\$ 25,070	\$ (3,582)	116.67 %
Administration/Clerk	280,718	70,179	54,288	15,892	77.36
Finance	328,516	82,129	65,201	16,928	79.39
Planning & Zoning	91,292	22,823	18,407	4,416	80.65
General Government	129,855	32,464	25,015	7,449	77.05
Information Technology	43,258	10,815	10,499	316	97.08
Public Safety	1,849,918	462,480	425,966	36,514	92.10
Building Department	302,645	75,661	68,712	6,949	90.82
Public Works	1,012,344	253,086	231,603	21,483	91.51
Parks and recreation	291,182	72,796	20,631	52,165 ^{¶(4)}	28.34
Senior Center	13,540	3,385	2,629	756	78
Total Expenditures	4,429,220	1,107,305	948,022	159,283	85.62
Excess Revenues (Expenditures)	1,398,599	349,650	(808,816)	(1,158,466)	
Other Financing Sources (Uses)					
Transfers in	1,200	300	-	-	-
Transfers out	(1,301,000)	(325,250)	(325,250)	-	100.00
TOTAL OTHER FINANCING SOURCES (USES)	(1,299,800)	(324,950)	(325,250)	-	
Excess (Deficiency) of Revenues and Other Financing Sources Over (Under) Expenditures and Other Uses	\$ 98,799	\$ 24,700	\$ (1,134,066)	\$ (1,158,466)	

Item Explanation of items percentage received/expended less than 90% or greater than 110% and \$ variance greater than \$20,000.

- ¶(1) Tax Settlements are received in June, December, and January
- ¶(2) MSA Funding comes in July and Fire Relief State as well as the Agriculture Credit come in October.
- ¶(3) Our broker CD rates tumbled last year at the start of the pandemic and have yet to recover.
- ¶(4) There has been less activity at the parks to due COVID-19 as well as most expenditures are seasonal based.

A detailed report of revenues and expenditures can be provided upon request.

Meeting Date: May 3rd, 2021



CITY OF HAM LAKE
MEMO

To: Mayor and Councilmembers
From: Andrea Worcester, Finance/Human Resource Director
Subject: Transfer from the General Fund to the Revolving Street Fund

Introduction/Discussion:

At the last Council meeting, our auditor reported the General Fund's fund balance increased \$588,609 in 2020 and ended the year at \$3,818,890. This end of year fund balance contributed to a fund balance ratio is 66.6 percent and well above the 35-50 percent required by the City's Fund Balance Policy. Based on the historical trend of the City, it the fund balance ratio has been kept at an average of 57 percent year over year. In order to move back into the normal ration, a transfer of \$550,470 should be done from the General Fund.

The Revolving Street Fund's fund balance decreased \$719,920 in 2020 and ended with a total of \$898,185. In the next couple of years, the fund is going to have some large projects that it will struggle to fully fund without more revenue sources.

Recommendation:

I recommend transferring \$550,470 from the General Fund to the Revolving Street fund.

April 29, 2021

Honorable Mayor and Councilmembers
City of Ham Lake
15544 Central Avenue NE
Ham Lake, Minnesota 55304

Re: East Frontage Road south of Crosstown Boulevard Feasibility Study

Dear Mayor and Council Members.

The City Council resolution requesting Anoka County Housing & Redevelopment Authority funding for the preparation of a feasibility study was approved at the February 23rd Housing & Redevelopment Authority meeting for construction of MSA Chisholm Street/ 173rd Lane and Baltimore Street from the Chisholm Street temporary cul-de-sac being construction by Holiday Station Store to 171st Avenue. The purpose of this report is to determine the project necessity, feasibility, cost effectiveness and recommendations on construction.

EXISTING CONDITIONS:

The existing service driveway south of Crosstown Boulevard gives access to the Holiday Station Store and to the Baltimore Street cul-de-sac. The Baltimore Street cul-de-sac is a 29-foot-wide rural section that is 183 feet long and has not been improved in recent years. The Baltimore Street cul-de-sac has an access to the Holiday Station Store and the former VFW parking lot (Figure 1), as well as right-in and right-out access to Crosstown Boulevard (CSAH 18).

Drainage from Baltimore Street drains to two structures on the north end of either side of Baltimore Street and is maintained by the City of Ham Lake. The structures discharge into the existing County ditch.

The Holiday owned parcels adjacent to Highway 65 and south of Crosstown are parcels 05-32-23-43-0012, 05-32-23-43-0016 and 05-32-23-43-0017. There are four other parcels owned by Holiday, 05-32-23-43-0005, 05-32-23-0004, 05-32-23-43-0002, 05-32-23-43-0003. Ditch 58-3-1 is located on the eastern portion of parcel 05-32-23-43-0017.

Also adjacent to Highway 65, Jake's Auto Mall is located on the western portion of parcel 08-32-23-12-0021 and owned by Northwest Real Estate LLC. Parcel 08-32-23-12-0003 is adjacent to Highway 65. It is a vacant property and owned by Osborne Development, Inc. with a 30-foot road easement dedicated to the City of Ham Lake on the west side of the parcel, east of the MnDOT right-of-way and the adjacent Osborne Development parcel is 08-32-23-12-0019.

Soils:

Soils were evaluated using the Anoka County Soils Map (Figure 2). The soils in the area consist of Cut and Fill soils, Zimmerman Fine Sand B and C, Soderville Fine Sand, Lino Loamy Fine Sand and Isanti Fine Sandy Loam. The suitable cut material will be used for fill. The Cut and Fill soils are unknown. The Zimmerman Fine Sand and Soderville Fine Sand are suitable for road subbase. They are generally well drained that generally covers the higher ground. Lino Loamy Fine Sand is a poorly drained soil with a relatively high-water table and will likely require placement of suitable fill from site excavation or imported soils for roadway

construction. Due to the high-water table, Lino Loamy Fine Sand is not suitable for stormwater infiltration but will be replaced with site soils due to wetland impacts for the roadway. The Isanti Fine Sandy Loam is in low-lying areas near organic soils, has high water tables and is poorly drained, usually requiring proper drainage and/or placement of suitable fill for roadway construction. The estimated excavation and unsuitable soils excavation and granular borrow quantities are included in the estimated project cost (Figure 3).

Wetlands and Flood Zone:

Wetlands exist adjacent to the proposed street improvements. Figure 4 illustrates the approximate wetland locations based on the National Wetland Inventory. Wetlands affected by the proposed improvements would be delineated prior to beginning preparation of plans. The Flood Zone Map, Figure 5, shows an area adjacent to County Ditch 58-3-1 within Zone A (100-year flood area). As proposed, this street improvement project will not be affected by the 100-year flood area.

Right-of-Way and Easements:

The Baltimore Street right-of-way and the cul-de-sac will no longer be needed and will be removed and vacated after City approved acceptance of the final plat and construction plans for the proposed Holiday Station Store.

Parcel 08-32-23-12-0003 is adjacent to Highway 65 and has a 30-foot easement, according to the Anoka County Half Section Map, on the west side of the parcel, east of the MnDOT right-of-way, which will be vacated as it is no longer needed (Figure 6).

Proposed Improvements:

The proposed improvements include a 9-ton commercial street section design that meets the criteria for a minimum Minnesota State Aid Street section. The proposed is approximately 2,443 feet long through the proposed Business Park. The urban section is 29-foot wide pavement with B618 concrete curb and gutter. The street section will be 6 ½-inches of class 5 aggregate and 4-inches of bituminous pavement (Figure 7).

Soil correction is recommended where unsuitable and organic soils are found. Some of the unsuitable soil can be replaced with cut soils. However, without any correction, the roadway in those areas will be susceptible to differential settlement.

Figure 8 is a map of the proposed improvements. Construction of the urban section with concrete curb and gutter would require less maintenance and right-of-way compared to ditches, and will convey runoff away from the new street base and subgrade into a treatment and ponding area. The existing pond area north of 171st Avenue may require expansion or relocation and would be used for storage and/or as a sedimentation basin provided that it meets design standards. Additional ponding areas may be required to satisfy Coon Creek Watershed District water quality requirements.

The Holiday Station Store is planning improvements to the property, which includes the razing of the former VFW and the existing Holiday and constructing a new Holiday Station Store

(Figure 11-1 and 11-2). The right-in private access at the northwest corner of the Holiday parcel 05-32-23-43-0012 will be removed with the proposed Holiday improvements. There are three ponds within easements proposed on the property to manage stormwater. Holiday will construct the northerly 334 feet of municipal state aid Chisholm Street, which will terminate on the south end with a temporary cul-de-sac. The proposed street stub is approximately 334 feet in length with a commercial street section as seen in Figure 4. There will be an 8-foot paved bike path within the 20-foot easement from the temporary cul-de-sac easterly to Soderville Park.

Zoning:

The frontage road traverses thru four different parcels under the ownership of three different entities, which are from north to south:

- Outlot A of the proposed 2 lot Circle K plat (19.50 acres)
- 17255 Highway 65 - Northwest Real Estate LLC (08-32-23-12-0021 – 8.14 acres)
- Osborne Development Inc
 - 08-32-23-12-0003 – 5.30 acres
 - 08-32-23-12-0019 – 4.33 acres

With the exception of the southeast corner of Outlot A, which is zoned Single Family Residential (R-1), that portion of Outlot A that is currently not zoned Commercial Development Tier 1 (CD-1) is proposed to be zoned CD-1. The R-1 zoning results from preliminary plat approval of the 4 residential lots in Krawiecki Addition (Figure 10) in 2003. The 08-32-23-12-0021 parcel and the 08-32-23-12-0003 parcel are currently zoned CD-1. The 08-32-23-12-0019 parcel is currently zoned Commercial Development Tier 2 (CD-2). The current zoning map is attached as Figure 9.

Right-of-Way and Easements:

A 60-foot right-of-way will be required along the 0.46-mile length of the proposed roadway from the proposed Chisholm Street south of Crosstown Boulevard to 171st Avenue and Baltimore Street on the southern end of the project. The roadway transverses four properties where road easements would be obtained. Holiday will gift road easements through three parcels, 05-32-23-43-0005, 05-32-23-43-0004 and 05-32-23-43-0017 and stormwater easements through 1 parcel, 05-32-23-43-0017. Osborne Development, Inc. will gift the road and stormwater easements to the City on two parcels, 08-32-23-12-0003 and 08-32-23-12-0019. Right-of-way and a stormwater pipe easement will need to be acquired from Jake's Auto Mall. The estimated cost to acquire right-of-way and stormwater easements is from \$2.25 to \$3.75 per square foot. At 47,100 square feet, the total will be between \$105,975 and \$176,625.

Cost Estimate:

The project cost estimates are based on anticipated 2022 construction prices plus a 17% project development cost and an 8% engineering and inspection cost (Figure 3). The final design has not been completed and therefore unknown work is not included in the estimate. The cost estimate includes subgrade correction, storm piping, and right-of-way and easement acquisition. Where additional costs may arise are additional subgrade correction and storm drainage/ponding.

Potential Subdivision of Parcels:

The ultimate development (Figure 12) of the proposed Holiday (Circle K) lot combination creates a total of 6 lots from the existing 7 lots.

Parcel 08-32-23-12-0021 will split the parcel into two lots from the existing one.

Parcels 08-32-23-12-0003 and 08-32-23-12-0019 will split the parcels into four commercial parcels from the existing two parcels.

The parcels can be found at:

Osborne (2 parcels)

1. <https://gis.anokacountymn.gov/propertysearch/?find=08-32-23-12-0003> (5.30 acres)
2. <https://gis.anokacountymn.gov/propertysearch/?find=08-32-23-12-0019> (4.33 acres)

Jake's Auto Mall (1 parcel)

3. <https://gis.anokacountymn.gov/propertysearch/?find=08-32-23-12-0021> (8.14 acres)

Circle K (1 parcel – Outlot A of proposed plat, which includes R-1 residential SE corner)

4. <https://gis.anokacountymn.gov/propertysearch/?find=05-32-23-43-0017> (current acreage of 21.83 acres)

Anticipated Revenues:

The proposed funding is anticipated to be from advancements from the Local Partnership Program, Anoka County Housing and Redevelopment Authority (HRA), Assessments and Drainage Funds and/or bonding for the project.

The total Local Partnership Program funding available for the fiscal year 2023 is \$2.74 million. The anticipated allowable maximum Local Partnership Program award is \$710,000.00 and can include up to 8% for construction engineering resulting in a very competitive funding program. The project is required to deliver a benefit to both the local community and the trunk highway system. This project will benefit the state highway system by closing three Highway 65 accesses at parcels 05-32-23-43-0017 (two) and 08-32-23-43-12-0021.

Anoka County Housing and Redevelopment Authority has funding available with a maximum of \$25,000. Although the funding is flexible, there are guidelines and are generally used for assistance of infrastructure costs once the planning due diligence is complete.

Assuming the advance will take place in 2022, advancing from future MSA funds is limited to three times the previous year's allotment or \$2,000,000, whichever is less. See attached Municipal State Aid Construction Account Advance Guidelines. The City could take advantage of the present low construction costs and low bonding cost due to the present economy and bond for the project.

April 29, 2021
Honorable Mayor and Councilmembers
Page 5

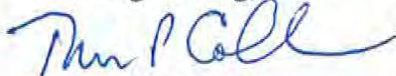
City policy is to assess benefitted parcels for the improvement. Although the Holiday parcels and the Osborne parcels benefit, the gift of easements exclude them from assessment. There will be one active assessment, Jake's Auto Mall. The total number of assessments is one.

City funds may be used for costs after funding allotment.

The estimated construction costs are \$1,525,173.66 (Figure 3).

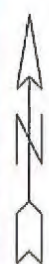
Sincerely,

RFC Engineering, Inc.

A handwritten signature in blue ink, appearing to read "Tom P. Collins".

Tom Collins, P.E.
Ham Lake City Engineer

cc: File 2020.083
cc: 2021 correspondence



Description
 POTENTIAL HRA PROJECT

Drawn
 CSA

Date
 3/9/21

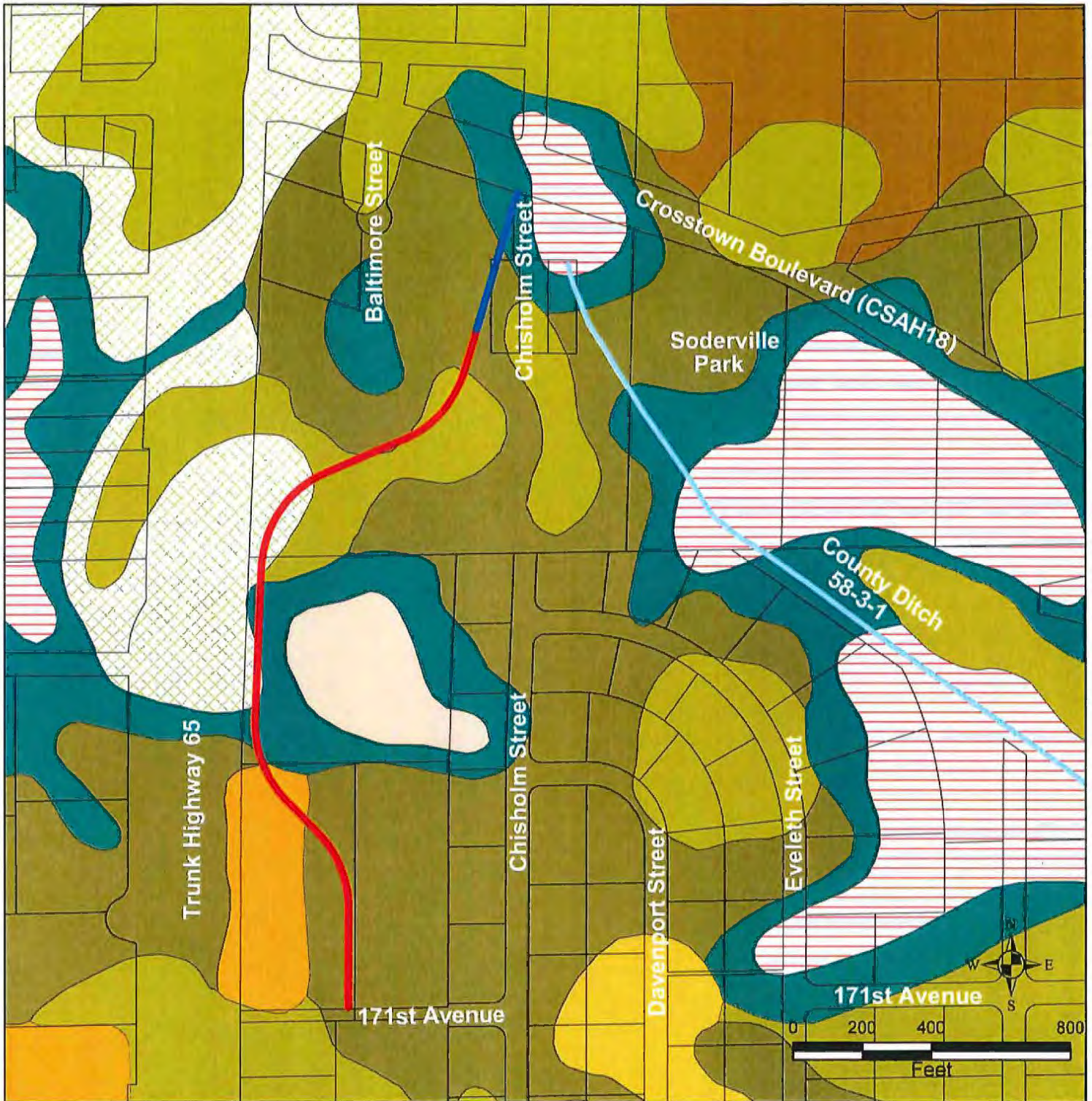
Project No.
 2002.083

Figure No.
 1

Project
 FEASIBILITY STUDY
 EAST FRONTAGE ROAD

13635 Johnson Street
 Ham Lake, MN 55304
 Voice: 763.862.8000
 Fax: 763.862.8042





- | | | |
|-----------------------------|-----------------------------|------------------------------|
| Anoka Loamy Fine Sand (AnA) | Marsh (Mc) | Ditches |
| Cut and Fill Land (Cu) | Soderville Fine Sand (SoA) | Holiday Proposed Improvement |
| Isanti Fine Sandy Loam (Iw) | Zimmerman Fine Sand B (ZmB) | Potential HRA Project |
| Lino Loamy Fine Sand (LnA) | Zimmerman Fine Sand C (ZmC) | |
| Markey Muck (Ma) | | |

Sheet Title:
SOILS MAP

Drawn:
EMP

Date:
3/10/2021

Project No.
2002.083

Figure No.
2

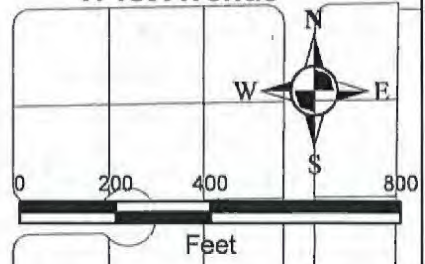
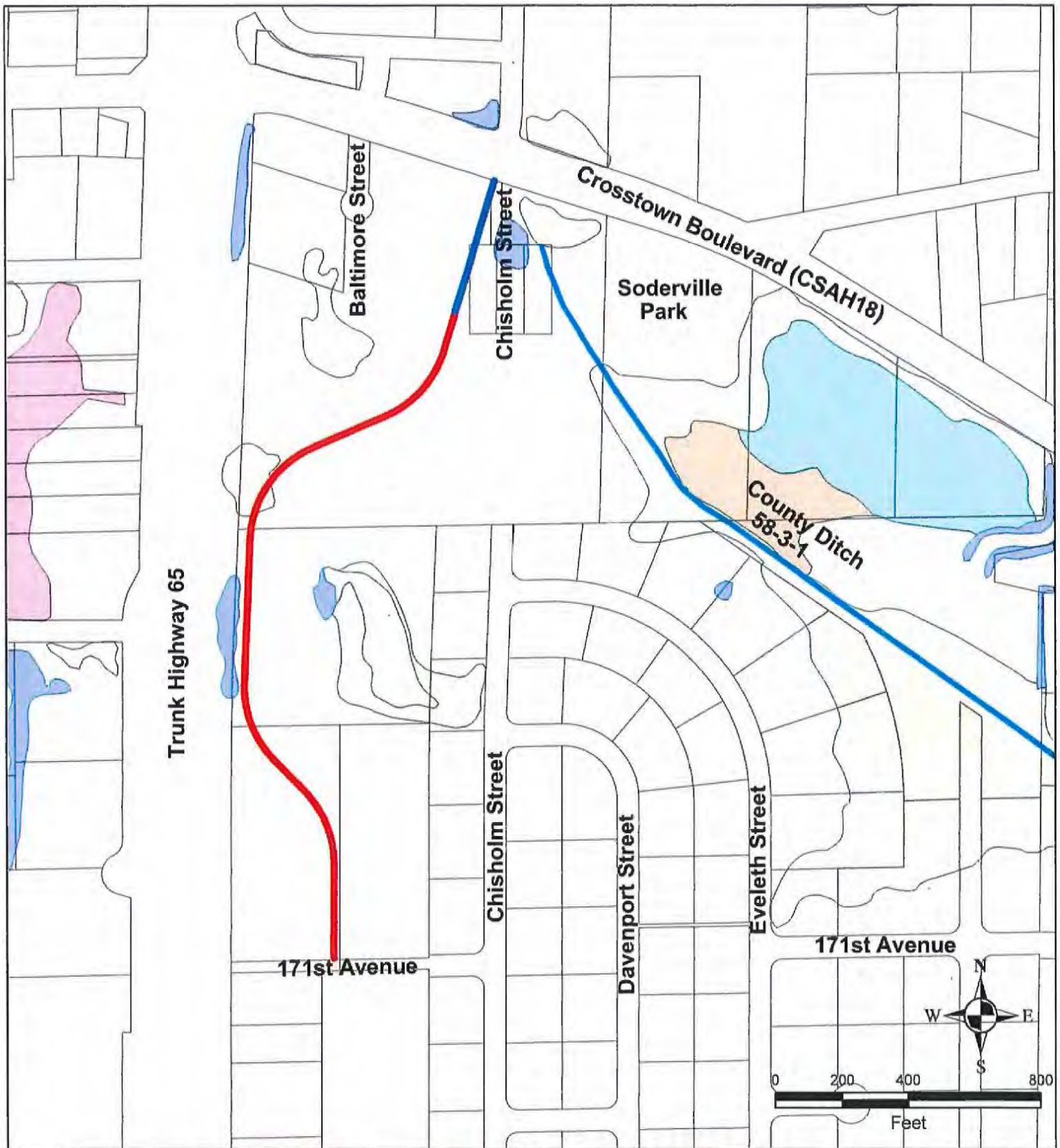
Project:
FEASIBILITY STUDY
EAST FRONTAGE ROAD

13635 Johnson Street
Ham Lake, MN 55304
Telephone (763) 862-8000
Fax (763) 862-8042



CONSTRUCTION COST ESTIMATE
 MSA 197-119-001
 East Frontage Road
 4/29/2021

ITEM NUMBER	ITEM DESCRIPTION	UNIT	EST QTY	UNIT PRICE	TOTAL
2021.501	MOBILIZATION	LUMP SUM	1	\$75,000.00	\$75,000.00
2101.511	CLEARING AND GRUBBING	LUMP SUM	1	\$8,000.00	\$8,000.00
2104.505	REMOVE BITUMINOUS PAVEMENT	SQ YD	1,558	\$5.50	\$8,569.00
2104.513	SAWING BITUMINOUS PAVEMENT (FULL DEPTH)	LIN FT	320	\$3.50	\$1,120.00
2105.501	COMMON EXCAVATION	CU YD	5,451	\$18.70	\$101,933.70
2105.504	GEOTEXTILE FABRIC TYPE 1	SQ YD	30	\$5.25	\$157.50
2105.507	MUCK EXCAVATION (LV)	CU YD	2,241	\$15.00	\$33,615.00
2105.521	GRANULAR BORROW (CV)	CU YD	2,913	\$24.00	\$69,912.00
2105.607	TOPSOIL PLACEMENT (CV)	CU YD	589	\$9.50	\$5,595.50
2211.501	AGGREGATE BASE, CLASS 5 OR 7	TON	3,423	\$28.40	\$97,213.20
2211.501	AGGREGATE BASE CLASS 5 DRIVEWAY	TON	114	\$28.40	\$3,237.60
2357.502	BITUMINOUS MATERIAL FOR TACK COAT	GALLON	384	\$2.90	\$1,113.60
2360.501	TYPE SP 12.5 WEARING COURSE MIXTURE (2;B) DRIVEWAY 2.0" THICK	TON	80	\$96.00	\$7,680.00
2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (2C) DRIVEWAY 1.0" THICK	TON	40	\$111.00	\$4,440.00
2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (2,C)	TON	1,032	\$96.00	\$99,072.00
2360.501	TYPE SP 12.5 WEARING COURSE MIXTURE (2,B OR C)	TON	1,032	\$111.00	\$114,552.00
2501.602	24" PIPE APRON	EACH	5	\$900.00	\$4,500.00
2501.602	TRASH GUARD FOR 24" PIPE APRON	EACH	5	\$350.00	\$1,750.00
2503.511	24" CP PIPE SEWER	LIN FT	137	\$80.00	\$10,960.00
2503.511	15" RC PIPE SEWER CLASS IV	LIN FT	1,031	\$69.00	\$71,139.00
2503.511	18" RC PIPE SEWER CLASS IV	LIN FT	909	\$79.00	\$71,811.00
2503.511	24" RC PIPE SEWER CLASS IV	LIN FT	214	\$89.00	\$19,046.00
2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN SPECIAL 1	EACH	12	\$3,930.00	\$47,160.00
2506.602	CATCH BASIN	EACH	8	\$3,179.00	\$25,432.00
2511.501	RANDOM RIPRAP CLASS III	CU YD	40	\$18.00	\$720.00
2531.501	CONCRETE CURB & GUTTER DESIGN B618	LIN FT	4,815	\$28.00	\$134,820.00
2540.602	INSTALL MAIL BOX SUPPORT	EACH	1	\$203.00	\$203.00
2563.601	TRAFFIC CONTROL	LUMP SUM	1	\$8,000.00	\$8,000.00
2564.531	SIGN PANELS TYPE C	SQ FT	35	\$76.00	\$2,660.00
2573.501	STABILIZED CONSTRUCTION EXIT	LUMP SUM	1	\$8,800.00	\$8,800.00
2573.502	SILT FENCE, TYPE HEAVY DUTY	LIN FT	4,900	\$2.80	\$13,720.00
2573.502	STORM DRAIN INLET PROTECTION	EACH	22	\$199.00	\$4,378.00
2573.560	CULVERT END CONTROLS	EACH	5	\$275.00	\$1,375.00
2575.601	EROSION CONTROL	LUMP SUM	1	\$5,000.00	\$5,000.00
2575.605	TURF ESTABLISHMENT	ACRE	2.7	\$5,000.00	\$13,500.00
2582.503	4" DOUBLE SOLID LINE YELLOW PAINT	LIN FT	2,443	\$0.81	\$1,978.83
2582.503	4" SOLID LINE MULTI-COMPONENT GROUND IN (WR)	LIN FT	60	\$6.25	\$375.00
TOTAL ESTIMATED CONSTRUCTION COST					\$1,078,538.93
PROJECT DEVELOPMENT COSTS (17%)					\$183,351.62
CONSTRUCTION ENGINEERING & INSPECTION COSTS (8%)					\$86,283.11
LAND ACQUISITION					\$177,000.00
TOTAL PROJECT COST					\$1,525,173.66



- Emergent Wetland
- Pond
- Shrub/Emergent Wetland
- Holiday Proposed Improvement
- Forested Wetland
- Shrub Wetland
- Ditches
- Potential HRA Project

Sheet Title:
NATIONAL WETLAND INVENTORY

Drawn:
EMP

Date:
3/22/2021

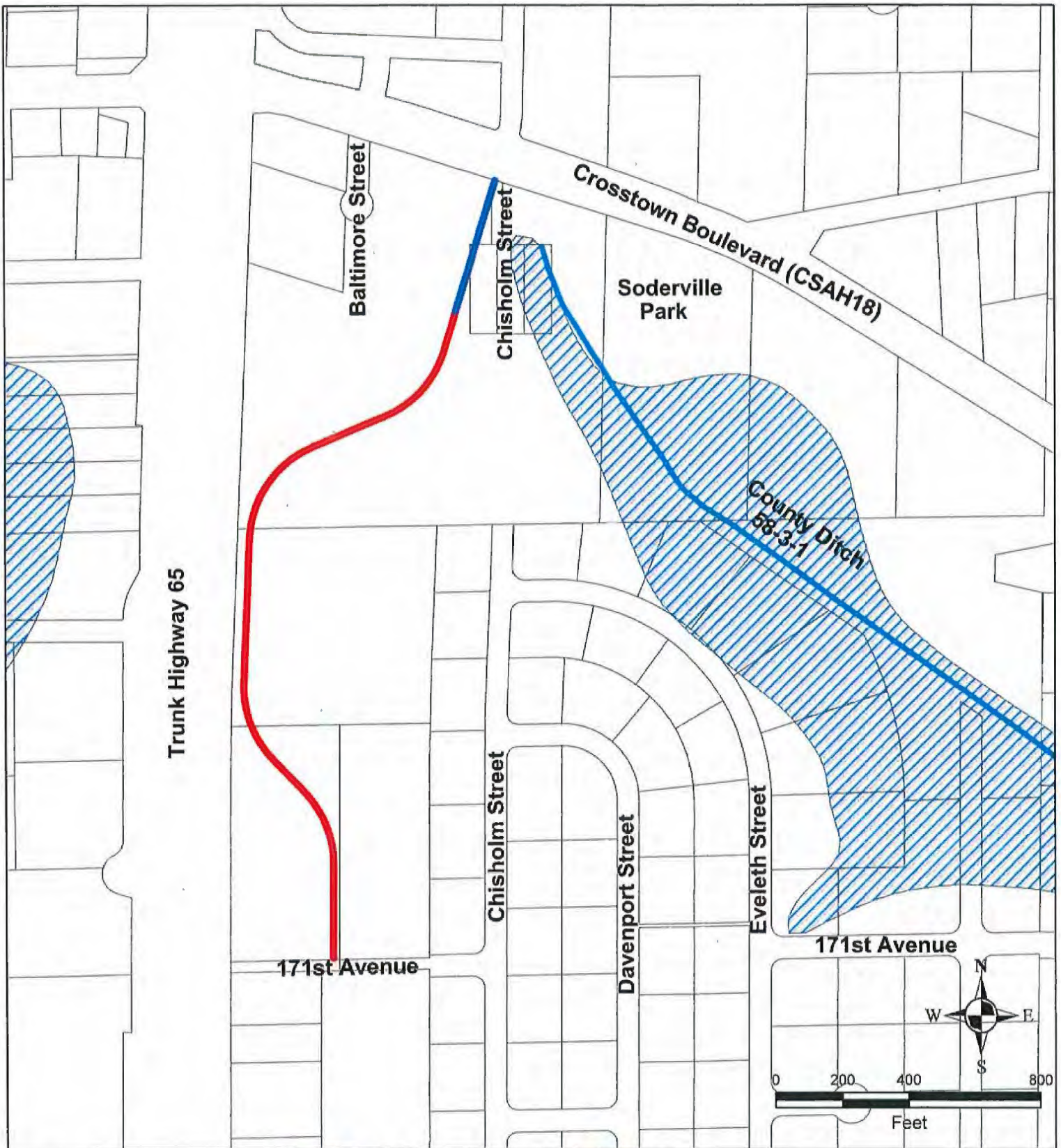
Project No.
2002.083

Figure No.
4

Project:
FEASIBILITY STUDY
EAST FRONTAGE ROAD

13635 Johnson Street
Ham Lake, MN 55304
Telephone (763) 862-8000
Fax (763) 862-8042





- Holiday Proposed Improvement
- Potential HRA Project
- Ditches
- Flood Zone A

Sheet Title:
FLOOD ZONE MAP

Project:
FEASIBILITY STUDY
EAST FRONTAGE ROAD

Drawn:
EMP

Date:
3/22/2021

Project No.
2002.083

Figure No.
5

13635 Johnson Street
Ham Lake, MN 55304
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Fax (763) 862-8042



S 1/2 SECTION 5, T. 32, R. 23

CITY OF HAM LAKE

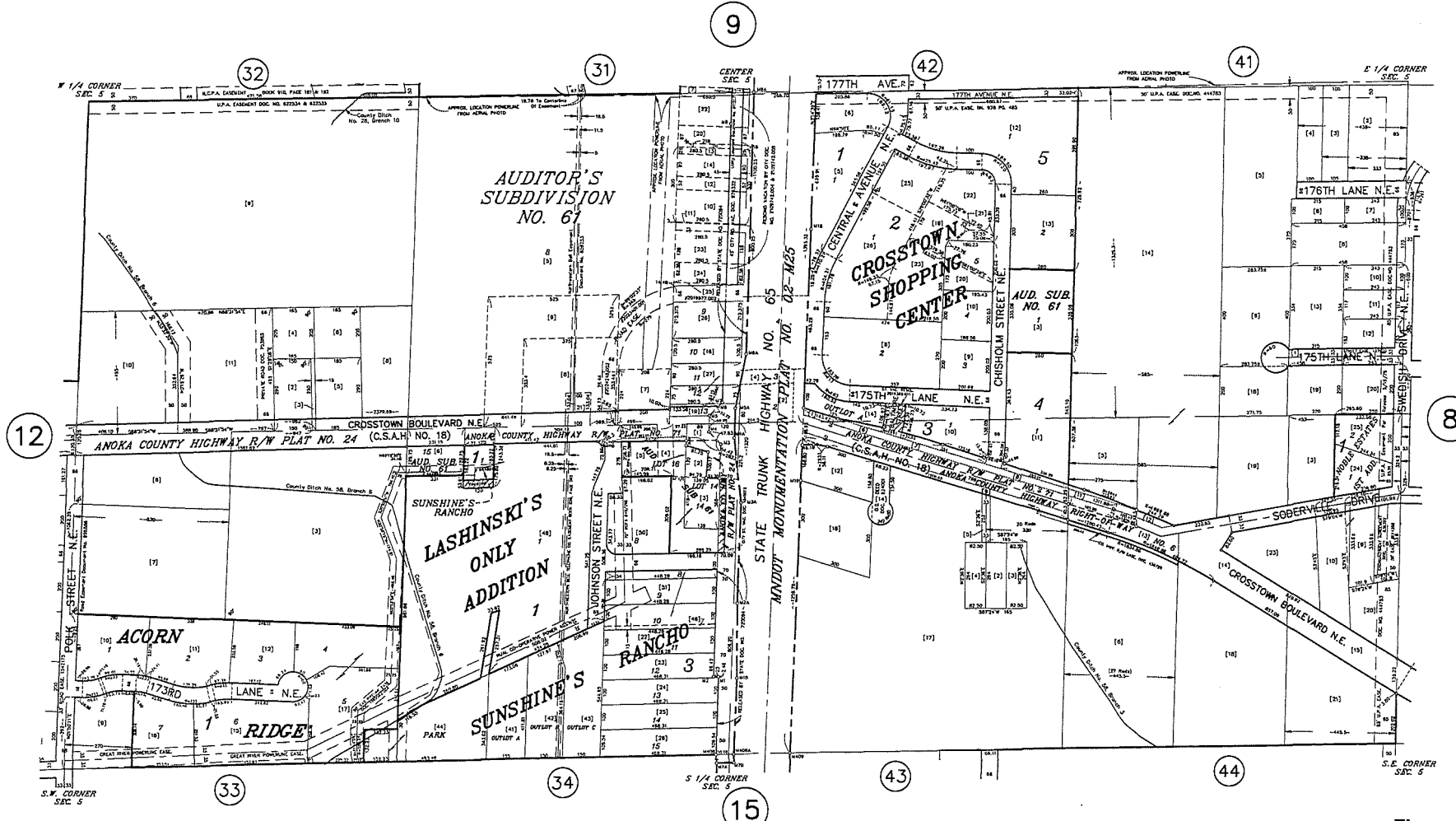
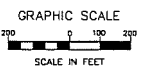
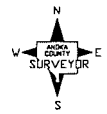


Figure 6-1



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

QUARTER QUARTER INDEX

22	21	12	11
23	24	13	14
32	31	22	21
33	34	23	24

NORTH HALF OF SECTION

SOUTH HALF OF SECTION

PROPERTY IDENTIFICATION NUMBER

Section	Township	Range	Quarter	Specific
Number	Number	Number	Number	Parcel
XX	XX	XX	XX	XXXX

SPECIFIC PARCEL NUMBERS ARE IN BRACKETS: [1]
EXAMPLE OF PIN NUMBER: 05-32-23-34-0043

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

N 1/2 SECTION 8, T. 32, R. 23

CITY OF HAM LAKE

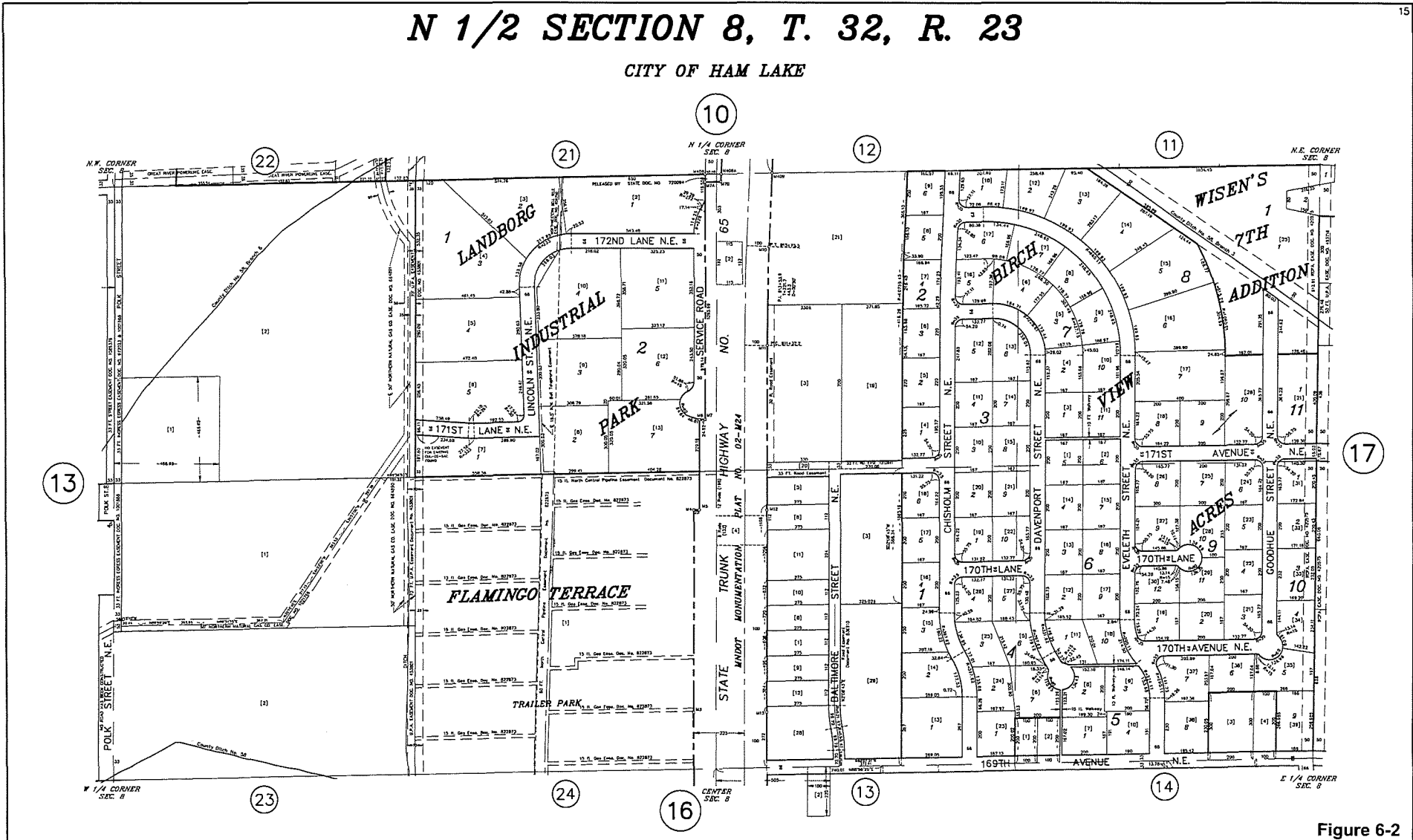
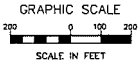


Figure 6-2



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

QUARTER QUARTER INDEX

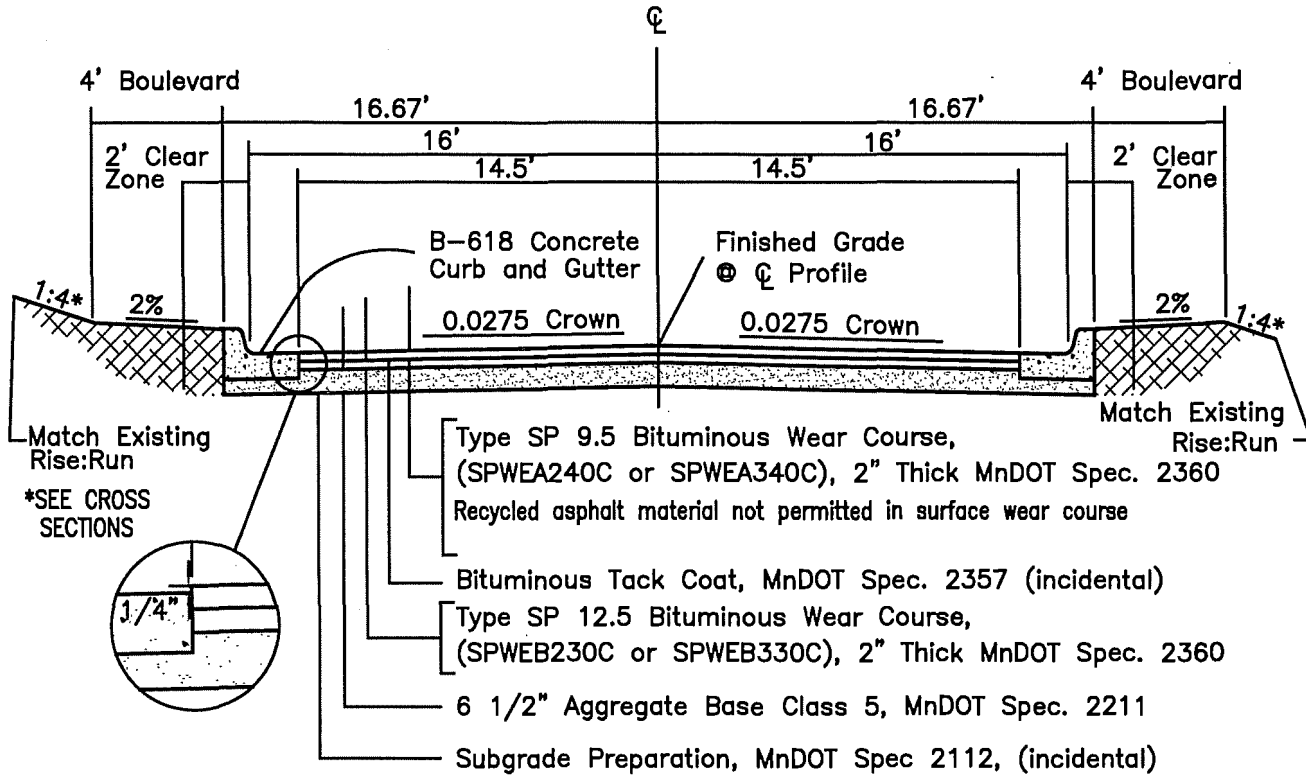
22	21	12	11
23	24	13	14
NORTH HALF OF SECTION			
32	31	42	41
33	34	43	44
SOUTH HALF OF SECTION			

PROPERTY IDENTIFICATION NUMBER

Section Township Range Quarter Specific
Number Number Number Quarter Parcel
XX XX XX XX XXXX

SPECIFIC PARCEL NUMBERS ARE IN BRACKETS: [1]
EXAMPLE OF PIN NUMBER: 06-32-23-13-013

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



TYPICAL URBAN SECTION

TYPICAL STREET SECTION

COMMERCIAL 9-TON RFC-366B1A

NOT TO SCALE

Sheet Title
TYPICAL STREET SECTION

Drawn
CSA

Date
3/9/21

Project No.
2003.083

Figure No.
7

Project
FEASIBILITY STUDY
EAST FRONTAGE ROAD

13635 Johnson Street
Ham Lake, MN 55304
Telephone (763) 862-8000
Fax (763) 862-8042



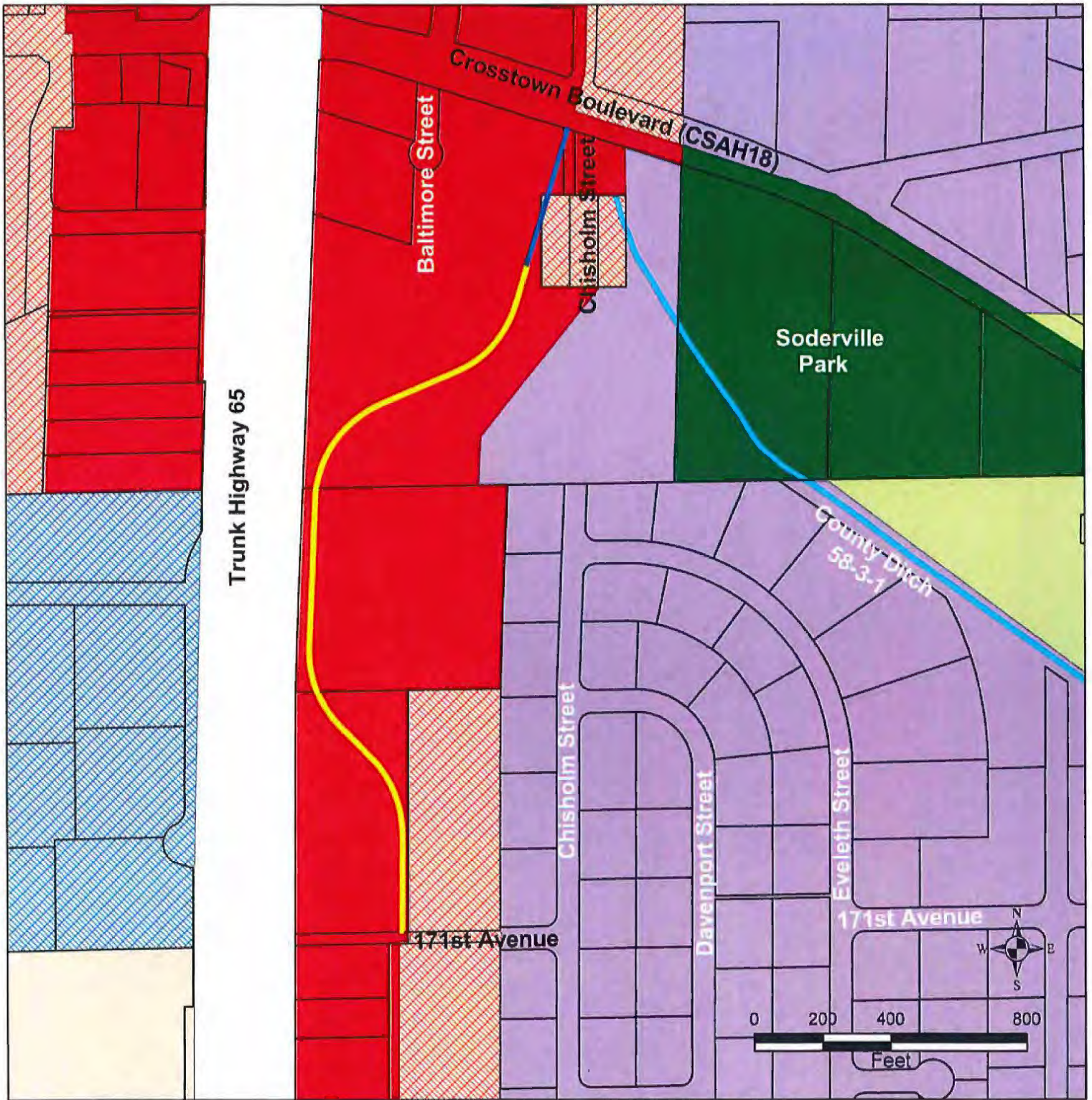
Description POTENTIAL HRA PROJECT	Drawn CSA	Date 3/9/21	Project No. 2002.083	Figure No. 8
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









Project
 FEASIBILITY STUDY
 EAST FRONTAGE ROAD

13635 Johnson Street
 Ham Lake, MN 55304
 Voice: 763.862.8000
 Fax: 763.862.8042



RFC
 Engineering, Inc.
 CONSULTING ENGINEERS



- | | | |
|--|--|--|
|  R-A Rural Single Family Residential |  CD-1 Commercial Development Tier 1 |  Potential HRA Project |
|  R-1 Single Family Residential |  CD-2 Commercial Development Tier 2 |  Holiday Proposed Improvement |
|  R-M Residential/Manufactured Mobile Homes |  I-P Industrial Park |  Ditches |
| |  Park | |

Sheet Title:
ZONING MAP

Project:
FEASIBILITY STUDY
EAST FRONTAGE ROAD

Drawn:
EMP

Date:
3/26/2021

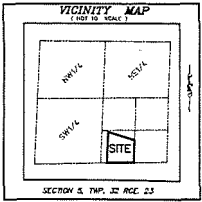
Project No.
2002.083

Figure No.
9

13635 Johnson Street
Ham Lake, MN 55304
Telephone (763) 862-8000
Fax (763) 862-8042



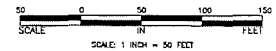
HOLIDAY STATION STORE HAM LAKE



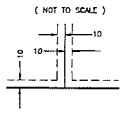
LEGEND

- DENOTES 3/4 INCH X 18 INCH IRON PIPE MONUMENT SET AND MARKED BY LICENSE NUMBER 22448 UNLESS OTHERWISE INDICATED.
- DENOTES 3/4 INCH IRON PIPE MONUMENT FOUND, IF MONUMENT HAS AN IDENTIFYING LICENSE NUMBER, THAT IDENTIFYING LICENSE NUMBER IS SHOWN ALONGSIDE THE SYMBOL.
- DENOTES CONTROLLED ACCESS PER MINNESOTA DEPARTMENT OF TRANSPORTATION MONUMENTATION PLAN NO. 22-462.

THE SOUTH LINE OF THE SOUTHWEST QUARTER OF SECTION 5, TOWNSHIP 32, RANGE 23, IS REQUIRED TO HAVE A BEARING OF SOUTH 59 DEGREES 03 MINUTES 45 SECONDS WEST BASED ON N.A.D., 1983, 2011 ADJUSTMENT.



DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THIS:



BEING 10.0 FEET IN WIDTH, UNLESS OTHERWISE INDICATED, ADJOINING LOT LINES AND ADJOINING STREET LINES, AS SHOWN ON PLAN.

STATE TRUNK HIGHWAY NO. 65
 MONUMENTATION PLAN NO. 02-M25

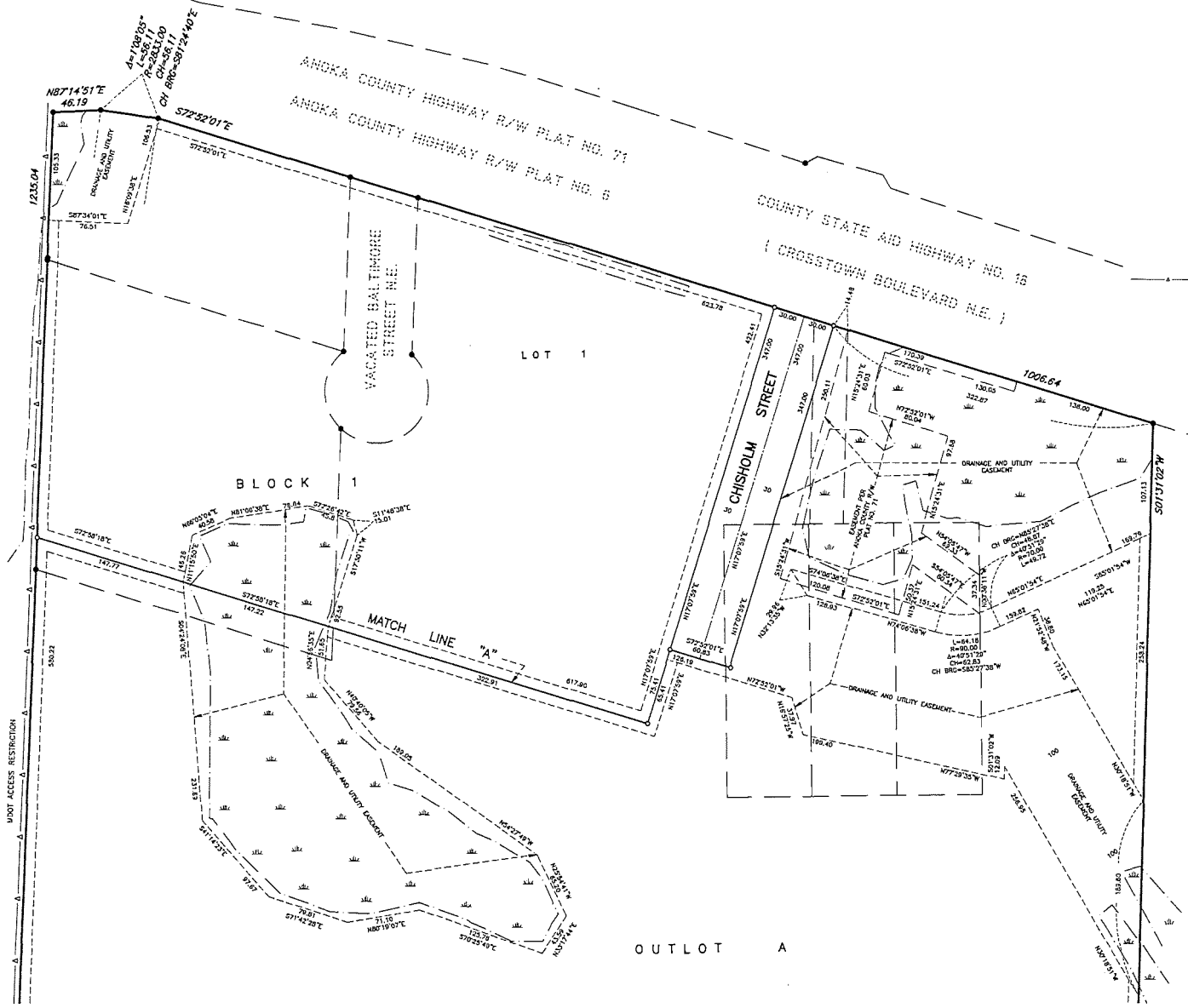


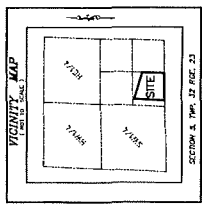
Figure 11-1

HONSA SURVEYING

1392 PACIFIC AVENUE, DODAM, MN (651) 492-6725

SHEET 2 OF 3 SHEETS

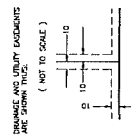
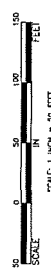
HOLIDAY STATION STORE HAM LAKE



LEGEND

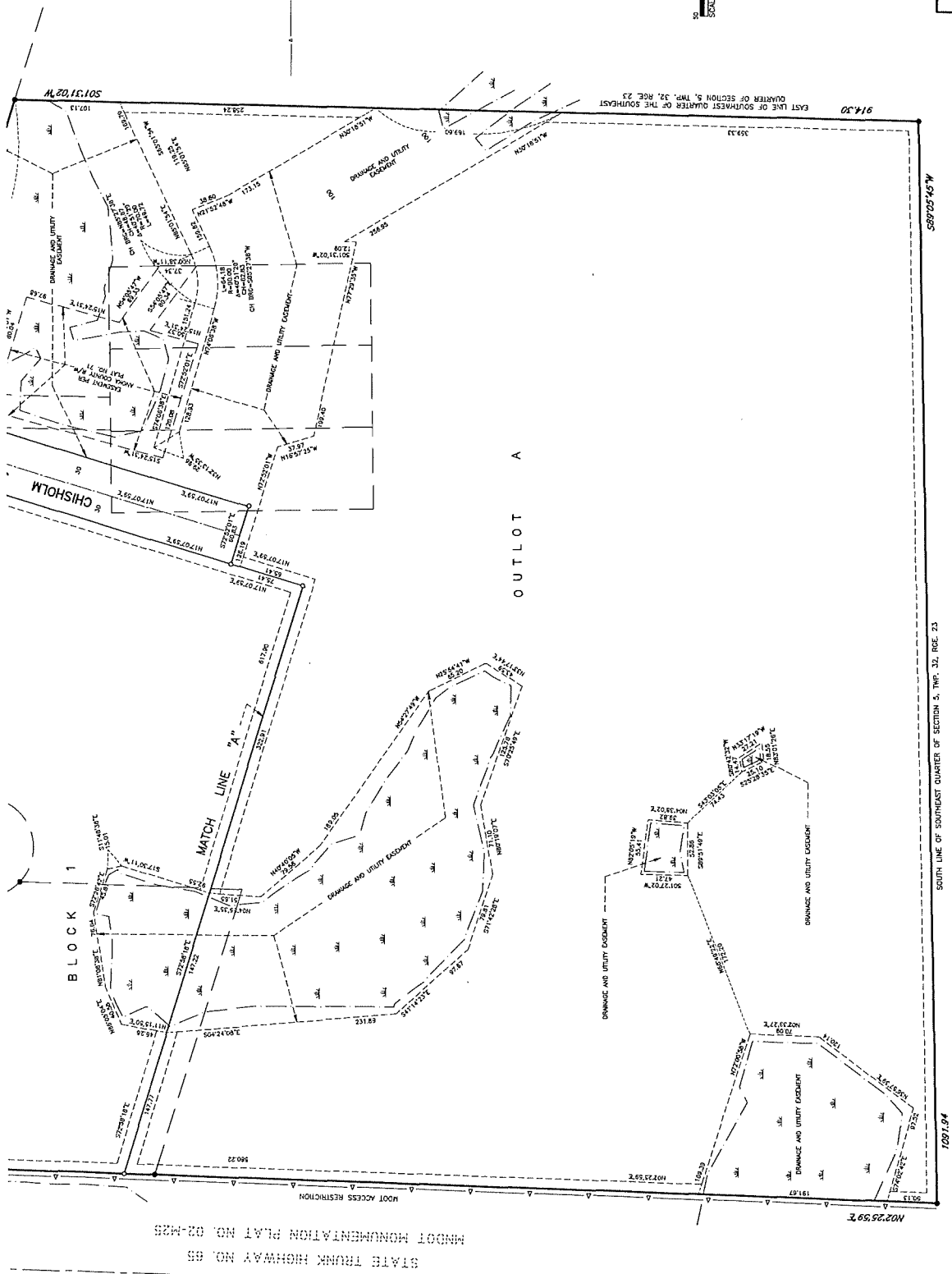
- CONCRETE 3/4" INCH X 18 INCH IRON PIPE MONUMENT SET APPROXIMATE LOCATIONS INDICATED
- CONCRETE 3/4" INCH IRON PIPE MONUMENT FEEDS OF APPROXIMATE LOCATIONS INDICATED
- DRAINAGE AND UTILITY EGRESS
- DRAINAGE AND UTILITY EGRESS

THE SOUTH LINE OF THE STRAIGHTEST QUARTERS OF THE SOUTHWEST QUARTER OF SECTION 5, TWP. 32, RGE. 23 TO MAKE A CORNER OF SECTION 33 TO BE LOCATED TO 2011 METERS WEST BASED ON NAD 1983.



BEING TO BE FILED IN WORK UNLESS OTHERWISE STATED BY THE SURVEYOR

Figure 11-2



SOUTH LINE OF SOUTHWEST QUARTER OF SECTION 5, TWP. 32, RGE. 23

1097.94

58970545'W

914.30

EAST LINE OF SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 5, TWP. 32, RGE. 23

1071.94

58970545'W

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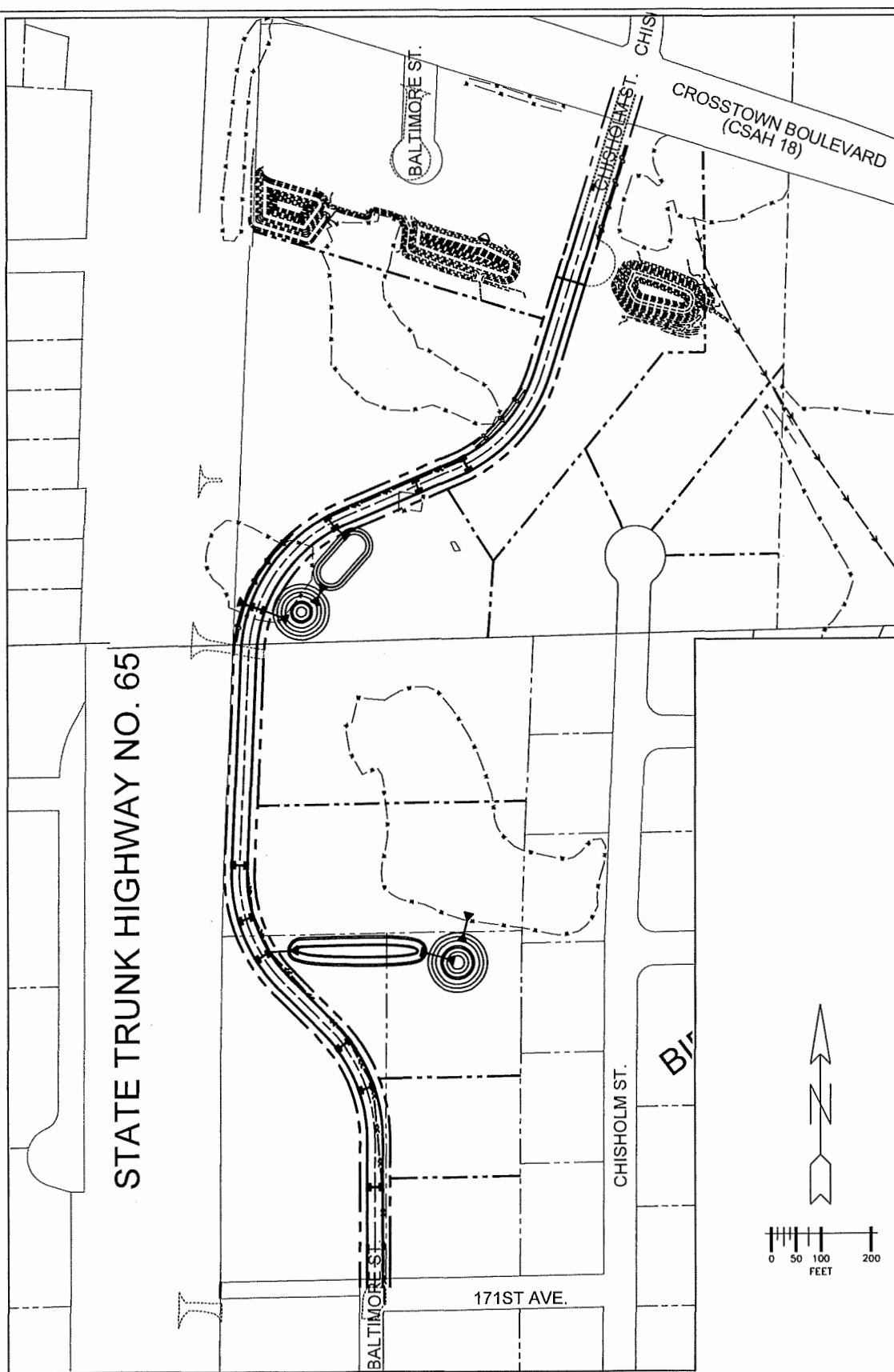
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Description
 POTENTIAL ULTIMATE DEVELOPMENT

Drawn
 ACC

Date
 4/28/21

Project No.
 2002.083

Figure No.
 12

Project
 FEASIBILITY STUDY
 EAST FRONTAGE ROAD

13635 Johnson Street
 Ham Lake, MN 55304
 Voice: 763.862.8000
 Fax: 763.862.8042



RFC
 Engineering & Inc.
 CONSULTING ENGINEERS

Meeting Date: May 3, 2021



**CITY OF HAM LAKE
STAFF REPORT**

To: Mayor and Councilmembers

From: Dawnette Shimek, Deputy City Clerk

Item/Title/Subject: Street Improvement Petition for Tippecanoe Street NE from proposed 162nd Lane NE south to cul-de-sac

Introduction/Discussion: The attached petition is for the bituminous surfacing of Tippecanoe Street NE from proposed 162nd Lane NE south to cul-de-sac. It is required that not less than 35% in frontage of the real property abutting the proposed improvements be met. The petition was signed by 79% of real property owners.

Recommendation: I recommend that the Council adopt a resolution ordering a feasibility study for the proposed project.

RESOLUTION NO. 21-XX

WHEREAS, a certain petition requesting the improvement of Tippecanoe Street NE from proposed 162nd Lane NE south to the cul-de-sac, is hereby declared to be signed by the required percentage of owners of property affected thereby, and to assess the benefited properties for all of the cost of the improvement, pursuant to Minnesota Statutes, Chapter 429,

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Ham Lake, Minnesota:

That the proposed improvement be referred to Tom Collins, City Engineer for study and that he is instructed to report to the Council with all convenient speed advising the Council in a preliminary way as to whether the proposed improvement is feasible and as to whether it should best be made as proposed or in connection with some other improvement, and the estimated cost of the improvement as recommended.

Adopted by the City Council of the City of Ham Lake this 3rd day of May, 2021.

Michael G. Van Kirk
Mayor

Denise Webster
City Clerk

HAM LAKE, MINNESOTA

Date: 4/15/2021

To the City Council of Ham Lake, Minnesota

We, the undersigned, owners of not less than 35 percent in frontage of the real property abutting Tippecanoe Street NE from proposed 162nd Lane NE south to cul-de-sac, hereby petition that such street be improved by bituminous surfacing pursuant to Minnesota Statutes, Chapter 429.

SIGNATURE OF OWNER

DESCRIPTION OF PROPERTY

<u>Dale E Ocker</u>	<u>PARCEL 1 14-32-23-24-0003</u>	<u>yes</u>
<u>Janet Horn</u>	<u>2 14-32-23-24-0004</u>	<u>yes</u>
<u>Curt & Debbie Hoppert</u>	<u>5 14-32-23-31-0008</u>	<u>NO</u>
<u>Jim Buelker</u>	<u>7-14-32-23-31-0010</u>	<u>yes</u>
<u>Arden Dashi</u>	<u>9-14-32-23-31-0006</u>	<u>yes</u>
<u>Esquivel Vera</u>	<u>4-14-32-23-31-0003</u>	<u>yes</u>

Examined, checked, and found to be in proper form and to be signed by the required number of owners of property affected by the making of the improvement petitioned for.

Dawnette Shimek
Dawnette Shimek, Deputy City Clerk

Dated: 4/22/2021

Tippecanoe Street Petition

<u>Parcel</u>	<u>Parcel ID number</u>	<u>Frontage (feet)</u>	<u>Notes</u>
1	14-32-23-24-0003	293.3	Reflects E.G. Rud & Sons Sketch and Description
2	14-32-23-24-0004	320	
3	14-32-23-24-0002	320	
4	14-32-23-31-0003	320	
5	14-32-23-31-0008	320.04	
6	14-32-23-31-0012	66	City of Ham Lake ownership
7	14-32-23-31-0010	264.83	includes portion of cul-de-sac
8	14-32-23-31-0011	100.02	all cul-de-sac frontage
9	14-32-23-31-0006	1,831.41	includes portion of cul-de-sac
Total		3,835.60	

Minimum frontage required to meet the 35% minimum requirement: 1,342.46 feet

Parcels from the NW to the SE

SKETCH AND DESCRIPTION

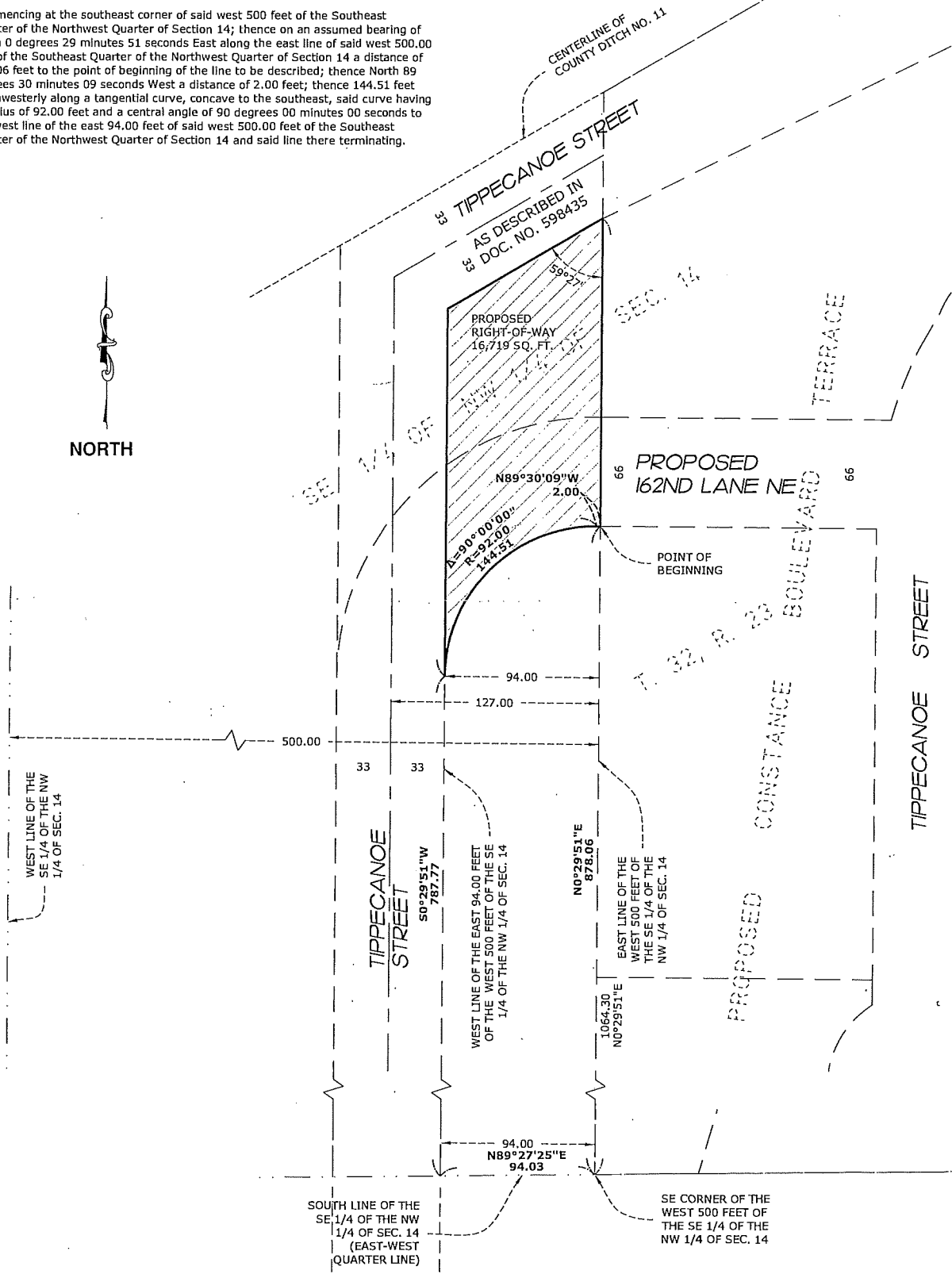
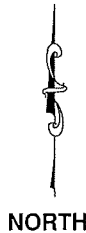
~for~ RFC ENGINEERING

ANOKA COUNTY HIGHWAY RIGHT OF WAY PLAT NO. 21
 CONSTANCE BOULEVARD (COUNTY ROAD NO. 60)

PROPOSED RIGHT OF WAY DESCRIPTION

That part of the east 94.00 feet of the west 500.00 feet of the Southeast Quarter of the Northwest Quarter of Section 14, Township 32, Range 23, Anoka County, Minnesota, lying southerly of the southerly right-of-way line of Tippecanoe Street N.E. as described in Document Number 598435 and northerly of the following described line:

Commencing at the southeast corner of said west 500 feet of the Southeast Quarter of the Northwest Quarter of Section 14; thence on an assumed bearing of North 0 degrees 29 minutes 51 seconds East along the east line of said west 500.00 feet of the Southeast Quarter of the Northwest Quarter of Section 14 a distance of 878.06 feet to the point of beginning of the line to be described; thence North 89 degrees 30 minutes 09 seconds West a distance of 2.00 feet; thence 144.51 feet southwesterly along a tangential curve, concave to the southeast, said curve having a radius of 92.00 feet and a central angle of 90 degrees 00 minutes 00 seconds to the west line of the east 94.00 feet of said west 500.00 feet of the Southeast Quarter of the Northwest Quarter of Section 14 and said line there terminating.



I hereby certify that this plan, survey or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.
 By: *[Signature]*
 Minnesota License No. 41578
 Dated 8th day of September, 2020.

DATUM: Assumed		JOB NO. 201003ED	
REVISIONS		SCALE: 1" = 60'	
1		DATE: 9/4/2020	
2		DRAWN BY: BPN	
3		CREW:	
NO.	DATE	DESCRIPTION	BY

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
 www.egrud.com