AGENDA
City Council Regular Meeting
Tuesday, June 4, 2024
7:00 PM
Council Chambers

1. CALL TO ORDER/PLEDGE OF ALLEGIANCE

2. APPROVAL OF AGENDA

3. PRESENTATIONS, PROCLAMATIONS AND ACKNOWLEDGMENTS

a. Police Officer Oath of Office

b. Youth Commission Report

4. RESPONSE TO PUBLIC COMMENT

5. PUBLIC COMMENT

Individuals will be allowed to address the Council on subjects that are not a part of the meeting agenda. Typically, replies to the concerns expressed will be made via letter or phone call within a week or at the following council meeting.

6. CONSENT AGENDA

a. Bill Listings

b. Minutes of the May 21, 2024 Regular Meeting Minutes

c. Rich Valley East AUAR

d. Approve Agreement & Authorize Signatures - Harmony

e. Liquor License Renewals

f. Medical Leave of Absence - Fire Department

g. PD/PW Building Distributed Antenna System

h. Bray Hill Subdivsion Agreement

i. Request for a Minor Amendment to the Joint Public

7. PUBLIC HEARINGS

a. Rosemount Zoning Code Update

8. UNFINISHED BUSINESS

9. NEW BUSINESS

10. ANNOUNCEMENTS

a. City Staff Updates

b. Upcoming Community Calendar

11. ADJOURNMENT

ROSEMOUNT MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM: Police Officer Oath of Office	**AGENDA SECTION:** PRESENTATIONS, PROCLAMATIONS AND ACKNOWLEDGMENTS
PREPARED BY: Mikael Dahlstrom, Police Chief	**AGENDA NO.** 3.a.
ATTACHMENTS: Hotaling Oath of Office	**APPROVED BY:** LJM
RECOMMENDED ACTION: None	

BACKGROUND

In October of 2022, the police department was fortunate to hire Officer Steven Hotaling as badge #3568. Officer Hotaling came to the department as a lateral hire after spending three years with the Elko New Market Police Department. While with Elko New Market, Officer Hotaling gained experience and specialized as a Taser instructor, "Toward Zero Death" coordinator, and a Field Training Officer.

Steve was born and raised in St. Paul Park, Minnesota. He became interested in the law enforcement field in junior high and eventually graduated from Park High School in 2001. Following high school, Steve earned an associate degree in law enforcement from the Minneapolis Community and Technical College and attended law enforcement "skills" training at Hennepin Technical College.

Prior to joining our Department, Steve worked a variety of private security jobs and also volunteered as a Reserve Police Officer for the Cottage Grove Police Department for 9 years. In 2015, Steve was hired by the Minnesota State Patrol for a non-sworn security officer position and worked for several years at the State Capitol. Currently, Officer Hotaling is serving as a Field Training Officer, the liaison for our Reserve program, and is a member of our Recruitment Team.

Officer Hotaling reports that the Department and City were very welcoming when he started; he appreciates working for a Department that is growing and one that allows opportunities to train in his areas of special interest. In his spare time, Steve enjoys spending time with this family, going to his cabin, playing fantasy football, and taking vacations on a cruise ship.

We are proud to have Officer Steven Hotaling as a member of our team!

RECOMMENDATION

None

STATE OF MINNESOTA)
COUNTY OF DAKOTA) §
CITY OF ROSEMOUNT)

I, Steven Hotaling, solemnly swear that I will support the Constitution of the United States and of the State of Minnesota, and faithfully discharge the duties of a Police Officer with the Rosemount Police Department in the County of Dakota and the State of Minnesota, to the best of my judgment and ability. So help me God.

_____
Steven Hotaling

Subscribed and sworn to
before me this 4th day
of June, 2024

_____
Mayor Jeffery D. Weisensel

ROSEMOUNT MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM: Youth Commission Report	**AGENDA SECTION:** PRESENTATIONS, PROCLAMATIONS AND ACKNOWLEDGMENTS
PREPARED BY: Erin Fasbender, City Clerk	**AGENDA NO.** 3.b.
ATTACHMENTS:	**APPROVED BY:** LJM
RECOMMENDED ACTION: Receive Youth Commission Annual Report	

BACKGROUND

Last term's Youth Commission Chairperson, Julia Alex, was Chair for the past 2023-2024 year and is completing her duties as Chair by presenting the annual report.

RECOMMENDATION

Staff recommends the Council receive the Youth Commission's annual report.

PACKET: 07019 05/17/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-005066 MARCO TECHNOLOGIES LLC									
I 528859358		SHARP MX-3071 CONTRACT	APBNK	5/17/2024	R	5/08/2024	178.30	178.30CR	
		G/L ACCOUNT		CK: 155536			178.30		
		101 41810-01-202.00 DUPLICATING & COPYING COSTS					178.30	SHARP MX-3071 CONTRACT	
		REG. CHECK				1	178.30	178.30CR	0.00
							178.30	0.00	
01-004079 METRO SALES INC									
I INV2481295		RICOH/IM C300F COLOR COPIER	APBNK	5/17/2024	R	3/07/2024	101.73	101.73CR	
		G/L ACCOUNT		CK: 155537			101.73		
		101 41810-01-202.00 DUPLICATING & COPYING COSTS					101.73	RICOH/IM C300F COLOR COPIER	
I INV2519219		COPIER COSTS C300F	APBNK	5/17/2024	R	5/03/2024	100.09	100.09CR	
		G/L ACCOUNT		CK: 155537			100.09		
		101 41810-01-202.00 DUPLICATING & COPYING COSTS					100.09	COPIER COSTS C300F	
I INV2523308		C307 COLOR COPIER	APBNK	5/17/2024	R	5/13/2024	67.00	67.00CR	
		G/L ACCOUNT		CK: 155537			67.00		
		101 41810-01-202.00 DUPLICATING & COPYING COSTS					67.00	C307 COLOR COPIER	
		REG. CHECK				1	268.82	268.82CR	0.00
							268.82	0.00	
01-003048 US BANK EQUIPMENT FINANCE									
I 528232424		C3500 & C3510 COPIER LEASES	APBNK	5/17/2024	R	5/01/2024	358.00	358.00CR	
		G/L ACCOUNT		CK: 155538			358.00		
		101 41810-01-202.00 DUPLICATING & COPYING COSTS					358.00	C3500 & C3510 COPIER LEASES	
I 528497316		RICOH C3500 CONTRACT	APBNK	5/17/2024	R	5/05/2024	173.00	173.00CR	
		G/L ACCOUNT		CK: 155538			173.00		
		101 41810-01-202.00 DUPLICATING & COPYING COSTS					173.00	RICOH C3500 CONTRACT	
		REG. CHECK				1	531.00	531.00CR	0.00
							531.00	0.00	
01-240010 XCEL ENERGY									
I 6870492-3	4/24A	NON METERED STREET LIGHTS	APBNK	5/17/2024	R	5/03/2024	10,777.70	10,777.70CR	
		G/L ACCOUNT		CK: 155539			10,777.70		
		608 49508-01-381.00 ELECTRIC UTILITIES					10,777.70	NON METERED STREET LIGHTS	

PACKET: 07019 05/17/2024 AP CHECK RUN

VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
			REG. CHECK			1	10,777.70	10,777.70CR	0.00
							10,777.70	0.00	

PACKET: 07019 05/17/2024 AP CHECK RUN
VENDOR SET: 01

R E P O R T T O T A L S

F U N D D I S T R I B U T I O N

FUND NO#	FUND NAME	AMOUNT
101	GENERAL FUND	978.12CR
608	STREET LIGHT UTILITY FUND	10,777.70CR
	** TOTALS **	11,755.82CR

---- TYPE OF CHECK TOTALS ----

	NUMBER	GROSS BALANCE	PAYMENT DISCOUNT	OUTSTANDING
HAND CHECKS		0.00	0.00	0.00
		0.00	0.00	
DRAFTS		0.00	0.00	0.00
		0.00	0.00	
REG-CHECKS	4	11,755.82	11,755.82CR	0.00
		11,755.82	0.00	
EFT		0.00	0.00	0.00
		0.00	0.00	
NON-CHECKS		0.00	0.00	0.00
		0.00	0.00	
ALL CHECKS	4	11,755.82	11,755.82CR	0.00
		11,755.82	0.00	

ERRORS: 0 WARNINGS: 0

Leah Malecha

05/23/2024

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-004026 ALERUS									
I C156283		APR'24 COBRA MONTHLY SRV FE	APBNK	5/20/2024	D	5/07/2024	30.00	30.00CR	
		G/L ACCOUNT		CK: 001905			30.00		
		101 41320-31-319.00 OTHER PROFESSIONAL SERVICES					30.00	APR'24 COBRA MONTHLY SRV FEE	
				DRAFTS			1 30.00	30.00CR	0.00
							30.00	0.00	
01-002071 AMERICAN FLAGPOLE & FLAG CO									
I 189914		CUSTOM CITY FLAGS	APBNK	5/23/2024	R	5/10/2024	999.83	999.83CR	
		G/L ACCOUNT		CK: 155540			999.83		
		101 41940-01-219.00 FLAGS & FLAGPOLE MAINTENANCE					999.83	CUSTOM CITY FLAGS	
				REG. CHECK			1 999.83	999.83CR	0.00
							999.83	0.00	
01-011365 ANCOM TECHNICAL CENTER									
I 121310		PAGER REPAIR	APBNK	5/23/2024	R	5/02/2024	130.00	130.00CR	
		G/L ACCOUNT		CK: 155541			130.00		
		101 42210-01-329.00 OTHER COMMUNICATION COSTS					130.00	PAGER REPAIR	
I 121311		PAGER REPAIR	APBNK	5/23/2024	R	5/02/2024	150.00	150.00CR	
		G/L ACCOUNT		CK: 155541			150.00		
		101 42210-01-329.00 OTHER COMMUNICATION COSTS					150.00	PAGER REPAIR	
				REG. CHECK			1 280.00	280.00CR	0.00
							280.00	0.00	
01-011644 APPLE FORD LINCOLN AV									
I A1W665058		SWITCH	APBNK	5/23/2024	R	5/07/2024	26.29	26.29CR	
		G/L ACCOUNT		CK: 155542			26.29		
		101 43100-01-221.00 EQUIPMENT PARTS					26.29	SWITCH	
				REG. CHECK			1 26.29	26.29CR	0.00
							26.29	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-005657 AT&T MOBILITY									
I	X05032024 PD	APR INTERNET & CELL SERVICE	APBNK	5/23/2024	R	4/25/2024	2,299.22	2,299.22CR	
		G/L ACCOUNT		CK: 155543			2,299.22		
		101 42110-01-329.00 OTHER COMMUNICATION COSTS					2,299.22	APR INTERNET & CELL SERVICES	
I	X05032024 PW	CELLULAR FOR TOWER,LIFTS,WE	APBNK	5/23/2024	R	4/25/2024	524.56	524.56CR	
		G/L ACCOUNT		CK: 155543			524.56		
		601 49400-01-321.00 TELEPHONE COSTS					174.85	CELLULAR FOR TOWER,LIFTS,WELLS	
		603 49500-01-321.00 TELEPHONE COSTS					174.85	CELLULAR FOR TOWER,LIFTS,WELLS	
		602 49450-01-321.00 TELEPHONE COSTS					174.86	CELLULAR FOR TOWER,LIFTS,WELLS	
				REG. CHECK			1	2,823.78	2,823.78CR	0.00
								2,823.78	0.00	
01-006169 JAYME AUNE									
I	2024-0277	PERMIT 5116-DAMAGE DEPOSIT	APBNK	5/23/2024	R	5/06/2024	300.00	300.00CR	
		G/L ACCOUNT		CK: 155544			300.00		
		101 22005 REFUNDS PAYABLE - P&R					300.00	PERMIT 5116-DAMAGE DEPOSIT	
				REG. CHECK			1	300.00	300.00CR	0.00
								300.00	0.00	
01-020090 BACHMAN'S INC-CREDIT DEPT									
I	386980/50	PARK TREES	APBNK	5/23/2024	R	5/13/2024	606.10	606.10CR	
		G/L ACCOUNT		CK: 155545			606.10		
		101 41110-01-225.00 LANDSCAPING MATERIALS					606.10	PARK TREES	
				REG. CHECK			1	606.10	606.10CR	0.00
								606.10	0.00	
01-006126 BEAUDRY OIL & PROPANE									
I	2630385	3,000 GAL UNLEADED FUEL	APBNK	5/23/2024	R	5/03/2024	7,872.82	7,872.82CR	
		G/L ACCOUNT		CK: 155546			7,872.82		
		101 43100-01-212.00 MOTOR FUELS					7,872.82	3,000 GAL UNLEADED FUEL	
				REG. CHECK			1	7,872.82	7,872.82CR	0.00
								7,872.82	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-003889 BERRY COFFEE COMPANY									
I	1007156	COFFEE SUPPLIES FOR SC	APBNK	5/23/2024	R	5/16/2024	266.41	266.41CR	
		G/L ACCOUNT		CK: 155547			266.41		
		101 45100-30-219.00 OTHER OPERATING SUPPLIES				266.41	COFFEE SUPPLIES FOR SC		
				REG. CHECK		1	266.41	266.41CR	0.00
							266.41	0.00	
01-006127 BLUE TO GOLD LLC									
I	BTG-FLM-44781	OFFICER TRAINING	APBNK	5/23/2024	R	5/19/2024	225.00	225.00CR	
		G/L ACCOUNT		CK: 155548			225.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS				225.00	OFFICER TRAINING		
				REG. CHECK		1	225.00	225.00CR	0.00
							225.00	0.00	
01-003249 BRANDL ANDERSON HOMES									
I	2023-03049	AS-BUILT SURVEY REFUND	APBNK	5/23/2024	R	5/16/2024	2,000.00	2,000.00CR	
		G/L ACCOUNT		CK: 155549			2,000.00		
		101 22010 AS-BUILT SURVEY DEPOSITS				2,000.00	AS-BUILT SURVEY REFUND		
I	2023-03485	AS-BUILT SURVEY REFUND	APBNK	5/23/2024	R	5/16/2024	2,000.00	2,000.00CR	
		G/L ACCOUNT		CK: 155549			2,000.00		
		101 22010 AS-BUILT SURVEY DEPOSITS				2,000.00	AS-BUILT SURVEY REFUND		
I	2023-05052	AS-BUILT SURVEY REFUND	APBNK	5/23/2024	R	5/16/2024	2,000.00	2,000.00CR	
		G/L ACCOUNT		CK: 155549			2,000.00		
		101 22010 AS-BUILT SURVEY DEPOSITS				2,000.00	AS-BUILT SURVEY REFUND		
I	2023-05621	AS-BUILT SURVEY REFUND	APBNK	5/23/2024	R	5/16/2024	2,000.00	2,000.00CR	
		G/L ACCOUNT		CK: 155549			2,000.00		
		101 22010 AS-BUILT SURVEY DEPOSITS				2,000.00	AS-BUILT SURVEY REFUND		
				REG. CHECK		1	8,000.00	8,000.00CR	0.00
							8,000.00	0.00	
01-021815 BRAUN INTERTEC CORP									
I	B384133	AKRON AVE SOUTH EXTENSION	APBNK	5/23/2024	R	5/03/2024	2,550.00	2,550.00CR	
		G/L ACCOUNT		CK: 155550			2,550.00		
		483 48000-01-303.00 ENGINEERING FEES				2,550.00	AKRON AVE SOUTH EXTENSION		

PACKET: 07024 05/23/2024 AP CHECK RUN
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VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
		REG. CHECK				1	2,550.00 / 2,550.00	2,550.00CR / 0.00	0.00

01-004103 BUSINESS ESSENTIALS

I OE-QT-78748-1	20 CASES MULTI-USE COPY PAP	APBNK	5/23/2024	R	5/08/2024	839.80	839.80CR	
	G/L ACCOUNT		CK: 155551			839.80		
	101 41810-01-203.00 PRINTED FORMS & PAPER					839.80	20 CASES MULTI-USE COPY PAPER	
I OE-QT-78846-1	20 CASES MULTI-USE COPY PAP	APBNK	5/23/2024	R	5/09/2024	839.80	839.80CR	
	G/L ACCOUNT		CK: 155551			839.80		
	101 41810-01-203.00 PRINTED FORMS & PAPER					839.80	20 CASES MULTI-USE COPY PAPER	
	REG. CHECK				1	1,679.60 / 1,679.60	1,679.60CR / 0.00	0.00

01-003796 CAMPBELL KNUTSON PA

I 2024-0282	APRIL LEGAL SERVICES	APBNK	5/23/2024	R	4/30/2024	9,048.99	9,048.99CR	
	G/L ACCOUNT		CK: 155552			9,048.99		
	101 42110-01-304.00 LEGAL FEES					9,048.99	APRIL LEGAL SERVICES	
	REG. CHECK				1	9,048.99 / 9,048.99	9,048.99CR / 0.00	0.00

01-002078 CDW GOVERNMENT INC

I RC44355	KEYBOARD ERGO	APBNK	5/23/2024	R	5/03/2024	84.38	84.38CR	
	G/L ACCOUNT		CK: 155553			84.38		
	101 41320-01-392.00 P.C. ACCESSORIES & SUPPLIES					84.38	KEYBOARD ERGO	
I RC52175	USB-C CABLES (3) - IT	APBNK	5/23/2024	R	5/03/2024	17.76	17.76CR	
	G/L ACCOUNT		CK: 155553			17.76		
	101 41320-01-392.00 P.C. ACCESSORIES & SUPPLIES					17.76	USB-C CABLES (3) - IT	
I RD68414	USB CABLES (3) - GIS	APBNK	5/23/2024	R	5/08/2024	40.65	40.65CR	
	G/L ACCOUNT		CK: 155553			40.65		
	101 41320-01-392.00 P.C. ACCESSORIES & SUPPLIES					40.65	USB CABLES (3) - GIS	
I RG57328	UPS - STEEPLE CENTER	APBNK	5/23/2024	R	5/13/2024	737.34	737.34CR	
	G/L ACCOUNT		CK: 155553			737.34		
	101 45100-01-580.00 OTHER EQUIPMENT PURCHASES					737.34	UPS - STEEPLE CENTER	
I RH30232	CRADLEPOINT POWER SUPPLY	APBNK	5/23/2024	R	5/15/2024	43.19	43.19CR	
	G/L ACCOUNT		CK: 155553			43.19		
	101 42110-01-392.00 P.C. ACCESSORIES & SUPPLIES					43.19	CRADLEPOINT POWER SUPPLY	

PACKET: 07024 05/23/2024 AP CHECK RUN
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VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
		REG. CHECK				1	923.32	923.32CR	0.00
							923.32	0.00	

01-000717 CEMSTONE PRODUCTS CO

I 7416545	FLOAT	APBNK	5/23/2024	R	4/26/2024	66.75	66.75CR	
	G/L ACCOUNT		CK: 155554			66.75		
	101 43121-01-410.00	CONCRETE SIDEWALK/CURB REPAIRS			66.75	FLOAT		
I 7420587	CONCRETE FOR CURB	APBNK	5/23/2024	R	5/01/2024	839.50	839.50CR	
	G/L ACCOUNT		CK: 155554			839.50		
	101 43121-01-410.00	CONCRETE SIDEWALK/CURB REPAIRS			839.50	CONCRETE FOR CURB		
		REG. CHECK			1	906.25	906.25CR	0.00
						906.25	0.00	

01-030498 CENTRAL TURF & IRRIGATION S

I 50263167-00	IRRIGATION REPAIR PARTS	APBNK	5/23/2024	R	5/06/2024	140.12	140.12CR	
	G/L ACCOUNT		CK: 155555			140.12		
	101 45202-01-221.00	EQUIPMENT PARTS			140.12	IRRIGATION REPAIR PARTS		
I 50263274-00	IRRIGATION REPAIR PARTS	APBNK	5/23/2024	R	5/08/2024	181.50	181.50CR	
	G/L ACCOUNT		CK: 155555			181.50		
	101 45202-01-221.00	EQUIPMENT PARTS			181.50	IRRIGATION REPAIR PARTS		
I 50263339-00	IRRIGATION PARTS	APBNK	5/23/2024	R	5/09/2024	602.06	602.06CR	
	G/L ACCOUNT		CK: 155555			602.06		
	101 45202-01-221.00	EQUIPMENT PARTS			602.06	IRRIGATION PARTS		
		REG. CHECK			1	923.68	923.68CR	0.00
						923.68	0.00	

01-000424 CERTIFIED RECYCLING LLC

I 79999	GARBAGE FROM GAS STATION	APBNK	5/23/2024	R	4/30/2024	220.00	220.00CR	
	G/L ACCOUNT		CK: 155556			220.00		
	101 41940-01-384.00	REFUSE DISPOSAL			220.00	GARBAGE FROM GAS STATION		
		REG. CHECK			1	220.00	220.00CR	0.00
						220.00	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-001576 CG MARKETING GROUP									
I 104826		BUSINESS CARDS-PD	APBNK	5/23/2024	R	5/08/2024	202.84	202.84CR	
		G/L ACCOUNT		CK: 155557			202.84		
		101 42110-01-203.00 PRINTED FORMS & PAPER				202.84	BUSINESS CARDS-PD		
				REG. CHECK		1	202.84	202.84CR	0.00
							202.84	0.00	
01-005542 CHARTER COMMUNICATIONS									
I 113140301041524		FIRE STATION 2 CABLE	APBNK	5/23/2024	R	4/15/2024	148.68	148.68CR	
		G/L ACCOUNT		CK: 155558			148.68		
		101 42210-01-439.00 OTHER MISCELLANEOUS CHARGES				148.68	FIRE STATION 2 CABLE		
				REG. CHECK		1	148.68	148.68CR	0.00
							148.68	0.00	
01-002913 CITY AUTO GLASS-SO ST PAUL									
I I001224083		WINDSHIELD REPLACEMENT	APBNK	5/23/2024	R	5/08/2024	1,278.76	1,278.76CR	
		G/L ACCOUNT		CK: 155559			1,278.76		
		101 43100-01-404.00 CONTRACTED MACH & EQUIP SERV				175.00	WINDSHIELD REPLACEMENT		
		101 43100-01-221.00 EQUIPMENT PARTS				1,103.76	WINDSHIELD REPLACEMENT		
				REG. CHECK		1	1,278.76	1,278.76CR	0.00
							1,278.76	0.00	
01-030974 CITY OF ST PAUL									
I IN58273		OFFICER TRAINING	APBNK	5/23/2024	R	5/08/2024	800.00	800.00CR	
		G/L ACCOUNT		CK: 155560			800.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS				800.00	OFFICER TRAINING		
				REG. CHECK		1	800.00	800.00CR	0.00
							800.00	0.00	
01-001623 CITY OF WEST ST PAUL									
I 2024-00000042		1ST QTR'24 VOLUNTEER COORD	APBNK	5/23/2024	R	5/07/2024	3,847.47	3,847.47CR	
		G/L ACCOUNT		CK: 155561			3,847.47		
		101 41810-01-319.00 OTHER PROFESSIONAL SERVICES				3,847.47	1ST QTR'24 VOLUNTEER COORD		
				REG. CHECK		1	3,847.47	3,847.47CR	0.00
							3,847.47	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-004639 CLEARWAY COMMUNITY SOLAR LL									
I ROSEMNT-12405		MAR'24 SOLAR SUBSCRIPTIONS	APBNK	5/23/2024 R		5/07/2024	14,939.25	14,939.25CR	
		G/L ACCOUNT		CK: 155562			14,939.25		
		101 11510 NATIONAL GUARD A/R					9,167.88	MAR'24 SOLAR SUBSCRIPTIONS	
		101 41940-01-381.00 ELECTRIC UTILITIES					247.74	MAR'24 SOLAR SUBSCRIPTIONS	
		101 43121-01-381.00 ELECTRIC UTILITIES					40.37	MAR'24 SOLAR SUBSCRIPTIONS	
		101 45100-01-381.00 ELECTRIC UTILITIES					3,929.09	MAR'24 SOLAR SUBSCRIPTIONS	
		101 45202-01-381.00 ELECTRIC UTILITIES					166.12	MAR'24 SOLAR SUBSCRIPTIONS	
		201 46300-01-381.00 ELECTRIC UTILITIES					5.55	MAR'24 SOLAR SUBSCRIPTIONS	
		601 49406-01-381.00 ELECTRIC UTILITIES					215.29	MAR'24 SOLAR SUBSCRIPTIONS	
		601 49417-01-381.00 ELECTRIC UTILITIES					414.20	MAR'24 SOLAR SUBSCRIPTIONS	
		601 49418-01-381.00 ELECTRIC UTILITIES					369.67	MAR'24 SOLAR SUBSCRIPTIONS	
		602 49452-01-381.00 ELECTRIC UTILITIES					57.83	MAR'24 SOLAR SUBSCRIPTIONS	
		602 49458-01-381.00 ELECTRIC UTILITIES					34.53	MAR'24 SOLAR SUBSCRIPTIONS	
		602 49460-01-381.00 ELECTRIC UTILITIES					20.88	MAR'24 SOLAR SUBSCRIPTIONS	
		603 49511-01-381.00 ELECTRIC UTILITIES					12.11	MAR'24 SOLAR SUBSCRIPTIONS	
		608 49508-01-381.00 ELECTRIC UTILITIES					257.99	MAR'24 SOLAR SUBSCRIPTIONS	
				REG. CHECK			1	14,939.25	14,939.25CR	0.00
								14,939.25	0.00	
01-031530 COMPUTER INTEGRATION TECH									
I 375477		JUN'24 DATTO BACKUPS	APBNK	5/23/2024 R		5/15/2024	777.00	777.00CR	
		G/L ACCOUNT		CK: 155564			777.00		
		101 41320-01-391.00 P.C. MAINTENANCE					777.00	JUN'24 DATTO BACKUPS	
I 375546		JUN'24 MANAGED SERVER BACKU	APBNK	5/23/2024 R		5/15/2024	2,655.00	2,655.00CR	
		G/L ACCOUNT		CK: 155564			2,655.00		
		101 41320-01-391.00 P.C. MAINTENANCE					2,655.00	JUN'24 MANAGED SERVER BACKUP	
				REG. CHECK			1	3,432.00	3,432.00CR	0.00
								3,432.00	0.00	
01-004277 CORE & MAIN LP									
I U307785		IPERL METER KITS	APBNK	5/23/2024 R		4/25/2024	31,172.16	31,172.16CR	
		G/L ACCOUNT		CK: 155565			31,172.16		
		601 49400-01-220.00 METER PURCHASES					31,172.16	IPERL METER KITS	
I U780040		OMNI R2 2-INCH METERS	APBNK	5/23/2024 R		4/26/2024	5,087.27	5,087.27CR	
		G/L ACCOUNT		CK: 155565			5,087.27		
		601 49400-01-220.00 METER PURCHASES					5,087.27	OMNI R2 2-INCH METERS	
I U816482		IPERL METERS & ASSORTED PAR	APBNK	5/23/2024 R		5/03/2024	11,337.59	11,337.59CR	
		G/L ACCOUNT		CK: 155565			11,337.59		
		601 49400-01-220.00 METER PURCHASES					11,337.59	IPERL METERS & ASSORTED PARTS	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
			REG. CHECK			1	47,597.02	47,597.02CR	0.00
							47,597.02	0.00	

01-031577 CORPORATE MECHANICAL INC

I W74768	SC WEEKLY BOILER CHECKS	APBNK	5/23/2024	R	5/15/2024	787.00	787.00CR	
	G/L ACCOUNT		CK: 155566			787.00		
	101 45100-30-404.00	CONTRACTED MACH & EQUIP R & M			787.00	SC WEEKLY BOILER CHECKS		
		REG. CHECK			1	787.00	787.00CR	0.00
						787.00	0.00	

01-031850 CROSS NURSERIES INC

I 051637	ARBOR DAY TREES	APBNK	5/23/2024	R	4/26/2024	6,942.50	6,942.50CR	
	G/L ACCOUNT		CK: 155567			6,942.50		
	205 49005-01-439.00	OTHER MISCELLANEOUS CHARGES			500.00	ARBOR DAY TREES		
	101 41110-01-225.00	LANDSCAPING MATERIALS			6,442.50	ARBOR DAY TREES		
		REG. CHECK			1	6,942.50	6,942.50CR	0.00
						6,942.50	0.00	

01-004437 CUSTOM CAP & TIRE

I 270066527	8 TIRES	APBNK	5/23/2024	R	5/13/2024	1,222.06	1,222.06CR	
	G/L ACCOUNT		CK: 155568			1,222.06		
	101 43100-01-222.00	TIRES			1,222.06	8 TIRES		
		REG. CHECK			1	1,222.06	1,222.06CR	0.00
						1,222.06	0.00	

01-040040 DAKOTA AWARDS & ENGRAVING

I 27774	NAME PLATE-SGT TAPPER	APBNK	5/23/2024	R	5/07/2024	25.50	25.50CR	
	G/L ACCOUNT		CK: 155569			25.50		
	101 41810-01-209.00	OTHER OFFICE SUPPLIES			25.50	NAME PLATE-SGT TAPPER		
		REG. CHECK			1	25.50	25.50CR	0.00
						25.50	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-040435 DAKOTA ELECTRIC ASSOCIATION									
I	200001066414	4/24 STREET LIGHTS	APBNK	5/23/2024	R	5/08/2024	6,275.85	6,275.85CR	
		G/L ACCOUNT		CK: 155570			6,275.85		
		608 49508-01-381.00 ELECTRIC UTILITIES					6,275.85	STREET LIGHTS	
I	200001519073	4/24 SIREN #10	APBNK	5/23/2024	R	5/08/2024	5.00	5.00CR	
		G/L ACCOUNT		CK: 155570			5.00		
		101 43121-01-381.00 ELECTRIC UTILITIES					5.00	SIREN #10	
I	200001834654	4/24 LIFT STATION #4	APBNK	5/23/2024	R	5/08/2024	215.04	215.04CR	
		G/L ACCOUNT		CK: 155570			215.04		
		602 49454-01-381.00 ELECTRIC UTILITIES					215.04	LIFT STATION #4	
I	200002004786	4/24 CONNEMARA PARK SHELTER/LIGH	APBNK	5/23/2024	R	5/08/2024	19.21	19.21CR	
		G/L ACCOUNT		CK: 155570			19.21		
		101 45202-01-381.00 ELECTRIC UTILITIES					19.21	CONNEMARA PARK SHELTER/LIGHTS	
I	200002007870	4/24 IRRIGATION PUMP/SP CONTROL	APBNK	5/23/2024	R	5/08/2024	18.98	18.98CR	
		G/L ACCOUNT		CK: 155570			18.98		
		101 45202-01-381.00 ELECTRIC UTILITIES					18.98	IRRIGATION PUMP/SP CONTROL BLD	
I	200002009231	4/24 WELL #8	APBNK	5/23/2024	R	5/08/2024	2,067.94	2,067.94CR	
		G/L ACCOUNT		CK: 155570			2,067.94		
		601 49408-01-381.00 ELECTRIC UTILITIES					2,067.94	WELL #8	
I	200002009496	4/24 WATER TOWER #2	APBNK	5/23/2024	R	5/08/2024	223.21	223.21CR	
		G/L ACCOUNT		CK: 155570			223.21		
		601 49416-01-381.00 ELECTRIC UTILITIES					223.21	WATER TOWER #2	
I	200002079739	4/24 JAYCEE PARK SHELTER/LIGHTS	APBNK	5/23/2024	R	5/08/2024	79.79	79.79CR	
		G/L ACCOUNT		CK: 155570			79.79		
		101 45202-01-381.00 ELECTRIC UTILITIES					79.79	JAYCEE PARK SHELTER/LIGHTS	
I	200002080539	4/24 LIFT STATION #3	APBNK	5/23/2024	R	5/08/2024	213.93	213.93CR	
		G/L ACCOUNT		CK: 155570			213.93		
		602 49453-01-381.00 ELECTRIC UTILITIES					213.93	LIFT STATION #3	
I	200002112506	4/24 JAYCEE PARK TRAIL LIGHTS	APBNK	5/23/2024	R	5/08/2024	173.60	173.60CR	
		G/L ACCOUNT		CK: 155570			173.60		
		101 45202-01-381.00 ELECTRIC UTILITIES					173.60	JAYCEE PARK TRAIL LIGHTS	
I	200002868701	4/24 STORM DRAIN LIFT STATION #3	APBNK	5/23/2024	R	5/08/2024	259.68	259.68CR	
		G/L ACCOUNT		CK: 155570			259.68		
		603 49513-01-381.00 ELECTRIC UTILITIES					259.68	STORM DRAIN LIFT STATION #3	
I	200003329984	4/24 SDLS #4/LS #6	APBNK	5/23/2024	R	5/08/2024	128.14	128.14CR	
		G/L ACCOUNT		CK: 155570			128.14		
		603 49514-01-381.00 ELECTRIC UTILITIES					25.63	SDLS #4/LS #6	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
		602 49456-01-381.00 ELECTRIC UTILITIES					102.51	SDLS #4/LS #6	
I 200003564457	4/24	METERED TUNNEL LIGHTS	APBNK	5/23/2024	R	5/08/2024	17.27	17.27CR	
		G/L ACCOUNT		CK: 155570			17.27		
		608 49508-01-381.00 ELECTRIC UTILITIES					17.27	METERED TUNNEL LIGHTS	
I 200003949690	4/24	LIFT STATION #9	APBNK	5/23/2024	R	5/08/2024	150.80	150.80CR	
		G/L ACCOUNT		CK: 155570			150.80		
		602 49457-01-381.00 ELECTRIC UTILITIES					150.80	LIFT STATION #9	
I 200004097754	4/24	STORM DRAIN LIFT STATION #6	APBNK	5/23/2024	R	5/08/2024	44.01	44.01CR	
		G/L ACCOUNT		CK: 155570			44.01		
		603 49516-01-381.00 ELECTRIC UTILITIES					44.01	STORM DRAIN LIFT STATION #6	
I 200010038900	4/24	STORM DRAIN LIFT STATION #8	APBNK	5/23/2024	R	5/08/2024	30.88	30.88CR	
		G/L ACCOUNT		CK: 155570			30.88		
		603 49518-01-381.00 ELECTRIC UTILITIES					30.88	STORM DRAIN LIFT STATION #8	
I 200010054799	4/24	LIFT STATION #5	APBNK	5/23/2024	R	5/08/2024	335.35	335.35CR	
		G/L ACCOUNT		CK: 155570			335.35		
		602 49455-01-381.00 ELECTRIC UTILITIES					335.35	LIFT STATION #5	
I 200010057891	4/24	LIFT STATION #12	APBNK	5/23/2024	R	5/08/2024	55.43	55.43CR	
		G/L ACCOUNT		CK: 155570			55.43		
		602 49462-01-381.00 ELECTRIC UTILITIES					55.43	LIFT STATION #12	
				REG. CHECK			1	10,314.11	10,314.11CR	0.00
								10,314.11	0.00	
01-005196 DATAWORKS PLUS LLC									
I 24-954		IBIS MAINTENANCE FEE	APBNK	5/23/2024	R	5/15/2024	505.00	505.00CR	
		G/L ACCOUNT		CK: 155572			505.00		
		101 42110-01-433.00 DUES & SUBSCRIPTIONS					505.00	IBIS MAINTENANCE FEE	
				REG. CHECK			1	505.00	505.00CR	0.00
								505.00	0.00	
01-006166 DAYTRIPPERS DINNER THEATRE									
I 203		RAS TRIP LUNCH & SHOW	APBNK	5/23/2024	R	5/04/2024	2,496.00	2,496.00CR	
		G/L ACCOUNT		CK: 155573			2,496.00		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					2,496.00	RAS TRIP LUNCH & SHOW	
				REG. CHECK			1	2,496.00	2,496.00CR	0.00
								2,496.00	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-040825 DICK'S VALLEY SERVICE INC									
I 24-83275		TOWING CHARGE-SQUAD 190	APBNK	5/23/2024	R	5/06/2024	250.00	250.00CR	
		G/L ACCOUNT		CK: 155574			250.00		
		101 43100-01-404.00 CONTRACTED MACH & EQUIP SERV				250.00	TOWING CHARGE-SQUAD 190		
				REG. CHECK		1	250.00	250.00CR	0.00
							250.00	0.00	
01-040990 DISPLAY SALES COMPANY									
I INV3030		ADJUSTABLE BANDING STRAPS	APBNK	5/23/2024	R	5/09/2024	105.00	105.00CR	
		G/L ACCOUNT		CK: 155575			105.00		
		101 43121-01-224.00 STREET MAINTENANCE MATERIALS				105.00	ADJUSTABLE BANDING STRAPS		
I INV3064		HOLIDAY DECORATIONS	APBNK	5/23/2024	R	5/13/2024	1,132.00	1,132.00CR	
		G/L ACCOUNT		CK: 155575			1,132.00		
		101 43121-01-224.00 STREET MAINTENANCE MATERIALS				1,132.00	HOLIDAY DECORATIONS		
				REG. CHECK		1	1,237.00	1,237.00CR	0.00
							1,237.00	0.00	
01-050213 EARL F ANDERSEN INC									
I 0136017-IN		STREET SIGN BRACKETS	APBNK	5/23/2024	R	5/01/2024	1,550.00	1,550.00CR	
		G/L ACCOUNT		CK: 155576			1,550.00		
		101 43121-01-226.00 SIGN REPAIR MATERIALS				1,550.00	STREET SIGN BRACKETS		
				REG. CHECK		1	1,550.00	1,550.00CR	0.00
							1,550.00	0.00	
01-050329 ECM PUBLISHERS INC									
I 995995		ORDINANCE PUBLIC NOTICE	APBNK	5/23/2024	R	4/26/2024	38.75	38.75CR	
		G/L ACCOUNT		CK: 155577			38.75		
		101 41810-01-351.00 LEGAL NOTICES PUBLISHING				38.75	ORDINANCE PUBLIC NOTICE		
I 997313		CITY WIDE GARAGE SALE AD	APBNK	5/23/2024	R	5/05/2024	3,000.00	3,000.00CR	
		G/L ACCOUNT		CK: 155577			3,000.00		
		101 45100-01-349.00 OTHER ADVERTISING				3,000.00	CITY WIDE GARAGE SALE AD		
I 998073		CANDIDATE FILING PUBLISH	APBNK	5/23/2024	R	5/10/2024	54.24	54.24CR	
		G/L ACCOUNT		CK: 155577			54.24		
		101 41320-01-351.00 LEGAL NOTICES PUBLISHING				54.24	CANDIDATE FILING PUBLISH		

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 998074		5/21 PH ARMIJOS FAMILY LIQU	APBNK	5/23/2024 R		5/10/2024	46.50	46.50CR	
		G/L ACCOUNT		CK: 155577			46.50		
		101 41810-01-351.00 LEGAL NOTICES PUBLISHING				46.50	5/21 PH ARMIJOS FAMILY LIQUOR		
I 998075		KJ WALK VAC PUBLIC NOTICE	APBNK	5/23/2024 R		5/10/2024	58.12	58.12CR	
		G/L ACCOUNT		CK: 155577			58.12		
		101 41810-01-351.00 LEGAL NOTICES PUBLISHING				58.12	KJ WALK VAC PUBLIC NOTICE		
				REG. CHECK		1	3,197.61	3,197.61CR	0.00
							3,197.61	0.00	
01-050340 ECOLAB PEST									
I 5320751		PEST CONTROL-MN DOT	APBNK	5/23/2024 R		5/09/2024	46.16	46.16CR	
		G/L ACCOUNT		CK: 155578			46.16		
		101 41940-01-319.00 OTHER PROFESSIONAL SERVICES				46.16	PEST CONTROL-MN DOT		
				REG. CHECK		1	46.16	46.16CR	0.00
							46.16	0.00	
01-050812 EHLERS									
I 97658		MN FORWARD FUND MEETING	APBNK	5/23/2024 R		5/08/2024	343.75	343.75CR	
		G/L ACCOUNT		CK: 155579			343.75		
		201 46300-01-319.00 OTHER PROFESSIONAL SERVICES				343.75	MN FORWARD FUND MEETING		
				REG. CHECK		1	343.75	343.75CR	0.00
							343.75	0.00	
01-051340 EMERGENCY AUTOMOTIVE TECH									
I OAK24104A		SQUAD 35190 STRIP	APBNK	5/23/2024 R		5/08/2024	1,050.00	1,050.00CR	
		G/L ACCOUNT		CK: 155580			1,050.00		
		207 49007-01-576.00 OTHER EQUIPMENT PURCHASES				1,050.00	SQUAD 35190 STRIP		
				REG. CHECK		1	1,050.00	1,050.00CR	0.00
							1,050.00	0.00	
01-000385 FARMERS MILL & ELEVATOR									
I YC037085		ROUND 1 OF FERTILIZER FOR 2	APBNK	5/23/2024 R		4/26/2024	22,780.33	22,780.33CR	
		G/L ACCOUNT		CK: 155581			22,780.33		
		101 45202-01-216.00 CHEMICALS & CHEMICAL PRODUCTS				22,780.33	ROUND 1 OF FERTILIZER FOR 2024		

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
		REG. CHECK				1	22,780.33	22,780.33CR	0.00
							22,780.33	0.00	

01-002591 FERGUSON ENTERPRISES LLC #3

I 0260670	HYDRANT METER REPLACEMENT	APBNK	5/23/2024	R	4/25/2024	1,417.65	1,417.65CR	
	G/L ACCOUNT		CK: 155582			1,417.65		
	601 49400-01-220.00	METER PURCHASES			1,417.65	HYDRANT METER REPLACEMENT		
		REG. CHECK			1	1,417.65	1,417.65CR	0.00
						1,417.65	0.00	

01-006172 DEJA FERGUSON

I 2024-0284	PERMIT 5579-DAMAGE DEPOSIT	APBNK	5/23/2024	R	5/20/2024	300.00	300.00CR	
	G/L ACCOUNT		CK: 155583			300.00		
	101 22005	REFUNDS PAYABLE - P&R			300.00	PERMIT 5579-DAMAGE DEPOSIT		
		REG. CHECK			1	300.00	300.00CR	0.00
						300.00	0.00	

01-005314 FLEET SERVICES

I 2024100021	APR'24 PD/PW LEASE	APBNK	5/23/2024	R	5/14/2024	6,247.53	6,247.53CR	
	G/L ACCOUNT		CK: 155584			6,247.53		
	207 49007-01-548.00	LEASE PROGRAM-P.W. VEHICLES			4,493.19	APR'24 PD/PW LEASE		
	207 49007-01-549.00	LEASE PROGRAM-POLICE VEHICLES			1,430.32	APR'24 PD/PW LEASE		
	601 49400-01-548.00	LEASE PROGRAM-P.W. VEHICLES			108.00	APR'24 PD/PW LEASE		
	602 49450-01-548.00	LEASE PROGRAM-P.W. VEHICLES			108.01	APR'24 PD/PW LEASE		
	603 49500-01-548.00	LEASE PROGRAM-P.W. VEHICLES			108.01	APR'24 PD/PW LEASE		
		REG. CHECK			1	6,247.53	6,247.53CR	0.00
						6,247.53	0.00	

01-005768 FP MAILING SOLUTIONS

I 2024-0276	5/14 POSTAGE METER REFILL	APBNK	5/16/2024	D	5/14/2024	500.00	500.00CR	
	G/L ACCOUNT		CK: 001906			500.00		
	101 41810-01-322.00	POSTAGE COSTS			500.00	5/14 POSTAGE METER REFILL		
		DRAFTS			1	500.00	500.00CR	0.00
						500.00	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-000677 GERTEN GREENHOUSES INC-4461									
C 217767/12		FERTILIZER W/CREDIT RETURN	APBNK	5/23/2024	R	5/15/2024	186.75CR	186.75	
		G/L ACCOUNT		CK: 155585			186.75CR		
		101 45202-01-216.00 CHEMICALS & CHEMICAL PRODUCTS					186.75CR	FERTILIZER W/CREDIT RETURN	
I 13537/1		WATER TRUCK REEL/WAND	APBNK	5/23/2024	R	5/07/2024	203.97	203.97CR	
		G/L ACCOUNT		CK: 155585			203.97		
		101 43100-01-221.00 EQUIPMENT PARTS					203.97	WATER TRUCK REEL/WAND	
I 57123/1		REPLACEMENT PLANTERS	APBNK	5/23/2024	R	5/13/2024	189.95	189.95CR	
		G/L ACCOUNT		CK: 155585			189.95		
		101 43121-01-225.00 LANDSCAPING MATERIALS					189.95	REPLACEMENT PLANTERS	
I 57244/1		REPLACEMENT PLANTERS	APBNK	5/23/2024	R	5/13/2024	379.90	379.90CR	
		G/L ACCOUNT		CK: 155585			379.90		
		101 43121-01-225.00 LANDSCAPING MATERIALS					379.90	REPLACEMENT PLANTERS	
I 875488/6		REPLACEMENT PLANTS	APBNK	5/23/2024	R	5/07/2024	429.12	429.12CR	
		G/L ACCOUNT		CK: 155585			429.12		
		101 43121-01-225.00 LANDSCAPING MATERIALS					429.12	REPLACEMENT PLANTS	
I 879551/6		PLANT REPLACEMENTS	APBNK	5/23/2024	R	5/13/2024	155.52	155.52CR	
		G/L ACCOUNT		CK: 155585			155.52		
		101 43121-01-225.00 LANDSCAPING MATERIALS					155.52	PLANT REPLACEMENTS	
				REG. CHECK		1	1,171.71	1,171.71CR	0.00
							1,171.71	0.00	
01-071220 GRAINGER									
I 9113341631		CHEMICAL RESISTANT GLOVES	APBNK	5/23/2024	R	5/09/2024	67.92	67.92CR	
		G/L ACCOUNT		CK: 155586			67.92		
		101 45202-01-216.00 CHEMICALS & CHEMICAL PRODUCTS					67.92	CHEMICAL RESISTANT GLOVES	
I 9113503420		PROXIMITY CARD READER	APBNK	5/23/2024	R	5/09/2024	420.68	420.68CR	
		G/L ACCOUNT		CK: 155586			420.68		
		101 41940-01-223.00 BUILDING REPAIR SUPPLIES					420.68	PROXIMITY CARD READER	
I 9118996611		AIR FILTERS & WATER FILTERS	APBNK	5/23/2024	R	5/15/2024	263.54	263.54CR	
		G/L ACCOUNT		CK: 155586			263.54		
		101 41940-01-223.00 BUILDING REPAIR SUPPLIES					263.54	AIR FILTERS & WATER FILTERS	
				REG. CHECK		1	752.14	752.14CR	0.00
							752.14	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-005693 GREAT AMERICA FINANCIAL SVC									
I	36437716	POSTAGE EQUIPMENT	APBNK	5/20/2024	D	4/25/2024	192.41	192.41CR	
		G/L ACCOUNT		CK: 001907			192.41		
		101 41810-01-413.00 OFFICE EQUIPMENT RENTAL					192.41	POSTAGE EQUIPMENT	
				DRAFTS			1 192.41	192.41CR	0.00
							192.41	0.00	
01-080050 HACH COMPANY									
I	14016147	DR 900 COLORIMETER, MANGANE	APBNK	5/23/2024	R	4/30/2024	2,636.75	2,636.75CR	
		G/L ACCOUNT		CK: 155587			2,636.75		
		601 49400-01-216.00 CHEMICALS & CHEMICAL PRODUCTS					2,636.75	DR 900 COLORIMETER, MANGANESE	
				REG. CHECK			1 2,636.75	2,636.75CR	0.00
							2,636.75	0.00	
01-006168 HALLS OF MAGIC LLC									
I	CONTRACT 2902	SAFETY CAMP ENTERTAINMENT	APBNK	5/23/2024	R	5/10/2024	375.00	375.00CR	
		G/L ACCOUNT		CK: 155588			375.00		
		205 49005-01-439.00 OTHER MISCELLANEOUS CHARGES					375.00	SAFETY CAMP ENTERTAINMENT	
				REG. CHECK			1 375.00	375.00CR	0.00
							375.00	0.00	
01-080458 HAWKINS INC									
I	6748599	CHEMICALS AND PUMP PARTS	APBNK	5/23/2024	R	5/03/2024	15,592.42	15,592.42CR	
		G/L ACCOUNT		CK: 155589			15,592.42		
		601 49400-01-216.00 CHEMICALS & CHEMICAL PRODUCTS					15,592.42	CHEMICALS AND PUMP PARTS	
I	6757063	CHLORINE TANK RENTAL	APBNK	5/23/2024	R	5/15/2024	160.00	160.00CR	
		G/L ACCOUNT		CK: 155589			160.00		
		601 49400-01-216.00 CHEMICALS & CHEMICAL PRODUCTS					160.00	CHLORINE TANK RENTAL	
				REG. CHECK			1 15,752.42	15,752.42CR	0.00
							15,752.42	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-005278 HLS OUTDOOR									
I	0015089863-001	IRRIGATION PARTS	APBNK	5/23/2024	R	5/13/2024	417.00	417.00CR	
		G/L ACCOUNT		CK: 155590			417.00		
		101 45202-01-221.00 EQUIPMENT PARTS					417.00	IRRIGATION PARTS	
I	0015582916-001	IRRIGATION PARTS	APBNK	5/23/2024	R	5/16/2024	1,026.48	1,026.48CR	
		G/L ACCOUNT		CK: 155590			1,026.48		
		101 45202-01-221.00 EQUIPMENT PARTS					1,026.48	IRRIGATION PARTS	
				REG. CHECK		1	1,443.48	1,443.48CR	0.00
							1,443.48	0.00	
01-081575 HOME DEPOT CREDIT SERVICE									
I	9035986	SCREWS-GARBAGE CAN SIGNS	APBNK	5/23/2024	R	5/07/2024	44.91	44.91CR	
		G/L ACCOUNT		CK: 155591			44.91		
		101 43100-01-221.00 EQUIPMENT PARTS					44.91	SCREWS-GARBAGE CAN SIGNS	
				REG. CHECK		1	44.91	44.91CR	0.00
							44.91	0.00	
01-006139 HUEBSCH									
I	20315485	MATS & AIR FRESHENER @ FS #	APBNK	5/23/2024	R	5/08/2024	35.76	35.76CR	
		G/L ACCOUNT		CK: 155592			35.76		
		101 41940-01-319.00 OTHER PROFESSIONAL SERVICES					35.76	MATS & AIR FRESHENER @ FS #1	
I	20315493	MATS & AIR FRESHENER @ PD &	APBNK	5/23/2024	R	5/08/2024	203.12	203.12CR	
		G/L ACCOUNT		CK: 155592			203.12		
		101 41940-01-319.00 OTHER PROFESSIONAL SERVICES					203.12	MATS & AIR FRESHENER @ PD & CH	
I	20315494	MATS @ PW SOUTH	APBNK	5/23/2024	R	5/08/2024	16.27	16.27CR	
		G/L ACCOUNT		CK: 155592			16.27		
		101 41940-01-319.00 OTHER PROFESSIONAL SERVICES					16.27	MATS @ PW SOUTH	
I	20315495	MATS & TOWELS @ PW CENTRAL	APBNK	5/23/2024	R	5/08/2024	46.27	46.27CR	
		G/L ACCOUNT		CK: 155592			46.27		
		101 43100-01-211.00 CLEANING SUPPLIES					25.02	MATS & TOWELS @ PW CENTRAL	
		101 41940-01-319.00 OTHER PROFESSIONAL SERVICES					21.25	MATS & TOWELS @ PW CENTRAL	
I	20315496	MATS & AIR FRESHENER @ PW N	APBNK	5/23/2024	R	5/08/2024	81.25	81.25CR	
		G/L ACCOUNT		CK: 155592			81.25		
		101 41940-01-319.00 OTHER PROFESSIONAL SERVICES					81.25	MATS & AIR FRESHENER @ PW N	
I	20315498	MATS & AIR FRESHENER @ FS #	APBNK	5/23/2024	R	5/08/2024	31.76	31.76CR	
		G/L ACCOUNT		CK: 155592			31.76		
		101 41940-01-319.00 OTHER PROFESSIONAL SERVICES					31.76	MATS & AIR FRESHENER @ FS #2	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
		REG. CHECK				1	414.43	414.43CR	0.00
							414.43	0.00	

01-003122 I STATE TRUCK CENTER

I C242874945:01	COOLANT TUBE & ASSEMBLY	APBNK	5/23/2024	R	5/03/2024	257.62	257.62CR	
	G/L ACCOUNT		CK: 155593			257.62		
	101 43100-01-221.00	EQUIPMENT PARTS				257.62	COOLANT TUBE & ASSEMBLY	
I C242875155:01	COOLANT LINE	APBNK	5/23/2024	R	5/06/2024	103.27	103.27CR	
	G/L ACCOUNT		CK: 155593			103.27		
	101 43100-01-221.00	EQUIPMENT PARTS				103.27	COOLANT LINE	
		REG. CHECK				1	360.89	360.89CR	0.00
							360.89	0.00	

01-001690 IN CONTROL INC

I S-INV01536	PW-BUILDING SITE SURVEY	APBNK	5/23/2024	R	4/30/2024	364.00	364.00CR	
	G/L ACCOUNT		CK: 155594			364.00		
	601 49400-01-319.00	OTHER PROFESSIONAL SERVICES				364.00	PW-BUILDING SITE SURVEY	
I S-INV01539	WELL 7 FLOW METER TROUBLESH	APBNK	5/23/2024	R	4/30/2024	1,400.00	1,400.00CR	
	G/L ACCOUNT		CK: 155594			1,400.00		
	601 49400-01-319.00	OTHER PROFESSIONAL SERVICES				1,400.00	WELL 7 FLOW METER TROUBLESHOOT	
		REG. CHECK				1	1,764.00	1,764.00CR	0.00
							1,764.00	0.00	

01-003699 JANI-KING OF MINNESOTA

I MIN05240216	RCC CLEANING 4-27-24	APBNK	5/23/2024	R	5/09/2024	140.00	140.00CR	
	G/L ACCOUNT		CK: 155595			140.00		
	101 45100-01-312.00	CUSTODIAL SERVICES				140.00	RCC CLEANING 4-27-24	
I MIN05240220	SC CLEANING 4-20-24	APBNK	5/23/2024	R	5/13/2024	140.00	140.00CR	
	G/L ACCOUNT		CK: 155595			140.00		
	101 45100-30-312.00	CUSTODIAL SERVICES				140.00	SC CLEANING 4-20-24	
		REG. CHECK				1	280.00	280.00CR	0.00
							280.00	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-006167 FATIMA KHAN									
I 2024-0275		PERMIT 5935-DAMAGE DEPOSIT	APBNK	5/23/2024 R		5/07/2024	500.00	500.00CR	
		G/L ACCOUNT		CK: 155596			500.00		
		101 22005 REFUNDS PAYABLE - P&R				500.00	PERMIT 5935-DAMAGE DEPOSIT		
				REG. CHECK		1	500.00	500.00CR	0.00
							500.00	0.00	
01-005741 KIRCHNER LAWN & LANDSCAPE									
I 8394		STUMP GRIND	APBNK	5/23/2024 R		5/13/2024	100.00	100.00CR	
		G/L ACCOUNT		CK: 155597			100.00		
		101 43121-01-409.00 TREE TRIMMING				100.00	KIRCHNER LAWN & LANDSCAPE		
				REG. CHECK		1	100.00	100.00CR	0.00
							100.00	0.00	
01-002685 LEAGUE OF MN CITIES									
I 406323		PRE CONFERENCE WORKSHOP REG	APBNK	5/23/2024 R		5/17/2024	65.00	65.00CR	
		G/L ACCOUNT		CK: 155598			65.00		
		101 41110-01-437.00 CONFERENCES & SEMINARS				65.00	PRE CONFERENCE WORKSHOP REG		
				REG. CHECK		1	65.00	65.00CR	0.00
							65.00	0.00	
01-002082 LENCO ARMORED VEHICLES									
I 21007		BEARCAT REPAIR PARTS	APBNK	5/23/2024 R		5/06/2024	2,720.63	2,720.63CR	
		G/L ACCOUNT		CK: 155599			2,720.63		
		206 49006-01-409.00 OTHER CONTRACTED REPAIR & MAIN				2,720.63	BEARCAT REPAIR PARTS		
				REG. CHECK		1	2,720.63	2,720.63CR	0.00
							2,720.63	0.00	
01-001905 LEXISNEXIS RISK SOLNS FL IN									
I 1843662-20240430		APRIL SUBSCRIPTION FEE	APBNK	5/23/2024 R		4/30/2024	658.67	658.67CR	
		G/L ACCOUNT		CK: 155600			658.67		
		101 42110-01-433.00 DUES & SUBSCRIPTIONS				658.67	APRIL SUBSCRIPTION FEE		
				REG. CHECK		1	658.67	658.67CR	0.00
							658.67	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-003592 MCMULLEN INSPECTIONS INC									
I 2024-0279		APRIL 2024 ELECTRICAL INVOI	APBNK	5/23/2024	R	5/07/2024	10,688.31	10,688.31CR	
		G/L ACCOUNT		CK: 155601			10,688.31		
		101 20825 ELEC INSPCTR SHARE OF PMT FEES					10,688.31	APRIL 2024 ELECTRICAL INVOICE	
				REG. CHECK		1	10,688.31	10,688.31CR	0.00
							10,688.31	0.00	
01-130725 MENARDS-APPLE VALLEY									
I 72605		EXT CORDS,TIE DOWNS & TOTE	APBNK	5/23/2024	R	4/26/2024	253.93	253.93CR	
		G/L ACCOUNT		CK: 155602			253.93		
		101 43121-01-224.00 STREET MAINTENANCE MATERIALS					253.93	EXT CORDS,TIE DOWNS & TOTE	
I 73534		BUILDING REPAIR SUPPLIES	APBNK	5/23/2024	R	5/14/2024	83.94	83.94CR	
		G/L ACCOUNT		CK: 155602			83.94		
		101 41940-01-223.00 BUILDING REPAIR SUPPLIES					83.94	BUILDING REPAIR SUPPLIES	
I 73685		CABLE SLEEVES	APBNK	5/23/2024	R	5/17/2024	26.07	26.07CR	
		G/L ACCOUNT		CK: 155602			26.07		
		101 45202-01-221.00 EQUIPMENT PARTS					26.07	CABLE SLEEVES	
				REG. CHECK		1	363.94	363.94CR	0.00
							363.94	0.00	
01-002233 MHSRC/DDP									
I 53596		SENIOR DRIVER SAFETY CLASS	APBNK	5/23/2024	R	5/15/2024	584.00	584.00CR	
		G/L ACCOUNT		CK: 155603			584.00		
		101 45100-93-219.00 OTHER OPERATING SUPPLIES					584.00	SENIOR DRIVER SAFETY CLASS	
				REG. CHECK		1	584.00	584.00CR	0.00
							584.00	0.00	
01-005706 MIDWEST MACHINERY CO									
I 10007025		CABLE KIT	APBNK	5/23/2024	R	4/26/2024	107.77	107.77CR	
		G/L ACCOUNT		CK: 155604			107.77		
		101 43100-01-221.00 EQUIPMENT PARTS					107.77	CABLE KIT	
I 10007036		U BOLTS	APBNK	5/23/2024	R	4/26/2024	70.28	70.28CR	
		G/L ACCOUNT		CK: 155604			70.28		
		101 43100-01-221.00 EQUIPMENT PARTS					70.28	U BOLTS	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
			REG. CHECK			1	178.05 / 178.05	178.05CR / 0.00	0.00

01-003896 MMKR & CO., P.A.

I 56206	AUDIT SVCS THRU 04/30/2024	APBNK	5/23/2024	R	5/08/2024	8,570.00	8,570.00CR	
	G/L ACCOUNT		CK: 155605			8,570.00		
	101 41810-01-301.00	AUDITING & ACCOUNTING SERVICES				8,570.00	AUDIT SVCS THRU 04/30/2024	
		REG. CHECK				1	8,570.00 / 8,570.00	8,570.00CR / 0.00	0.00

01-000030 MN DEPT OF REVENUE

I 202405220772	APRIL PETROLEUM TAX	APBNK	5/20/2024	D	5/17/2024	98.61	98.61CR	
	G/L ACCOUNT		CK: 001908			98.61		
	101 43100-01-212.00	MOTOR FUELS				98.61	APRIL PETROLEUM TAX	
		DRAFTS				1	98.61 / 98.61	98.61CR / 0.00	0.00

01-000031 MN DEPT OF REVENUE

I 202405220773	APRIL SALES & USE TAX	APBNK	5/20/2024	D	5/17/2024	8,970.00	8,970.00CR	
	G/L ACCOUNT		CK: 001909			8,970.00		
	101 22810	SALES TAX PAYABLE				72.90	APRIL SALES & USE TAX	
	601 22810	SALES TAX PAYABLE				2,475.10	APRIL SALES & USE TAX	
	650 22810	SALES TAX PAYABLE				6,421.57	APRIL SALES & USE TAX	
	101 41520-01-439.00	OTHER MISCELLANEOUS CHARGES				0.43	APRIL SALES & USE TAX	
		DRAFTS				1	8,970.00 / 8,970.00	8,970.00CR / 0.00	0.00

01-001328 MN ENERGY RESOURCES CORP

I 0503984315-1	4/24 FIRE STATION #2	APBNK	5/23/2024	D	4/25/2024	423.72	423.72CR	
	G/L ACCOUNT		CK: 001910			423.72		
	101 41940-01-383.00	GAS UTILITIES				423.72	FIRE STATION #2	
I 0737046210-2	4/24 FLINT HILLS REC COMPLEX	APBNK	5/23/2024	D	4/26/2024	156.37	156.37CR	
	G/L ACCOUNT		CK: 001910			156.37		
	101 45202-01-383.00	GAS UTILITIES				156.37	FLINT HILLS REC COMPLEX	
		DRAFTS				1	580.09 / 580.09	580.09CR / 0.00	0.00

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-002214 MN POLLUTION CONTROL AGY									
	I 2024-0280	WASTEWATER LICENSE RENEWAL	APBNK	5/23/2024	R	5/13/2024	23.00	23.00CR	
		G/L ACCOUNT		CK: 155606			23.00		
		602 49450-01-437.00 CONFERENCES & SEMINARS				23.00	WASTEWATER LICENSE RENEWAL		
				REG. CHECK		1	23.00	23.00CR	0.00
							23.00	0.00	
01-139915 MTI DISTRIBUTING INC									
	I 1428453-00	RIM & VALVE SOLENOID	APBNK	5/23/2024	R	5/13/2024	270.93	270.93CR	
		G/L ACCOUNT		CK: 155607			270.93		
		101 43100-01-221.00 EQUIPMENT PARTS				270.93	RIM & VALVE SOLENOID		
				REG. CHECK		1	270.93	270.93CR	0.00
							270.93	0.00	
01-141542 NORTHERN SAFETY TECH									
	I 57626	SHIPPING CHARGE	APBNK	5/23/2024	R	4/26/2024	20.00	20.00CR	
		G/L ACCOUNT		CK: 155608			20.00		
		101 43100-01-221.00 EQUIPMENT PARTS				20.00	SHIPPING CHARGE		
				REG. CHECK		1	20.00	20.00CR	0.00
							20.00	0.00	
01-000988 OFFICE OF MN IT SERVICES									
	I W24030614	LANGUAGE LINE SERV	APBNK	5/23/2024	R	4/11/2024	157.46	157.46CR	
		G/L ACCOUNT		CK: 155609			157.46		
		101 42110-01-313.00 TEMPORARY SERVICE FEES				157.46	LANGUAGE LINE SERV		
	I W24040591	LANGUAGE LINE SERV	APBNK	5/23/2024	R	5/13/2024	92.40	92.40CR	
		G/L ACCOUNT		CK: 155609			92.40		
		101 42110-01-313.00 TEMPORARY SERVICE FEES				92.40	LANGUAGE LINE SERV		
				REG. CHECK		1	249.86	249.86CR	0.00
							249.86	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-004427 ONE TEN TEN HOMES LLC									
I	2023-03169	AS-BUILT SURVEY REFUND	APBNK	5/23/2024	R	5/20/2024	2,000.00	2,000.00CR	
		G/L ACCOUNT		CK: 155610			2,000.00		
		101 22010 AS-BUILT SURVEY DEPOSITS					2,000.00	AS-BUILT SURVEY REFUND	
				REG. CHECK			1	2,000.00	2,000.00CR	0.00
								2,000.00	0.00	
01-003953 ONEADVANCED, INC									
I	P23456	INCODE USQL LICENSE	APBNK	5/23/2024	R	5/01/2024	323.00	323.00CR	
		G/L ACCOUNT		CK: 155611			323.00		
		101 41320-01-394.00 P.C. SOFTWARE PURCHASES					323.00	INCODE USQL LICENSE	
				REG. CHECK			1	323.00	323.00CR	0.00
								323.00	0.00	
01-002023 PARAMOUNT AUTO SERVICE-1852									
I	453225	STATE LEASE VEHICLE OIL CHA	APBNK	5/23/2024	R	2/27/2024	156.51	156.51CR	
		G/L ACCOUNT		CK: 155612			156.51		
		101 43100-01-221.00 EQUIPMENT PARTS					54.21	STATE LEASE VEHICLE OIL CHANGE	
		101 43100-01-404.00 CONTRACTED MACH & EQUIP SERV					102.30	STATE LEASE VEHICLE OIL CHANGE	
				REG. CHECK			1	156.51	156.51CR	0.00
								156.51	0.00	
01-006171 PEARSON EDUCATION									
I	2024-0281	PERMIT 5152-DAMAGE DEPOSIT	APBNK	5/23/2024	R	5/07/2024	500.00	500.00CR	
		G/L ACCOUNT		CK: 155613			500.00		
		101 22005 REFUNDS PAYABLE - P&R					500.00	PERMIT 5152-DAMAGE DEPOSIT	
				REG. CHECK			1	500.00	500.00CR	0.00
								500.00	0.00	
01-004740 PELLICCI ACE ROSEMOUNT									
I	11878/R	FITTINGS AND TOOL	APBNK	5/23/2024	R	5/09/2024	34.97	34.97CR	
		G/L ACCOUNT		CK: 155614			34.97		
		101 43100-01-221.00 EQUIPMENT PARTS					9.98	FITTINGS AND TOOL	
		101 45202-01-241.00 SMALL TOOLS					24.99	FITTINGS AND TOOL	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 11902/R		ANCHORS	APBNK	5/23/2024 R		5/13/2024	9.95	9.95CR	
		G/L ACCOUNT		CK: 155614			9.95		
		101 45202-01-221.00 EQUIPMENT PARTS				9.95	ANCHORS		
I 11904/R		5/16 SPRING SNAP	APBNK	5/23/2024 R		5/13/2024	35.88	35.88CR	
		G/L ACCOUNT		CK: 155614			35.88		
		101 43121-01-224.00 STREET MAINTENANCE MATERIALS				35.88	5/16 SPRING SNAP		
I 11909/R		HAND TAMPERS	APBNK	5/23/2024 R		5/14/2024	89.98	89.98CR	
		G/L ACCOUNT		CK: 155614			89.98		
		101 43121-01-224.00 STREET MAINTENANCE MATERIALS				89.98	HAND TAMPERS		
I 11930/R		NUTS & BOLTS	APBNK	5/23/2024 R		5/16/2024	1.70	1.70CR	
		G/L ACCOUNT		CK: 155614			1.70		
		101 45202-01-221.00 EQUIPMENT PARTS				1.70	NUTS & BOLTS		
				REG. CHECK		1	172.48	172.48CR	0.00
							172.48	0.00	

01-006170 KRYSTLE PEPPLE

I 2024-0278		GARAGE SALE REGISTRAT'N REF	APBNK	5/23/2024 R		5/13/2024	15.00	15.00CR	
		G/L ACCOUNT		CK: 155615			15.00		
		101 22005 REFUNDS PAYABLE - P&R				15.00	GARAGE SALE REGISTRAT'N REFUND		
				REG. CHECK		1	15.00	15.00CR	0.00
							15.00	0.00	

01-160940 PILGRIM PROMOTIONS INC

I 16842		SUMMER T-SHIRTS	APBNK	5/23/2024 R		5/13/2024	3,185.10	3,185.10CR	
		G/L ACCOUNT		CK: 155616			3,185.10		
		101 45100-01-219.00 OTHER OPERATING SUPPLIES				501.60	SUMMER T-SHIRTS		
		101 45100-98-219.00 OTHER OPERATING SUPPLIES				688.75	SUMMER T-SHIRTS		
		101 45100-95-219.00 OPERATING SUPPLIES				630.75	SUMMER T-SHIRTS		
		101 45100-91-219.00 OTHER OPERATING SUPPLIES				1,364.00	SUMMER T-SHIRTS		
				REG. CHECK		1	3,185.10	3,185.10CR	0.00
							3,185.10	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-005641 RAIN BIRD INTERNATIONAL INC									
I 62557		DATAPLAN RENEWAL	APBNK	5/23/2024 R		5/08/2024	3,135.00	3,135.00CR	
		G/L ACCOUNT		CK: 155617			3,135.00		
		101 45202-01-403.00 CONTRACTED R & M-OTHER IMPROV					3,135.00 DATAPLAN RENEWAL		
				REG. CHECK		1	3,135.00	3,135.00CR	0.00
							3,135.00	0.00	
01-005198 ROCK HARD LANDSCAPE SUPPLY									
I 3146381		MULCH FOR STEEPLE CENTER	APBNK	5/23/2024 R		5/10/2024	560.00	560.00CR	
		G/L ACCOUNT		CK: 155618			560.00		
		101 43121-01-225.00 LANDSCAPING MATERIALS					560.00 MULCH FOR STEEPLE CENTER		
				REG. CHECK		1	560.00	560.00CR	0.00
							560.00	0.00	
01-005439 ROSEMOUNT CAR SPA, LLC									
I 16-FD		COMMAND VEHICLE WASHES	APBNK	5/23/2024 R		4/30/2024	85.92	85.92CR	
		G/L ACCOUNT		CK: 155619			85.92		
		101 42210-01-211.00 CLEANING SUPPLIES					85.92 COMMAND VEHICLE WASHES		
				REG. CHECK		1	85.92	85.92CR	0.00
							85.92	0.00	
01-190555 SHORT ELLIOT HENDRICKSON									
I 466296		CSAH 42 & BLAINE TRUNK WM E	APBNK	5/23/2024 R		5/07/2024	22,105.51	22,105.51CR	
		G/L ACCOUNT		CK: 155620			22,105.51		
		418 48000-01-303.00 ENGINEERING FEES					22,105.51 CSAH 42 & BLAINE TRUNK WM EXT		
I 467126		WELL 17 DESIGN & CONSTRUCTI	APBNK	5/23/2024 R		5/14/2024	1,615.81	1,615.81CR	
		G/L ACCOUNT		CK: 155620			1,615.81		
		601 49400-01-303.00 ENGINEERING FEES					1,615.81 WELL 17 DESIGN & CONSTRUCTION		
				REG. CHECK		1	23,721.32	23,721.32CR	0.00
							23,721.32	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-001474 SRF CONSULTING GROUP INC									
I	12387.00-15	DUNMORE GREENWAY PLANNING	APBNK	5/23/2024	R	4/30/2024	1,163.64	1,163.64CR	
		G/L ACCOUNT		CK: 155621			1,163.64		
		205 49005-01-530.00 IMPROVEMENTS OTHER THAN BLDGS					1,163.64	DUNMORE GREENWAY PLANNING	
I	16955.00-9	ASPEN AVE EXTENSION	APBNK	5/23/2024	R	4/30/2024	711.27	711.27CR	
		G/L ACCOUNT		CK: 155621			711.27		
		493 48000-01-303.00 ENGINEERING FEES					711.27	ASPEN AVE EXTENSION	
				REG. CHECK		1	1,874.91	1,874.91CR	0.00
							1,874.91	0.00	
01-000268 SUSA									
I	2024-0283	2024 SUSA MEMBERSHIP	APBNK	5/23/2024	R	5/13/2024	125.00	125.00CR	
		G/L ACCOUNT		CK: 155622			125.00		
		601 49400-01-433.00 DUES & SUBSCRIPTIONS					125.00	2024 SUSA MEMBERSHIP	
				REG. CHECK		1	125.00	125.00CR	0.00
							125.00	0.00	
01-000549 TKDA ASSOCIATES									
I	002024002074	2024 STREET IMPROV PROJECT	APBNK	5/23/2024	R	5/03/2024	220.59	220.59CR	
		G/L ACCOUNT		CK: 155623			220.59		
		492 48000-01-303.00 ENGINEERING FEES					220.59	2024 STREET IMPROV PROJECT	
				REG. CHECK		1	220.59	220.59CR	0.00
							220.59	0.00	
01-201538 TOTAL SOURCE INC									
I	20696	#10 GENERIC ENVELOPES	APBNK	5/23/2024	R	5/13/2024	973.70	973.70CR	
		G/L ACCOUNT		CK: 155624			973.70		
		101 41810-01-204.00 ENVELOPES & LETTERHEADS					973.70	#10 GENERIC ENVELOPES	
I	20710	#9 AP CHECK ENVELOPES	APBNK	5/23/2024	R	5/17/2024	818.85	818.85CR	
		G/L ACCOUNT		CK: 155624			818.85		
		101 41810-01-204.00 ENVELOPES & LETTERHEADS					818.85	#9 AP CHECK ENVELOPES	
				REG. CHECK		1	1,792.55	1,792.55CR	0.00
							1,792.55	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
01-202315 TWIN CITY HARDWARE									
I	PSI2265649	FH PARK DOOR PROGRAMMING	APBNK	5/23/2024	R	5/17/2024	435.00	435.00CR	
		G/L ACCOUNT		CK: 155625			435.00		
		101 45100-01-219.00 OTHER OPERATING SUPPLIES					435.00	FH PARK DOOR PROGRAMMING	
				REG. CHECK			1 435.00	435.00CR	0.00
							435.00	0.00	
01-001337 US BANK									
C	202405150699	RETURN 100' CAT6 CABLE	APBNK	5/07/2024	D	4/05/2024	43.24CR	43.24	
		G/L ACCOUNT		CK: 001911			43.24CR		
		101 42110-01-242.00 MINOR EQUIPMENT					43.24CR	RETURN 100' CAT6 CABLE	
I	202405150667	LMC ANNUAL CONFERENCE REG	APBNK	5/07/2024	D	3/27/2024	425.00	425.00CR	
		G/L ACCOUNT		CK: 001911			425.00		
		101 41110-01-437.00 CONFERENCES & SEMINARS					425.00	LMC ANNUAL CONFERENCE REG	
I	202405150668	FOOD FOR CC	APBNK	5/07/2024	D	4/02/2024	18.48	18.48CR	
		G/L ACCOUNT		CK: 001911			18.48		
		101 41110-01-315.00 SPECIAL PROGRAMS					18.48	FOOD FOR CC	
I	202405150669	FOOD FOR CC MEETING 4/2	APBNK	5/07/2024	D	4/02/2024	84.04	84.04CR	
		G/L ACCOUNT		CK: 001911			84.04		
		101 41110-01-315.00 SPECIAL PROGRAMS					84.04	FOOD FOR CC MEETING 4/2	
I	202405150670	FOOD/SUPPLIES - STATE OF CI	APBNK	5/07/2024	D	4/05/2024	127.57	127.57CR	
		G/L ACCOUNT		CK: 001911			127.57		
		101 41110-01-315.00 SPECIAL PROGRAMS					127.57	FOOD/SUPPLIES - STATE OF CITY	
I	202405150671	TRAINING J WALTMAN	APBNK	5/07/2024	D	4/01/2024	1,230.00	1,230.00CR	
		G/L ACCOUNT		CK: 001911			1,230.00		
		101 41520-01-437.00 CONFERENCES & SEMINARS					1,230.00	TRAINING J WALTMAN	
I	202405150672	NLC REG. CITY SUMMIT - MAYO	APBNK	5/07/2024	D	4/04/2024	640.00	640.00CR	
		G/L ACCOUNT		CK: 001911			640.00		
		101 41110-01-437.00 CONFERENCES & SEMINARS					640.00	NLC REG. CITY SUMMIT - MAYOR	
I	202405150673	Clerk Institute - Year 1	APBNK	5/07/2024	D	3/27/2024	460.00	460.00CR	
		G/L ACCOUNT		CK: 001911			460.00		
		101 41110-01-437.00 CONFERENCES & SEMINARS					460.00	Clerk Institute - Year 1	
I	202405150674	Tags for Appreciation Event	APBNK	5/07/2024	D	4/18/2024	8.52	8.52CR	
		G/L ACCOUNT		CK: 001911			8.52		
		101 41110-01-598.00 COUNCIL DESIGNATED					8.52	Tags for Appreciation Event	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 202405150675		Stickers - Appreciation Eve	APBNK	5/07/2024	D	4/18/2024	8.99	8.99CR	
		G/L ACCOUNT		CK: 001911			8.99		
		101 41110-01-598.00 COUNCIL DESIGNATED					8.99	Stickers - Appreciation Event	
I 202405150676		Helium Balloons - Volunteer	APBNK	5/07/2024	D	4/23/2024	9.73	9.73CR	
		G/L ACCOUNT		CK: 001911			9.73		
		101 41110-01-598.00 COUNCIL DESIGNATED					9.73	Helium Balloons - Volunteer	
I 202405150677		Subs & Chips - Volunteer Ev	APBNK	5/07/2024	D	4/24/2024	308.49	308.49CR	
		G/L ACCOUNT		CK: 001911			308.49		
		101 41110-01-598.00 COUNCIL DESIGNATED					308.49	Subs & Chips - Volunteer Event	
I 202405150678		PW SEASONAL JOB POSTING	APBNK	5/07/2024	D	4/09/2024	99.00	99.00CR	
		G/L ACCOUNT		CK: 001911			99.00		
		101 45202-01-433.00 DUES & SUBSCRIPTIONS					99.00	PW SEASONAL JOB POSTING	
I 202405150679		PW SEASONAL JOB POSTING	APBNK	5/07/2024	D	4/09/2024	99.00	99.00CR	
		G/L ACCOUNT		CK: 001911			99.00		
		101 45202-01-433.00 DUES & SUBSCRIPTIONS					99.00	PW SEASONAL JOB POSTING	
I 202405150680		BLACK FRAMES FOR RIBBON CUT	APBNK	5/07/2024	D	4/10/2024	30.23	30.23CR	
		G/L ACCOUNT		CK: 001911			30.23		
		101 41910-01-209.00 OTHER OFFICE SUPPLIES					30.23	BLACK FRAMES FOR RIBBON CUTS	
I 202405150681		FRANA NOMINATION FOR F&C 20	APBNK	5/07/2024	D	4/11/2024	150.00	150.00CR	
		G/L ACCOUNT		CK: 001911			150.00		
		201 46300-01-349.00 OTHER ADVERTISING					150.00	FRANA NOMINATION FOR F&C 2023	
I 202405150682		FINANCE & COMMERCE SUBS.	APBNK	5/07/2024	D	4/11/2024	249.00	249.00CR	
		G/L ACCOUNT		CK: 001911			249.00		
		201 46300-01-433.00 DUES & SUBSCRIPTIONS					249.00	FINANCE & COMMERCE SUBS.	
I 202405150683		APRIL ADVOCACY FORUM - DEVE	APBNK	5/07/2024	D	4/02/2024	18.00	18.00CR	
		G/L ACCOUNT		CK: 001911			18.00		
		201 46300-01-437.00 CONFERENCES & SEMINARS					18.00	APRIL ADVOCACY FORUM - DEVELOP	
I 202405150684		BLOOMBERG DIGITAL SUB - 202	APBNK	5/07/2024	D	4/13/2024	299.00	299.00CR	
		G/L ACCOUNT		CK: 001911			299.00		
		201 46300-01-433.00 DUES & SUBSCRIPTIONS					299.00	BLOOMBERG DIGITAL SUB - 2024	
I 202405150685		WSJ SUBSCRIPTION 2024	APBNK	5/07/2024	D	4/14/2024	252.88	252.88CR	
		G/L ACCOUNT		CK: 001911			252.88		
		201 46300-01-433.00 DUES & SUBSCRIPTIONS					252.88	WSJ SUBSCRIPTION 2024	
I 202405150686		DOMESTIC VIOLENCE LUNCHEON	APBNK	5/07/2024	D	3/27/2024	175.00	175.00CR	
		G/L ACCOUNT		CK: 001911			175.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS					175.00	DOMESTIC VIOLENCE LUNCHEON	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 202405150687		TRAINING FOR 62 TWO CLASSES	APBNK	5/07/2024	D	4/16/2024	600.00	600.00CR	
		G/L ACCOUNT		CK: 001911			600.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS					600.00	TRAINING FOR 62 TWO CLASSES	
I 202405150688		SNACKS FOR TEEN ACADEMY	APBNK	5/07/2024	D	4/16/2024	18.93	18.93CR	
		G/L ACCOUNT		CK: 001911			18.93		
		101 42110-01-439.00 OTHER MISCELLANEOUS CHARGES					18.93	SNACKS FOR TEEN ACADEMY	
I 202405150689		MEDICAL GLOVES XL	APBNK	5/07/2024	D	4/19/2024	355.20	355.20CR	
		G/L ACCOUNT		CK: 001911			355.20		
		101 42110-01-219.00 OTHER OPERATING SUPPLIES					355.20	MEDICAL GLOVES XL	
I 202405150690		Uniform - 3501	APBNK	5/07/2024	D	4/03/2024	159.99	159.99CR	
		G/L ACCOUNT		CK: 001911			159.99		
		101 42110-01-217.00 CLOTHING ALLOWANCE - POLICE					159.99	Uniform - 3501	
I 202405150691		Therapy Sessions	APBNK	5/07/2024	D	4/11/2024	640.00	640.00CR	
		G/L ACCOUNT		CK: 001911			640.00		
		101 42110-01-319.00 OTHER PROFESSIONAL SERVICES					640.00	Therapy Sessions	
I 202405150692		Lodging - 40	APBNK	5/07/2024	D	4/18/2024	537.24	537.24CR	
		G/L ACCOUNT		CK: 001911			537.24		
		101 42110-01-331.00 TRAVEL EXPENSE					537.24	Lodging - 40	
I 202405150693		Lodging ETI - 02	APBNK	5/07/2024	D	4/18/2024	537.24	537.24CR	
		G/L ACCOUNT		CK: 001911			537.24		
		101 42110-01-331.00 TRAVEL EXPENSE					537.24	Lodging ETI - 02	
I 202405150694		Lodging - 01	APBNK	5/07/2024	D	4/18/2024	537.24	537.24CR	
		G/L ACCOUNT		CK: 001911			537.24		
		101 42110-01-331.00 TRAVEL EXPENSE					537.24	Lodging - 01	
I 202405150695		FBI LEEDA CLI ECKSTEIN	APBNK	5/07/2024	D	3/28/2024	795.00	795.00CR	
		G/L ACCOUNT		CK: 001911			795.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS					795.00	FBI LEEDA CLI ECKSTEIN	
I 202405150696		ECKSTEIN DMT RECERT	APBNK	5/07/2024	D	4/08/2024	75.00	75.00CR	
		G/L ACCOUNT		CK: 001911			75.00		
		208 49008-01-437.00 CONFERENCES & SEMINARS					75.00	ECKSTEIN DMT RECERT	
I 202405150697		REMAINING PAYMENT FOR LODGI	APBNK	5/07/2024	D	4/12/2024	277.03	277.03CR	
		G/L ACCOUNT		CK: 001911			277.03		
		101 42110-01-331.00 TRAVEL EXPENSE					277.03	REMAINING PAYMENT FOR LODGING	
I 202405150698		HENN TECH CAREER FAIR GOODI	APBNK	5/07/2024	D	4/23/2024	112.35	112.35CR	
		G/L ACCOUNT		CK: 001911			112.35		
		101 42110-01-439.00 OTHER MISCELLANEOUS CHARGES					112.35	HENN TECH CAREER FAIR GOODIES	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 202405150700		100' CAT 6 CABLE	APBNK	5/07/2024	D	4/05/2024	43.24	43.24CR	
		G/L ACCOUNT		CK: 001911			43.24		
		101 42110-01-242.00 MINOR EQUIPMENT					43.24	100' CAT 6 CABLE	
I 202405150701		PHONE LINE & PWR STRIP	APBNK	5/07/2024	D	4/05/2024	12.68	12.68CR	
		G/L ACCOUNT		CK: 001911			12.68		
		101 42110-01-242.00 MINOR EQUIPMENT					12.68	PHONE LINE & PWR STRIP	
I 202405150702		TOUCH 'N FLOW NOZZLE	APBNK	5/07/2024	D	4/05/2024	18.00	18.00CR	
		G/L ACCOUNT		CK: 001911			18.00		
		101 42110-01-241.00 SMALL TOOLS					18.00	TOUCH 'N FLOW NOZZLE	
I 202405150703		SOTA CONF LODGING-3539	APBNK	5/07/2024	D	4/23/2024	362.34	362.34CR	
		G/L ACCOUNT		CK: 001911			362.34		
		101 42110-01-331.00 TRAVEL EXPENSE					362.34	SOTA CONF LODGING-3539	
I 202405150704		SOTA CONF LODGING-3544	APBNK	5/07/2024	D	4/23/2024	362.34	362.34CR	
		G/L ACCOUNT		CK: 001911			362.34		
		101 42110-01-331.00 TRAVEL EXPENSE					362.34	SOTA CONF LODGING-3544	
I 202405150705		DMT-G RECERTIFICATION FOR 3	APBNK	5/07/2024	D	4/09/2024	75.00	75.00CR	
		G/L ACCOUNT		CK: 001911			75.00		
		208 49008-01-437.00 CONFERENCES & SEMINARS					75.00	DMT-G RECERTIFICATION FOR 3544	
I 202405150706		SUPERVISOR TRAINING FOR 356	APBNK	5/07/2024	D	4/09/2024	300.00	300.00CR	
		G/L ACCOUNT		CK: 001911			300.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS					300.00	SUPERVISOR TRAINING FOR 3568	
I 202405150707		CHIEFS CONFERENCE FOR 35S40	APBNK	5/07/2024	D	4/10/2024	800.00	800.00CR	
		G/L ACCOUNT		CK: 001911			800.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS					800.00	CHIEFS CONFERENCE FOR 35S40	
I 202405150708		TWO TRAINING COURSES FOR 35	APBNK	5/07/2024	D	4/10/2024	600.00	600.00CR	
		G/L ACCOUNT		CK: 001911			600.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS					600.00	TWO TRAINING COURSES FOR 3568	
I 202405150709		Mentoring & Coaching for 35	APBNK	5/07/2024	D	4/10/2024	300.00	300.00CR	
		G/L ACCOUNT		CK: 001911			300.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS					300.00	Mentoring & Coaching for 3568	
I 202405150710		DNA Swabs	APBNK	5/07/2024	D	4/02/2024	53.52	53.52CR	
		G/L ACCOUNT		CK: 001911			53.52		
		101 42110-01-219.00 OTHER OPERATING SUPPLIES					53.52	DNA Swabs	
I 202405150711		OFFICE SUPPLIES	APBNK	5/07/2024	D	4/03/2024	24.34	24.34CR	
		G/L ACCOUNT		CK: 001911			24.34		
		101 41810-01-209.00 OTHER OFFICE SUPPLIES					24.34	OFFICE SUPPLIES	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 202405150712		OFFICE SUPPLIES	APBNK	5/07/2024	D	4/04/2024	59.46	59.46CR	
		G/L ACCOUNT		CK: 001911			59.46		
		101 41810-01-209.00 OTHER OFFICE SUPPLIES				59.46	OFFICE SUPPLIES		
I 202405150713		Office Supplies	APBNK	5/07/2024	D	4/08/2024	39.72	39.72CR	
		G/L ACCOUNT		CK: 001911			39.72		
		101 41810-01-209.00 OTHER OFFICE SUPPLIES				39.72	Office Supplies		
I 202405150714		COFFEE POT	APBNK	5/07/2024	D	4/16/2024	18.27	18.27CR	
		G/L ACCOUNT		CK: 001911			18.27		
		101 41810-01-209.00 OTHER OFFICE SUPPLIES				18.27	COFFEE POT		
I 202405150715		FORENSIC DNA TRAINING FOR 4	APBNK	5/07/2024	D	3/29/2024	75.00	75.00CR	
		G/L ACCOUNT		CK: 001911			75.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS				75.00	FORENSIC DNA TRAINING FOR 48		
I 202405150716		FORENSIC DNA TRAINING FOR 7	APBNK	5/07/2024	D	3/29/2024	75.00	75.00CR	
		G/L ACCOUNT		CK: 001911			75.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS				75.00	FORENSIC DNA TRAINING FOR 71		
I 202405150717		2 CSO BADGES FOR $98.576 EA	APBNK	5/07/2024	D	4/09/2024	197.15	197.15CR	
		G/L ACCOUNT		CK: 001911			197.15		
		101 42110-01-217.00 CLOTHING ALLOWANCE - POLICE				197.15	2 CSO BADGES FOR $98.576 EACH		
I 202405150718		BCA CRIME SCENE TRN FOR 354	APBNK	5/07/2024	D	4/09/2024	450.00	450.00CR	
		G/L ACCOUNT		CK: 001911			450.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS				450.00	BCA CRIME SCENE TRN FOR 3548		
I 202405150719		10 RPD BDGS 98.58 EA #76-80	APBNK	5/07/2024	D	4/18/2024	985.80	985.80CR	
		G/L ACCOUNT		CK: 001911			985.80		
		101 42110-01-221.00 EQUIPMENT PARTS				985.80	10 RPD BDGS 98.58 EA #76-80 x2		
I 202405150720		5 RPD HAT BDGS @ $95 EA	APBNK	5/07/2024	D	4/18/2024	475.00	475.00CR	
		G/L ACCOUNT		CK: 001911			475.00		
		101 42110-01-217.00 CLOTHING ALLOWANCE - POLICE				475.00	5 RPD HAT BDGS @ $95 EA		
I 202405150721		MN CIT 40-HOUR CERT CLASS	APBNK	5/07/2024	D	4/03/2024	975.00	975.00CR	
		G/L ACCOUNT		CK: 001911			975.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS				975.00	MN CIT 40-HOUR CERT CLASS		
I 202405150722		BCA CRIME SCENE TRAINING 35	APBNK	5/07/2024	D	4/10/2024	450.00	450.00CR	
		G/L ACCOUNT		CK: 001911			450.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS				450.00	BCA CRIME SCENE TRAINING 3566		
I 202405150723		MN BCA BUDGET STAFFING 3538	APBNK	5/07/2024	D	4/11/2024	300.00	300.00CR	
		G/L ACCOUNT		CK: 001911			300.00		
		101 42110-01-437.00 CONFERENCES & SEMINARS				300.00	MN BCA BUDGET STAFFING 3538		

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 202405150724		POLICE BIKE LIGHT CHARGER	APBNK	5/07/2024	D	4/18/2024	39.90	39.90CR	
		G/L ACCOUNT		CK: 001911			39.90		
		101 42110-01-241.00 SMALL TOOLS					39.90	POLICE BIKE LIGHT CHARGER	
I 202405150725		CAR WASH BRUSHES	APBNK	5/07/2024	D	3/31/2024	31.98	31.98CR	
		G/L ACCOUNT		CK: 001911			31.98		
		101 42210-01-211.00 CLEANING SUPPLIES					31.98	CAR WASH BRUSHES	
I 202405150726		PLUG ADAPTER FOR E21,PAR TA	APBNK	5/07/2024	D	3/31/2024	52.45	52.45CR	
		G/L ACCOUNT		CK: 001911			52.45		
		101 42210-01-241.00 SMALL TOOLS					52.45	PLUG ADAPTER FOR E21,PAR TABLE	
I 202405150727		FOOD FOR AV FIRE STANDBY	APBNK	5/07/2024	D	4/22/2024	125.63	125.63CR	
		G/L ACCOUNT		CK: 001911			125.63		
		101 42210-01-439.00 OTHER MISCELLANEOUS CHARGES					125.63	FOOD FOR AV FIRE STANDBY	
I 202405150728		DRY ERASE MARKER AND ERASER	APBNK	5/07/2024	D	4/22/2024	20.07	20.07CR	
		G/L ACCOUNT		CK: 001911			20.07		
		101 42210-01-219.00 OTHER OPERATING SUPPLIES					20.07	DRY ERASE MARKER AND ERASERS	
I 202405150729		PAR BOARD BAGS & GREASE PEN	APBNK	5/07/2024	D	4/22/2024	83.59	83.59CR	
		G/L ACCOUNT		CK: 001911			83.59		
		101 42210-01-219.00 OTHER OPERATING SUPPLIES					83.59	PAR BOARD BAGS & GREASE PENS	
I 202405150730		1/2 " DEEP WELL IMPACT SOCK	APBNK	5/07/2024	D	4/04/2024	137.00	137.00CR	
		G/L ACCOUNT		CK: 001911			137.00		
		101 45202-01-241.00 SMALL TOOLS					137.00	1/2 " DEEP WELL IMPACT SOCKETS	
I 202405150731		CAR BUMPER FOR SKATE PARK	APBNK	5/07/2024	D	4/16/2024	211.79	211.79CR	
		G/L ACCOUNT		CK: 001911			211.79		
		101 45202-01-221.00 EQUIPMENT PARTS					211.79	CAR BUMPER FOR SKATE PARK	
I 202405150732		PHONE CASE CHUCK'S NEW IPHO	APBNK	5/07/2024	D	4/05/2024	25.21	25.21CR	
		G/L ACCOUNT		CK: 001911			25.21		
		101 43121-01-321.00 TELEPHONE COSTS					25.21	PHONE CASE CHUCK'S NEW IPHONE	
I 202405150733		PARTS FOR PLOW OPS	APBNK	5/07/2024	D	3/28/2024	13.75	13.75CR	
		G/L ACCOUNT		CK: 001911			13.75		
		101 43100-01-221.00 EQUIPMENT PARTS					13.75	PARTS FOR PLOW OPS	
I 202405150734		basketball court paint	APBNK	5/07/2024	D	4/23/2024	211.98	211.98CR	
		G/L ACCOUNT		CK: 001911			211.98		
		101 45202-01-229.00 OTHER MAINTENANCE SUPPLIES					211.98	basketball court paint	
I 202405150735		Fire ext. cabinet hammers	APBNK	5/07/2024	D	3/28/2024	40.60	40.60CR	
		G/L ACCOUNT		CK: 001911			40.60		
		101 41940-01-223.00 BUILDING REPAIR SUPPLIES					40.60	Fire ext. cabinet hammers	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 202405150736		Air pressure switch	APBNK	5/07/2024	D	4/17/2024	114.84	114.84CR	
		G/L ACCOUNT		CK: 001911			114.84		
		101 41940-01-223.00 BUILDING REPAIR SUPPLIES					114.84	Air pressure switch	
I 202405150737		2 pin bulbs	APBNK	5/07/2024	D	4/19/2024	60.04	60.04CR	
		G/L ACCOUNT		CK: 001911			60.04		
		101 41940-01-223.00 BUILDING REPAIR SUPPLIES					60.04	2 pin bulbs	
I 202405150738		ONE COMMANDER PRO FILE EXPL	APBNK	5/07/2024	D	4/04/2024	25.00	25.00CR	
		G/L ACCOUNT		CK: 001911			25.00		
		601 49400-01-394.00 P.C. SOFTWARE PURCHASES					25.00	ONE COMMANDER PRO FILE EXPLORE	
I 202405150739		PW & ENG OFFICE SUPPLIES 1	APBNK	5/07/2024	D	4/05/2024	33.75	33.75CR	
		G/L ACCOUNT		CK: 001911			33.75		
		101 41940-01-208.00 MISCELLANEOUS SUPPLIES					33.75	PW & ENG OFFICE SUPPLIES 1	
I 202405150740		BOXES REQUESTED BY UTILITIE	APBNK	5/07/2024	D	4/06/2024	642.74	642.74CR	
		G/L ACCOUNT		CK: 001911			642.74		
		601 49400-01-229.00 OTHER MAINTENANCE SUPPLIES					642.74	BOXES REQUESTED BY UTILITIES	
I 202405150741		PW & ENG OFFICE SUPPLIES 2	APBNK	5/07/2024	D	4/07/2024	19.36	19.36CR	
		G/L ACCOUNT		CK: 001911			19.36		
		101 41940-01-208.00 MISCELLANEOUS SUPPLIES					19.36	PW & ENG OFFICE SUPPLIES 2	
I 202405150742		COLOR PAPER,LAMINATING SHEE	APBNK	5/07/2024	D	4/10/2024	77.81	77.81CR	
		G/L ACCOUNT		CK: 001911			77.81		
		101 41940-01-208.00 MISCELLANEOUS SUPPLIES					77.81	COLOR PAPER,LAMINATING SHEETS	
I 202405150743		LABEL MAKER TAPE CARTRIDGES	APBNK	5/07/2024	D	4/11/2024	13.99	13.99CR	
		G/L ACCOUNT		CK: 001911			13.99		
		101 41810-01-209.00 OTHER OFFICE SUPPLIES					13.99	LABEL MAKER TAPE CARTRIDGES	
I 202405150744		LABEL MAKER TAPE CARTRIDGES	APBNK	5/07/2024	D	4/11/2024	49.70	49.70CR	
		G/L ACCOUNT		CK: 001911			49.70		
		101 43100-01-215.00 SHOP MATERIALS					49.70	LABEL MAKER TAPE CARTRIDGES	
I 202405150745		ARENA OFFICE CHARGING STATI	APBNK	5/07/2024	D	4/01/2024	39.99	39.99CR	
		G/L ACCOUNT		CK: 001911			39.99		
		650 45130-01-209.00 OTHER OFFICE SUPPLIES					39.99	ARENA OFFICE CHARGING STATION	
I 202405150746		CHAIN LUBE FOR ZAMBONI	APBNK	5/07/2024	D	4/02/2024	71.00	71.00CR	
		G/L ACCOUNT		CK: 001911			71.00		
		650 45130-01-221.00 EQUIPMENT PARTS					71.00	CHAIN LUBE FOR ZAMBONI	
I 202405150747		OFFICE CHAIR	APBNK	5/07/2024	D	4/02/2024	179.99	179.99CR	
		G/L ACCOUNT		CK: 001911			179.99		
		650 45130-01-209.00 OTHER OFFICE SUPPLIES					179.99	OFFICE CHAIR	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 202405150748		SCREWS,3 HOLE PUNCH,DETERGE	APBNK	5/07/2024	D	4/02/2024	107.08	107.08CR	
		G/L ACCOUNT		CK: 001911			107.08		
		101 45100-30-221.00 EQUIPMENT PARTS					107.08	SCREWS,3 HOLE PUNCH,DETERGENT	
I 202405150749		MIAMA SPRING WORKSHOP	APBNK	5/07/2024	D	4/03/2024	70.00	70.00CR	
		G/L ACCOUNT		CK: 001911			70.00		
		650 45130-01-433.00 DUES & SUBSCRIPTIONS					70.00	MIAMA SPRING WORKSHOP	
I 202405150750		SMALL MAGNETS	APBNK	5/07/2024	D	4/10/2024	6.85	6.85CR	
		G/L ACCOUNT		CK: 001911			6.85		
		101 45100-01-221.00 EQUIPMENT PARTS					6.85	SMALL MAGNETS	
I 202405150751		SENIOR MOVIE SHOWING RENTAL	APBNK	5/07/2024	D	3/25/2024	3.99	3.99CR	
		G/L ACCOUNT		CK: 001911			3.99		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					3.99	SENIOR MOVIE SHOWING RENTAL	
I 202405150752		REGISTRATION DROP BOX	APBNK	5/07/2024	D	3/26/2024	51.49	51.49CR	
		G/L ACCOUNT		CK: 001911			51.49		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					51.49	REGISTRATION DROP BOX	
I 202405150753		BUS FOR RAS MYSTERY TRIP	APBNK	5/07/2024	D	3/26/2024	1,055.24	1,055.24CR	
		G/L ACCOUNT		CK: 001911			1,055.24		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					1,055.24	BUS FOR RAS MYSTERY TRIP	
I 202405150754		SENIOR CRAFT SUPPLIES	APBNK	5/07/2024	D	4/02/2024	7.99	7.99CR	
		G/L ACCOUNT		CK: 001911			7.99		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					7.99	SENIOR CRAFT SUPPLIES	
I 202405150755		SENIOR CRAFT SUPPLIES	APBNK	5/07/2024	D	4/02/2024	7.74	7.74CR	
		G/L ACCOUNT		CK: 001911			7.74		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					7.74	SENIOR CRAFT SUPPLIES	
I 202405150756		MEALS FOR SENIOR LUNCHEON	APBNK	5/07/2024	D	4/02/2024	1,427.38	1,427.38CR	
		G/L ACCOUNT		CK: 001911			1,427.38		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					1,427.38	MEALS FOR SENIOR LUNCHEON	
I 202405150757		TABLECLOTHS FOR SENIOR EVEN	APBNK	5/07/2024	D	4/04/2024	12.98	12.98CR	
		G/L ACCOUNT		CK: 001911			12.98		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					12.98	TABLECLOTHS FOR SENIOR EVENT	
I 202405150758		FLOWERS SENIOR VOLUNTEER EV	APBNK	5/07/2024	D	4/10/2024	45.34	45.34CR	
		G/L ACCOUNT		CK: 001911			45.34		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					45.34	FLOWERS SENIOR VOLUNTEER EVENT	
I 202405160761		SENIOR VOLUNTEER LUNCHEON	APBNK	5/07/2024	D	4/10/2024	468.72	468.72CR	
		G/L ACCOUNT		CK: 001911			468.72		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					468.72	SENIOR VOLUNTEER LUNCHEON	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
I 202405160762		DEPARTMENT CANVA SUBSCRIPTI	APBNK	5/07/2024	D	4/13/2024	239.99	239.99CR	
		G/L ACCOUNT		CK: 001911			239.99		
		101 45100-01-433.00 DUES & SUBSCRIPTIONS					239.99	DEPARTMENT CANVA SUBSCRIPTION	
I 202405160763		SENIOR CRAFT SUPPLIES	APBNK	5/07/2024	D	4/15/2024	21.50	21.50CR	
		G/L ACCOUNT		CK: 001911			21.50		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					21.50	SENIOR CRAFT SUPPLIES	
I 202405160764		AVERY POSTCARDS - 4 BOXES	APBNK	5/07/2024	D	4/11/2024	93.48	93.48CR	
		G/L ACCOUNT		CK: 001911			93.48		
		101 41810-01-209.00 OTHER OFFICE SUPPLIES					93.48	AVERY POSTCARDS - 4 BOXES	
I 202405160765		MOUSE PAD WITH WRIST SUPPOR	APBNK	5/07/2024	D	4/11/2024	9.58	9.58CR	
		G/L ACCOUNT		CK: 001911			9.58		
		101 41810-01-209.00 OTHER OFFICE SUPPLIES					9.58	MOUSE PAD WITH WRIST SUPPORT	
I 202405160766		HEADPHONE STAND, LAPTOP BAG	APBNK	5/07/2024	D	4/12/2024	24.49	24.49CR	
		G/L ACCOUNT		CK: 001911			24.49		
		101 41810-01-209.00 OTHER OFFICE SUPPLIES					24.49	HEADPHONE STAND, LAPTOP BAG	
I 202405160767		MONTHLY SUBSCRIPTION	APBNK	5/07/2024	D	3/28/2024	45.00	45.00CR	
		G/L ACCOUNT		CK: 001911			45.00		
		101 45100-01-433.00 DUES & SUBSCRIPTIONS					45.00	MONTHLY SUBSCRIPTION	
				DRAFTS		1	22,367.77	22,367.77CR	0.00
							22,367.77	0.00	
01-006173 UTILITY LOGIC LLC									
I 14642		MAGNETIC GROUND EXTENSIONS	APBNK	5/23/2024	R	5/06/2024	235.00	235.00CR	
		G/L ACCOUNT		CK: 155626			235.00		
		601 49400-01-242.00 MINOR EQUIPMENT					235.00	MAGNETIC GROUND EXTENSIONS	
I 14644		PUSH INSPECTION CAMERA	APBNK	5/23/2024	R	5/06/2024	12,135.00	12,135.00CR	
		G/L ACCOUNT		CK: 155626			12,135.00		
		602 49450-01-242.00 MINOR EQUIPMENT					12,135.00	PUSH INSPECTION CAMERA	
				REG. CHECK		1	12,370.00	12,370.00CR	0.00
							12,370.00	0.00	
01-006174 VELVET TONES									
I 2024-0285		PERFORMANCE AT RAS LUNCHEON	APBNK	5/23/2024	R	5/13/2024	150.00	150.00CR	
		G/L ACCOUNT		CK: 155627			150.00		
		101 45100-87-219.00 OTHER OPERATING SUPPLIES					150.00	PERFORMANCE AT RAS LUNCHEON	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
		REG. CHECK				1	150.00	150.00CR	0.00
							150.00	0.00	

01-005960 VIA ACTUARIAL SOLUTIONS

I RMF-2024-04	2023 GASB 67/68 VALUATION	APBNK	5/23/2024	R	5/10/2024	1,600.00	1,600.00CR	
	G/L ACCOUNT		CK: 155628			1,600.00		
	101 41810-01-301.00 AUDITING & ACCOUNTING SERVICES				1,600.00	2023 GASB 67/68 VALUATION		
	REG. CHECK				1	1,600.00	1,600.00CR	0.00
						1,600.00	0.00	

01-006157 WRIGHT-HENNEPIN COOP ELECTR

I 35031304912	MAY FIRE PANEL MONITORING-S	APBNK	5/23/2024	R	4/29/2024	27.95	27.95CR	
	G/L ACCOUNT		CK: 155629			27.95		
	101 45100-30-404.00 CONTRACTED MACH & EQUIP R & M				27.95	MAY FIRE PANEL MONITORING-SC		
	REG. CHECK				1	27.95	27.95CR	0.00
						27.95	0.00	

01-231910 WSB AND ASSOCIATES INC

I 21997-000-9	2023 STREET IMPV PROJECT	APBNK	5/23/2024	R	4/22/2024	89,230.00	89,230.00CR	
	G/L ACCOUNT		CK: 155630			89,230.00		
	486 48000-01-303.00 ENGINEERING FEES				89,230.00	2023 STREET IMPV PROJECT		
I 22714-000-11	2023 MS4 & MONITORING PROGR	APBNK	5/23/2024	R	4/22/2024	1,585.00	1,585.00CR	
	G/L ACCOUNT		CK: 155630			1,585.00		
	603 49500-01-303.00 ENGINEERING FEES				1,585.00	2023 MS4 & MONITORING PROGRAM		
I 24934-000-1	FIRST STATE BANK OF ROSEMOU	APBNK	5/23/2024	R	4/22/2024	1,534.25	1,534.25CR	
	G/L ACCOUNT		CK: 155630			1,534.25		
	456 48000-01-303.00 ENGINEERING FEES				1,534.25	FIRST STATE BANK OF ROSEMOUNT		
	REG. CHECK				1	92,349.25	92,349.25CR	0.00
						92,349.25	0.00	

01-260150 ZACK'S INCORPORATED

I 36749	RATCHET STRAPS WITH J HOOKS	APBNK	5/23/2024	R	5/14/2024	147.67	147.67CR	
	G/L ACCOUNT		CK: 155631			147.67		
	101 43100-01-221.00 EQUIPMENT PARTS				147.67	RATCHET STRAPS WITH J HOOKS		

PACKET: 07024 05/23/2024 AP CHECK RUN

VENDOR SET: 01

VENDOR SEQUENCE

VENDOR	ITEM NO#	DESCRIPTION	BANK	CHECK	STAT	DUE DT / DISC DT	GROSS / BALANCE	PAYMENT / DISCOUNT	OUTSTANDING
			REG. CHECK			1	147.67	147.67CR	0.00
							147.67	0.00	

PACKET: 07024 05/23/2024 AP CHECK RUN
VENDOR SET: 01

R E P O R T T O T A L S

F U N D D I S T R I B U T I O N

FUND NO#	FUND NAME	AMOUNT
101	GENERAL FUND	161,671.31CR
201	PORT AUTHORITY FUND	1,318.18CR
205	PARK IMPROVEMENT FUND	2,038.64CR
206	INSURANCE FUND	2,720.63CR
207	EQUIPMENT CIP FUND	6,973.51CR
208	DUI FORFEITURE FUND	150.00CR
418	CSAH 42/BLAINE WATERMAIN	22,105.51CR
456	FIRST STATE BANK	1,534.25CR
483	AKRON AVE SOUTH EXT	2,550.00CR
486	2023 PAVEMENT MANAGEMENT	89,230.00CR
492	2024 STREET IMPROVEMENT	220.59CR
493	ASPEN AVE EXTENSION	711.27CR
601	WATER UTILITY FUND	77,859.65CR
602	SEWER UTILITY FUND	13,627.17CR
603	STORM WATER UTILITY FUND	2,240.17CR
608	STREET LIGHT UTILITY FUND	6,551.11CR
650	ARENA FUND	6,782.55CR
	** TOTALS **	398,284.54CR

---- TYPE OF CHECK TOTALS ----

	NUMBER	GROSS BALANCE	PAYMENT DISCOUNT	OUTSTANDING
HAND CHECKS		0.00	0.00	0.00
		0.00	0.00	
DRAFTS	7	32,738.88	32,738.88CR	0.00
		32,738.88	0.00	
REG-CHECKS	90	365,545.66	365,545.66CR	0.00
		365,545.66	0.00	
EFT		0.00	0.00	0.00
		0.00	0.00	
NON-CHECKS		0.00	0.00	0.00
		0.00	0.00	
ALL CHECKS	97	398,284.54	398,284.54CR	0.00
		398,284.54	0.00	

ERRORS: 0 WARNINGS: 0

05/23/2024

Leah Malecha

ROSEMOUNT CITY COUNCIL
REGULAR MEETING PROCEEDINGS
MAY 21, 2024

CALL TO ORDER/PLEDGE OF ALLEGIANCE

Pursuant to due call and notice thereof, a regular meeting of the Rosemount City Council was held on Tuesday, May 21, 2024, at 7:00 PM. in Rosemount Council Chambers, 2875 145th Street West.

Mayor Weisensel called the meeting to order with Councilmembers Freske, Essler and Klimpel. Councilmember Theisen was absent.

APPROVAL OF AGENDA

City Administrator Martin noted items 7.b. & 7.c.regarding the Tops Tavern liquor licenses were removed as the parties involved had settled the private matter regarding the liquor license.

Motion by Weisensel **Second by** Klimpel
Motion to approve the agenda
Ayes: 4.
Nays: None. Motion Carried.

PRESENTATIONS, PROCLAMATIONS AND ACKNOWLEDGMENTS

a. Presentation from the Rosemount Area Arts Council

Dan Schultz, Parks & Recreation Director, introduced the Rosemount Area Arts Council president, Tony Sasso. Mr. Sasso provided an update on the Rosemount Area Arts Councils' (RAAC) past year's activities and what will be coming up in the future for RAAC. Mr. Sasso noted anyone can become a member of RAAC or volunteer by viewing the website for further information.

b. Presentation of Award for Kicks 4 A Cure

Dakota County Chamber of Commerce, Jon Althoff, presented an award to Mayor Weisensel who won the Kicks 4 A Cure campaign this past fall.

The next event will be on October 5, 2024 held at TCO Stadium.

c. Proclamation - National Public Works Week

Public Works Director, Egger, highlighted Public Works Week. Every public works professional strives to improve and advance quality of life for the community they serve, leading to healthier, happier communities.

The City Council read the proclamation.

RESPONSE TO PUBLIC COMMENT

None.

PUBLIC COMMENT

None.

CONSENT AGENDA

Motion by Essler **Second by** Freske

Motion to approve the consent agenda with item 6.e. pulled.

Ayes: 4.

Nays: None. Motion Carried.

a. Bill Listings

b. Minutes of the May 7, 2024 Regular Meeting Minutes

c. Minutes of the May 7,2024 Work Session Proceedings

d. Service Agreement – Rosemount Area Arts Council

e. 2025 SIP Feasibility Report

Mayor Weisensel pulled this item for further discussion. The Public Works Director, Egger, further explained the process of a street improvement project and specifically showed the area where the 2025 construction will be completed. Mr. Egger noted the delivery of the feasibility report will be delivered this fall, and further discussions will take place with property owners this fall. Mr. Egger also noted several discussions have taken place with school district officials, i.e. timelines, logistics of forthcoming school district projects, etc. For more information regarding the project, the website has a dedicated page for the 2025 street improvement project.

Motion by Weisensel **Second by** Essler

Motion to

1. Approve proposal for Engineering Services for the 2025 Street Improvement Project, City Project 2025-02; and
2. Adopt a resolution authorizing the preparation of a Feasibility Report for the 2025 Street Improvement Project, City Project 2025-02.

Ayes: 4.

Nays: None. Motion carried.

f. Request by KJ Walk, Inc for Preliminary and Final Plats for Rosewood Center 2nd Addition

g. Request by KJ Walk, Inc for Preliminary and Final Plats Rosewood Commons 3rd Addition

h. Temporary On-Sale Liquor License - Barmans Hospitality Group DBA Celts

i. Request by First State Bank of Rosemount for Prestwick Place 26th Preliminary and Final Plats

j. Talamore 4th Addition Utility Easement

PUBLIC HEARINGS

a. Request by KJ Walk, Inc for the vacation of utility and drainage easements over portions of Outlots C and D, ROSEWOOD CENTER

Community Development Director Kienberger discussed the summary of the request from KJ Walk, Inc. for the vacation of drainage and utility easements covering portions of Outlots C & D, ROSEWOOD CENTER. The plats were approved by the Planning Commission at their April 23, 2024, meeting. The new drainage and utility easements will be dedicated on the Rosewood Center 2nd Addition plat.

Mayor Weisensel opened the public hearing at 7:41 p.m.

Motion by Weisensel **Second by** Essler

Motion to close the public hearing

Ayes: 4.

Nays: None. Motion carried.

Motion by Essler **Second by** Freske

Motion to adopt a resolution approving the vacation of certain easements within Outlots C and D, Rosewood Center, subject to conditions.

Ayes: 4.

Nays: None. Motion carried.

UNFINISHED BUSINESS

None.

NEW BUSINESS

a. Joint Powers Agreement with Dakota County for Cost Contribution for the Rosemount Greenway – Flint Hills Segment

Parks and Recreation Director Schultz provided an overview of the Rosemount Greenway project and noted this request for a Joint Powers Agreement with Dakota County is specifically for the Flint Hills Segment for a multi-purpose trail and sidewalk improvements. The County would reimburse the City for up to $508,200. The City is covering the cost of project design and will be responsible for delivery of the trail projects.

Motion by Klimpel **Second by** Essler

Motion to approve entering into a Joint Powers Agreement with Dakota County for a Cost Contribution for the Rosemount Greenway – Flint Hills Segment.

Ayes: 4.
Nays: None. Motion Carried.

b. Pickle Ball Project – Change Order #1

Parks and Recreation Director Schultz provided an overview of the pickle ball project that is anticipated to be completed mid-summer 2024. The change order includes court lighting and some additional work for the parking lot and drive lane lighting.

Councilmember Freske questioned how the lights would be controlled. Mr. Schultz confirmed the lights will be controlled by a push button system and, depending on how popular the courts are, staff have the opportunity to turn them on and off every night if necessary.

Motion by Freske **Second by** Klimpel

Motion to approve change order #1 for the Pickle Ball project in the amount $232,035.00.

Ayes: 4.
Nays: None. Motion Carried.

c. PD PW Campus Project Update

City Administrator Martin provided a status update on the Police Department/Public Works Project Campus. Mr. Martin discussed the current state of the construction, budget and pending change orders. The project remains on budget as anticipated. The timeline for the competition is still December 2024.

ANNOUNCEMENTS

a. City Staff Updates

Parks and Recreation Director Schultz highlighted the upcoming Memorial Day program on Monday, May 27 at 11:00 a.m. in Central Park. Mr. Schultz stated should there be rain, the event will be held at the Legion. The Legion will offer a free lunch following the presentation.

b. Upcoming Community Calendar

Mayor Weisensel reviewed the calendar of events and upcoming meetings.

ADJOURNMENT

There being no further business to come before the City Council at the regular council meeting and upon a motion by Weisensel and a second by Essler the meeting was adjourned at 8:02 p.m.

Respectfully submitted,

Erin Fasbender
City Clerk

ROSEMOUNT
MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM:	Adopt Alternative Urban Areawide Review (AUAR) for Rich Valley East (Driver Avenue/CSAH 42 Area)	**AGENDA SECTION:** CONSENT AGENDA
PREPARED BY:	Anthony Nemcek , Senior Planner	**AGENDA NO.** 6.c.
ATTACHMENTS:	Resolution, Final AUAR	**APPROVED BY:** LJM
RECOMMENDED ACTION: Motion to Adopt a Resolution Authorizing the Adoption of the Rich Valley East Alternative Urban Areawide Review (AUAR) Update		

BACKGROUND

The City Council is being asked to adopt a resolution adopting the Final Alternative Urban Areawide Review (AUAR) for the potential development of land abutting the north side of CSAH 42 between Driver Avenue and Emery Avenue. The AUAR has been submitted by Kimley-Horn on behalf of Project Mercury, LLC. The development scenario anticipated by the AUAR, in addition to one scenario that is consistent with the City's land use plan, is for 2.3 million square feet of data center development spread among several buildings. Based on the proposed size of the data center, the development would meet the criteria for a mandatory Environmental Assessment Worksheet (EAW). Given the size and scope of planned future development on the site, the developer has chosen instead to study the entire site through the AUAR process rather than completing multiple EAW's (or an EIS) over the project area. The intent of the AUAR is to recognize worst-case potential impacts and identify mitigation measures that may be taken to compensate for those impacts.

The AUAR was ordered by the City on January 2, 2024. Two development scenarios were reviewed within the AUAR, one of which would include Project Mercury's proposed development of essentially the entire site for approximately 2.3 million square feet of data center use, and the other scenario would follow the City's Comprehensive Plan for the property. The City's future land use map identifies roughly one quarter of the site for Light Industrial uses, half for Business Park uses, and the remainder for Community Commercial uses.

The state's environmental rules (MR4410) specify that the City of Rosemount is the Responsible Government Unit for the AUAR. Project Mercury, LLC., hired Kimley-Horn to prepare the document, and the City contracted with WSB to review and process the AUAR on behalf of the City. The AUAR was prepared and reviewed. It was submitted for the required 30-day comment period on February 6, 2024, to the review agencies and made available to the public. Comments were due on March 14, 2024, and were received from Dakota County and the Minnesota Pollution Control Agency (MPCA). Responses to comments were addressed and the AUAR was revised based on the comments. The Final AUAR was then submitted on May 7 for the required 10-day comment period. With no objections from any of the review agencies, the City can move to the final step of adopting the AUAR.

With the completion of the two comment periods, the review of comments from the review agencies, and receiving no objections from the agencies, the next step is for the City to consider adopting the AUAR. By adopting the AUAR, the AUAR becomes the official environmental review document for any development that occurs in the study area and meets the requirements of Minnesota Rule 4410. This means that any project that is proposed in the study area that may trigger environmental review, such as an EAW, is covered under the AUAR provided the project meets the mitigation measures in the AUAR and fall within the development scenarios analyzed in the AUAR. Once adopted, the AUAR is valid for five years and can then be updated.

Before any construction can occur on the site, proposed development of the site must go through all required approvals including, but not limited to, site plan review and plat approval. Additionally, if development consistent with Scenario 1 is to occur, an amendment to the City's Comprehensive Plan must be approved. The learnings from this AUAR will be applied to any future development applications.

RECOMMENDATION

Staff recommends adoption of the Rich Valley East Alternative Urban Areawide Review (AUAR) Update

CITY OF ROSEMOUNT
DAKOTA COUNTY, MINNESOTA

RESOLUTION 2024-60

A RESOLUTION AUTHORIZING THE ADOPTION OF THE RICH VALLEY EAST INDUSTRIAL DEVELOPMENT FINAL ALTERNATIVE URBAN AREAWIDE REVIEW (AUAR) 2023

WHEREAS, an AUAR has been completed for the project pursuant to Minnesota Rules 4410 which identifies and assesses the environmental impacts and mitigation measures associated with the Rich Valley East Industrial Development Study Area; and

WHEREAS, the Rosemount Industrial property is located on approximately 333 acres located on 6 parcels north of County Road 42 and east of Driver Avenue East; and

WHEREAS, the AUAR was completed pursuant to Minnesota Rule 4410.3610; and

WHEREAS, the AUAR was distributed for the required 30-day comment, revised based on comments, and redistributed for the required 10-day objection period; and

WHEREAS, comments received on the AUAR have generated information adequate to determine mitigation measures associated with the potential development in this area; and

WHEREAS, the comments received and the City's responses to these comments are included in the public record for the AUAR; and

WHEREAS, development of the Rich Valley East Industrial Development Study Area is expected to comply with all Rosemount and review agency standards as well as the mitigation measures outlined in the AUAR;

NOW THEREFORE BE IT RESOLVED, by the City Council of Rosemount, MN that the City of Rosemount adopts the Rich Valley East Industrial Development AUAR dated May 2024.

ADOPTED this 4th day of June 2024, by the City Council of the City of Rosemount.

_____
Jeffery D. Weisensel, Mayor

ATTEST:

_____
Erin Fasbender, City Clerk

Rich Valley East Industrial

ALTERNATIVE URBAN AREAWIDE REVIEW

APRIL 2024

PREPARED FOR:

ROSEMOUNT MINNESOTA

PREPARED BY:

Kimley»Horn

Table of Contents

1. Project Title 1
2. Proposer 1
3. RGU 1
4. Reason for Preparation 2
5. Project Location 2
6. Project Description 5
7. Climate Adaption and Resilience 9
8. Cover Types 15
9. Permits and Approvals Required 18
10. Land Use 19
11. Geology, Soils, and Topography/Land Forms 29
12. Water Resources 34
13. Contamination/Hazardous Materials/Wastes 47
14. Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features) 50
15. Historic Properties 56
16. Visual 57
17. Air 57
18. Greenhouse Gas (GHG) Emissions/Carbon Footprint 58
19. Noise 62
20. Transportation 63
21. Cumulative Potential Effects 68
22. Other Potential Environmental Effects 69
Mitigation plan 71

List of Tables

Table 1: Development Scenarios 6
Table 2: Climate Considerations and Adaptions 11
Table 3: Existing Cover Types 15
Table 4: Green Infrastructure 16
Table 5: Trees 16
Table 6: Anticipated Permits and Approvals 18
Table 7: Rosemount 2040 Comprehensive Plan designations within the AUAR Study Area 20
Table 8: Wetland Buffer Strips and Setbacks 23
Table 9: Soil Types 31
Table 10: Delineation Summary 36
Table 11: Wells within the AUAR Study Area 38
Table 12: Sites Identified within Study Area 48
Table 13: Construction Emissions 60

Table 14: Annual Operational Emissions 60
Table 15: Trip Generation Forecasts 64
Table 16: Existing and Projected Intersection LOS 65
Table 17: Mitigation Plan (Scenario 1 and Scenario 2) 71

List of Figures

Figure 1: USGS Map 3
Figure 2: AUAR Study Area 4
Figure 3: Development Scenario 1 7
Figure 4: Development Scenario 2 8
Figure 5: Flood Impact Zones 14
Figure 6: Cover Types 17
Figure 7: Existing Land Use 26
Figure 8: Future Land Use 27
Figure 9: Existing Zoning Map 28
Figure 10: Soil Types 33
Figure 11: Wetland Delineation Summary 35
Figure 12: Surface Water Resources 37
Figure 13: Groundwater Resources 39

List of Appendices

Appendix A: Wetland Delineation Report
Appendix B: Traffic Impact Analysis
Appendix C: Greenhouse Gas Quantifaction
Appendix D: Agency Project Correspondence
Appendix E: Environmental Review Map
Appendix F: City of Rosemount Sanitary Sewer Plans
Appendix G: Agency Comment Responses
Appendix H: Agency Comments

Alternative Urban Areawide Review

This Alternative Urban Areawide Review (AUAR) follows the format of an Environmental Assessment Worksheet (EAW) (December 2022 version). Where the AUAR guidance provided by the Minnesota Environmental Quality Board (EQB) indicates that an AUAR response should differ notably from what is required for an EAW, the guidance is noted in *italics.*

1. PROJECT TITLE

Rich Valley East Industrial Development

2. PROPOSER

Proposer: Project Mercury, LLC
Contact Person: Erin Carlson
Title: President
Address: 313 Washington Ave S, Apt 1119
City, State, ZIP: Minneapolis, MN 55415
Phone: 651-643-0470
Email: erin@gsdrllc.com

3. RGU

RGU: City of Rosemount
Contact Person: Anthony Nemcek
Title: Senior Planner
Address: 2875 145th St W
City, State, ZIP: Rosemount, MN 55068
Phone: 651-322-2090
Email: Anthony.nemcek@rosemountmn.gov

4. REASON FOR PREPARATION

AUAR Guidance: Not applicable to an AUAR.

5. PROJECT LOCATION

County: Dakota
City/Township: Rosemount
PLS Location (¼, ¼, Section, Township, Range): Section 29 and 30, Township 115N, Range 18W
Watershed (81 major watershed scale): Mississippi River & Lake Pepin
Tax Parcel Numbers: 34-03000-01-010, 34-03000-19-010, 34-02900-35-010, 34-02900-25-011, 34-02900-20-030, and 34-02900-10-010
At a minimum, attach each of the following to the AUAR:

- **US Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries** (see
- **Figure 1)**
- **Map depicting the boundaries of the AUAR and any subdistricts used in the AUAR analysis** (see **Figure 2** through **Figure 4**)
- List of data sources, models, and other resources (from the Item-by-Item Guidance: Climate Adaptation and Resilience or other) used for information about current Minnesota climate trends and how climate change is anticipated to affect the general location of the project during the life of the project (as detailed below in Item 7)
- **Cover type map as required for Item 8** (see **Figure 6**)
- **Land use and planning and zoning maps as required in conjunction with Item 10** (see **Figure 7**, **Figure 8**, and **Figure 9**)

Figure 1: USGS Map

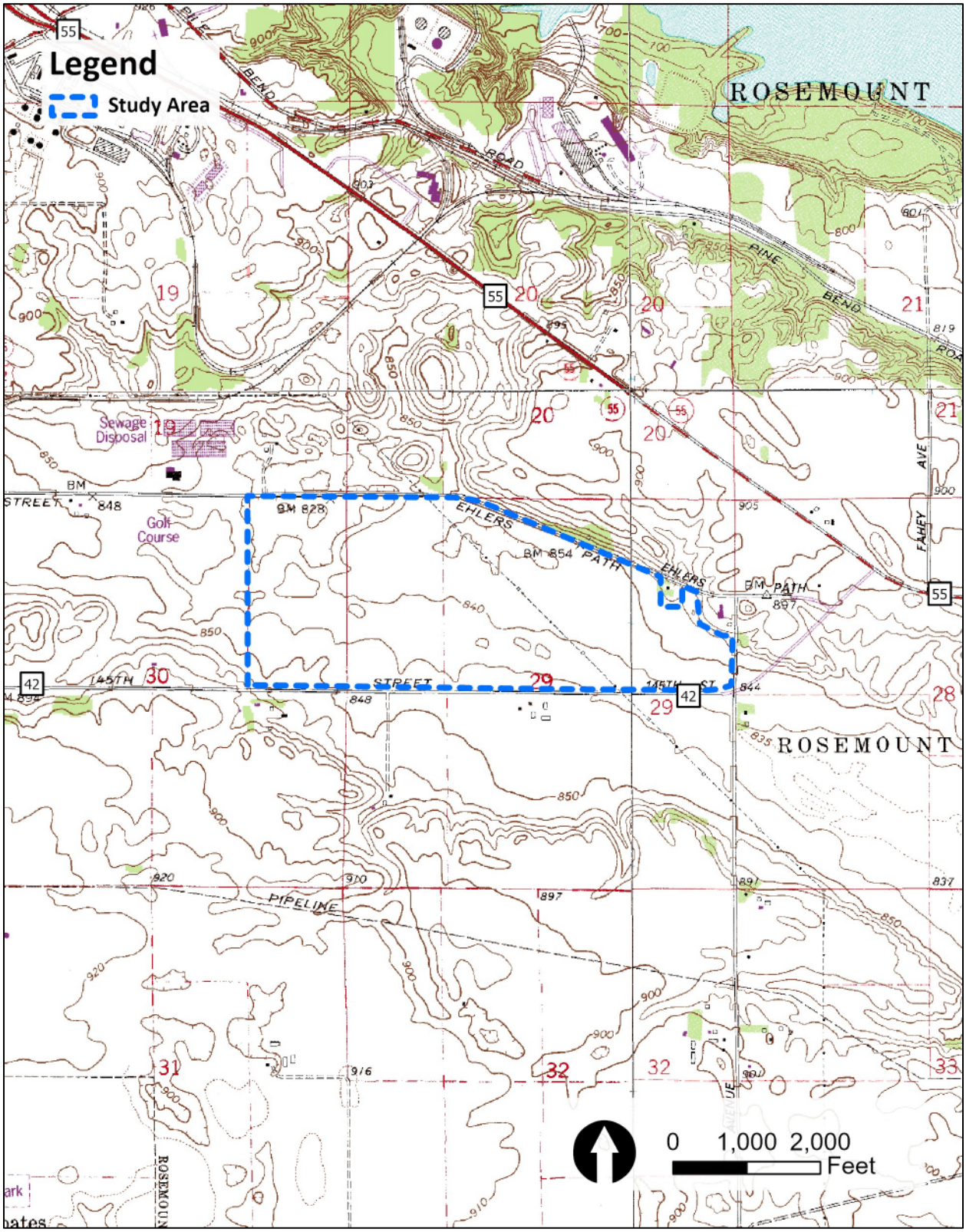


Figure 2: AUAR Study Area

6. PROJECT DESCRIPTION

AUAR Guidance: Instead of the information called for on the EAW form, the description section of an AUAR should include the following elements for each major development scenario included:

- *Anticipated types and intensity (density) of residential and commercial/warehouse/light industrial development throughout the AUAR area.*
- *Infrastructure planned to serve development (roads, sewers, water, stormwater system, etc.). Roadways intended primarily to serve as adjoining land uses within an AUAR area are normally expected to be reviewed as part of an AUAR. More "arterial" types of roadways that would cross an AUAR area are an optional inclusion in the AUAR analysis; if they are included, a more intensive level of review, generally including an analysis of alternative routes, is necessary.*
- *Information about the anticipated staging of various developments, to the extent known, and of the infrastructure, and how the infrastructure staging will influence the development schedule.*

The AUAR study area encompasses an area totaling approximately 333 acres on 6 parcels in the City of Rosemount, Dakota County, Minnesota (shown on Figure 2). The study area is bounded by 140th Street E to the north, Emery Avenue E to the east, County Road 42 to the south, and Driver Avenue E to the west. Project Mercury, LLC is proposing to develop the study area from existing farmland to data center use.

Development Scenarios

The development scenarios, Scenario 1 and Scenario 2, are outlined in Table 1. Scenario 1 includes multiple buildings for a total of 2.3 million square feet of proposed data center development (see Figure 3). Scenario 2 includes multiple buildings for a total of 1,293,333 square feet of proposed business park, 646,667 square feet of light industrial, and 560,000 square feet of community commercial development (see Figure 4).

The intent of the AUAR is to recognize the worst-case potential impacts and identify mitigation measures that may be taken to compensate for those impacts. Development of the study area would include new infrastructure, including water service, sewer, stormwater, streets, and utilities. All new services would be extensions to existing infrastructure or upgrades to existing systems to support the new development.

Scenario 1

Scenario 1 represents proposed data center development. This scenario would require an amendment to the City of Rosemount's 2040 Comprehensive Plan. Construction is anticipated to take place over 3 to 4 phases from the end of 2024 to 2027 for the first phase. The remaining 2 to 3 phases are anticipated to be complete by 2039 (see Figure 3).

Scenario 2

Scenario 2 generally represents the density and land uses presently allowed under the City of Rosemount's 2040 Comprehensive Plan. Construction is anticipated to take place over multiple phases from 2024 to 2027 (see Figure 4).

Table 1: Development Scenarios

Component	Scenario 1	Scenario 2
Data Center (square feet)	2,300,000	-
Community Commercial (square feet)	-	560,000
Light Industrial (square feet)	-	646,667
Business Park (square feet)	-	1,293,333
Total (square feet)	**2,300,000**	**2,500,000**
Total Project Area	**333 acres**	**333 acres**

Figure 3: Development Scenario 1

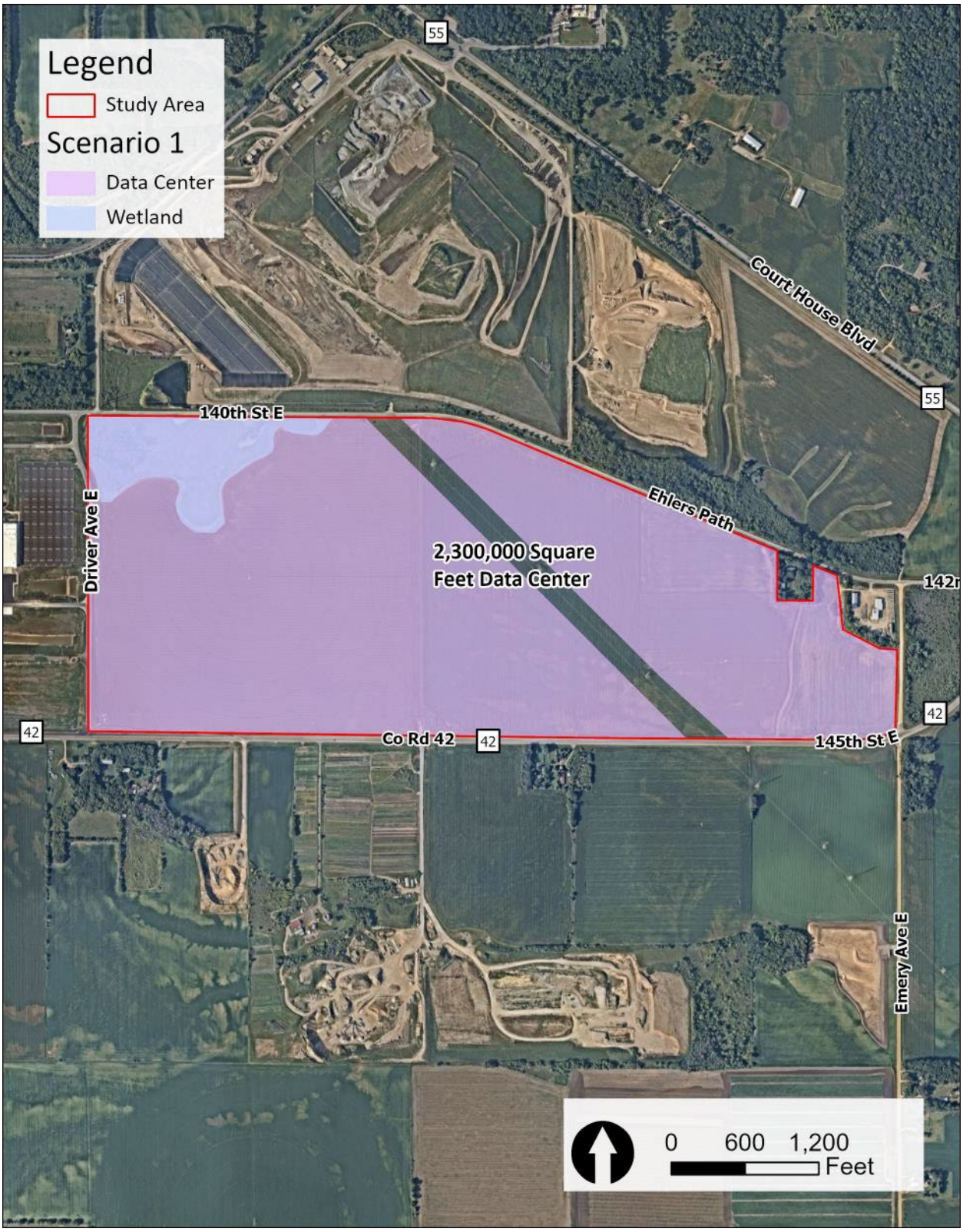
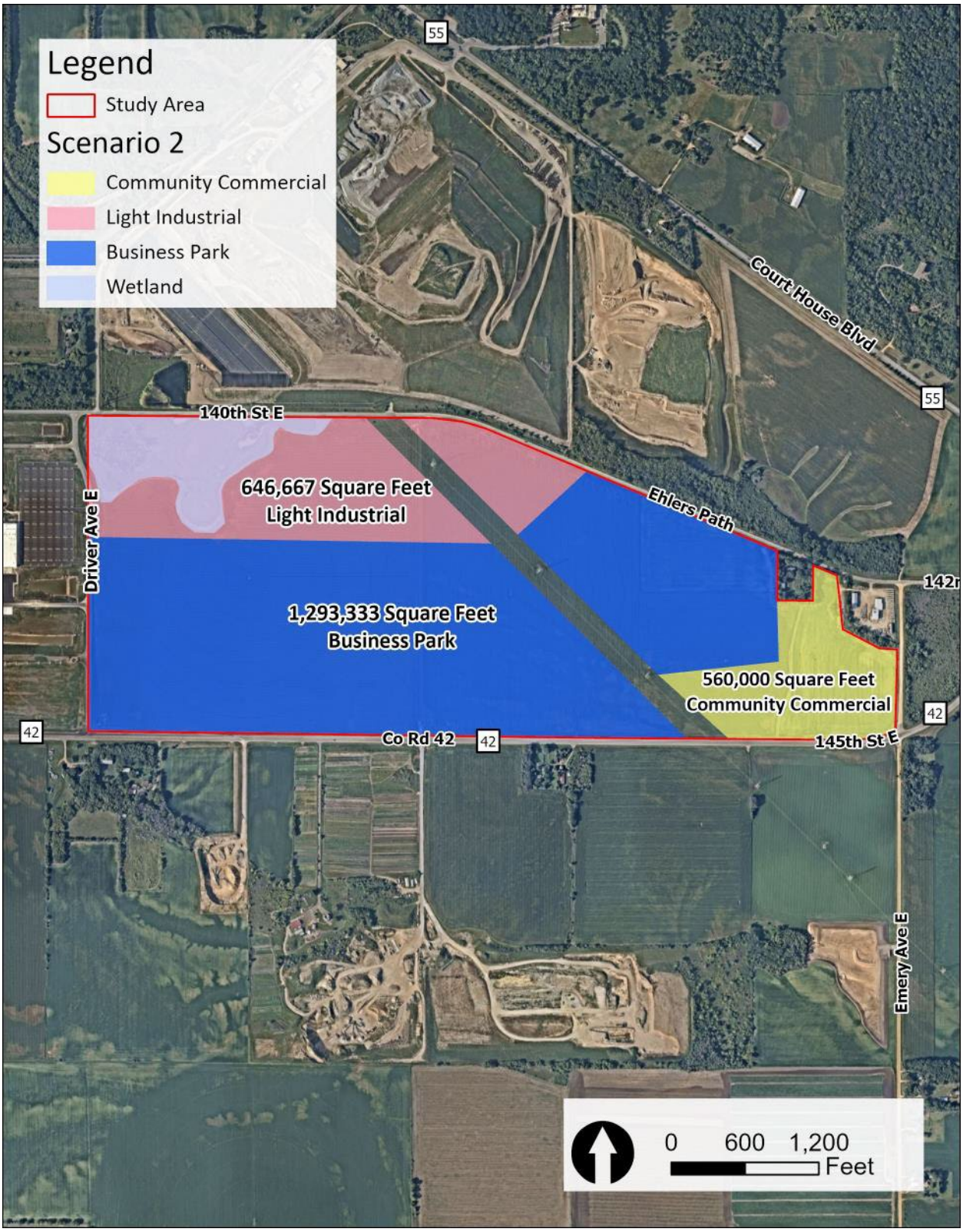


Figure 4: Development Scenario 2



7. CLIMATE ADAPTION AND RESILIENCE

a. Describe the climate trends in the general location of the project (see guidance: *Climate Adaptation and Resilience*) and how climate change is anticipated to affect that location during the life of the project.

Trends in temperature, precipitation, flood risk, and cooling degree days are described below for the general project location. Some of the climate projections summarized below use Representative Concentration Pathways (RCPs), which are greenhouse gas concentration scenarios used by the Intergovernmental Panel on Climate Change. RCP 4.5 is an intermediate scenario in which emissions decline after peaking around 2040, and RCP 8.5 is a worst-case scenario in which emissions continue to rise through the 21st century.[1]

Temperature

According to the Minnesota Climate Explorer, the historical average temperature in Dakota County between 2002 and 2022 was approximately 45.1°F, with the lowest average in 2014 (42.1°F) and the highest average in 2012 (49.5°F).[2] The average annual temperature in Dakota County is projected to increase to 49.0°F from 2040 to 2059 under RCP 4.5 (intermediate emissions pathway). In 2080-2099, average annual temperature is projected to further increase to 51.4°F and 55.1°F under RCP 4.5 and 8.5 (high emissions pathway), respectively.

Urban Heat Island

Surfaces and structures such as roads, parking lots, and buildings absorb and re-emit more heat from the sun than natural landscapes. This can significantly raise air temperature and overall extreme heat vulnerability in urban areas where there are dense concentrations of these surfaces. This is referred to as urban heat island effect. According to the Metropolitan Council's Extreme Heat Map Tool, the AUAR study area is located in an area of low to medium heat vulnerability.[3]

Precipitation

According to the Minnesota Climate Explorer, historic average precipitation in Dakota County between 2002 and 2022 was approximately 30.3 inches, with the lowest in 2022 (22.3 inches) and the highest in 2019 (41.5 inches). Average annual precipitation in Dakota County from 2040-2059 is projected to be 32.3 inches under RCP 4.5. From 2080-2099, average annual precipitation is projected to be 32.6 inches under RCP 4.5 and 35.3 inches under RCP 8.5.

Flood Risk

In many places, climate change is exacerbating the frequency and intensity of the extreme rainfall events and associated flooding. According to the Metropolitan Council Localized Flood Map Screening Tool, a tool that identifies potential surface flooding locations, the study area is located within Primary, Secondary, Tertiary, and Shallow Flood Impact Zones (FIZ) as shown in

[1] Climate Explorer Metadata. Available at https://climate.umn.edu/dnrs-climate-explorer-tool-cmip5
[2] Minnesota Climate Explorer: Minnesota Department of Natural Resources. Available at https://arcgis.dnr.state.mn.us/climateexplorer/main/historical
[3] Extreme Heat Map Tool, Metropolitan Council. Available at https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/CVA/Extreme-Heat.aspx

Figure 5.[4] Primary, Secondary, and Tertiary FIZ describe the first areas to fill with water during a flood event, with Primary filling first, followed by Secondary and Tertiary. Shallow FIZ are separate low areas generally considered low risk, but this depth may still be a concern for certain types of infrastructure.

Cooling Degree Days

As defined by the National Weather Service, degree days are based on the assumption that when the outside temperature is 65°F, heating or cooling is not needed to be comfortable. Degree days are the difference between the daily temperature mean and 65°F. If the temperature mean is above 65°F, 65 is subtracted from the mean and the result is the cooling degree days. For example, if the mean temperature over a 24-hour period is 70°F, then there have been 5 cooling degree days.[5] Cooling degree days are used as a proxy to estimate cooling needs for buildings.

According to Heat Vulnerability in Minnesota, the number of cooling degree days in 2019 for Dakota County was 424. The number of cooling days in 2050 for Dakota County is projected to be 505 and 652 for RCP 4.5 and 8.5, respectively.[6]

b. For each resource category in the table below, describe the project's proposed activities and how the project's design will interact with those climate trends. Describe proposed adaptations to address the project effects identified.

[4] Localized Flood Map Screening Tool. Metropolitan Council. Available at https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/CVA/Tools-Resources.aspx

[5] "What Are Heating and Cooling Degree Days," National Weather Service. Available at https://www.weather.gov/key/climate_heat_cool.

[6] Heat Vulnerability in Minnesota. Minnesota Department of Health and the University of Minnesota. Available at https://maps.umn.edu/climatehealthtool/heat_app/.

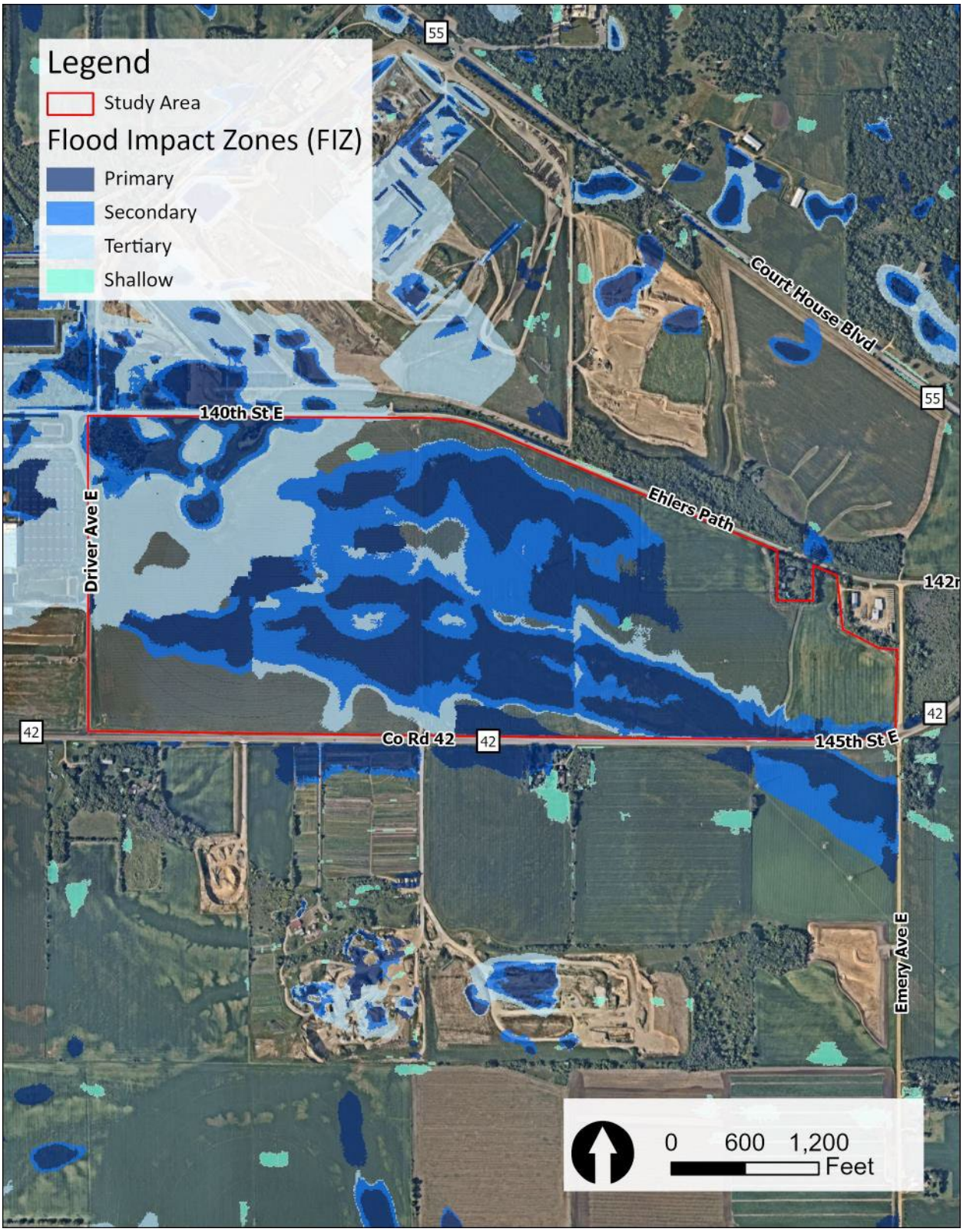
Table 2: Climate Considerations and Adaptions

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptions (Scenario 1 and Scenario 2)
Project Design	Aspects of building architecture/materials choices and site design may impact urban heat island conditions in the surrounding area, including changing climate zones, temperature trends, and potential for extended heat waves.	In the coming decades, the location of the study area is anticipated to experience: • Increased annual temperatures • Increased annual precipitation and more frequent heavy rainfall events • Increased freeze thaw cycles • Medium urban heat island effect	• Energy end-use efficient appliances and equipment and energy efficient lighting will be incorporated into building design • Building shells will be energy efficient • Proposed trees and landscaping will reduce runoff and mitigate heat island effect
Land Use	No critical facilities (i.e., facilities necessary for public health and safety, those storing hazardous materials, or those with housing occupants who may be insufficiently mobile) are proposed and the study area has a low risk of localized flooding.	Portions of the proposed development may experience flooding during extreme rain events.	Design of the site and stormwater management facilities will be completed to reduce the risk of flooding in the AUAR study area. Infiltration areas will be used to improve water quality and stormwater runoff in the project vicinity.

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptions (Scenario 1 and Scenario 2)
Water Resources	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence water resources.	Water resources in the general project area may become warmer, more polluted, and change in volume due to increased temperatures and runoff. There may be more evaporation and water available when it rains leading to an increase in the flood potential. It is projected that there will be more severe storm events with high, intense rain amounts which will require drainage systems to be adequately maintained to accommodate for the increase in water volume.	• Developer will consider using native plants and perennials for landscaping and stormwater features will absorb water and reduce the water demand for irrigation. • Water reuse systems may be implemented to reduce water usage • Stormwater BMPs will be designed to weather a 100-year storm event in accordance with City/VRJPO requirements as the property is developed, see Item 12.ii.
Contamination/ Hazardous Materials/ Wastes	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence the potential environmental effects of generation/use/storage of hazardous waste and materials.	The proposed development is not anticipated to generate hazardous waste or materials.	Not applicable

Resource Category	Climate Considerations	Project Information	
		Climate Change Risks and Vulnerabilities	Adaptions (Scenario 1 and Scenario 2)
Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)	Current Minnesota climate trends and anticipated climate change in the general location of the project may influence the local species and suitable habitat.	Suitable habitat for species may become unsuitable due to land use changes, increased temperature, and increased runoff	Climate-appropriate native plantings and stormwater BMPs will provide suitable habitat for small mammals, insects, and bird species.

Figure 5: Flood Impact Zones



8. COVER TYPES

AUAR Guidance: The following information should be provided:

- *A cover type map, at least at the scale of a USGS topographic map, depicting:*
  - *Wetlands (identified by Circular 39 type)*
  - *Watercourses (rivers, streams, creeks, ditches)*
  - *Lakes (identify public waters status and shoreland management classification)*
  - *Woodlands (break down by classes where possible)*
  - *Grassland (identify native and old field)*
  - *Cropland*
  - *Current development*
- *An overlay map showing anticipated development in relation to the cover types. This map should also depict any "protection areas," existing or proposed, that will preserve sensitive cover types. Separate maps for each major development scenario should be generally provided.*

The AUAR study area is approximately 333 acres of agricultural land. There are no existing buildings and structures within the study area. Existing cover types within the study area are shown in Table 3 and on Figure 6 and were determined by reviewing 2023 aerial photography. There are three wetlands within the AUAR study area, located in the northwest corner of the study area.

Table 3: Existing Cover Types

Cover Type	Existing (acres)	Scenario 1 (acres)	Scenario 2 (acres)
Wetlands and Shallow Lakes (less than 2 meters deep)	20.5	20.5	20.5
Rivers/Streams	0	0	0
Wooded/Forest	1.5	0	0
Brush/Grassland	2.5	2.5	2.5
Cropland	299.5	0	0
Livestock Rangeland/Pastureland	0	0	0
Lawn/Landscaping	0	117	201
Green Infrastructure (total from Table 4)	0	56	0
Impervious Surface	9	135	109
Stormwater Pond (wet sedimentation basins)	0	0	0
Other (describe)	0	N/A	N/A
Total	**333 acres**	**333 acres**	**333 acres**

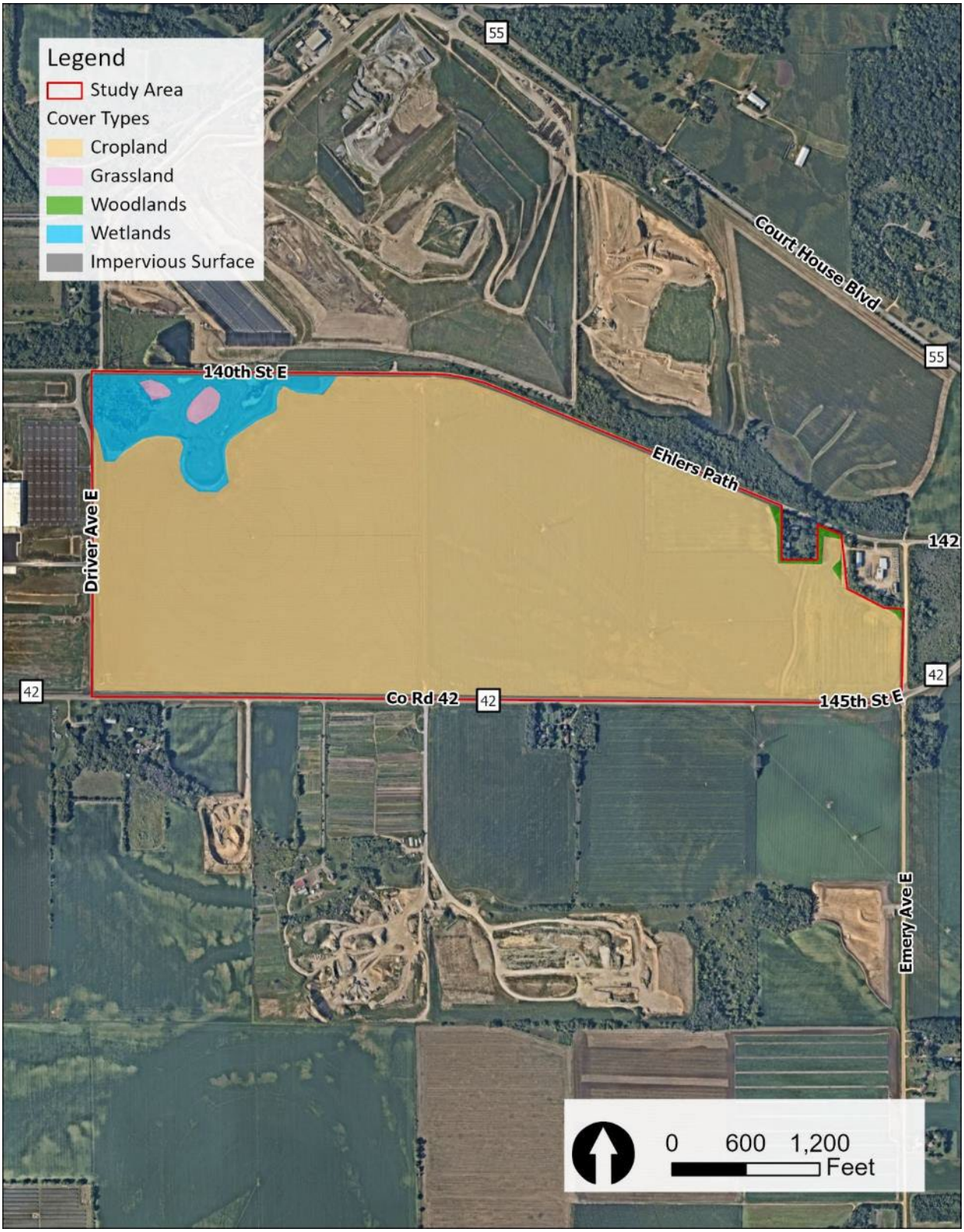
Table 4: Green Infrastructure

Green Infrastructure	Before (acres)	Scenario 1 (acres)	Scenario 2 (acres)
Constructed Infiltration Systems (infiltration basins, infiltration trenches, rainwater gardens, bioretention areas without underdrains, swales with impermeable check dams)	0	56	0
Total	**0**	**56**	**0**

Table 5: Trees

Trees	Area (acres)
Area of Mature Trees Removed During Development	1
Area of New Trees Planted	50

Figure 6: Cover Types



9. PERMITS AND APPROVALS REQUIRED

AUAR Guidance: A listing of major approvals (including any comprehensive plan amendments and zoning amendments) and public financial assistance and infrastructure likely to be required by the anticipated types of development projects should be given for each major development scenario. This list will help orient reviewers to the framework that will protect environmental resources. The list can also serve as a starting point for the development of the implementation aspects of the mitigation plan to be developed as part of the AUAR.

Table 6: Anticipated Permits and Approvals

Unit of Government	Type of Application	Status
Federal		
US Army Corps of Engineers	Section 404 Permit	To be applied for, if applicable
Federal Aviation Administration	FAA Permit	To be applied for, if applicable
State		
Minnesota Pollution Control Agency	Section 401 Water Quality Certification	To be applied for, if applicable
	National Pollutant Discharge Elimination System Stormwater Permit for Construction Activities	To be applied for, if applicable
	Sanitary Sewer Extension Permit	To be applied for, if applicable
	Construction Contingency Plan and Response Action Plan approval	To be applied for, if applicable
	Notice of Intent of Demolition	To be applied for, if applicable
	Industrial Wastewater Permit	To be applied for, if applicable
	Significant Industrial User Permit	To be applied for, if applicable
	Air Emissions Permit	To be applied for, if applicable
	Environmental Assessment Workshop (EAW)[7]	To be applied for, if applicable
Minnesota Department of Natural Resources	Temporary Groundwater Appropriation Permit for Construction Dewatering	To be applied for, if applicable
	Water Appropriation Permit	To be applied for, if applicable
Minnesota Department of Health	Water Main Installation Permit	To be applied for, if applicable
Regional		
Metropolitan Council	Sewer Extension Permit	To be applied for, if applicable
	Sewer Connection Permit to Connect	To be applied for, if applicable

[7] If either scenario results in a proposed project that anticipates the need for more than 1,000,000 gallons of fuel storage for backup generators and may exceed the threshold for air emissions, a separate EAW will be required for these components of the project per Minnesota Rules 4410.4300.

Unit of Government	Type of Application	Status
	Direct Connection Permit	To be applied for, if applicable
	Industrial Waste Discharge Permit	To be applied for, if applicable
County		
Dakota County	Right-of-Way Permit	To be applied for, if applicable
Watershed District		
Vermillion River Watershed Joint Powers Organization	Review of project over 40 acres is preferred, but not required. Construction document review, approval, and permits for the project are not required by VRWJPO	To be applied for, if applicable
City		
City of Rosemount	Preliminary/Final Plat	To be applied for, if applicable
	Comprehensive Plan Amendment	To be applied for, if applicable
	Sign Permit	To be applied for, if applicable
	Site Plan Approval	To be applied for, if applicable
	Building Permit	To be applied for, if applicable
	Erosion Control, Grading, and Stormwater Permit	To be applied for, if applicable
	Right-of-Way permit	To be applied for, if applicable
	WCA Review and Approval	To be applied for, if applicable
	Wetland Buffer Zone Management Plan approval	To be applied for, if applicable
	Zoning Map Amendment	To be applied for, if applicable
	Planned Unit Development	To be applied for, if applicable
	Conditional Use Permit	To be applied for, if applicable
	Tree Replacement Plan	To be applied for, if applicable
	AUAR Approval	In process

10. LAND USE

a. Describe:

i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, and prime or unique farmlands.

The AUAR study area is located in a semirural area east of US 52 (Highway 52) in Rosemount, Minnesota. The study area consists of six existing parcels, which are currently agricultural fields (see Figure 7). The study area is generally bounded by 140th Street to the north, Emery Avenue E to the east, County Road 42 to the south and Driver Avenue to the west. Land uses adjacent to the study area include an existing landfill and aggregate mining facility to the north, additional agricultural land to the south and the east, and ongoing industrial development to the west.

There are no existing parks or trails within or adjacent the study area. Rosemount Greenway Regional Trail runs adjacent to the northern boundary of the AUAR study area, planned to follow 140th Street East/Ehlers Path.

According to the Natural Resources Conservation Service (NRCS), 62.5 percent of the study area is considered prime farmland, and an additional 24.2 percent of the study area is considered farmland of statewide importance (see Table 9).

ii. Planned land use as identified in comprehensive plans (if available) and any other applicable plan for land use, water, or resource management by a local, regional, state, or federal agency.

AUAR Guidance: Water-related land use management districts should be delineated on appropriate maps, and the land use restrictions applicable in those districts should be described. If any variances or deviations from these restrictions within the AUAR area are envisioned, this should be discussed.

Rosemount 2040 Comprehensive Plan

The City of Rosemount adopted the *Rosemount 2040 Comprehensive Plan*[8] in 2020. The Comprehensive Plan designates a specific mix of future land use designations throughout the city. This plan describes Rosemount as an "emerging suburban edge" community that is continuing to develop from agricultural land to urbanized development. One of the goals of the Comprehensive Plan update is to achieve sustainable development that can be supported by the City's infrastructure without extending services through undeveloped properties. Anticipated phasing for future development in the AUAR study area is predicted to occur between 2024 and 2039. The study area is identified as Business Park, Light Industrial, and Community Commercial 2040 future land use (see Table 7).

Table 7: Rosemount 2040 Comprehensive Plan designations within the AUAR Study Area

Future Land Use Designation	Purpose	Typical Uses	Expected Floor Area Ratio
Business Park	Promote development of businesses with a large number of employees that offer wages to support an entire family and that are further constructed of high-quality buildings providing both beauty and tax base to the community.	Light manufacturing, processing, and assembling, warehousing, wholesaling, and distribution, medical and dental, financial institutions, and office	Between 0.25 and 0.35

[8] Source: City of Rosemount 2040 Comprehensive Plan. Available at: https://www.rosemountmn.gov/185/Comprehensive-Plan

Future Land Use Designation	Purpose	Typical Uses	Expected Floor Area Ratio
Light Industrial	Provide opportunities for high paying manufacturing, assembly, or wholesaling jobs that require less intense land development along with some outdoor storage.	Manufacturing, assembly, professional services, laboratories, general repair services, post-secondary trade or vocational schools, public buildings, and warehousing	Between 0.10 and 0.20
Community Commercial	Provide retail, professional offices, and personal services that serve daily and weekly needs of the residents of Rosemount	Retail, offices, personal services, restaurants, gas stations, and auto oriented business not requiring outdoor storage	Between 0.15 and 0.20

Dakota County 2040 Comprehensive Plan

The Dakota County 2040 Comprehensive Plan[9] is used to guide the County's housing, transportation, county facilities, parks, and land use planning over the next 20 years. Rosemount is classified as an "emerging suburban edge" community. According to this plan, the "emerging suburban edge" classification refers to communities with areas of rapid growth and change. These communities have significant amounts of land for future development. Primary concerns in suburban edge communities include protecting water supplies and preserving open space.

In Dakota County, cities independently administer zoning and comprehensive planning land use controls; the County does not have land use or zoning authority in Rosemount.

Future Rosemount Greenway

In 2012, Dakota County adopted The Rosemount Greenway Masterplan to create a future greenway connection (the Rosemount Greenway) between Downtown Rosemount, Spring Lake Park, and the Mississippi River. A portion of this planned greenway runs along 140th Street E north of the AUAR study area.

iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

AUAR Guidance: Water-related land use management districts should be delineated on appropriate maps, and the land use restrictions applicable in those districts should be described. If any variances or deviations from these restrictions within the AUAR area are envisioned, this should be discussed.

[9] Source: Dakota County 2040 Comprehensive Plan. Available at: https://www.co.dakota.mn.us/Government/Planning/CompPlan/Documents/2040ComprehensivePlanAmendment.pdf

Existing Zoning

The entirety of the study area is currently zoned AG, Agricultural. According to Rosemount's city code, the AG, Agricultural district is primarily intended to "establish and encourage the long-term continuation of agricultural and related uses in the city in areas which are both suitable for agriculture and are not planned for urban development."[10] Permitted uses include agriculture, commercial greenhouse and landscape nurseries, commercial livestock, dairy farming, keeping of horses, and single-family detached dwellings. The AUAR study area is currently used for agricultural purposes (crop cultivation), but in the future, agricultural land in the City of Rosemount is expected to be developed to different land uses.

Any new development, redevelopment, change in land use, or change in zoning is required to be consistent with the current City's Comprehensive Plan.

FEMA National Flood Hazard

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (panel numbers 27037C0235E and 27037C0230E, effective 12/02/2011), the AUAR study area is located in an area of minimal flood hazard and not located within a FEMA 100-year floodplain.

Vermillion River Watershed Joint Powers Organization

The study area is located within the Vermillion River watershed, which is administered by the Vermillion River Watershed Joint Powers Organization (VRWJPO). The VRWJPO seeks to protect surface water, ground water, and natural resources within the Vermillion River watershed. Jurisdiction of the VRWJPO is provided under the Metropolitan Surface Water Management Act and the Metropolitan Area Local Water Management Rules. No streams or waterbodies with VRJWPO designations are located within or adjacent to the AUAR study area.

Rosemount Comprehensive Wetland Management Plan

The Rosemount Comprehensive Wetland Management Plan, last updated March 2021, identifies wetlands within the study area. This plan lays out the City's rules regarding development within and near wetlands. Development adjacent to wetlands the must adhere to several standards listed in Rosemount Municipal Code 11-7-3 including the wetland buffer strips and setbacks listed in Table 8. Additionally, for all new and redeveloped land, the developer shall be responsible for the installation of monuments that mark the outer edge of the wetland buffer zones and will be required to prepare a Buffer Zone Management Plan. Buffer zone monitoring will be required for a minimum of five years to ensure compliance with the performance standards as outlined on the Wetland Buffer Zone Management Plan.

[10] Source: City of Rosemount Zoning Code. Available at: https://codelibrary.amlegal.com/codes/rosemountmn/latest/rosemount_mn/0-0-0-5111#JD_11-4-3

Table 8: Wetland Buffer Strips and Setbacks[11]

Wetland Classification	Permanent Buffer Strip Average Width (Feet)	Additional Structure Setback from Buffer (Feet)	Minimum Permanent Buffer Zone Width (Feet)
Preserve	75	30	30
Manage 1	50	30	30
Manage 2	30	30	15
Manage 3	15	30	15

Other Special Districts and Zoning Overlays

The Mississippi River Corridor Critical Area (MRCCA) is a program to provide land planning and regulation along the Mississippi River. The MRCCA is located about 0.3 miles away from the AUAR Study Area.

iv. If any critical facilities (i.e., facilities necessary for public health and safety, those storing hazardous materials, or those housing occupants who may be insufficiently mobile) are proposed in floodplain areas and other areas identified as at risk for localized flooding, describe the risk potential considering changing precipitation and event intensity.

No critical facilities are proposed as part of the project, and no portion of the study area is located within a FEMA 100-year floodplain area.

b. Discuss the project's compatibility with nearby land uses, zoning, and plans listed in Item 9a above, concentrating on implications for environmental effects.

AUAR Guidance: The extent of conversion of existing farmlands anticipated in the AUAR should be described. If any farmland will be preserved by special protection programs, this should be discussed.

If development of the AUAR will interfere or change the use of any existing designated parks, recreation areas, or trails, this should be described in the AUAR. The RGU may also want to discuss under this item any proposed parks, recreation areas, or trails to be developed in conjunction with development of the AUAR area.

The AUAR must include a statement of certification from the RGU that its comprehensive plan complies with the requirements set out at Minnesota Rules, part 4410.3610, subpart 1. The AUAR document should discuss the proposed AUAR area development in the context of the comprehensive plan. If this has not been done as part of the responses to Items 6, 9, 11, 18, and others, it must be addressed here; a brief synopsis should be presented here if the material has been presented in detail under other items. Necessary amendments to comprehensive plan

[11] Source: City of Rosemount. Comprehensive Wetland Management Plan (2013). https://ci.rosemount.mn.us/DocumentCenter/View/214/Comprehensive-Wetland-Management-Plan-2013?bidId=

elements to allow for any of the development scenarios should be noted. If there are any management plans of any other local, state, or federal agencies applicable to the AUAR area, the document must discuss the compatibility of the plan with the various development scenarios studied, with emphasis on any incompatible elements.

Existing Land Use

Scenario 1 and Scenario 2

The existing agricultural land is expected to transition to different land uses as the city develops. Any new development, redevelopment, change in land use, or change in zoning is required to be consistent with the Comprehensive Plan

Existing Zoning

Scenario 1 and Scenario 2

The existing zoning of the AUAR study area is Agricultural. Scenario 1 proposes data center use and Scenario 2 proposes business park, light industrial, and community commercial use. These are inconsistent with the current zoning and would require a zoning change.

2040 Comprehensive Plan

The City of Rosemount has certified that the 2040 Comprehensive Plan complies with the requirements set forth in Minnesota Rules, part 4410.3610, subpart 1.

Scenario 1

Scenario 1 includes data center use and the future land use designation of Community Commercial does not allow for data center use. Therefore, Scenario 1 would require a comprehensive plan amendment to allow for data center use.

Scenario 2

Scenario 2, which includes Light Industrial, Business Park, and Community Commercial, is consistent with the densities and land uses allowed under the comprehensive plan.

Vermillion River Watershed Joint Powers Organization

Scenario 1 and Scenario 2

The proposed development will need to be consistent with the rules of the VRWMJPO. Additionally, all construction and development within will follow best management practices regarding stormwater, erosion control, and drainage.

Rosemount Comprehensive Wetland Management Plan

Scenario 1 and Scenario 2

Wetlands and wetland buffer areas in the AUAR study area will be avoided for the development proposed in Scenario 1 and Scenario 2. Therefore, the development will not impose on the existing wetland buffer.

Future Rosemount Greenway

The development proposed in Scenario 1 and Scenario 2 will not have impacts on the future Rosemount Greenway Regional Trail.

c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

Scenario 1

Scenario 1 would require a zoning change and comprehensive plan amendment to allow for data center uses.

Scenario 2

Scenario 2 would require a zoning change to allow for business park, light industrial, and community commercial uses.

Figure 7: Existing Land Use

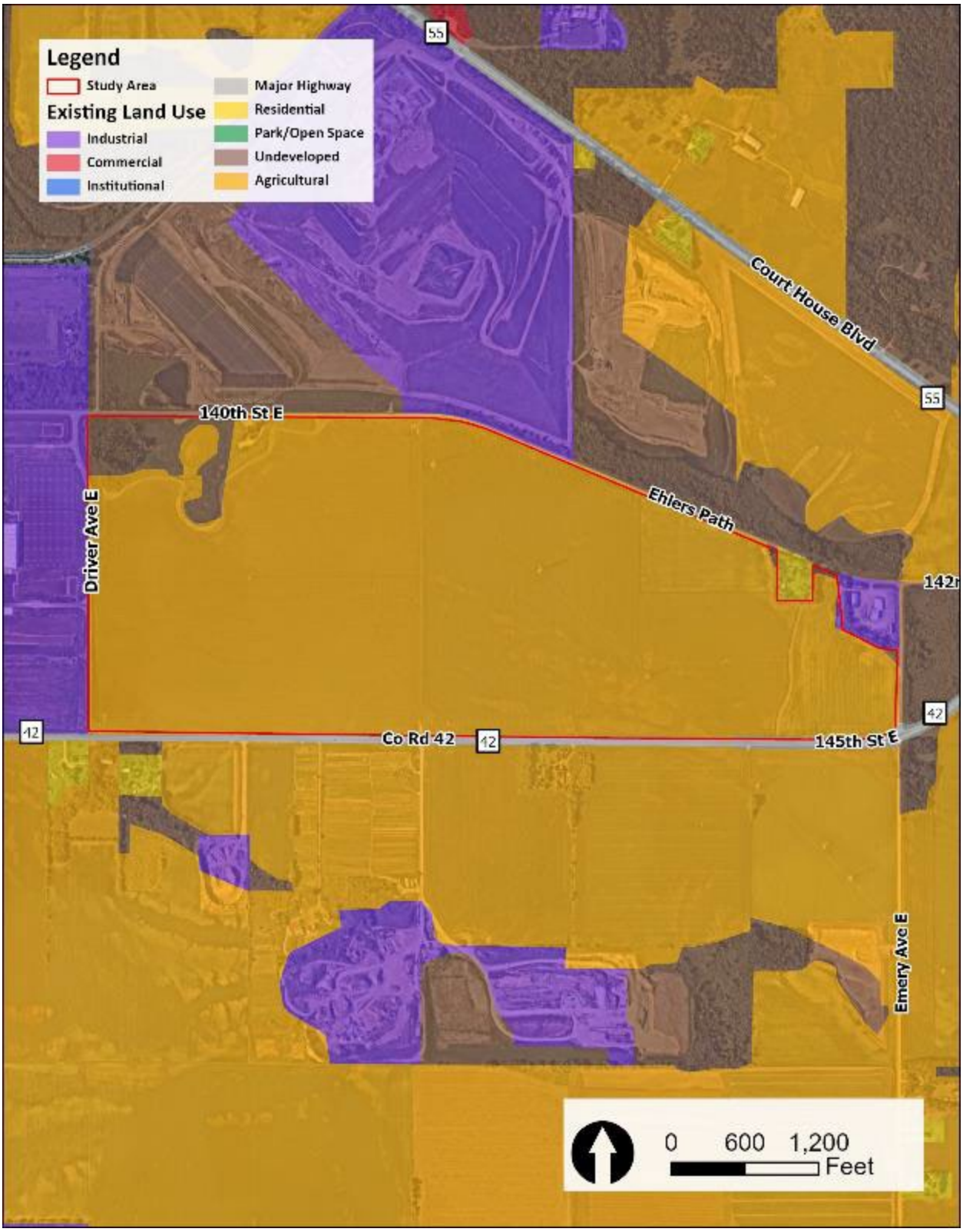


Figure 8: Future Land Use

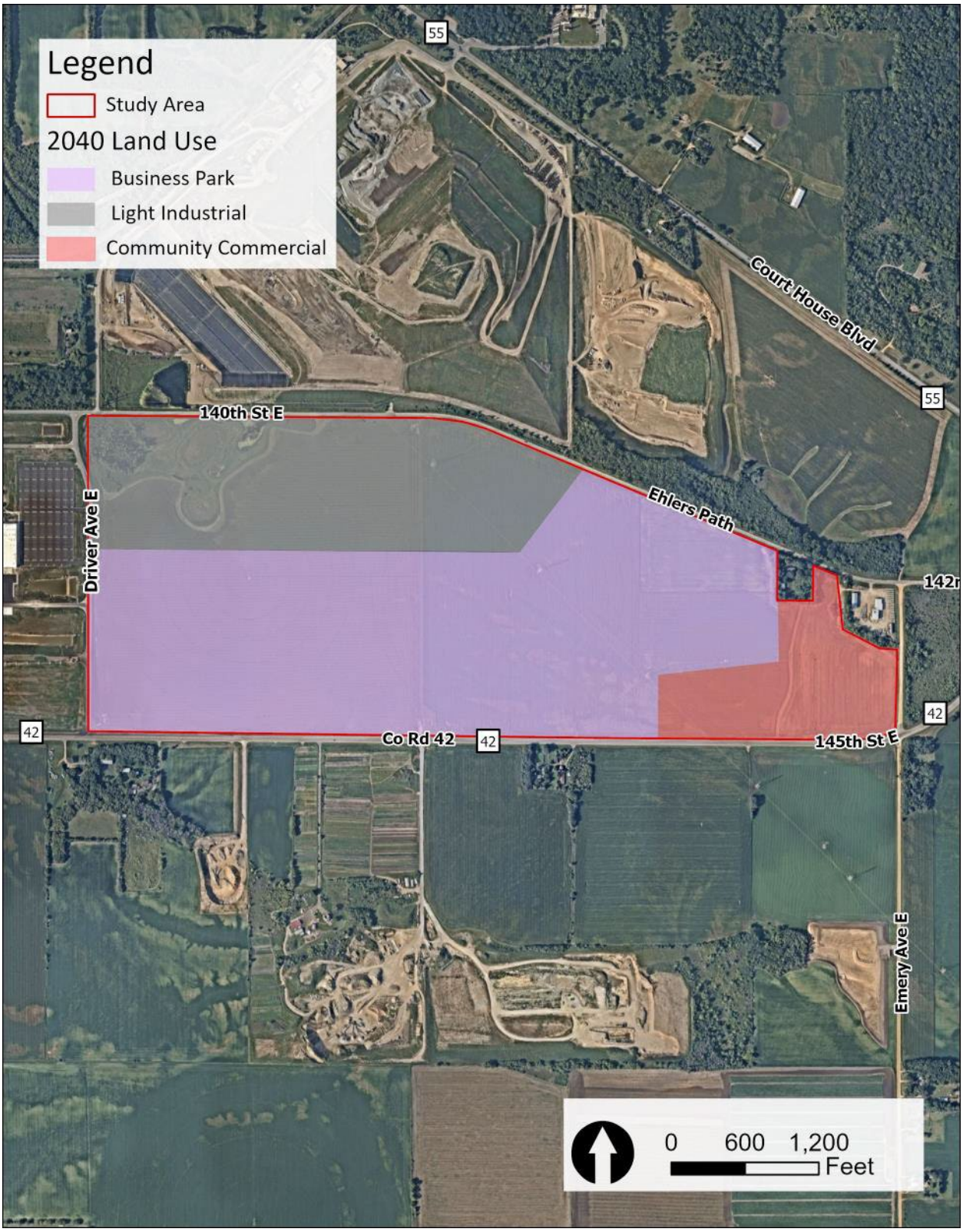
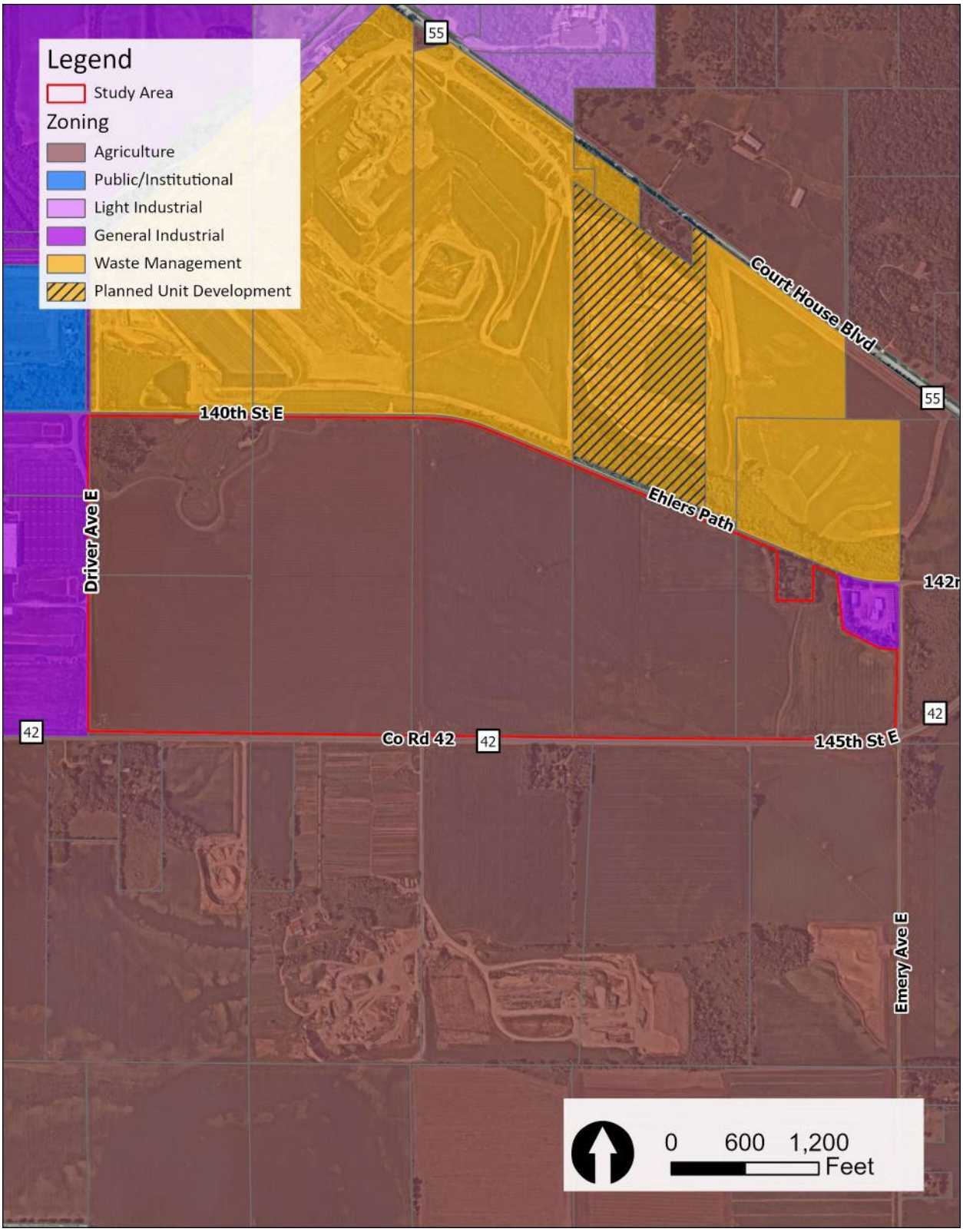


Figure 9: Existing Zoning Map



11. GEOLOGY, SOILS, AND TOPOGRAPHY/LAND FORMS

a. Geology – Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

AUAR Guidance: A map should be included to show any groundwater hazards identified.

According to the Geologic Atlas of Dakota County (Minnesota Geological Survey, 1990), the AUAR study area is underlain by glacial till, glacial outwash, limestone, and sandstone. Depth to bedrock ranges from 80-120 feet below ground surface across the study area. Bedrock is comprised of limestone and sandstone. In descending order, the upper two formations are the Prairie Du Chien Group and the Jordan Sandstone formation.

A Geotechnical Evaluation Report of the site was conducted in November 2023. According to borings conducted during the study, this site is underlain by glacial outwash deposits, commonly composed of mixed sand with gravel and cobbles from the Superior Lobe Glaciation. The glacial outwash deposits are overlain by topsoil. The existing surface vegetation, root zones and topsoil are not considered suitable for support of the proposed buildings and should be removed and replaced with engineered fill. According to the geotechnical report, the majority of on-site non-organic soils can be considered for reuse as engineered fill.

There are no known sinkholes or unconfined/shallow aquifers located within the AUAR study area. There are karst conditions located approximately 500 feet to the north and south of the study area.

According to the Minnesota Pollution Control Agency (MPCA), karst is a landscape formed by the dissolution of a layer or layers of soluble bedrock, such as limestone, dolomite, or gypsum. One of the distinctive features of karst landscapes is the potential presence of caves and sinkholes. Cracks and fissures form and grow in the bedrock as runoff passes through the ground, forming passages, caves, and possibly even sinkholes. Prior to development, the study area will be investigated to identify subsurface voids, cavities, fractures, or other discontinuities which could pose an environmental concern or a construction hazard to future development. If karst conditions are found to be present, the project proposer will follow the VRWJPO, City of Rosemount, and the MPCA design guidelines.

Karst landscapes provide conditions where runoff and potential contaminants can flow more easily into groundwater. According to the Pollution Sensitivity of Near-Surface Materials model from the MnDNR, the AUAR study area is located in an area of high sensitivity to groundwater pollution.[12]

[12] MN DNR Pollution Sensitivity of Near-Surface Materials
https://files.dnr.state.mn.us/waters/groundwater_section/mapping/mha/hg02_report.pdf

Depth to groundwater was measured within the AUAR study area using previously completed borings. Groundwater is present at approximately 6 to 20 feet below grade, excluding the wetland portion. Water was observed in the wetland area during a site visit in October 2023. For both scenarios, stormwater BMPs and construction best practices, no adverse impacts to groundwater are anticipated as a result of the project.

b. Soils and Topography – Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability, or other soil limitations, such as steep slopes or highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections, or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

AUAR Guidance: The number of acres to be graded and number of cubic yards of soil to be moved need not be given; instead, a general discussion of the likely earthmoving needs for development of the area should be given, with an emphasis on unusual or problem areas. In discussing mitigation measures, both the standard requirements of the local ordinances and any special measures that would be added for AUAR purposes should be included. A standard soils map for the area should be included.

According to the Natural Resources Conservation Service (NRCS) Web Soil, the area is comprised of 15 different soil types. Soil information is included in Table 9 and Figure 10. The erosion hazard rating included in indicates the hazard of soil loss from off-road areas after disturbance activities that expose the soil surface. Within the AUAR study area, 97.5 percent of the soil surface is mapped with a “slight” rating, meaning that erosion is unlikely under ordinary climatic conditions. 2.5 percent of the study area is mapped with a “moderate” rating, indicating that some erosion is likely in these areas and that erosion control measures may be needed.

Topography within the study area varies from 828 feet in elevation in the northwest corner of the study area to 870 feet in elevation in the southwest portion of the study area. The site generally drains from east to northwest to the wetland feature in the northwest corner of the AUAR study area.

<u>Scenario 1 and 2</u>

Earthwork on-site is anticipated to generally balance and be kept on-site. The proposed project would require approximately 2,000,000 total cubic yards of excavation over 300 acres. Where appropriate, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control. The proposed development within the AUAR study area will require compliance with the VRWJPO and the City of Rosemount’s erosion and sediment control standards.

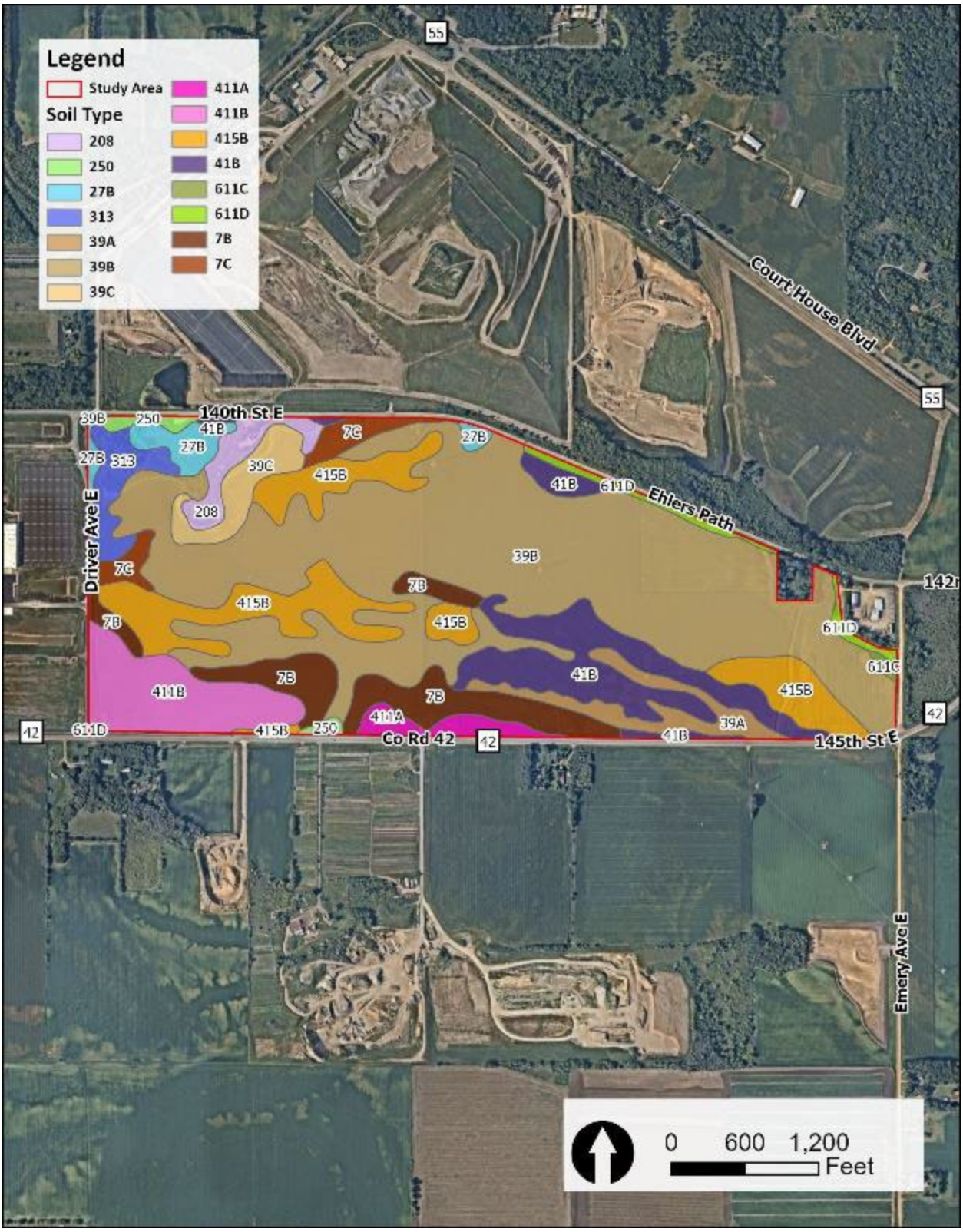
A National Pollutant Discharge Elimination System (NPDES) and Stormwater Pollution Prevention Program Construction Stormwater Permit (SWPPP) will be obtained prior to any earthwork or grading activities within the AUAR study area.

Table 9: Soil Types

Map unit symbol	Soil Type	Farmland Classification	Erosion Hazard	Hydric	Acres Within Study Area	Percent of Site
7B	Hubbard loamy sand, 1 to 6 percent slopes	Not prime farmland	Slight	Not Hydric	24.6	7.4%
7C	Hubbard loamy sand, 6 to 12 percent slopes	Not prime farmland	Slight	Not Hydric	7.3	2.2%
27B	Dickinson sandy loam, 2 to 6 percent slopes	All areas are prime farmland	Slight	Not Hydric	7.3	2.2%
39A	Wadena loam, 0 to 2 percent slopes	All areas are prime farmland	Slight	Hydric (1% to 32%)	10.2	3.1%
39B	Wadena loam, 2 to 6 percent slopes	All areas are prime farmland	Slight	Not Hydric	151.0	45.4%
39C	Wadena loam, 6 to 12 percent slopes	Farmland of statewide importance	Moderate	Not Hydric	8.2	2.50%
41B	Estherville sandy loam, 2 to 6 percent slopes	Farmland of statewide importance	Slight	Hydric (1% to 32%)	31.8	9.5%
208	Kato silty clay loam	Prime farmland if drained	Slight	Hydric (66% to 99%)	6.8	2.0%
250	Kennebec silt loam	All areas are prime farmland	Slight	Not Hydric	3.4	1.0%

Map unit symbol	Soil Type	Farmland Classification	Erosion Hazard	Hydric	Acres Within Study Area	Percent of Site
313	Spillville loam, 0 to 2 percent slopes, occasionally flooded	All areas are prime farmland	Slight	Hydric (1% to 32%)	7.9	2.4%
411A	Waukegan silt loam, 0 to 1 percent slopes	All areas are prime farmland	Slight	Not Hydric	6.3	1.9%
411B	Waukegan silt loam, 1 to 6 percent slopes	All areas are prime farmland	Slight	Not Hydric	21.7	6.5%
415B	Kanaranzi loam, 2 to 6 percent slopes	Farmland of statewide importance	Slight	Not Hydric	40.6	12.2%
611C	Hawick gravelly sandy loam, 6 to 12 percent slopes	Not prime farmland	Slight	Not Hydric	0.7	0.2%
611D	Hawick gravelly sandy loam, 12 to 20 percent slopes	Not prime farmland	Slight	Not Hydric	5.3	1.6%
Total					333	100%

Figure 10: Soil Types



12. WATER RESOURCES

AUAR Guidance: The information called for on the EAW form should be supplied for any of the infrastructure associated with the AUAR development scenarios, and for any development expected to physically impact any water resources. Where it is uncertain whether water resources will be impacted depending on the exact design of future development, the AUAR should cover the possible impacts through a "worst case scenario" or else prevent impacts through the provisions of the mitigation plan.

a. Describe surface water and groundwater features on or near the site below.

i. Surface Water – lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within one mile of the project. Include DNR Public Waters Inventory number(s), if any.

In 2022, HDR delineated aquatic resources within the AUAR study (see Appendix A for the report). The findings of this delineation summary are provided in Figure 11 and Table 10 below. In total, 20.51 acres of wetland were delineated. Three wetlands were identified: a shallow marsh, wet meadow, and hardwood swamp.

There are no DNR Public Water Basins, Public Waters Watercourses, or designated trout streams within one mile of the AUAR study area. The Mississippi River Corridor Critical Area is within one mile of the AUAR Study Area. The AUAR study area is located within the Vermillion River Watershed Joint Powers Organization area. Based on the regulatory framework in the VRWJPO regarding water and natural resources, the City has chosen to adopt the VRWJPO Standards into the City's ordinances, so approvals related to the VRWJPO Standards will be handled by the City.

Runoff from the study area generally drains northwest towards the existing wetland at a rate consistent with agricultural use.

Figure 11: Wetland Delineation Summary

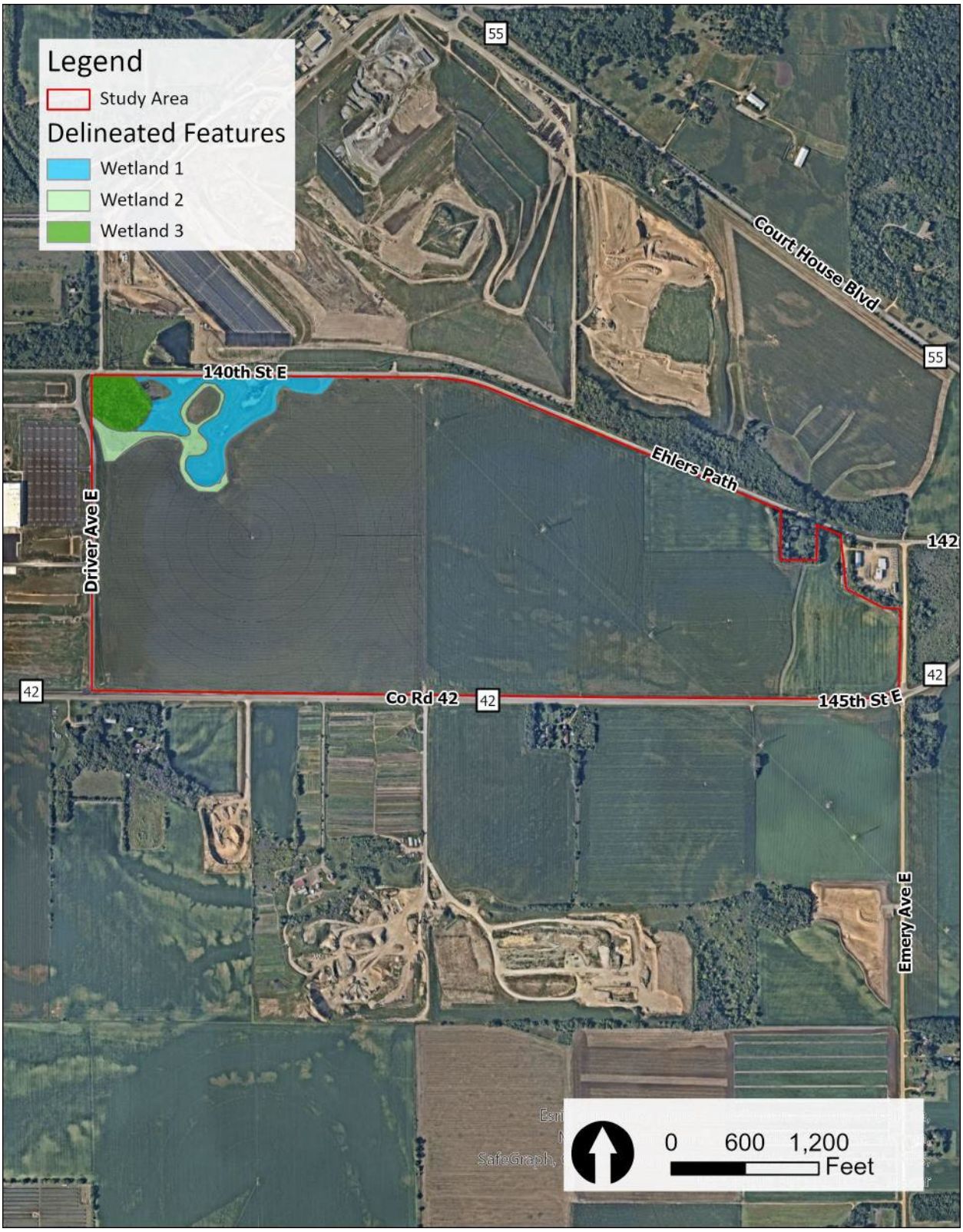
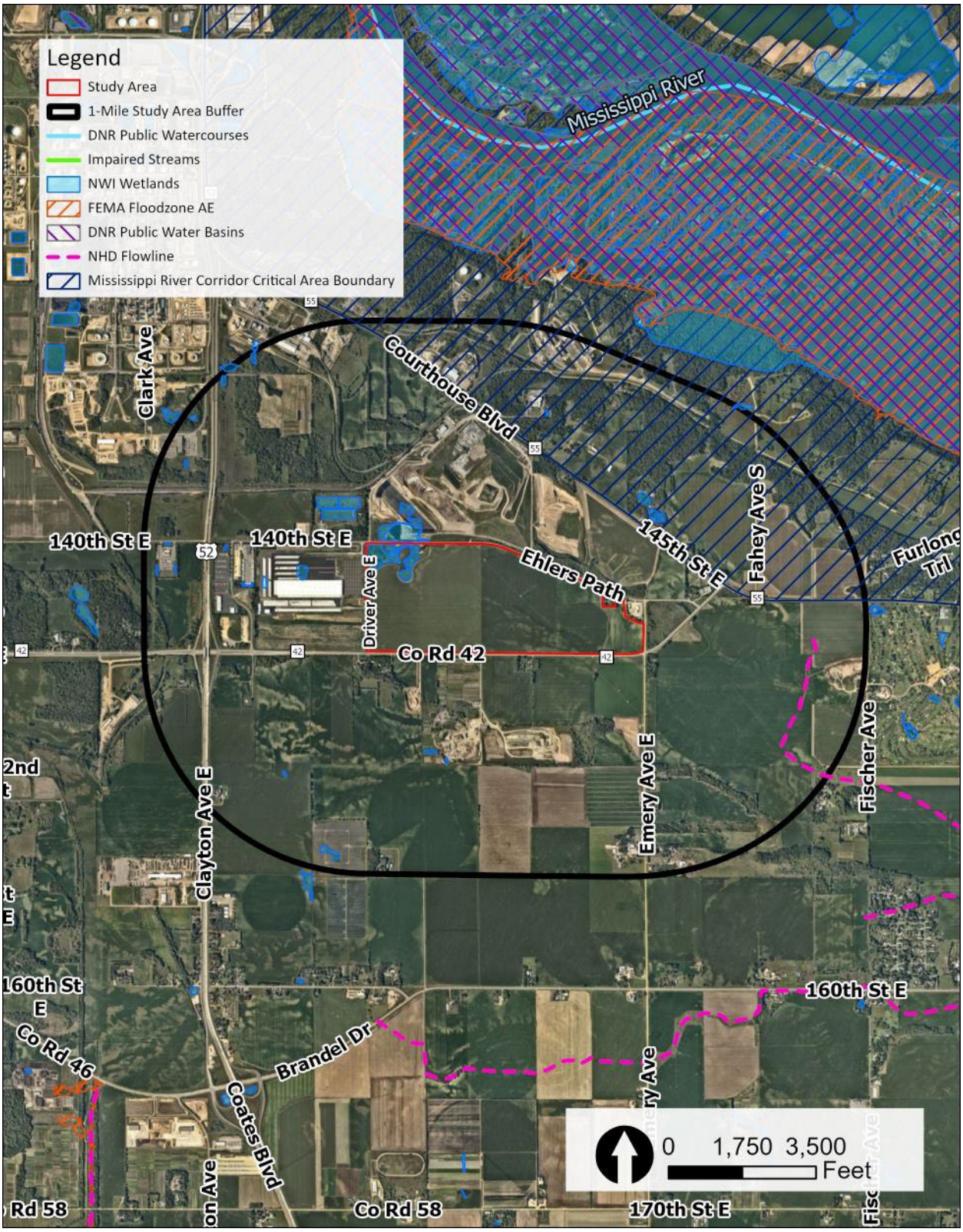


Table 10: Delineation Summary

Resource ID	Wetland Plant Community	C-39 Type	Notes	Size
Wetland 1	Shallow Marsh	3	Wetland located on the northwestern side of the study area. The wetland is contained within the project boundary by the roadway. The wetland boundary was determined based on the transition from hydrophytic vegetation to upland vegetation and the toe of an adjacent slope.	12.15 acres
Wetland 2	Wet Meadow	2	Wetland located on the northwest corner of the study area. The wetland extends outside of the project boundary. The wetland boundary was determined based on the transition from hydrophytic vegetation to upland vegetation and the toe of an adjacent slope.	4.33 acres
Wetland 3	Hardwood Swamp	7	Wetland located on the northwest corner of the study area. The wetland extends outside of the project boundary. The wetland boundary was determined based on the transition from hydrophytic vegetation to upland vegetation and the toe of an adjacent slope.	0.93 acres
Total				20.5 acres

Figure 12: Surface Water Resources



ii. Groundwater – aquifers, springs, and seeps. Include 1) depth to groundwater; 2) if project is within a MDH well protection area; and 3) identification of any onsite and/or nearby wells, including unique numbers and well logs, if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

Depth to groundwater was measured within the AUAR study area using previously completed borings. Groundwater is present between 6 to 20 feet, excluding the wetland portion of the study area.

Based on Dakota County's well records, there are three wells located within the AUAR study area, see Table 11. Groundwater wells will be properly sealed by a licensed well contractor prior to redevelopment within the AUAR study area per MPCA and MDH well sealing requirements.

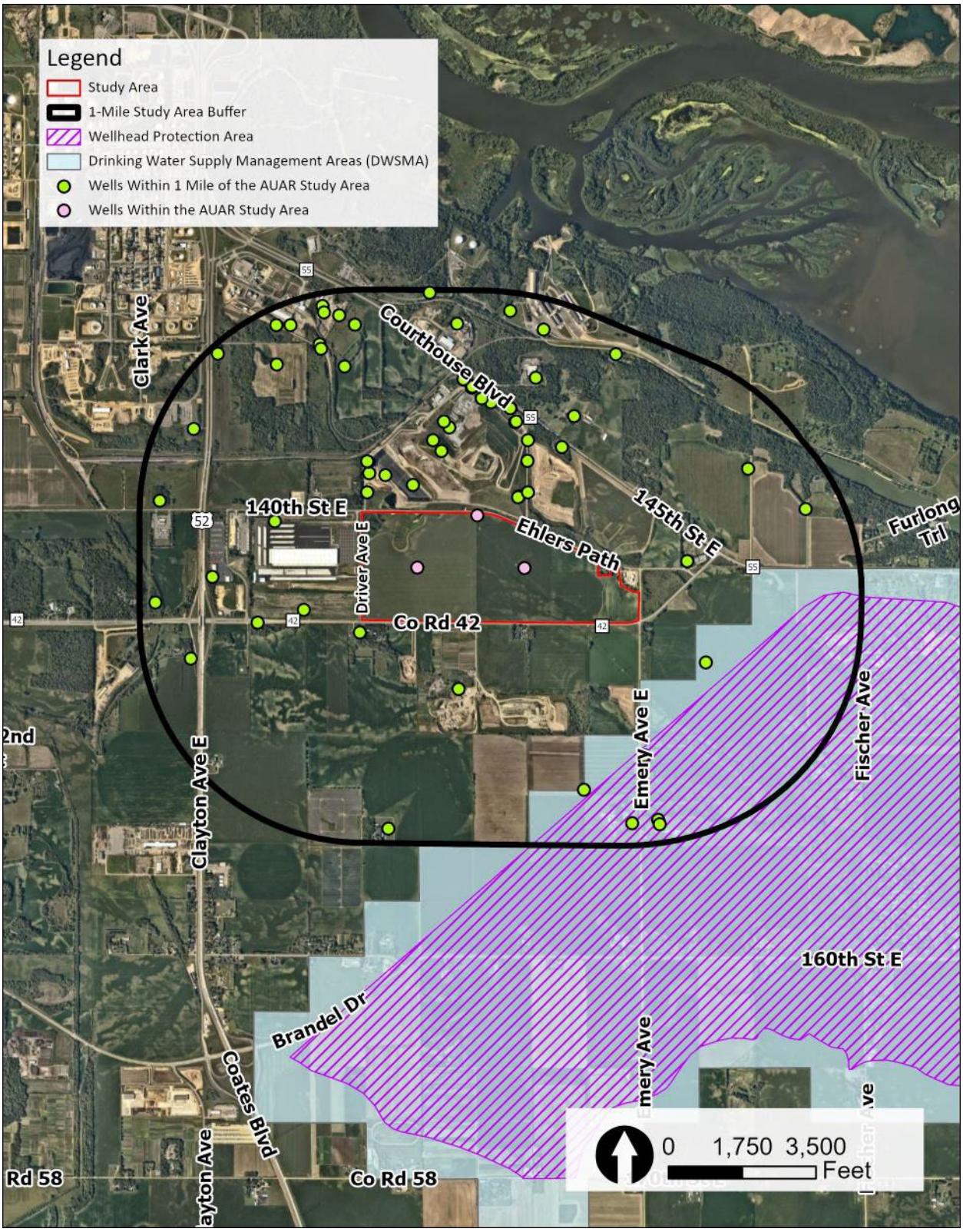
If unidentified wells are found, the MPCA and Minnesota Department of Health must be contacted to determine the course of action, which may include sealing, relocating, or preserving by a licensed well contractor according to Minnesota Rules Chapter 4725.

The AUAR study area is not located within a wellhead protection area or drinking water supply management area. The AUAR study area is located approximately 0.25 miles away from the Hastings Drinking Water Supply Management Area. There are no impacts to the Hastings DWSMA anticipated.

Table 11: Wells within the AUAR Study Area

Well ID Number	Index Status	Well Use	Well Depth (feet)
214195	Active	Irrigation	274
214196	Active	Irrigation	278
T00023	Active	Environmental	166

Figure 13: Groundwater Resources



b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects below.

i. Wastewater – For each of the following, describe the sources, quantities, and composition of all sanitary, municipal/domestic, and industrial wastewaters projected or treated at the site.

AUAR Guidance: Observe the following points of guidance in an AUAR:

- *Only domestic wastewater should be considered in an AUAR—industrial wastewater would be coming from industrial uses that are excluded from review through an AUAR process*
- *Wastewater flows should be estimated by land use subareas of the AUAR area; the basis of flow estimates should be explained*
- *The major sewer system features should be shown on a map and the expected flows should be identified*
- *If not explained under Item 6, the expected staging of the sewer system construction should be described*
- *The relationship of the sewer system extension to the RGU's comprehensive sewer plan and (for metro area AUARs) to Metropolitan Council regional systems plans, including MUSA expansions, should be discussed. For non-metro area AUARs, the AUAR must discuss the capacity of the RGU's wastewater treatment system compared to the flows from the AUAR area; any necessary improvements should be described.*
- *If on-site systems will serve part of the AUAR, the guidance in the February 2000 edition of the EAW Guidelines on page 16 regarding item 18b under Residential development should be followed.*

1) If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.

Maps of major sewer system features in the City of Rosemount are included in Appendix F of the AUAR. The AUAR study area is mostly located within the Metropolitan Urban Service Area (MUSA). The eastern portion of the AUAR study area is located outside of the current 2030 MUSA. Before the approval of a sanitary sewer extension, a comprehensive plan amendment would be submitted in order to re-guide the staging from outside of the Current 2030 MUSA to within the Current 2030 MUSA.

The proposed development is expected to generate approximately 1-1.7 million gallons per day of industrial wastewater and 400,000 gallons per day of domestic

wastewater under Scenario 1. This volume was estimated using process water intake, where industrial wastewater is approximately one third of the water intake and domestic wastewater is estimated conservatively to be equivalent to the domestic water demands for the campus. Approximately 100,500 gallons per day of domestic wastewater is anticipated to be generated under Scenario 2. This volume was estimated using the Metropolitan Council's Sewer Availability Charge (SAC) tool. Wastewater from the development proposed in Scenario 1 and Scenario 2 is proposed to be collected by an on-site conveyance system that will route wastewater to a City trunk main which flows to the existing Metropolitan Council interceptor system. Wastewater flows to MCES L74 and L75, the capacities of the lift stations may need improvements and capacity increases as the region develops. Wastewater from the property will flow to the Metropolitan Council Environmental Services (MCES) Empire Wastewater Treatment Plant (WWTP) in Empire Township, Dakota County.

The Empire Wastewater Treatment Plant WWTP is an advanced secondary treatment plant with ultraviolet disinfection. Currently, the plant has a maximum capacity of 28.61 million gallons per day. The plant currently experiences average flows of 10.73 million gallons per day. Based on the wastewater quality and flows, MCES will review the plant to ensure no detrimental performance from accepting the flows. In the event that there are some wastewater flow or constituent concerns, storage may help attenuate peaks. As a mitigation measure for increased water use, the project may use effluent water from the MCES Empire treatment facility for non-contact cooling.

The City's 2040 Comprehensive Sanitary Sewer Plan, completed in 2019, planned for industrial uses to contribute 1,500 gallons per acre per day.

The developments proposed in Scenario 1 and Scenario 2 is consistent with the City's planned sanitary sewer usage from the 2040 Comprehensive Plan, meaning the regional treatment facility and wastewater collection pipes have sufficient long-term capacity to handle the additional wastewater flow that would be generated by the proposed developments. MCES lift stations may need future improvements and should be reviewed from a regional perspective.

2) If the wastewater discharge is to a subsurface sewage treatment system (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.

No subsurface sewage treatment systems are anticipated within the AUAR study area for the proposed development scenario.

3) If the wastewater discharge is to surface water, identify the wastewater treatment methods, discharge points, and proposed effluent limitations to

mitigation impacts. Discuss any effects to surface or groundwater from wastewater discharges.

No wastewater discharge to surface waters is anticipated for the proposed development scenario.

ii. Stormwater – Describe changes in surface hydrology resulting from change of land cover. Describe the routes and receiving water bodies for runoff from the project site (major downstream water bodies as well as the immediate receiving waters). Discuss environmental effects from stormwater discharges on receiving waters post-construction, including how the project will affect runoff volume, discharge rate, and change in pollutants. Consider the effects of current Minnesota climate trends and anticipated changes in rainfall frequency, intensity, and amount with this discussion. For projects requiring NPDES/SDS Construction Stormwater permit coverage, state the total number of acres that will be disturbed by the project and describe the stormwater pollution prevention plan (SWPPP), including specific best management practices to address soil erosion and sedimentation during and after project construction. Discuss permanent stormwater management plans, including methods of achieving volume reduction to restore or maintain the natural hydrology of the site using green infrastructure practices or other stormwater management practices. Identify any receiving waters that have construction-related water impairments or are classified as special as defined in the Construction Stormwater permit. Describe additional requirements for special and/or impaired waters.

AUAR Guidance: For an AUAR the following additional guidance should be followed in addition to that in EAW Guidelines:

- *It is expected that an AUAR will have a detailed analysis of stormwater issues*
- *A map of the proposed stormwater management system and of the water bodies that will receive stormwater should be provided*
- *The description of the stormwater systems would identify on-site and "regional" detention ponding and also indicate whether the various ponds will be new water bodies or converted existing ponds or wetlands. Where on-site ponds will be used but have not yet been designed, the discussion should indicate the design standards that will be followed.*
- *If present in or adjoining the AUAR area, the following types of water bodies must be given special analyses:*
    - *Lakes: Within the Twin Cities metro area, a nutrient budget analysis must be prepared for any "priority lake" identified by the Metropolitan Council. Outside of the metro area, lakes needing a nutrient budget analysis must be determined by consultation with the MPCA and DNR staffs.*

- *Trout streams: If stormwater discharges will enter or affect a trout stream, an evaluation of the impacts on the chemical composition and temperature regime of the stream and the consequent impacts on the trout population (and other species of concern) must be included.*

Environmental Effects

Stormwater runoff can cause a number of environmental problems. When untreated stormwater drains from manmade locations such as agricultural fields, impervious surfaces, and construction sites, it can carry sediments and/or pollutants that harm aquatic ecosystems and wildlife.

Existing conditions

There is currently no impervious surface area within the study area. Runoff from the study area generally drains northwest towards the existing wetland at a rate consistent with agricultural use. Based on the information gathered from StreamStats, an unnamed flow path is located on the project site with a drainage area of about 5,550 acres, including offsite drainage areas that may contribute runoff within the site. Due to recent developments within this drainage area, it is likely that not all 5,550 acres is currently flowing through the site and further review of offsite drainage areas is needed prior to development.

During Construction

During construction, erosion and sediment control best management practices (BMPs) will be implemented to prevent impacts to aquatic ecosystems. The following design/construction standards are to be adhered to during construction:

- Grading of the infiltration basins shall be accomplished using low-impact, earthmoving equipment to prevent compaction of the underlying soils.
- Infiltration basin excavation shall be held 1 foot above the bottom of the excavation until the contributing drainage areas with exposed soils have been fully stabilized.
- Divert upland drainage areas to prevent runoff from entering the excavated basins or into the work areas.
- Care must be taken to avoid contamination of engineered soils with sediment, in-situ, or topsoil during and after installation. Materials must be segregated.
- Installation with dry soil conditions is critical to prevent smearing and compaction. Schedule work for periods of dry weather.
- Do not leave infiltration areas and/or perimeter slope exposed overnight. Secure the area from risk of precipitation and damages at the end of every work day. In the event of rain, take action to divert stormwater away from work area

and temporarily cover all exposed soils with filter fabric or impermeable sheeting.

- In the event that the sediment is introduced into the BMP during or immediately following excavation, remove sediment prior to initiating the next step in the infiltration basin construction process.
- Excavate sediment built up during construction after stabilization of upstream areas and before placement of hydraulic soil stabilizer type special.
- Stockpiling of materials shall not be allowed in proposed infiltration areas before or after they are constructed. Only specified equipment will be allowed inside of the orange construction fence for the sole purpose of constructing the infiltration basins.
- All infiltration basin construction activities shall be completed during dry soil conditions.
- All infiltration areas shall be protected during construction operations.

Post Construction

Overall impervious surface area is proposed to increase to over 100 acres in Scenario 1 and Scenario 2. After development, stormwater from the impervious areas of the site will be directed to one of the nine stormwater management basins on site. On-site stormwater basins will need to be sized to accommodate runoff from these impervious areas and the outlet control structures designed to discharge at a rate less than that required by the City of Rosemount requirements and the City of Rosemount's stormwater management plan. Additionally, in coordination with the City of Rosemount, proposed stormwater infrastructure will need to be sized to accommodate the pass-through from existing offsite flows. As it leaves the site, stormwater will be routed to the proposed portion of the trunk storm sewer line that will cross the site and eventually discharge into the Mississippi River. Pretreatment of stormwater is required prior to discharge to an infiltration basin.

The soils across the AUAR study area consists of hydraulic group A or B and are well-suited for infiltration, and more specifically bioinfiltration. Filtration will be pursued if future soil borings identify soil layers that would restrict infiltration. The required treatment volume is determined by the City of Rosemount and the Vermillion River Watershed Joint Powers Organization (VRWJPO) as a function of new impervious area. The project will be required to meet the VRWJPO and City of Rosemount's Engineering Guidelines and 2018 CSWMP requirements. The project will be required to retain and infiltrate the 100-year, 24-hour rainfall event (7.4 inches). Additionally, new stormwater infrastructure will be designed to meet the City's requirements for no net increase of total phosphorus (TP) and total suspended solids (TSS) and provide a net reduction of TP and TSS. Finally, existing off-site flows directed to the project will need to be retained and managed on-site.

The following stormwater management requirements will be adhered to:

- City of Rosemount Code of Ordinances, Chapter 10, Section 2
- City of Rosemount Comprehensive Surface Water Management Plan
  - Including the City of Rosemount's Stormwater Management Plan and engineering guidelines from the City of Rosemount included within the Comprehensive Surface Water Management Plan.
- Vermillion River Joint Watershed Powers Organization Standards
- National Pollution Discharge Elimination System permit requirements will be determined for each new development within the AUAR study area.
- City of Rosemount Stormwater Management Plan and Engineering Guidelines

Additionally, to mitigate additional winter salt use associated with the planned increase impervious surfaces, the project proposer will implement a chloride management plan for the proposed development.

iii. Water Appropriation – Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use, and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Discuss how the proposed water use is resilient in the event of changes in total precipitation, large precipitation events, drought, increased temperatures, variable surface water flows and elevations, and longer growing seasons. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation. Describe contingency plans should the appropriation volume increase beyond infrastructure capacity or water supply for the project diminish in quantity or quality, such as reuse of water, connections with another water source, or emergency connections.

AUAR Guidance: If the area requires new water supply wells, specific information about that appropriation and its potential impacts on groundwater levels should be given; if groundwater levels would be affected, any impacts resulting on other resources should be addressed.

A Water Use Appropriations Permit would be obtained if permanent dewatering is determined to be necessary for design of development in Scenario 1 and 2. A Water Use Appropriation permit is required for permanent water appropriations and applies to users withdrawing more than 10,000 gallons of water per day or one million gallons per year.

The water supply for the study area will be obtained from the City of Rosemount. Nine groundwater wells are the source of drinking water for the city. The groundwater wells

range in depth from 400 to 507 feet deep and draw water from the Jordan aquifer. According to the City's comprehensive plan, the City's firm pumping capacity is 7,900 gallons per minute as of 2019.

A conceptual watermain service for the west portion of the study area is from an existing 12-inch main located on Driver Avenue west of the study area and a connection to the south along County Road 42 to a future 16-inch watermain. The proposed water main service for the east portion of the study area could come from a future 12-inch main located on Ehlers Path northwest of the study area and a connection to the south along County Road 42 to a future 16-inch watermain.

For industrial process water in Scenario 1, reclaimed/reuse water may also be a feasible and necessary alternative and will be evaluated as site design progresses. The reclaimed water could come from the nearby MCES Empire WWTP. Currently, the WWTP has averaged between 10 and 11 million gallons of flow per day. MCES is interested in providing reclaimed water for the region. The Empire WWTP effluent pipe is located at the northwest corner of the site and a MCES study completed in 2018 explored siting a potential reclamation facility at the existing MCES lift station L74 site which is approximately 1,000 feet northwest of the site. The 2018 study explored siting the reclamation facility to provide reclaimed water for a proposed waste-to-biofuel facility located at County Road 71 and 117th St. The waste-to-biofuel facility was not developed; however, the study determined that it would be feasible to repurpose existing structures at the lift station and/or construct new structures for a reclamation facility. If completed, the reclamation facility could provide reclaimed water to the AUAR site and other sites in the vicinity.

The City is nearing their limit of 1.1-billion gallons per year for water appropriations, but are currently in the process of applying for an additional well and appropriations. The City also has planned 2.5-million gallon storage. The City's planned future wells and storage may be accelerated with Scenario 1. The existing water infrastructure is planned to be extended and upsized based on the City comprehensive plans and should be sufficient for the project needs pending additional City modeling efforts.

iv. Surface Waters

1) Wetlands – Describe any anticipated physical effects or alterations to wetland features, such as draining, filling, permanent inundation, dredging, and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed and identify those probable locations.

In 2022, HDR completed a wetland delineation which identified approximately 20.51 acres of wetland within AUAR study area.

The development proposed in both Scenario 1 and Scenario 2 is planning to avoid impacting the wetlands in the AUAR study area. If development plans change, the project proposer would be required to comply with all federal, state, and local wetland requirements including wetland mitigation requirements through the purchase of wetland banking credits. The City of Rosemount has buffer requirements outlined in the Rosemount Comprehensive Wetland Management Plan that may be applicable to adjacent development. More information on the Rosemount Comprehensive Wetland Management Plan can be found in Section 10.

2) **Other surface waters – Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal, and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features, taking into consideration how current Minnesota climate trends and anticipated climate change in the general location of the project may influence the effects. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.**

AUAR Guidance: Water surface use need only be addressed if the AUAR area would include or adjoin recreational water bodies.

No alternations to other surface waters are anticipated as part the development scenario. The AUAR study does not contain and is not adjacent to any recreational water bodies.

13. CONTAMINATION/HAZARDOUS MATERIALS/WASTES

a. **Pre-project Site Conditions – Describe existing contamination or potential environmental hazards on or in close proximity to the project site, such as soil or groundwater contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize, or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.**

A Phase I Environmental Site Assessment (ESA) of the study area was completed in December 2023 by Braun Intertec. The report identified that the study area is listed on the Minnesota Pollution Control Agency (MPCA) Voluntary Investigation and Cleanup (VIC) and Brownfields

databases in association with previous enrollment for suspected groundwater contamination. Shallow groundwater within the vicinity of the AUAR study area is contaminated with trichloroethene (TCE), a chlorinated volatile organic compound (VOC). Additionally, the SKB Rosemount Industrial Waste facility adjacent to the AUAR Study Area was identified as an active landfill and was listed on several regulatory databases. While no releases have been identified in association to the landfill's operation, there is a potential for surface water to conduct contaminants during storm events to the AUAR study area.

There is an existing hazardous liquid pipeline that bisects the AUAR study area. Additionally, there is an existing gas pipeline that is located northwest of the study area that in 2020 was proposed to be relocated to within the study area. There are no impacts related to existing or proposed pipelines within the study area.

Contaminated properties and potential environmental hazards located near the study area identified in the Phase I ESA are summarized in Table 12.

Table 12: Sites Identified within Study Area

Site Name	Site Address	Activity	Risk Level
Pine Bend Property C	Located within AUAR Study Area	Brownfields, Investigation and Cleanup	High
SKB/Ped Sand Pit	4992 145th Street East	Industrial Stormwater, 12-gallon non-PCB transformer oil spill occurred in July 2019, listed by MPCA as closed	Low
Xcel Energy – General Office	4594 145th Street East	29-gallon non-PCB transformer oil spill occurred in March 2020, listed by MPCA as closed	Low
Minnesota Precast Industries Inc	5480 142nd Street East	Industrial Stormwater	Low
Rosemount Revisions	N/A	Construction Stormwater	Low
Raymond J Ostertag Farm	5430 145th Street East	Feedlots	Low
Met Council Rosemount WWTP, Ponds 1 & 2	N/A	Storage tanks, very small quantity generator, listed on PFAS Industry Sector database	Medium
Rich Valley Golf Course	3855 145th Street	Brownfields, Investigation and Cleanup, minimal quantity generator	High
SKB Rosemount Industrial Waste Facility	13425 Courthouse Blvd.	Listed on PFAS Industry Sector database	High

A Phase II Environmental Site Assessment is recommended to be completed for the study area to further explore the recognized environmental concerns identified in the Phase I ESA. Once the Phase II ESA is complete, stormwater management facilities will be located outside of any known areas of contamination and will be designed according to local and state requirements.

A Response Action Plan (RAP) is needed from the MPCA for any known areas of contamination and a Construction Contingency Plan (CCP) would be prepared and implemented during construction.

b. Project Related Generation/Storage of Solid Wastes – Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

AUAR Guidance: Generally, only the estimated total quantity of municipal solid waste generated and information about any recycling or source separation programs of the RGU need to be included.

According to Dakota County Ordinances 110 and 111, Dakota County will ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811.

Construction Generated Solid Waste

Construction of the proposed development would generate construction-related waste materials such as wood, packaging, excess materials, and other wastes, which would either be recycled or disposed of in the proper facilities in accordance with state regulations and guidelines.

Operation Generated Solid Waste

Recycling for industrial buildings in the AUAR study area will be conducted in accordance with the 2016 Recycling Law (Minnesota Statutes Chapter 115A, Section 115A.151 and Section 115A.552). Furthermore, Dakota County Ordinance 15.08 requires all solid waste haulers to offer source separated recycling services and curbside pick-up within the county.

The proposed development would generate new demands on solid waste management and sanitation services provided in the project area. During operation, it is estimated that the non-residential (commercial/industrial) waste stream be approximately 13,238 for Scenario 1 and 37,500 for Scenario 2.

c. Project Related Use/Storage of Hazardous Materials – Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location, and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spills or releases of hazardous materials. Identify measures to avoid, minimize, or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

AUAR Guidance: Not required for an AUAR. Potential locations of storage tanks associated with commercial uses in the AUAR should be identified (e.g., gasoline tanks at service stations).

Scenario 1 could include several hundred diesel-powered backup generators for emergency use. Each of these generators would have a 1,100 gallon diesel belly tank that will be installed and maintained in compliance with applicable state regulations for aboveground storage tanks, including:

- New tanks and piping would be designed to applicable industry standards and guidance.
- Tank upgrades and repairs would follow applicable industry standards.
- Tank owners would clearly label all tanks and piping.
- Underground storage tanks of any size will not be used as above ground storage tanks.

Scenario 2 is not anticipated to include any storage tanks.

d. Project Related Generation/Storage of Hazardous Wastes – Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of hazardous wastes including source reduction and recycling.

AUAR Guidance: Not required for an AUAR.

Not applicable.

14. FISH, WILDLIFE, PLANT COMMUNITIES, AND SENSITIVE ECOLOGICAL RESOURCES (RARE FEATURES)

a. Describe fish and wildlife resources as well as habitats and vegetation on or near the site.

AUAR Guidance: The description of fish and wildlife resources should be related to the habitat types depicted on the cover types map. Any differences in impacts between development scenarios should be highlighted in the discussion.

The majority of the land within the AUAR study area has been previously disturbed through farming and provides limited and low-quality habitat. There is a wetland in the northwest corner of the site that may provide habitat for wildlife. Minimal wildlife habitat is located within the AUAR study area outside of this wetland due to the prior extent of continued ground disturbance and minimal natural vegetation. Wildlife that can be found within the study area include birds, small mammals, and insects. There is one site of biodiversity significance located approximately one mile away from the study area to the northwest and one regionally significant ecological area located approximately one mile away from the study area to the northwest. The AUAR study area is located approximately 1 mile away from the Mississippi River Twin Cities Important Bird Area.

b. Describe rare features such as state-listed (endangered, threatened, or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number and/or correspondence number (ERDB) from which the data were obtained and attach the Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe results.

AUAR Guidance: For an AUAR, prior consultation with the DNR Division of Ecological Resources for information about reports of rare plant and animal species in the vicinity is required. Include the reference numbers called for on the EAW form in the AUAR and include the DNR's response letter. If such consultation indicates the need, an on-site habitat survey for rare species in the appropriate portions of the AUAR area is required. Areas of on-site surveys should be depicted on a map, as should any "protection zones" established as a result.

State-Listed Species

Kimley-Horn conducted a review of the DNR Natural Heritage Information System (NHIS) in September 2023 per license agreement LA-1074 for the study area and area within a one-mile radius for state-listed threatened, endangered, and special concern species. The review identified one state-listed endangered species and two additional species of concern within the study area: Loggerhead Shrike, Lark Sparrow, and Bell's Vireo. A correspondence letter has been requested from the Minnesota DNR (MnDNR).

Loggerhead Shrike

The Loggerhead Shrike (*Lanius Ludovicianus*) is a Minnesota state-listed endangered species and is documented within the AUAR study area. The Loggerhead Shrike is a species of open landscapes and in Minnesota is largely restricted to areas that were historically prairie or oak savanna. While Minnesota's forested regions may have large tracts of cultivated fields and non-native grasslands, Loggerhead Shrikes rarely occur in these areas. Nests are well hidden in trees or brush and are usually less than 2 meters above the ground. Because the study area is largely agricultural, and due to the fact Loggerhead Shrike's require relatively large areas of grassland, the potential for the Loggerhead Shrike to utilize the study area is low.

Lark Sparrow

The Lark Sparrow (*Chondestes Grammacus*) is a Minnesota species of special concern as is documented within the AUAR study area. In Minnesota, Lark Sparrows typically occur in dry grasslands with a specific set of components and characteristics: short and/or sparse grasses (usually native) in areas of sand or gravel soils, with at least some bare ground and widely-scattered or patchy trees. Lark Sparrows usually builds its nest on the ground, rarely in a shrub or small tree. Lark Sparrows are short-distance migrators, overwintering in Mexico. Due to the specific nature of Lark Sparrow habitats, and the lack of habitat within the AUAR study area, the potential for the Lark Sparrow to nest in the study area is low.

Bell's Vireo

The Bell's Vireo (*Vireo Bellii*) is a Minnesota species of special concern and is documented within the AUAR study area. The preferred habitat for this species includes shrub thickets, clumps, and edges within or bordering open habitats such as grasslands or wetlands. The wetland in the northwestern portion of the site may represent marginally suitable habitat for the species.

Federally-Listed Species

The U.S. Fish and Wildlife (USFWS) Service Information for Planning and Conservation tool was used to identify federally-listed species within or near the AUAR Study Area. This review identified two federally-listed endangered species, Northern Long-eared Bat and Rusty Patched Bumble Bee. This review also identified one federally-listed proposed endangered species, Tricolored Bat, and one federally-listed candidate species, monarch butterfly.

Northern Long-eared Bat

Northern long-eared bat (*Myotis septentrionalis*) was designated a federally endangered species by FWS in April 2023. According to the MnDNR, in the southern part of the state, this species may use attics, bridges, and buildings for hibernating. In summer, the species is often found within forested habitats, especially around wetlands. Summer roosts may include under loose tree bark, in buildings, behind signs or shutters, caves, mines, and quarry tunnels. Given that the site area has been cultivated for agricultural use and does not contain caves or large expanses of forested habitat, the potential for the Northern Long-eared Bat to utilize the site is considered low. The project may include the removal of a small quantity of trees.

Tricolored Bat

The Tricolored Bat (*Perimyotis subflavus)* was proposed to be designated as a federally endangered species by the U.S. Fish and Wildlife in September 2022. According to the USFWS, during the winter, tricolored bats are often found in caves and abandoned mines. During the spring, summer, and fall, Tricolored Bats are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures. Like the Northern Long-eared Bat, the spread of white-nose syndrome across the eastern portion of the United States has become the major threat to the Tricolored Bat, with an estimated decline of more than 90 percent in affected colonies. According to the DNR's Rare Species Guide, there are no known maternity colonies within the state of Minnesota. Only three live hibernating individuals have been observed in Minnesota. Due to the low occurrence rate and given that the study area has been disturbed for agricultural use and does not contain caves or large expanses of forested habitat, the potential for the Tricolored Bat to utilize the study area is considered low.

Rusty Patched Bumble Bee

The Rusty Patched Bumble Bee (*Bombus affinis*) is designated as a federally-listed endangered species. The preferred habitat for this species includes grasslands and tallgrass prairies. The study area is located within a high potential zone for the rusty patched bumblebee and the study area includes an area of wetlands that could provide habitat for the rusty patched

bumblebee. Because the project is planning to avoid the wetlands within the study area, impacts to the rusty patched bumblebee are not anticipated.

Monarch Butterfly

The Monarch Butterfly (*Danaus plexippus*) is designated as a candidate species for official listing by the USFWS. The preferred habitat for this species is prairie where milkweed and flowers are present. According to the USFWS, there are many potential reasons for the butterfly's decline, including habitat loss at breeding and overwintering sites, disease, pesticides, logging at overwintering sites, and climate change. The study area has been disturbed for agricultural use and does not contain natural prairie vegetation; therefore, impacts to the Monarch Butterfly are not anticipated.

c. Discuss how the identified fish, wildlife, plant communities, rare features, and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

State-listed Species

Loggerhead Shrike

The trees located in along the study area boundary may represent marginally suitable habitat for Loggerhead Shrike. Tree removal activities related to the redevelopment of the site may have a negative impact on this species.

Lark Sparrow

The trees located in along the study area boundary may represent marginally suitable habitat for Lark Sparrow. Tree removal activities related to the redevelopment of the site may have a negative impact on this species.

Bell's Vireo

The wetland located in the northwest corner of the site may represent suitable habitat for Bell's Vireo. The proposed development in Scenario 1 and Scenario 2 will avoid this wetland. Therefore, negative impacts to Bell's Vireo are not anticipated.

Federally-listed Species

Northern Long-eared Bat

The proposed development will require tree clearing. According to the USFWS, tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. On November 30, 2022, the USFWS published in the Federal Register (87 FR 73488) a final rule which reclassified this species as an endangered species. The rule went into effect March 31, 2023.

Tricolored Bat

The proposed development will require tree clearing. According to the USFWS, the Tricolored Bat uses forested areas for roosting and foresting during the spring, summer, and fall.

Rusty Patched Bumble Bee

The Rusty Patched Bumble Bee (RPBB) may be impacted by a variety of activities associated with development including, but not limited to tree-removal, herbicide use, pesticide use, land-clearing, and soil disturbance or compaction. The proposed project may affect RPBB and/or suitable RPBB habitat, but disturbances are anticipated to be temporary in nature and/or insignificant given available foraging and breeding habitat in the surrounding landscape; therefore, long-term impacts to the RPBB are not anticipated. Additionally, the use of native plant species in seed mixes may be used to promote pollinator friendly habitat within the study area.

Invasive Species

Invasive species are a major cause of biodiversity loss and are considered biological pollutants by the DNR. Invasive species can be moved on construction equipment, landscaping equipment, and other debris.

Stormwater

Stormwater run-off can cause a number of environmental problems. When stormwater drains off a construction site, it can carry sediment and pollutants that harm lakes, rivers, streams, and wetlands which in turn may harm wildlife.

Tree Removal

The AUAR study area contains approximately 1.5 acres of wooded land. Forests and forested areas provide an important natural resource in Minnesota. Forest clearing and tree removal creates a variety of environmental impacts including habitat destruction, biodiversity impairment, soil erosion, and loss of carbon sinks. Although some tree removal will be necessary, the scope of removal will be limited as much as feasible to support the proposed development. Tree removal will adhere to the City's tree preservation requirements. The City of Rosemount regulates tree preservation and requires builders to submit a tree preservation plan prior to construction. City staff review these plans and attempt to identify and save as many significant trees as feasible[13].

d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

State-listed Species

Loggerhead Shrike

To avoid potential impacts to the loggerhead shrike, tree removal activities are anticipated to be conducted early in the construction season, prior to the breeding season for the loggerhead shrike (before April); therefore, no impacts are anticipated to this species. Any loggerhead shrike sightings will be reported to the DNR.

Lark Sparrow

[13] Source: Rosemount, Minn., Ordinance No. B-190

To avoid potential impacts to the lark sparrow, tree removal activities are anticipated to be conducted early in the construction season, prior to the breeding season for the lark sparrow (before April); therefore, no impacts are anticipated to this species. Any lark sparrow sightings will be reported to the DNR.

Bell's Vireo

The wetland located in the northwest corner of the site may represent suitable habitat for Bell's Vireo. The proposed development in Scenario 1 and Scenario 2 will avoid this wetland. Therefore, negative impacts to Bell's Vireo are not anticipated.

Federally-listed Species

Monarch Butterfly

The use of native plant species in seed mixes may be used to promote pollinator friendly habitat within the study area.

Northern Long-eared Bat

Tree clearing activities should be restricted to when Northern long-eared bats are not likely to be present, between November 1 to March 31. Coordination with USFWS before tree clearing is recommended.

Rusty Patched Bumble Bee

The use of native plant species, including flowering plants, in seed mixes may be used to promote pollinator friendly habitat within the study area. Additional mitigation measures include the minimization of mowing during the active season, keep some areas unmowed, and use a high cutting height (ideally 12-16 inches), and incorporating additional wildflower planting/restoration. As the RPBB High Potential Zone in the study area may contain suitable habitat, a habitat assessment may be required.

Tricolored Bat

Avoid tree clearing and trimming in the months of June and July to minimize potential impacts to the Tricolored Bat and other bat species.

Invasive Species

State requirements necessitate the control and spread of state listed noxious weeds and/or invasive weeds if encountered prior to construction. Disturbed areas would be reestablished using appropriate native and stabilization seed mixes. Methods to avoid spreading noxious weeds and/or invasive species will be incorporated into project specifications (and/or SWPPP when developed). According to the DNR, some methods that can prevent the spread of invasive species during construction include:

- Inspecting construction equipment and removing any visible plant, seeds, mud, dirt clods, and animals when arriving and leaving a site.
- Using certified weed-free products such as weed-free seed or hay whenever possible.
- Using mulch, soil, gravel, etc., that is free of invasive species whenever possible.

- Inspecting soil and plant material during planting for signs of invasive species and removing or destroying the invasive species or the plant and associated soil if the invasive species cannot be separated out.

Tree Removal

Although tree removal will be required for development, some existing trees may be preserved in areas around the perimeter of the property. Prior to construction, a tree preservation plan will be submitted and reviewed by city staff. Tree replacement will be conducted as required by the city.

Stormwater

The proposed development scenarios include stormwater management and treatment of all stormwater run-off within the AUAR study area.

15. HISTORIC PROPERTIES

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include 1) historic designations; 2) known artifact areas; and 3) architectural features. Attach letter received from the Minnesota State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

AUAR Guidance: For an AUAR, contact with the State Historic Preservation Office and State Archeologist is required to determine whether there are areas of potential impacts to these resources. If any exist, an appropriate site survey of high probability areas is needed to address the issue in more detail. The mitigation plan must include mitigation for any impacts identified.

A State Historic Preservation Office (SHPO) database search was requested in September 2023. Within Sections 29 and 30, Township 115 N, Range 18W, one historic property and one archaeological site was identified. See Appendix D for database results. The historic property is Edmund Knodt Farm which is located approximately 1.5 miles away from the AUAR study area. According to the Minnesota Office of the State Archeologist (OSA) Public Viewer map, there are archeological records identified in the vicinity of the site.

The Minnesota Indian Affairs Council identified no concerns for resources within the vicinity of the study area (see Appendix D for correspondence). A cultural resources management survey and research will be completed for the assessment of the area and consultation with Minnesota Tribal Historic Preservation Office (THPO) will be completed before construction.

16. VISUAL

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

AUAR Guidance: Any impacts on scenic views and vistas present in the AUAR should be addressed. This would include both direct physical impacts and impacts on visual quality or integrity. EAW Guidelines contains a list of possible scenic resources.

If any non-routine visual impacts would occur from the anticipated development, this should be discussed here along with appropriate mitigation.

The AUAR study area includes existing agricultural land that is not near any unique designated scenic views or vistas. Any development of agricultural land will have an impact on the visual look of a property. Future development would conform with the city ordinances for building height, building form, landscape screening, and lighting to avoid impacts to neighboring properties and species. No significant visual impacts are anticipated.

As building and site designs advance, lighting practices will be selected to address known ecological concerns and prevent avoidable impacts to insects, wildlife, rare plants, and adjacent natural areas. Guidance from the USFWS to minimize blue light, uplight, and backlight will be adhered to the extent practicable.

17. AIR

a. **Stationary Source Emissions – Describe the type, sources, quantities, and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health, or applicable regulatory criteria. Include a discussion of any methods used to assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.**

   AUAR Guidance: This item is not applicable to an AUAR. Any stationary air emissions source large enough to merit environmental review requires individual review.

   Not applicable to an AUAR.

b. **Vehicle Emissions – Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g., traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.**

   AUAR Guidance: Although the MPCA no longer issues Indirect Source Permits, traffic-related air quality may still be an issue if the analysis in Item 18 indicates that development would cause or worsen traffic congestion. The general guidance from the EAW form should still be followed. Questions about the details of air quality analysis should be directed to MPCA staff.

The Minnesota Department of Transportation (MnDOT) has developed a screening method designed to identify intersections that will not cause a carbon monoxide (CO) impact above state standards. MnDOT has demonstrated that even the 10 highest traffic volume intersections in the Twin Cities do not experience CO impacts. Therefore, intersections with traffic volumes lower than these 10 highest intersections will not cause a CO impact above state standards. MnDOT's screening method demonstrates that intersections with total daily approaching traffic volumes below 82,300 vehicles per day will not have the potential for causing CO air pollution problems. None of the intersections in the study area exceed the criteria that would lead to a violation of the air quality standards.

c. Dust and Odors – Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under Item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

AUAR Guidance: Dust and odors need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any dust control ordinances in effect.

The proposed development may generate temporary fugitive dust emissions during construction. The City of Rosemount regulates dust in accordance with the standards set by the MPCA.[14] Dust emissions can be controlled by sweeping, watering, sprinkling, as appropriate or as prevailing weather and soil conditions dictate. Dust emissions are not anticipated during operations as all ground surfaces will either be impervious or vegetated.

18. GREENHOUSE GAS (GHG) EMISSIONS/CARBON FOOTPRINT

a. GHG Quantification – For all proposed projects, provide quantification and discussion of project GHG emissions. Include additional rows in the tables as necessary to provide project-specific emission sources. Describe the methods used to quantify emissions. If calculation methods are not readily available to quantify GHG emissions for a source, describe the process used to come to that conclusion and any GHG emission sources not included in the total calculation.

About Greenhouse Gases (GHGs)

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes

[14] Source: Rosemount, Minnesota, Municipal Code § 11-9-1 (C)

through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

The primary GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Examples of fluorinated gases include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3); however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of GHGs exceeding natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming.[15]

Project-related GHG Emissions

This section describes the GHG emissions from the existing buildings within the study area and include an estimated quantification of the following GHG emissions associated with the proposed scenarios.

- Carbon dioxide (CO_2)
- Nitrous oxide (N_2O)
- Methane (CH_4)

The projected GHG emissions are provided on an average annual basis using the CO_2 equivalent (CO_2e) and include the proposer's best estimate of average annual emissions over the proposed life/design service life of future development. The estimates also include emissions from the construction and operating phases of the scenario. Emissions were estimated using the US Environmental Protection Agency's Simplified GHG Emissions Calculator (SGEC) (Version 7 June 2021)[16] and are summarized in Table 13 and Table 14 by project phase (i.e., construction and operations) and source type (e.g., combustion from mobile equipment, off-site electricity).

Construction emissions for the two proposed scenarios are based on length of construction and are from mobile equipment including passenger cars, light-duty trucks, and medium and heavy-duty trucks, and construction equipment (both gasoline and diesel).

[15] Summarized from U.S. EPA, Overview of Greenhouse Gases: https://www.epa.gov/ghgemissions/overview-greenhouse-gases
[16] Source: https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator

Table 13: Construction Emissions

Scope	Emission Type	Emission Sub-Type	Emitant	Existing CO_{2e} Emissions (total)	Scenario 1 Project-Related CO_{2e} Emissions (total)	Scenario 2 Project-Related CO_{2e} Emissions (total)
Scope 1	Combustion	Mobile equipment	CO_2, N_2O, CH_4	0	20,371	22,143
Total				**0**	**20,371**	**22,143**

Table 14: Annual Operational Emissions

Scope	Emission Type	Emission Sub-Type	Emitant	Existing CO_{2e} Emissions (tons/year)	Scenario 1 Proposed CO_{2e} Emissions (tons/year)	Scenario 2 Proposed CO_{2e} Emissions (tons/year)
Scope 1	Combustion	Stationary equipment	CO_2, N_2O, CH_4	0	4,868	3,147
Scope 1	Non-combustion	Refrigeration/AC Equipment	CO_2, N_2O, CH_4	0	309	0
Scope 2	Off-site electricity	Grid-based	CO_2, N_2O, CH_4	0	174,153	16,036
Scope 2	Renewable energy credit purchases	Grid-based	--	0	-174,153	0
Scope 3	Off-site waste management	Area	CO_2, CH_4	0	6,954	8,984
Total				**0**	**12,131**	**28,167**

b. GHG Assessment

i. Describe any mitigation considered to reduce the project's GHG emissions.

Scenario 1 and Scenario 2

Unless otherwise noted differently, the following are potential design strategies and sustainability measures that are under consideration for the proposed development to reduce emissions for both scenarios:

- Use energy efficient appliances, equipment, and lighting
- Energy efficient building shells

- Implement waste best management practices and recycle and compost appropriate material when applicable
- Trees and additional landscaping will be planted as part of the new development
- Provide electric vehicle-ready charging infrastructure
- Grid-based wind and solar power will be purchased (for Scenario 1)

Implementation of the above strategies will be evaluated on a case-by-case basis based on code requirements, feasibility, availability of materials, schedule, and tenant considerations.

ii. Describe and quantify reductions from selected mitigation, if proposed to reduce the project's GHG emissions. Explain why the selected mitigation was preferred.

- Both scenarios would require new appliances, equipment, and lighting during operation. The use of energy efficient technologies would reduce the amount of electricity used per product. Collectively, the implementation of these technologies would reduce overall energy use and in-turn, GHG emissions.
- Both scenarios would require heating and cooling during operation. One of the highest sources of energy use is energy spent heating and cooling buildings. The use of energy efficient building shells reduces the amount of energy needed for heating and cooling, therefore reducing energy use and GHG emissions.
- Waste would be generated during operation of both scenarios. By implementing waste best management practices and recycle and compost appropriate material when applicable, GHG emitted from wastes during operations can be reduced.
- Trees and additional landscaping can reduce the GHG footprint of the project by absorbing greenhouse gas emissions. For Scenario 1, the project proposer is planning to plant 15 percent of the site with new trees.
- Conventional gas-powered vehicles emit harmful GHG's. For Scenario 1, the project proposer is planning to provide electric vehicle-ready charging infrastructure to encourage adoption of electric vehicles.
- Renewable energy sources, such as wind and solar are able to provide electricity to the grid without emitting GHG's. Use of these sources radically reduce GHG emissions associated with electricity use. For Scenario 1, the project proposer is planning to fund renewable energy sources so 100 percent of their energy load will be offset by renewables.

The potential mitigation listed in Item 18.b.i. was selected to comply with best management practices for new construction and reduce GHG emissions where practicable during operations.

iii. Quantify the proposed project's predicted net lifetime GHG emissions (total tons per number of years) and how those predicted emissions may affect achievement of the Minnesota Next Generation Energy Act goals and/or other more stringent state or local GHG reduction goals.

The Next Generation Energy Act requires the state to reduce greenhouse gas emissions in the state by 80 percent between 2005 and 2050, while supporting clean energy, energy efficiency, and supplementing other renewable energy standards in Minnesota. The MPCA's biennial GHG emissions reduction report from 2021 identifies strategies for reducing emissions in the three economic sectors with the highest emissions – transportation, electricity generation, and agriculture, forestry, and land use.

The expected lifespan of the project is 50 years, this equates to a total estimated 626,928 $CO2_e$ metric tons over the lifetime of the development under Scenario 1 and 1,430,495 $CO2_e$ metric tons over the lifetime of the development under Scenario 2 (including both construction and operations phases). The proposer will evaluate implementing the sustainability measures listed in Item 18.b.i to reduce operational emissions to the extent practicable. The proposed project will be built in compliance with state regulations and city building codes.

19. NOISE

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area; 2) nearby sensitive receptors; 3) conformance to state noise standards; and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

AUAR Guidance: Construction noise need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any construction noise ordinances in effect.

If the area will include or adjoin major noise sources, a noise analysis is needed to determine if any noise levels in excess of standards would occur, and if so, to identify appropriate mitigation measures. With respect to traffic-generated noise, the noise analysis should be based on the traffic analysis of Item 18.

Existing Noise

The AUAR study area is currently agricultural land. The existing noise sources at the site consist mainly of the surrounding roadways.

Construction Noise

As stated in the AUAR guidelines, construction noise need not be addressed unless there is some unusual reason to do so. No unusual circumstances have been identified that would necessitate a detailed construction noise analysis. The City of Rosemount municipal code regulates the hours of

operation for construction equipment. Construction of the proposed project would comply with these requirements.

Traffic Generated Noise

A sound increase of 3 dBA is barely noticeable by the human ear, a 5 dBA increase is clearly noticeable, and a 10 dBA increase is heard as twice as loud. For example, if the sound energy is doubled (i.e., the amount of traffic doubles), there is a 3 dBA increase in noise, which is just barely noticeable to most people. On the other hand, if traffic increases by a factor of 10, the resulting sound level will increase by about 10 dBA and be heard as twice as loud.

Traffic volumes in the project area are either on roadways that do not have receivers that are sensitive to noise, or the traffic levels attributable to the project are well below the amount that would generate a sound increase that could be noticeable.

The change in traffic noise levels is not anticipated to be readily perceptible.

Operational Noise

The Rosemount Code of Ordinances regulates mechanical noise associated with building operation by the standards set by the MPCA.[17] For Scenario 1, further noise evaluation will be completed as design progresses and best practices to reduce noise spill will be implemented for the data center uses to comply with local and state noise regulations.

20. TRANSPORTATION

a. Describe traffic-related aspects of project construction and operation. Include 1) existing and proposed additional parking spaces; 2) estimated total average daily traffic generated; 3) estimated maximum peak hour traffic generated and time of occurrence; 4) source of trip generation rates used in the estimates; and 5) availability of transit and/or other alternative transportation modes.

Parking

Minimum off-street parking requirements listed in Section 11-6-1 of the City of Rosemount's Code of Ordinances will be adhered to.

Existing Conditions

The existing roadway network within the study area includes County Road 42/145th Street, Highway 52, MN Highway 55, Conley Avenue, 140th Street/142nd Street, Driver Avenue, Emery Avenue, and Blaine Avenue.

The roadway network is described below:

- County Road 42 is an east-west roadway that runs along the southern boundary of the AUAR development. West of Conley Avenue, County Road 42 is a four-lane, divided roadway with turn lanes provided at most intersections. East of Conley Avenue, County Road 42 tapers to a two-lane, undivided roadway with turn lanes provided for some movements. The 2021 Annual Average Daily Traffic (AADT) was 5,740 vehicles per day (VPD) east of Highway

[17] Source: Rosemount, Minnesota, Municipal Code § 11-9-1 (A)

52 and 15,900 VPD west of US 52 (2019). The speed limit on County Road 42 is 55 miles per hour (mph).

- Highway 52 is a north-south roadway that is located west of the AUAR development. Highway 52 is a four-lane divided roadway with interchanges provided at major intersecting roadways. The 2022 AADT is 35,453 VPD north of County Road 42 and 29,179 VPD south of County Road 42. The speed limit on Highway 52 is 65 mph.
- Blaine Avenue is a north-south roadway lies west of the AUAR area. Blaine Avenue is a two-lane undivided roadway. The 2021 ADT is 5,347 VPD. The speed limit on Blaine Avenue is 50 mph north of County Road 42 and 30 mph south of County Road 42.
- MN Highway 55 is a primarily east-west roadway that is located northeast of the AUAR development. MN Highway 55 is a two-lane undivided roadway (except west of Pine Bend Trail where it is a four lane divided roadway) with right and left turn lanes provided at major intersections and right-turn lanes provided at most smaller intersections. East of County Road 42 (145th Street) the 2019 AADT is 14,400 VPD and west of County Road 42 (145th Street) the 2015 AADT is 12,800 VPD. The speed limit on MN Highway 55 is 55 MPH. Note that despite running primarily east-west, the roadway is considered to be the northbound/southbound approaches of the intersection with County Road 42 in order to maintain consistency with the orientation of other intersections along County Road 42.
- 140th Street/142nd Street is an east-west roadway that runs along the northern boundary of the AUAR development. 140th Street/142nd Street is a two-lane undivided roadway. The 2019 AADT is 135 VPD near the site.
- Driver Avenue is a newly constructed road built as a part of the Rich Valley Golf Course redevelopment which runs north-south connecting County Road 42 to 140th Street, about ½ mile east of Conley Avenue. The border marks the western edge of this AUAR's study area as well as the eastern edge of the RVGC redevelopment area. It is a two-lane, undivided roadway and no traffic data is available at this point.

Traffic Generation

The trip generation of the two previously shown development scenarios were estimated based on data from the ITE Trip Generation Manual, 11th Edition. Scenario 1 utilized the Land Use Code (LUC) for Warehousing (LUC 150) while Scenario 2 utilized the codes for Light Industrial (LUC 110), Business Park (LUC 770), and Office Park (LUC 750). The trip generation is shown Table 15. The full traffic study conducted for the AUAR can be found in Appendix B.

Table 15: Trip Generation Forecasts

Scenario	AM Peak Hour			PM Peak Hour			Daily
	Total	In	Out	Total	In	Out	
Scenario 1	391	301	90	414	116	298	3,933
Scenario 2	2,970	2,538	402	2,726	571	2155	25,437

Availability of Transit

The Route 484 express bus operates along County Road 42 near the study area. The route travels from downtown Saint Paul to Rosemount Transit Station west of the study area via Highway 52 and County Road 42. Currently this route only stops at the Rosemount Transit

Station, but future development along County Road 42 corridor could drive service changes. There are no additional transit routes currently serving the AUAR study area.

b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system. If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 (available at: http://www.dot.state.mn.us/accessmanagement/resources.html) or a similar local guidance.

AUAR Guidance: For AUAR reviews, a detailed traffic analysis will be needed, conforming to the MnDOT guidance as listed on the EAW form. The results of the traffic analysis must be used in the response to Items 16 and 17.

A Traffic Impact Analysis (TIA) was completed in December 2023 based on the projected trip generation of the proposed scenarios. The results of this study can be found in Appendix C. Based on the detailed findings of the Rich Valley East Industrial TIA, the area's transportation network is expected to support redevelopment within the AUAR study area with mitigation. The TIA identified improvements that could be constructed to mitigate possible future traffic impacts associated with development within the AUAR study area. Metrics for traffic analysis include intersection delay as measured by Level of Service (LOS) and queue lengths.

The traffic analysis report includes intersection capacity analyses for intersections at the site access point along County Road 42 as well as intersection operations within the vicinity of the project (see locations identified on **Exhibit 1 of the TIA**). The access along County Road 42 meets the access spacing requirement in the Dakota County 2040 Transportation Plan. Based on the results of the TIA capacity analysis, several intersections operate poorly in Scenario 2 without mitigation, while Scenario 1 does not require any major mitigation measures (besides background mitigations) in order to operate acceptably due to a much lower anticipated trip generation. Table 14 shows the LOS for the study area intersections in each analysis scenario. Note that all future scenarios include significant background changes to the control and lane use proposed by traffic studies for other parcels in the vicinity.

Table 16: Existing and Projected Intersection LOS

Intersection	Existing LOS	No-Build LOS		Scenario 1 LOS		Scenario 2 LOS		Scenario 2 Mitigated LOS	
	2023	2027	2045	2027	2045	2027	2045	2027	2045
A.M. Peak Hour Intersection LOS									
County Road 42 & Highway 52 SB Ramps	D	B	B	B	C	F	F	D	D

Intersection	Existing LOS	No-Build LOS		Scenario 1 LOS		Scenario 2 LOS		Scenario 2 Mitigated LOS	
	2023	2027	2045	2027	2045	2027	2045	2027	2045
County Road 42 & Highway 52 NB Ramps	F	C	C	C	C	E	C	C	C
County Road 42 & Conley Avenue	A	A	B	C	C	F	C	B	B
County Road 42 & 142nd Street	A	A	A	A	A	A	A	A	A
County Road 42 & MN 55	A	A	B	A	B	A	B	B	B
County Road 42 & Blaine Avenue	C	B	B	B	B	B	B	B	B
County Road 42 & Driver Avenue	A	A	B	C	C	F	D	D	D
County Road 42 & South Access	--	--	--	A	B	F	D	D	D
County Road 42 & Emery Avenue	A	B	B	B	B	C	E	D	D
Blaine Avenue & 140th Street	A	A	A	A	A	A	A	A	A
P.M. Peak Hour Intersection LOS									
County Road 42 & Highway 52 SB Ramps	C	C	C	C	C	F	D	C	C
County Road 42 & Highway 52 NB Ramps	E	C	C	C	C	E	D	C	C
County Road 42 & Conley Avenue	A	A	C	B	D	F	C	C	C
County Road 42 & 142nd Street	A	A	A	A	A	A	B	B	B
County Road 42 & MN 55	A	B	B	B	B	C	C	C	C
County Road 42 & Blaine Avenue	C	B	C	B	C	D	C	B	B
County Road 42 & Driver Avenue	A	B	B	B	C	F	C	C	C
County Road 42 & South Access	--	--	--	A	A	F	C	B	B

Intersection	Existing LOS	No-Build LOS		Scenario 1 LOS		Scenario 2 LOS		Scenario 2 Mitigated LOS	
	2023	2027	2045	2027	2045	2027	2045	2027	2045
County Road 42 & Emery Avenue	A	A	A	A	A	D	B	B	B
Blaine Avenue & 140th Street	A	A	A	A	A	B	A	A	A

c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

The following provides a summary of mitigation improvements that were identified as part of the traffic analysis for the Rich Valley East property. It should be noted that mitigation measures noted in the mitigation plan are only the mitigation measures that are the direct result of the development in addition to the background mitigation.

Existing (2023) No-Build Conditions

- No Mitigation Necessary

Short-Term (2027) No- Build Conditions

- Short-Term (2027) background mitigation is sufficient. Short-Term Background mitigations include:
    - Installation of a traffic signal at the intersection of County Road 42 & Highway 52 southbound ramps.
    - Installation of a traffic signal at the intersection of County Road 42 & Highway 52 northbound ramps
    - Installation of a traffic signal at the intersection of County Road 42 & Blaine Avenue
    - Add separated northbound and southbound left and right turn lanes and an eastbound right turn lane at County Road 42 & Blaine Avenue.
    - Install stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane.

Short-Term (2027) Scenario 1 Conditions (Exhibit 12 in TIA)

- Short-Term (2027) background mitigation is sufficient.

Short-Term (2027) Scenario 2 Conditions (Exhibit 15 in TIA)

- Installation of a traffic signal at the intersection of County Road 42 & Conley Avenue. Additionally, install an additional eastbound through lane.
- Installation of a traffic signal at the intersection of County Road 42 & Driver Avenue. Additionally, install an additional through lane in each direction along County Road 42, an additional eastbound left turn lane, and two southbound right turn lanes.
- Installation of a traffic signal at the intersection of County Road 42 & South Access. Additionally, install two eastbound left turn lanes, a westbound right turn lane, and a channelized southbound right turn lane.

- Installation of a traffic signal at the intersection of County Road 42 & Minnesota 55.
- Addition of an eastbound left turn lane, westbound right turn lane, and southbound right turn lane at the intersection of County Road 42 & Emery Avenue.
- Addition of a second southbound left turn lane and westbound left turn lane at County Road 42 & Highway 52 southbound ramps.
- Addition of a second eastbound left turn lane, a second westbound right turn lane, and a channelized northbound right turn lane at County Road 42 & Highway 52 northbound ramps.

Long-Term (2045) No-Build Conditions

- Installation of a traffic signal at the intersection of County Road 42 & Minnesota 55. Install an additional through lane for each direction along Minnesota 55 (northbound/southbound).
- Install an additional eastbound left turn lane at County Road 42 & Highway 52 northbound ramps.

Long-Term (2045) Scenario 1 Conditions (Exhibit 12 in TIA)

- All Modifications from Long-Term (2045) No-Build Conditions.

Long-Term (2045) Scenario 2 Conditions (Exhibit 15 in TIA)

- All modifications from Short-Term (2027) Scenario 2 Conditions and Long-Term (2045) No-Build Conditions.

Extend eastbound left turn lane at County Road 42 & Highway 52 northbound ramps through the County Road 42 & Highway 52 southbound ramps intersection.

21. CUMULATIVE POTENTIAL EFFECTS

AUAR Guidance: Because the AUAR process by its nature is intended to deal with cumulative potential effects from all future developments within the AUAR area, it is presumed that the responses to all items on the EAW form automatically encompass the impacts from all anticipated developments within the AUAR area.

However, the total impact on the environment with respect to any of the items on the EAW form may also be influenced by past, present, and reasonably foreseeable future projects outside of the AUAR area. The cumulative potential effect descriptions may be provided as part of the responses to other appropriate EAW items, or in response to this item.

a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

Cumulative effects are defined as the "effect on the environment that results from the incremental effects of a project in addition to other projects in the environmentally relevant area that might reasonably be expected to affect the same environmental resources, including future projects actually planned or for which a basis of expectation has been laid, regardless of what person undertakes the other projects or what jurisdictions have authority over the projects."[18] The geographic areas considered for cumulative effects are those areas adjacent to

[18] Minnesota Rules, part 4410.0200, subpart 11a

the AUAR study area, and the timeframe considered includes projects that would be constructed in the reasonably foreseeable future.

b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

There are three reasonably foreseeable future projects that may interact with the environmental effects of the proposed project:

- Rich Valley Golf Club Redevelopment: This project is an industrial/office development located adjacent to the AUAR study area.
- UMore Park: This project is a proposed mixed-use development located approximately 1.2 miles away from the AUAR study area.
- Rosemount Greenway Regional Trail: A section of the Rosemount Greenway Regional Trail will be constructed north of the project.

Future private development projects may result in impacts to transportation, water resources, and utilities. These impacts will be addressed via the regulatory permitting and approval processes and will be individually mitigated to ensure minimal cumulative impacts occur.

c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

Not applicable.

22. OTHER POTENTIAL ENVIRONMENTAL EFFECTS

AUAR Guidance: If the project may cause any additional environmental effects not addressed by Items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

Electromagnetic Field Radiation

Electromagnetic field (EMF) radiation refers to the waves of the electromagnetic field produced by electrically charged objects. These waves propagate through space carrying electromagnetic radiant energy. EMF radiation can come from both natural sources such as the Earth's magnetic field and manmade sources, such as electronics/electronic appliances, cell phones, and power lines.

Types of EMF Radiation

Non-ionizing Radiation: This includes extremely low-frequency (60Hz) EMFs (like those from power lines) and low frequency (up to 1015Hz) optical radiation (like visible light, infrared, and ultraviolet). Non-ionizing radiation is generally considered less harmful, as it does not have enough energy to remove tightly bound electrons from atoms.

Ionizing Radiation: This includes ultraviolet rays (part of it), X-rays, and gamma rays, which have higher frequencies (greater than 1015Hz) and the energy to ionize atoms and molecules, potentially causing damage to cells and DNA.

Potential Impacts of EMF Radiation

The health and environmental impacts of EMF radiation have been a subject of extensive study. According to the World Health Organization (WHO), low-frequency EMF exposures from power lines and electrical appliances are far below the levels that can produce significant heating or long-term tissue damage. A committee of the National Research Council, the operating arm of the National Academy of Sciences, reported in 1996 that it had found no persuasive evidence that household appliances or power transmission lines presented a threat.[19]

Project related EMF Radiation

Scenario 1 and Scenario 2

Both Scenarios propose new electronics and utilities that would emit EMF levels. Scenario 1 would emit EMF levels typical of industrial and utility applications and Scenario 2 would emit EMF levels typical of office and warehouse applications. Under Scenario 1, the high voltage transmission lines servicing the new data center would be constructed. The EMFs generated by these transmission lines are within the non-ionizing range and would comply with federal regulatory standards to ensure public safety including the National Electrical Safety Code, which sets forth guidelines for the installation and operation of power lines to control EMF exposure.

The project's design includes EMF mitigation strategies to ensure that the EMF radiation levels remain well within the safety thresholds. These strategies include maintaining safe distances from residential areas, using EMF shielding techniques where necessary, and adhering to the recommended exposure limits set by health and safety regulatory bodies. Additionally, the EMF emissions from high voltage transmission lines are closely monitored and regulated to prevent any adverse environmental or health impacts.

1. [19] World Health Organization (2014). Electromagnetic fields and public health. Retrieved from WHO website. Available at: https://www.who.int/news-room/fact-sheets/detail/electromagnetic-fields-and-public-health-mobile-phones

MITIGATION PLAN

This Mitigation Plan is submitted as part of the AUAR to provide reviewers and regulators with an understanding of the actions that are advisable, recommended, or necessary to protect the environment and minimize potential impacts by the proposed development scenarios. This Mitigation Plan will be revised and updated based on comments received during the AUAR comment period.

This Mitigation Plan is intended to satisfy the AUAR rules that require the preparation of a mitigation plan that specifies measures or procedures that will be used to avoid, minimize, or mitigate the potential impacts of development within the AUAR study area. Although mitigation strategies are discussed throughout the AUAR document, this plan will be formally adopted by the RGU as their action plan to prevent potentially significant environmental impacts.

The primary mechanism for mitigation of environmental impacts is the effective use of ordinances, rules, and regulations. The plan does not modify the regulatory agencies' responsibilities for implementing their respective regulatory programs nor create additional regulatory requirements. The plan specifies the legal and institutional arrangements that will assure that the adopted mitigation measures are implemented.

In addition to the anticipated permits and approvals listed in Table 6, the mitigation measures developed in the AUAR process are outlined in Table 17. There were no impacts or mitigation strategies identified in Item 8; therefore, this area is not included in the Mitigation Plan. The remaining AUAR items have identified regulatory requirements and/or mitigation measures that reduce the level of potential impact of development within the study area. The plan is formatted consistent with the sections of the AUAR for ease of reference.

Table 17: Mitigation Plan (Scenario 1 and Scenario 2)

Resource Area	Mitigation
Land Use	**Scenario 1 and 2:** Any zoning inconsistencies will be addressed through a rezoning.
	Scenario 1 and 2: the City will coordinate with the Metropolitan Council to increase the TAZ allocations, if needed.
	Scenario 1: A comprehensive plan amendment will be applied for.
Geology, Soils, and Topography	**Scenario 1 and 2:** Erosion prevention and sediment control practices will be implemented on-site per the NPDES General Stormwater Permit requirements.
Water Resources	**Scenarios 1 and 2:** Infrastructure will be built within the AUAR study area to convey stormwater to stormwater management areas to help achieve the appropriate water quality treatment. The project will include approximately 56 acres of stormwater management areas. As required by the City and Vermillion River Watershed Joint Powers Organization, the quantity and rate of stormwater runoff from the 1-, 10-, and 100-year, 24-hour rainfall events in post-development conditions will be managed to not exceed the existing conditions.

Resource Area	Mitigation
	Scenarios 1 and 2: Stormwater will be conveyed by means of an underground storm sewer to constructed stormwater management areas. Conveyance systems will be designed in accordance with acceptable industry standards and in conformance with jurisdictional requirements.
	Scenarios 1 and 2: Maintenance and monitoring of the stormwater management areas will be performed to ensure long term effectiveness of the facilities.
	Scenarios 1 and 2: Obtain a permit from the Metropolitan Council and MPCA for a sewer extension and permit to connect.
	Scenarios 1 and 2: Obtain a permit from MDH for a watermain installation
	Scenarios 1 and 2: Groundwater wells will be properly sealed by a licensed well contractor prior to redevelopment within the AUAR study area per MPCA and MDH well sealing requirements. If any unverified wells are identified during construction, they will be examined by a licensed well contractor or a Dakota County well inspector to determine the status.
	Scenarios 1 and 2: A chloride management plan will be implemented, which will meet state and local requirements.
	Scenarios 1 and 2: Best management practices pertaining to stormwater management will be adhered to during construction.
	Scenarios 1 and 2: Avoidance measures will be taken to avoid impacts to the wetlands within the AUAR study area. If proposed design plans change and impacts to wetlands are necessary, the project proposer will purchase wetland banking credits. Buffers will be installed around wetlands to protect water quality from adjacent development.
	Scenarios 1 and 2: future development may use effluent water from the MCES Empire treatment facility for non-contact cooling. MCES lift stations may need future improvements and should be reviewed from a regional perspective.
	Scenarios 1 and 2: The existing water infrastructure is planned to be extended and upsized and should be sufficient for the future development needs pending additional City modeling efforts.
Contamination/ Hazardous Waste	**Scenarios 1 and 2:** Development would both generate construction-related waste materials such as wood, packaging, excess materials, and other wastes, which would be either recycled or disposed in the proper facilities; Products will be kept in their original containers unless they cannot be resealed. Original labels and Material Safety Data Sheets will be made available. Surplus materials will be properly removed from the property upon completion of use.
	Scenarios 1 and 2: Ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes 2020, section 473.811, subdivision 5c.
	Scenarios 1 and 2: Coordinate with the MPCA regarding the required plans, material handling, and disposal.
	Scenarios 1 and 2: A Phase II ESA and a Response Action Plan to be completed prior to construction.

Resource Area	Mitigation
Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources	**Scenario 1 and 2:** Wildlife friendly erosion control methods will be utilized within the study area to minimize impacts to wildlife using the site during construction.
	Scenario 1 and 2: Invasive species will be controlled during site construction. Additionally, appropriate measures will be taken to control the spread of invasive species will be controlled during construction and landscaping: • Inspecting construction equipment and removing any visible plant, seeds, mud, dirt clods, and animals when arriving and leaving a site. • Using certified weed-free products such as weed-free seed or hay whenever possible. • Using mulch, soil, gravel, etc., that is free of invasive species whenever possible. • Inspecting soil and plant material during planting for signs of invasive species and removing or destroying the invasive species or the plant and associated soil if the invasive species cannot be separated out. • Native and drought-tolerant species will be utilized in landscaped areas.
	Scenario 1 and 2: To avoid potential impacts to the Loggerhead Shrike, tree removal activities are anticipated to be conducted early in the construction season, prior to the species' breeding season. Any loggerhead shrike sightings will be reported to the DNR.
	Scenario 1 and 2: Tree clearing activities will be restricted to winter months when NLEB and migratory birds are not likely to be present (November 1 - March 31). If winter tree clearing is not feasible, technical assistance from the USFWS is required. A specific tree replacement plan will be created and approved by the City prior to development.
Historic Properties	**Scenario 1 and 2:** A cultural resources management survey and research will be completed for the assessment of the area and consultation with Minnesota Tribal Historic Preservation Office (THPO) will be completed before construction.
Visual	**Scenario 1 and 2:** Lighting practices will be selected to address known ecological concerns and prevent avoidable impacts to insects, wildlife, rare plants, and adjacent natural areas. Guidance from the USFWS that recommends a lighting system that minimizes uplight and backlight would be adhered to the extent practicable.
Air	**Scenario 1 and 2:** Construction will generate temporary fugitive dust emissions during construction. These emissions will be controlled by sweeping, watering, sprinkling, as appropriate or as prevailing weather and soil conditions dictate. The City of Rosemount regulates dust in accordance with the standards set by the MPCA.
Noise	**Scenario 1 and 2:** Construction activities may result in temporarily elevated noise levels. To the extent possible, construction activities will be conducted to minimize noise levels and nighttime construction activities. Permits related to construction noise must be obtained from the City at least 10 working days prior to the start of construction. **Scenario 1:** Further noise evaluation will be completed as design progresses and best practices to reduce noise will be implemented.

Transportation	**Short-Term (2027) No- Build Conditions** • Installation of a traffic signal at the intersection of County Road 42 & Highway 52 southbound ramps. • Installation of a traffic signal at the intersection of County Road 42 & Highway 52 northbound ramps • Installation of a traffic signal at the intersection of County Road 42 & Blaine Avenue • Add separated northbound and southbound left and right turn lanes and an eastbound right turn lane at County Road 42 & Blaine Avenue. • Install stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane. **Short-Term (2027) Scenario 2 Conditions (Exhibit 15 in TIA)** • Installation of a traffic signal at the intersection of County Road 42 & Conley Avenue. Additionally, install an additional eastbound through lane. • Installation of a traffic signal at the intersection of County Road 42 & Driver Avenue. Additionally, install an additional through lane in each direction along County Road 42, an additional eastbound left turn lane, and two southbound right turn lanes. • Installation of a traffic signal at the intersection of County Road 42 & South Access. Additionally, install two eastbound left turn lanes, a westbound right turn lane, and a channelized southbound right turn lane. • Installation of a traffic signal at the intersection of County Road 42 & Minnesota 55. • Addition of an eastbound left turn lane, westbound right turn lane, and southbound right turn lane at the intersection of County Road 42 & Emery Avenue. • Addition of a second southbound left turn lane and westbound left turn lane at County Road 42 & Highway 52 southbound ramps. • Addition of a second eastbound left turn lane, a second westbound right turn lane, and a channelized northbound right turn lane at County Road 42 & Highway 52 northbound ramps. **Long-Term (2045) No-Build Conditions** • Installation of a traffic signal at the intersection of County Road 42 & Minnesota 55. Install an additional through lane for each direction along Minnesota 55 (northbound/southbound). • Install an additional eastbound left turn lane at County Road 42 & Highway 52 northbound ramps. **Long-Term (2045) Scenario 1 Conditions (Exhibit 12 in TIA)** • All Modifications from Long-Term (2045) No-Build Conditions. **Long-Term (2045) Scenario 2 Conditions (Exhibit 15 in TIA)**

Resource Area	Mitigation
	• All modifications from Short-Term (2027) Scenario 2 Conditions and Long-Term (2045) No-Build Conditions. • Extend eastbound left turn lane at County Road 42 & Highway 52 northbound ramps through the County Road 42 & Highway 52 southbound ramps intersection.

Appendix A

Wetland Delineation Report

Delineation Report

Rosemount Property

Dakota County, Minnesota

November 2022

Prepared for:

Great River Energy

Prepared by:

1601 Utica Avenue South, Suite 600

St. Louis Park, MN 55416

Table of Contents

Introduction 1
Methods 1
Site Description 2
Results 4
Conclusions 8
References 9

List of Tables

Table 1. MLCCS Land Cover within Project Area 2
Table 2. Soil Map Units and Hydric Rating within Project Area 3
Table 3. Delineated Wetlands within Project Area 5

List of Figures

Figure 1 Project Location Map
Figure 2 NWI, Soils, and Topography
Figure 3 Delineated Wetlands

List of Appendices

Appendix A Wetland Delineation Data Sheets
Appendix B Antecedent Precipitation Information
Appendix C Photo Log

Introduction

Great River Energy retained HDR Engineering to conduct a wetland delineation on a parcel of property owned by Great River Energy located within the City of Rosemount, Minnesota. The property is approximately 329 acres in size and is located in Section 29 and 30, Township 115, Range 18 in Dakota County, Minnesota (Figure 1). HDR Engineering (HDR) conducted a wetland delineation on the property on October 6, 2022 to identify wetlands and waterways located on the property. The entire 329 acre property (study area) was reviewed for wetlands and waterways.

The Wetland Delineation was conducted by HDR Environmental Scientist Katie Lueth Minnesota Certified Wetland Delineator #1407, and HDR Environmental Scientist Michael Swenson Minnesota Certified Wetland Delineator #1263.

Methods

The wetland delineation was conducted using the “Routine Determination, Onsite Inspection Necessary” method outlined in the *1987 Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Midwest Regional Supplement* (USACE 2010) for all wetlands. The U.S. Army Corps of Engineers (USACE) defines areas as wetlands based on the following:

> Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas [33 CFR 328 3.b].

Wetland delineations are based on the presence of the following three parameters:

- The area must exhibit indicators of wetland hydrology
- The area must have a predominance of hydrophytic vegetation
- Hydric soils must be present

“Atypical” or “problem areas” may be missing one or more of the three parameters, and still be classified as wetlands.

Desktop Review

Initial desktop evaluation for the presence of wetlands within the subject property was performed using available information including: US Geological Survey topographic maps, Minnesota Department of Natural Resources (MN DNR) National Wetland Inventory (NWI) maps, Natural Resource Conservation Service (NRCS) Web Soil Survey Database, MN DNR Public Water Inventory (PWI) mapping, the City of Rosemount Wetland Management Plan, MN DNR Minnesota Land Cover Classification System (MLCSS), and aerial photography of the study area.

Onsite Review

The “Routine Determination, Onsite Inspection Necessary” delineations focused on all wetlands within the study area. The boundaries of all delineated wetlands and streams are shown in Figure

3. USACE Routine Wetland Delineation Data sheets and wetland boundaries were collected according to the *1987 Manual* and *Midwest Regional Supplement* and are included in Appendix A.

Upland and wetland plots were collected and evaluated for all wetland areas. At each plot location, a soil pit was dug for observation of soil and hydrology characteristics. Hydric soil and wetland hydrology characteristics were identified using methods described in the *1987 Manual* and *Midwest Regional Supplement.* The vegetation was analyzed for plant species dominance in a 5-foot radius from the sample pit for the herbaceous layer, in a 15-foot radius for shrub layer, and in a 30-foot radius for overstory trees. The wetland indicator status of plants was identified using the *National Wetland Plant List* (USACE 2021).

Data collection points along with wetland and stream boundaries were mapped using a GPS unit with sub-meter accuracy. Using GIS, an accurate delineation map (Figure 3) was created from the GPS data and field drawings, providing a permanent record of the onsite wetland and stream delineation boundaries for the study area.

Site Description

The study area is located in northern Dakota County, within the City of Rosemount. The study area is comprised of a 329-acre parcel that includes a series of agricultural fields excluding residential and commercial property in the northeastern corner. The properties immediately adjacent to the study area includes a landfill site to the north and agricultural fields to the west, south, and east. The area is bound by 140th St E/Conley Ave in the West and North, Emery Ave E in the East, and 145th St/Hwy 42 in the South. The project is located within the Eastern Broadleaf Forest—St. Paul-Baldwin Plains and Moraines Subsection as defined by MN DNR (MN DNR, 2005). This subsection is dominated by a large moraine and areas of outwash plain. This section is heavily developed as it encompasses part of the seven-county metropolitan area. The major landform is Superior lobe end moraine complex, and topography is rolling to hummocky on the moraine. Urban development is the primary land use in the region but the land use in and around the project area is agricultural production. Row crops within the study area included cut corn, cut and tilled potatoes, and soybeans that were under harvest at the time of delineation. ""Upland Soils – Cropland – Corn" as defined by the Minnesota Land Cover Classification System (MLCCS) is the dominant land cover within the study area. Table 1 summarizes MLCCS classifications associated with the study area.

Table 1. MLCCS Land Cover within Study Area

MLCCS Code	MLCCS Description	Acres within Project Area
24112	Upland Soils – Cropland - Corn	136.02
24116	Upland Soils – Cropland - Potato	105.39
24114	Upland Soils – Cropland - Soybeans	63.10
93300	Palustrine Open Water	24.23

Precipitation History Prior to Field Delineations

The USACE Antecedent Precipitation Tool (APT) (v1.0.19) was used to document antecedent precipitation conditions for the time of the delineation. Antecedent precipitation is defined as precipitation occurring on-site prior to the field reviews. Antecedent precipitation is an important factor to consider when evaluating potential wetland hydrology indicators. Additionally, antecedent precipitation helps to determine whether a site review is conducted during “normal environmental conditions” for that time of year. Precipitation data for the study area was identified as having a three-month-prior rating of “Normal Conditions” at the time of the October field delineation. The three-month-prior score was 10 for October 6, 2022. ATP outlets are included as Appendix B of this report.

Soils

The online USDA NRCS Web Soil Survey for Dakota County was reviewed to identify soil map units that occur within the Project Area and their respective hydric rating. Soil map units are composed of one or more soil types, each of which is rated as hydric soil or not hydric. The hydric rating of soil map units indicates percentage of the map unit that is considered hydric. Soil map units with a higher hydric rating have a higher potential of a hydric soil occurring within the soil map unit. The presence of soil map units containing hydric soils can assist with identifying areas of the landscape where wetlands may occur. Three map units are mapped as containing partially hydric soil components (NRCS 2021), and the other eleven units are rated as non-hydric. Table 2 lists the soil map units and their corresponding hydric ratings that are mapped within the study area. The locations of soil map units are shown on Figure 2.

Table 2. Soil Map Units and Hydric Rating within Study Area

Map Unit Symbol	Map Unit Name	Percent Hydric Rating
208	Kato silty clay loam	95%
250	Kennebec silt loam	0%
27B	Dickinson sandy loam, 2 to 6 percent slopes	0%
313	Spillville loam, 0 to 2 percent slopes, occasionally flooded	10%
39A	Wadena loam, 0 to 2 percent slopes	1%
39B	Wadena loam, 2 to 6 percent slopes	0%
39C	Wadena loam, 6 to 12 percent slopes	0%
411A	Waukegan silt loam, 0 to 1 percent slopes	0%
411B	Waukegan silt loam, 1 to 6 percent slopes	0%
415B	Kanaranzi loam, 2 to 6 percent slopes	0%

Map Unit Symbol	Map Unit Name	Percent Hydric Rating
41B	Estherville sandy loam, 2 to 6 percent slopes	1%
611C	Hawick gravelly sandy loam, 6 to 12 percent slopes	0%
611D	Hawick gravelly sandy loam, 12 to 20 percent slopes	0%
7B	Hubbard loamy sand, 1 to 6 percent slopes	0%
7C	Hubbard loamy sand, 6 to 12 percent slopes	0%

Source: USDA NRCS 2021

Results

Three wetlands (20.51 acres) were delineated within the study area. All delineated features are shown in Figure 3. Table 3 summarizes the delineated features by type. Detailed descriptions of each delineated feature are included in the following section. USACE field data sheets for the wetlands are attached as Appendix A. Photos of delineated features are included in the following section and shown in Appendix C. Locations of photos and field data sheet transects are shown in Figure 3. Wetlands 1 and 2 are identified in the City of Rosemount Wetland Management Plan 2020 Wetland Inventory Map as Wetland 679. Wetland 3 was not identified in the Wetland Management Plan.

Table 3. Delineated Wetlands within Study Area

Resource ID	Cowardin Wetland Type[1]	Circular 39 Wetland Type[2]	Eggers and Reed Vegetative Community[3]	Area within study area	Latitude	Longitude
Wetland 1	PUB	Type 3	Shallow Marsh	12.15	44.745230	-93.016140
Wetland 2	PEM	Type 2	Fresh (Wet) Meadow	4.33	44.744559	-93.017906
Wetland 3	PFO	Type 7	Hardwood Swamps	4.03	55.745470	-93.019312

Sources: (1) USFWS 1971; (2) USFWS 1979; (3) Eggers and Reed 2014

Wetland 1

Photo 5 – Wetland 1 - looking west

Wetland Setting: The wetland vegetation is dominated by reed canary grass (*Phalaris arundinacea)*.The wetland is located on the northwestern side of the study area. Wetland 1 is a shallow marsh and is contained within the project boundary by the roadway.

Wetland Type: PEM, Type 3 Shallow Marsh

Mapped as NWI: Yes

Mapped as PWI: No

Total Acreage Within Study Area: 12.15

Web Soil Survey Map Unit (Hydric Rating): 208-Kato silty loam (95%)

Soil Indicators: Sandy Redox (S5)

Hydrology Indicator: Surface Water (A1), High Water Table (A2), Inundation Visible on Aerial Imagery (B7), Geomorphic Position (D2), FAC-Neutral Test (D5).

Dominant Vegetation of Wetland Plot: Reed canary grass, Sorrel (*Rumex crispus*), Sedge (*Carex spp*.), and barnyard grass (*Echinochloa* muricata).

Adjacent Upland Vegetation: Thistle (*Cirsium arvense*), Goldenrod (*Solidago canadensis*), New England Aster (*Symphyotrichum novae-angliae*), brome (*Bromus inermis*), sorrel, dandelion (*Taraxacum officinale*), kochia (*Bassia scoparia*), and sow thistle (*Sonchus oleraceus*).

Basis of Delineation: The wetland boundary was determined based on the transition from hydrophytic vegetation to upland vegetation and the toe of an adjacent slope.

Wetland 2

Photo 4 – Wetland 2 - looking north

Wetland Setting: The wetland vegetation is dominated by cattail (*Typha angustifolia*), goldenrod (*Solidago gigantea*), willow (*Salix interior*), and aster. The wetland is located on the northwest corner of the study area. Wetland 2 is a wet meadow and extends outside of the project boundary.

Wetland Type: PEM, Type 2 Wet Meadow

Mapped as NWI: Yes

Mapped as PWI: No

Total Acreage Within Study Area: 4.33

Web Soil Survey Map Unit (Hydric Rating): 39C-Wadena loam, 6 to 12 percent slopes

Soil Indicators: Sandy Redox (S5)

Hydrology Indicator: Geomorphic position (D2) and Fac-Neutral test (D5).

Dominant Vegetation of Wetland Plot: Typha, solidago, willow, aster, reed canary grass.

Adjacent Upland Vegetation: Brome, goldenrod, New England aster, clover (*Trifolium arvense*), and thistle.

Basis of Delineation: The wetland boundary was determined based on the transition from hydrophytic vegetation to upland vegetation and the toe of an adjacent slope.

Wetland 3

Photo 1 – Wetland 3 - looking south

Wetland Setting: The wetland vegetation is dominated by cottonwood (*Populus deltoides*) and willow (*Salix interior)*.The wetland is located on the northwest corner of the study area. Wetland 3 is a hardwood swamp and extends outside of the project boundary.

Wetland Type: PFO, Type 7 Hardwood Swamp

Mapped as NWI: Yes

Mapped as PWI: No

Total Acreage Within Study Area: 4.03

Web Soil Survey Map Unit (Hydric Rating): 313-Spillville loam, 0 to 2 percent slopes, occasionally flooded (10%), 27B-Dickinson sandy loam, 2 to 6 percent slopes (0%)

Soil Indicators: Sandy Redox (S5)

Hydrology Indicator: Geomorphic position (D2) and Fac-Neutral test (D5).

Dominant Vegetation of Wetland Plot: Cottonwood and Willow

Adjacent Upland Vegetation: Brome, aster, goldenrod, thistle, and dandelion.

Basis of Delineation: The wetland boundary was determined based on the transition from hydrophytic vegetation to upland vegetation and the toe of an adjacent slope.

Conclusions

Three wetlands were identified and delineated in the study area. The wetland boundaries were delineated in accordance with the 1987 Manual and Midwest Regional Supplement. The features identified in this report are subject to review and approval by the USACE under Section 404 of the Clean Water Act and the City of Rosemount, Local Governmental Unit responsible for implementing the Minnesota Wetland Conservation Act. In addition to the Minnesota Wetland Conservation Act, the City of Rosemount regulates wetlands and activities that may affect wetlands through Wetland Overlay District Section 11-7-3 of Title 11 Zoning Regulations of the City Code. Any proposed impacts to the features identified in this report will require additional coordination with and authorization from these agencies.

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Figures

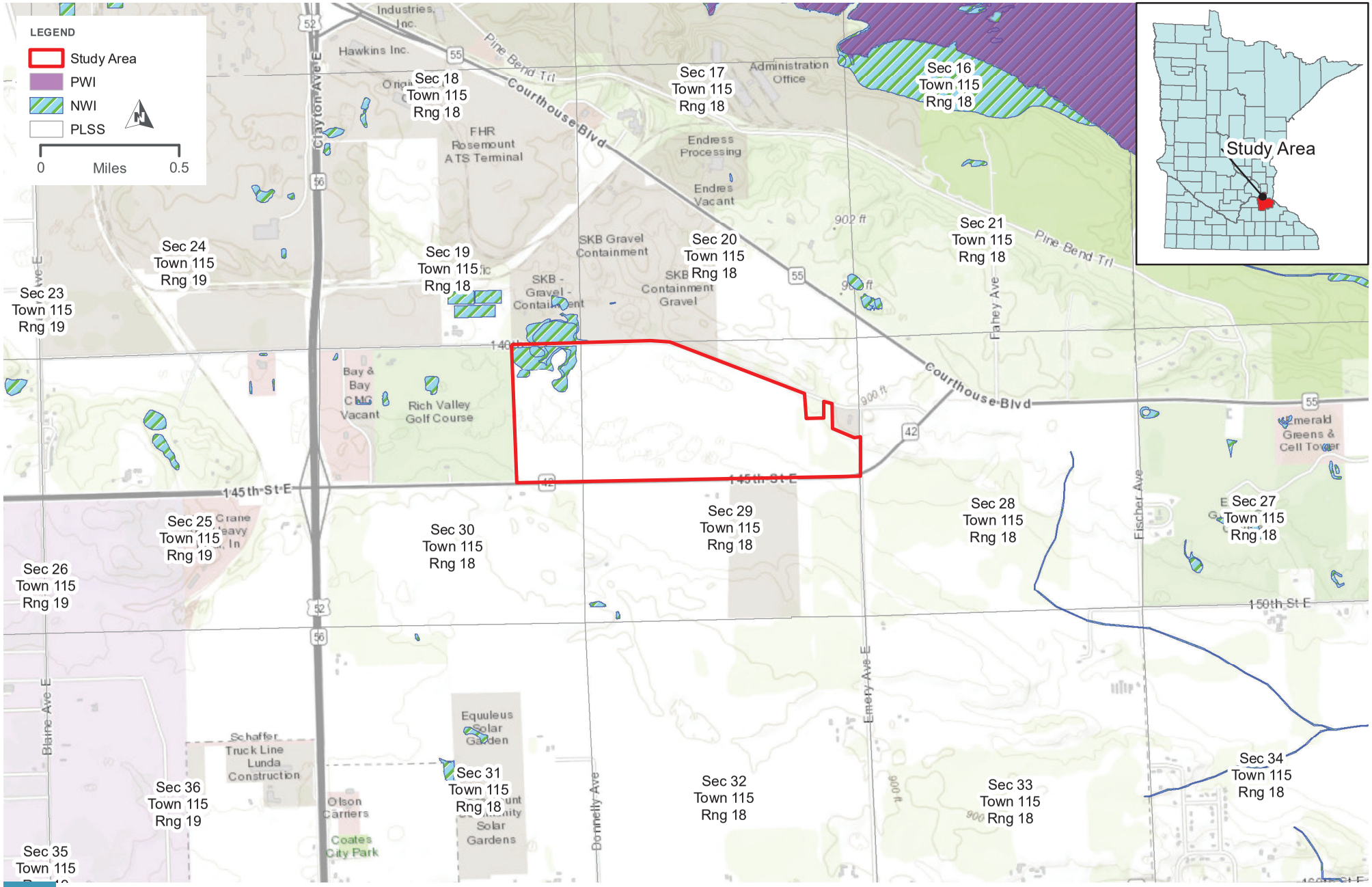


FIGURE 1. PROJECT LOCATION

ROSEMOUNT PROPERTY

DAKOTA COUNTY, MINNESOTA

DELINEATION REPORT

PATH: \\MSPE-GIS-FILE\GISPROJ\GRE\PN_ROSEMOUNT\7.2_WIP\MAP_DOCS\WORKING\ROSEMOUNT_FIGURE1_PROJECTLOCATION_LANDSCAPE.MXD - USER: KLUETH - DATE: 11/30/2022

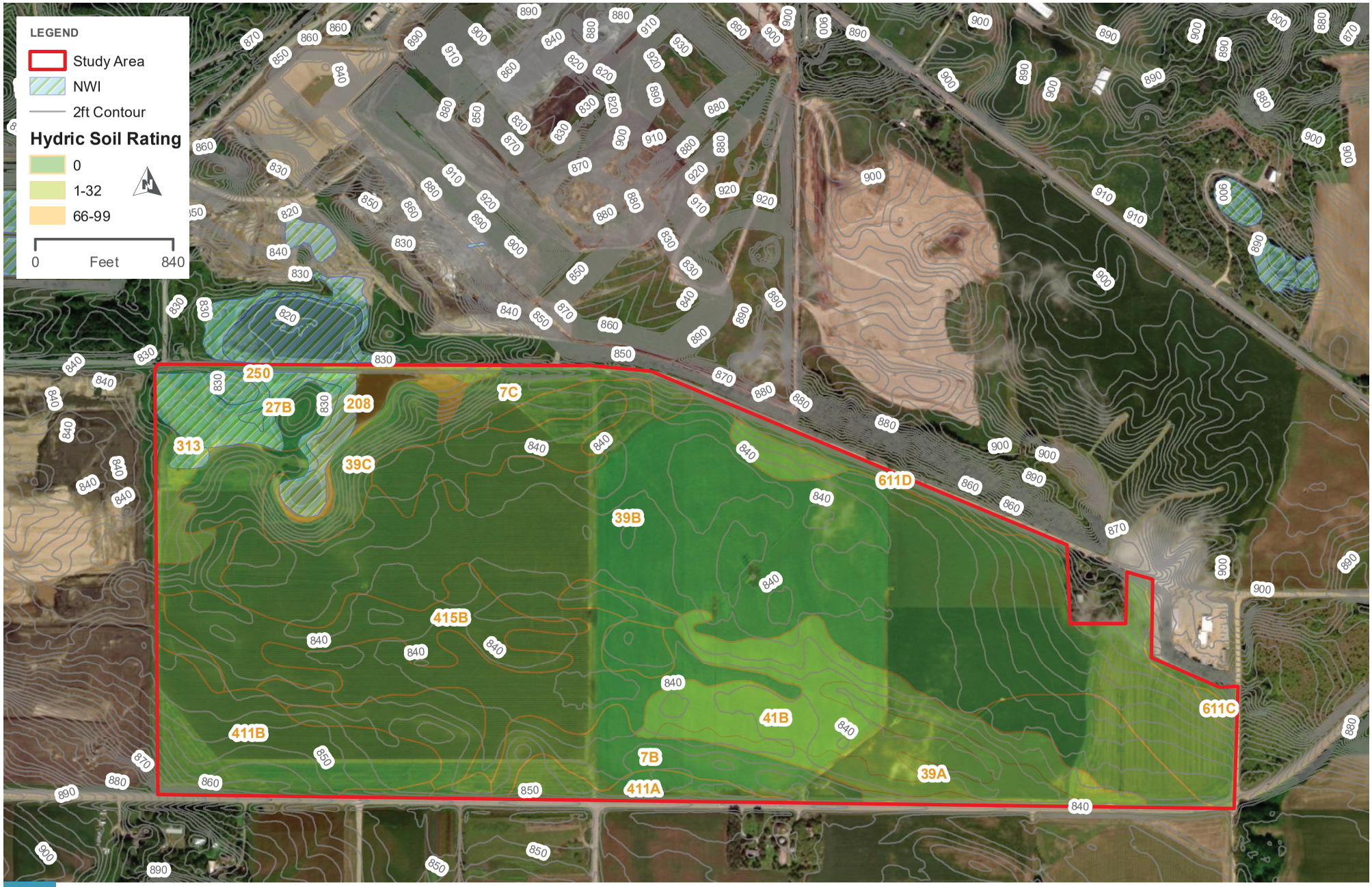


FIGURE 2. NWI, SOILS, AND TOPOGRAPHY

ROSEMOUNT PROPERTY

DAKOTA COUNTY, MINNESOTA

DELINEATION REPORT

PATH: \\MSPE-GIS-FILE\GISPROJ\GRE\PN_ROSEMOUNT\7.2_WIP\MAP_DOCS\WORKING\ROSEMOUNT_FIGURE2_NWITOPOSOILS_LANDSCAPE.MXD - USER: KLUETH - DATE: 11/30/2022

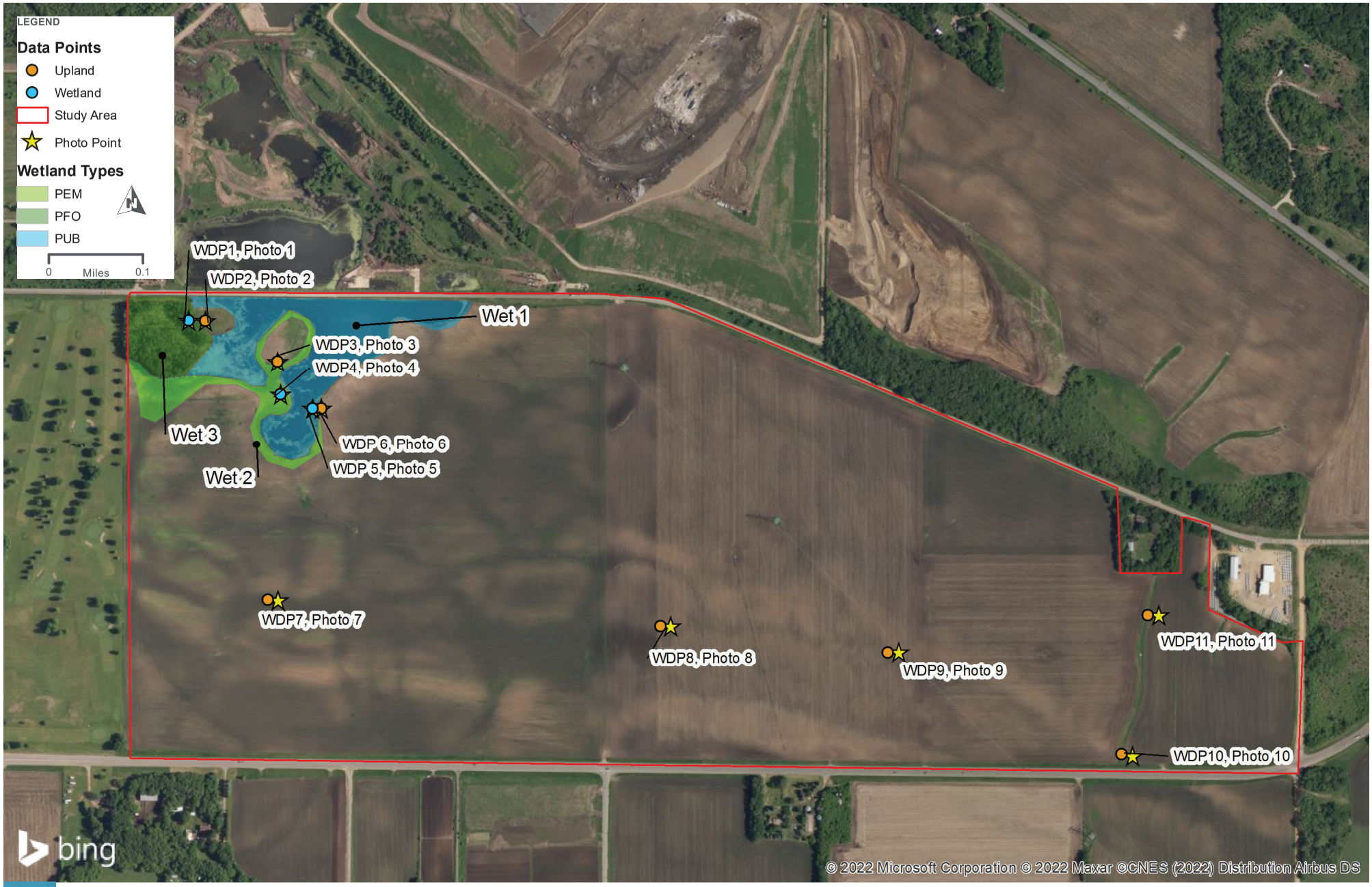


FIGURE 3. DELINEATED WETLANDS

ROSEMOUNT PROPERTY

DAKOTA COUNTY, MINNESOTA

PATH: \\MSPE-GIS-FILE\GISPROJ\GRE\PN_ROSEMOUNT\7.2_WIP\MAP_DOCS\WORKING\FIGURE3_DELINEATEDWETLANDS_LANDSCAPE.MXD - USER: KLUETH - DATE: 11/30/2022

DELINEATION REPORT

Appendix A
Wetland Delineation Data Sheets

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP1

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 30, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 44.745687 Long: -93.018808 Datum: WGS1984

Soil Map Unit Name: 313-Spillville loam, 0 to 2 percent slopes occasionally flooded NWI classification: PFO

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Plot is located in forested depression.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix interior*	20	Yes	FACW
2. *Populus deltoides*	40	Yes	FAC
3.			
4.			
5.			
	60	=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	50	Yes	FACW
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	50	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ____ 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Plot meets hydric vegetation indicator.

SOIL

Sampling Point: WDP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-3	10YR 2/1	100					Sandy	
3-10	10YR 2/2	90	5YR 4/6	10	C	M	Sandy	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** ___

Remarks:
Meets hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No ___	Depth (inches): ___
Water Table Present?	Yes ___	No ___	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Meets hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP2

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 30, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 44.745682 Long: -93.018447 Datum: WGS1984

Soil Map Unit Name: 27B-Dickinson sandy loam, 2 to 6 percent slopes NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Plot is located in upland meadow island surrounded by wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: ____)			
1. *Bromus inermis*	60	Yes	FACU
2. *Symphyotrichum novae-angliae*	5	No	FACW
3. *Rumex acetosa*	5	No	UPL
4. *Taraxacum officinale*	5	No	FACU
5. *Cirsium arvense*	10	No	FACU
6. *Solidago canadensis*	20	No	FACU
7.			
8.			
9.			
10.			
	105	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: WDP2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/2	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Does not meet hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Does not meet hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP3

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 30, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 44.745058 Long: -93.016883 Datum: WGS1984

Soil Map Unit Name: 27B-Dickinson sandy loam, 2 to 6 percent slopes NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Plot is located on an upland island surrounded by wetland. Vegetation has been mowed.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Bromus inermis*	60	Yes	FACU
2. *Solidago canadensis*	5	No	FACU
3. *Symphyotrichum novae-angliae*	5	No	FACW
4. *Trifolium arvense*	10	No	UPL
5. *Cirsium arvense*	5	No	FACU
6.			
7.			
8.			
9.			
10.			
	85	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Does not meet hydrophytic vegetation indicator.

SOIL

Sampling Point: WDP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 2/2	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):
Type: _____
Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Does not meet hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___
Water Table Present? Yes ___ No X Depth (inches): ___
Saturation Present? Yes ___ No X Depth (inches): ___
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Does not meet hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP4

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 30, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 44.744553 Long: -93.016816 Datum: WGS1984

Soil Map Unit Name: 39B-Wadena loam, 2 to 6 percent slopes NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Plot is partially mowed.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Typha angustifolia*	30	Yes	OBL
2. *Solidago gigantea*	15	No	FACW
3. *Salix interior*	20	No	FACW
4. *Symphyotrichum novae-angliae*	5	No	FACW
5. *Phalaris arundinacea*	40	Yes	FACW
6.			
7.			
8.			
9.			
10.			
	110	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ____ 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Meets hydrophytic vegetation indicator.

SOIL

Sampling Point: WDP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/1	100					Sandy	
2-6	10YR 2/2	90	5YR 4/6	10	C	M	Sandy	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ? Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Meets hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No ___	Depth (inches): ___
Water Table Present?	Yes ___	No ___	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Meets hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP5

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 30, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Pond Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 44.744334 Long: -93.016127 Datum: WGS1984

Soil Map Unit Name: 208 - Kato silty loam NWI classification: PUB

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	**Is the Sampled Area within a Wetland?** **Yes** X **No** ____
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Plot is located on edge of open water pond.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Phalaris arundinacea*	60	Yes	FACW
2. *Rumex crispus*	5	No	FAC
3. *Carex spp.*	15	No	FACW
4. *Echinochola crus-galli*	10	No	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	90	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

- ____ 1 - Rapid Test for Hydrophytic Vegetation
- X 2 - Dominance Test is >50%
- ____ 3 - Prevalence Index is ≤3.0[1]
- ____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** X **No** ____

Remarks: (Include photo numbers here or on a separate sheet.)
Hydrophytic vegetation is present.

SOIL

Sampling Point: WDP5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-2	10YR 2/1	100					Sandy	Sandy Loam
2-6	10YR 4/3	100					Sandy	Sandy Loam
6-20	10YR 4/2	90	5YR 5/6	10	C	M	Loamy/Clayey	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ? Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: ___

Depth (inches): ___

Hydric Soil Present? **Yes** X **No** ___

Remarks:
Meets hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- X Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No ___	Depth (inches): 1
Water Table Present?	Yes X	No ___	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No ___	Depth (inches): 0

Wetland Hydrology Present? **Yes** X **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Meets hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP6

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 30, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Rise Local relief (concave, convex, none): Convex

Slope (%): 2 Lat: 44.744334 Long: -93.015933 Datum: WGS1984

Soil Map Unit Name: 39C-Wadena loam, 6 to 12 percent slopes NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Plot is located on upland rise adjacent to pond. Vegetation has been mowed.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Cirsium arvense*	15	Yes	FACU
2. *Solidago canadensis*	10	No	FACU
3. *Symphyotrichum novae-angliae*	15	Yes	FACW
4. *Bromus inermis*	40	Yes	FACU
5. *Rumex acetosa*	5	No	UPL
6. *Taraxacum officinale*	5	No	FACU
7. *Bassia scoparia*	5	No	FACU
8. *Sonchus arvensis*	5	No	FACU
9.			
10.			
	100	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Does not meet hydrophytic vegetation indicator.

SOIL

Sampling Point: WDP6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	100					Sandy	Sandy Loam
6-20	10YR 4/2	100					Sandy	Sandy Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Does not meet hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___
Water Table Present? Yes ___ No X Depth (inches): ___
Saturation Present? Yes ___ No X Depth (inches): ___
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Does not meet hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP7

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 30, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None

Slope (%): 1 Lat: 44.741382 Long: -93.017092 Datum: WGS1984

Soil Map Unit Name: 415B-Kanaranzi loam, 2 to 6 percent slopes NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Plot is located in cut corn field. Field has not been tilled but stalk stubble remains.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Zea mays*	15	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	15	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Corn is cut to stubble. Does not meet hydrophytic vegetation indicator.

SOIL

Sampling Point: WDP7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/2	100					Sandy	Loamy Sand
6-20	10YR 4/3	100					Sandy	Loamy Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Does not meet hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___
Water Table Present? Yes ___ No X Depth (inches): ___
Saturation Present? Yes ___ No X Depth (inches): ___
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Does not meet hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP8

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 29, Twn 115, Rng 18

Landform (hillside, terrace, etc.): None Local relief (concave, convex, none): None

Slope (%): 0 Lat: 44.740978 Long: -93.008604 Datum: WGS1984

Soil Map Unit Name: 415b-Kanaranzi loam, 2 to 6 percent slopes NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil X , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Plot is in tilled potato field.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Solanum tuberosum*	15	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	15	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Does not meet hydrophytic vegetation indicator.

SOIL

Sampling Point: WDP8

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 5/2	100					Sandy	Loamy Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Does not meet hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___
Water Table Present? Yes ___ No X Depth (inches): ___
Saturation Present? Yes ___ No X Depth (inches): ___
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Does not meet hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP9

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 29, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Flat Local relief (concave, convex, none): None

Slope (%): 0 Lat: 44.740573 Long: -93.003691 Datum: WGS1984

Soil Map Unit Name: 39A-Wadena loam, 0 to 2 percent slopes NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation X , Soil ____ , or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____ , Soil ____ , or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Plot is in a soybean field and was undergoing harvest during the time of delineation.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Glycine max*	40	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	40	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Does not meet hydrophytic vegetation indicator.

SOIL

Sampling Point: WDP9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 5/2	100					Sandy	Loamy Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

___ Histosol (A1)
___ Histic Epipedon (A2)
___ Black Histic (A3)
___ Hydrogen Sulfide (A4)
___ Stratified Layers (A5)
___ 2 cm Muck (A10)
___ Depleted Below Dark Surface (A11)
___ Thick Dark Surface (A12)
___ Sandy Mucky Mineral (S1)
___ 5 cm Mucky Peat or Peat (S3)
___ Sandy Gleyed Matrix (S4)
___ Sandy Redox (S5)
___ Stripped Matrix (S6)
___ Dark Surface (S7)
___ Loamy Mucky Mineral (F1)
___ Loamy Gleyed Matrix (F2)
___ Depleted Matrix (F3)
___ Redox Dark Surface (F6)
___ Depleted Dark Surface (F7)
___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

___ Coast Prairie Redox (A16)
___ Iron-Manganese Masses (F12)
___ Red Parent Material (F21)
___ Very Shallow Dark Surface (F22)
___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Does not meet hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

___ Surface Water (A1)
___ High Water Table (A2)
___ Saturation (A3)
___ Water Marks (B1)
___ Sediment Deposits (B2)
___ Drift Deposits (B3)
___ Algal Mat or Crust (B4)
___ Iron Deposits (B5)
___ Inundation Visible on Aerial Imagery (B7)
___ Sparsely Vegetated Concave Surface (B8)
___ Water-Stained Leaves (B9)
___ Aquatic Fauna (B13)
___ True Aquatic Plants (B14)
___ Hydrogen Sulfide Odor (C1)
___ Oxidized Rhizospheres on Living Roots (C3)
___ Presence of Reduced Iron (C4)
___ Recent Iron Reduction in Tilled Soils (C6)
___ Thin Muck Surface (C7)
___ Gauge or Well Data (D9)
___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

___ Surface Soil Cracks (B6)
___ Drainage Patterns (B10)
___ Dry-Season Water Table (C2)
___ Crayfish Burrows (C8)
___ Saturation Visible on Aerial Imagery (C9)
___ Stunted or Stressed Plants (D1)
___ Geomorphic Position (D2)
___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___
Water Table Present? Yes ___ No X Depth (inches): ___
Saturation Present? Yes ___ No X Depth (inches): ___
(includes capillary fringe)

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Does not meet hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: MN Sampling Point: WDP10

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 29, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Slight Depression Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 44.739001 Long: -92.998645 Datum: WGS1984

Soil Map Unit Name: 41B-Estherville sandy loam, 2 to 6 percent slopes NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Plot is located in dry channel on east side on property.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Taraxacum officinale*	30	Yes	FACU
2. *Bromus inermis*	20	Yes	FACU
3. *Trifolium pratense*	10	No	FACU
4. *Poa pratensis*	20	Yes	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	80	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation

____ 2 - Dominance Test is >50%

____ 3 - Prevalence Index is ≤3.0[1]

____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Does not meet hydrophytic vegetation indicator.

SOIL

Sampling Point: WDP10

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 4/3	100					Sandy	Hard Packed Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Hard Packed Sand

Depth (inches): 4

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Does not meet hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Does not meet hydrology indicator.

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Rosemount Property City/County: Dakota Sampling Date: 10/06/2022

Applicant/Owner: Great River Energy State: Sampling Point: WDP11

Investigator(s): Michael Swenson, Katie Lueth Section, Township, Range: Sec 29, Twn 115, Rng 18

Landform (hillside, terrace, etc.): Channel Local relief (concave, convex, none): Concave

Slope (%): 1 Lat: 44.741145 Long: -92.998076 Datum: WGS1984

Soil Map Unit Name: 39B-Wadena loam, 2 to 6 percent slopes NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** **Yes** ____ **No** X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Plot is in dry channel.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
		=Total Cover	

Herb Stratum (Plot size: 5)			
1. *Taraxacum officianale*	30	Yes	FACU
2. *Bromus inermis*	20	Yes	FACU
3. *Trifolium pratense*	10	No	FACU
4. *Poa pratense*	10	No	FACU
5.			
6.			
7.			
8.			
9.			
10.			
	70	=Total Cover	

Woody Vine Stratum (Plot size: ____)			
1.			
2.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤3.0[1]
____ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? **Yes** ____ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Does not meet hydrophytic vegetation indicator.

SOIL

Sampling Point: WDP11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-4	10YR 3/2	100					Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ 2 cm Muck (A10)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ 5 cm Mucky Peat or Peat (S3)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Iron-Manganese Masses (F12)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Hard Packed Sand

Depth (inches): 4

Hydric Soil Present? **Yes** ___ **No** X

Remarks:
Does not meet hydric soil indicator.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ FAC-Neutral Test (D5)

Field Observations:

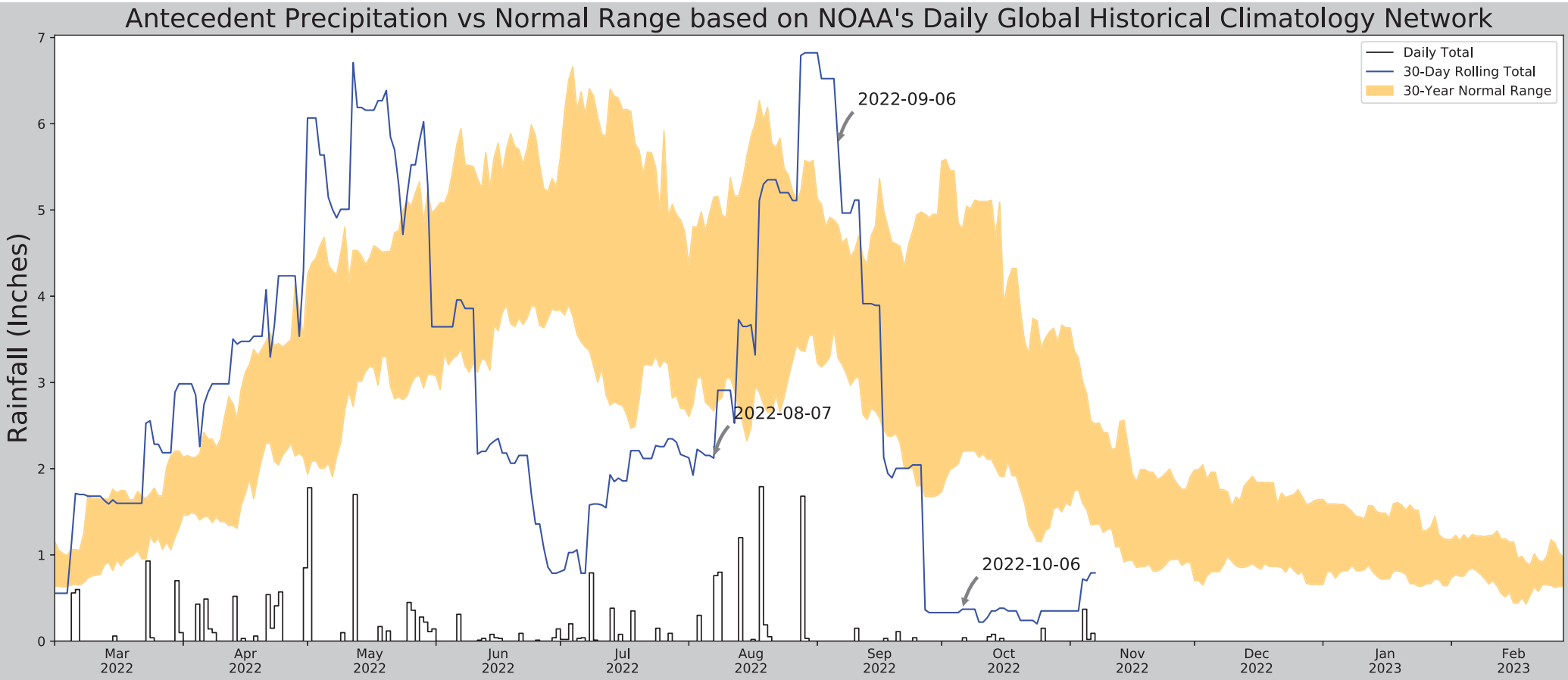
Surface Water Present?	Yes ___	No X	Depth (inches): ___
Water Table Present?	Yes ___	No X	Depth (inches): ___
Saturation Present? (includes capillary fringe)	Yes ___	No X	Depth (inches): ___

Wetland Hydrology Present? **Yes** ___ **No** X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
innnundation is visible on 2016 NAIP imagery

Remarks:
Does not meet hydrology indicator.

Appendix B
Antecedent Precipitation Information



Coordinates	44.745230, -93.016140
Observation Date	2022-10-06
Elevation (ft)	826.58
Drought Index (PDSI)	Mild drought
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2022-10-06	2.198032	4.784646	0.370079	Dry	1	3	3
2022-09-06	3.28189	4.825984	5.76378	Wet	3	2	6
2022-08-07	2.668898	5.147638	2.122047	Dry	1	1	1
Result							Normal Conditions - 10

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
ROSEMOUNT RSCH & OUTREACH CTR	44.7167, -93.0981	944.882	4.48	118.302	2.546	9001	70
ROSEMOUNT 3.3 SW	44.7182, -93.121	951.116	1.129	6.234	0.515	591	17
ROSEMOUNT 3.7 WSW	44.73, -93.1373	959.974	2.133	15.092	0.992	9	0
ROSEMOUNT 4.5 WSW	44.7208, -93.1497	940.945	2.549	3.937	1.157	431	2
ROSEMOUNT 3.9 W	44.7394, -93.1451	959.974	2.79	15.092	1.298	7	0
ROSEMOUNT 3.3 W	44.7506, -93.1326	978.018	2.89	33.136	1.396	15	0
ROSEMOUNT 4.1 W	44.7504, -93.1502	941.929	3.458	2.953	1.566	38	0
ROSEMOUNT 3.3 WNW	44.7608, -93.13	979.987	3.426	35.105	1.662	425	1
FARMINGTON 3NW	44.6661, -93.1756	959.974	5.169	15.092	2.404	572	0
BURNSVILLE 3.0 NE	44.7914, -93.2304	950.131	8.293	5.249	3.775	2	0
EAGAN 1.7 W	44.815, -93.1981	875.0	8.378	69.882	4.356	4	0
COTTAGE GROVE 0.8 NW	44.8233, -92.9389	810.039	10.735	134.843	6.278	2	0
MINNEAPOLIS/ST PAUL AP	44.8831, -93.2289	872.047	13.165	72.835	6.883	256	0

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Appendix C
Photo Log

Photo 1. WDP1 facing South

Photo 2. WDP2 facing West

Photo 3. WDP3 facing North

Photo 4. WDP4 facing North

Photo 5. WDP5 facing West

Photo 6. WDP6 facing Southwest

Photo 7. WDP7 facing West

Photo 8. WDP8 facing North

Photo 9. WDP9 facing West

Photo 10. WDP10 facing North

Photo 11. WDP11 facing North

Appendix B

Traffic Impact Analysis

Traffic Impact Analysis

Rich Valley East Industrial

AUAR

ROSEMOUNT, MINNESOTA

APRIL 2024

Prepared By:

Kimley»Horn

Contents

1.0 INTRODUCTION....4
2.0 EXISTING CONDITIONS....4
3.0 FUTURE CONDITIONS....7
4.0 PROPOSED DEVELOPMENT....10
5.0 INTERSECTION CAPACITY ANALYSIS....13
6.0 CONCLUSIONS AND RECOMMENDATIONS....42
APPENDIX....45

TABLES

TABLE 1: PROJECTED GROWTH RATES....8
TABLE 2: AUAR DEVELOPMENT SCENARIOS....10
TABLE 3: TRIP GENERATION SUMMARY (SCENARIO 1)....11
TABLE 4: TRIP GENERATION SUMMARY (SCENARIO 2)....11
TABLE 5: TRIP GENERATION FORECAST....12
TABLE 6: ANALYSIS SCENARIO SUMMARY....13
TABLE 7: LEVEL OF SERVICE GRADING CRITERIA....14
TABLE 8: EXISTING (2023) CONDITIONS AM PEAK HOUR DELAY AND LOS....15
TABLE 9: EXISTING (2023) CONDITIONS PM PEAK HOUR DELAY AND LOS....16
TABLE 10: SHORT-TERM (2027) NO-BUILD CONDITIONS AM PEAK HOUR DELAY AND LOS....18
TABLE 11: SHORT-TERM (2027) NO-BUILD CONDITIONS PM PEAK HOUR DELAY AND LOS....19
TABLE 12: LONG-TERM (2045) NO-BUILD CONDITIONS AM PEAK HOUR DELAY AND LOS....22
TABLE 13: LONG-TERM (2045) NO-BUILD CONDITIONS PM PEAK HOUR DELAY AND LOS....23
TABLE 14: SHORT-TERM (2027) SCENARIO 1 AM PEAK HOUR DELAY AND LOS....25
TABLE 15: SHORT-TERM (2027) SCENARIO 1 PM PEAK HOUR DELAY AND LOS....26
TABLE 16: LONG-TERM (2045) SCENARIO 1 MITIGATED AM PEAK HOUR DELAY AND LOS....28
TABLE 17: LONG-TERM (2045) SCENARIO 1 MITIGATED PM PEAK HOUR DELAY AND LOS....29

TABLE 18: SHORT-TERM (2027) SCENARIO 2 AM PEAK HOUR DELAY AND LOS..... 31

TABLE 19: SHORT-TERM (2027) SCENARIO 2 PM PEAK HOUR DELAY AND LOS..... 32

TABLE 20: SHORT-TERM (2027) SCENARIO 2 MITIGATED AM PEAK HOUR DELAY AND LOS 35

TABLE 21: SHORT-TERM (2027) SCENARIO 2 MITIGATED PM PEAK HOUR DELAY AND LOS 36

TABLE 22: LONG-TERM (2045) SCENARIO 2 MITIGATED AM PEAK HOUR DELAY AND LOS 39

TABLE 23: LONG-TERM (2045) SCENARIO 2 PM PEAK HOUR DELAY AND LOS..... 40

TABLE 24: LONG-TERM (2045) SCENARIO 2 MITIGATED PM PEAK HOUR DELAY AND LOS 41

EXHIBITS (SEE APPENDIX A)

EXHIBIT 1: PROJECT SITE LOCATION AND STUDY AREA

EXHIBIT 2: EXISTING GEOMETRY AND INTERSECTION CONTROL

EXHIBIT 3: EXISTING (2023) PEAK HOUR TRAFFIC VOLUMES

EXHIBIT 4: FUTURE BACKGROUND GEOMETRY AND INTERSECTION CONTROL

EXHIBIT 5: SHORT-TERM (2027) NO-BUILD PEAK HOUR TRAFFIC VOLUMES

EXHIBIT 6: LONG-TERM (2045) NO-BUILD PEAK HOUR TRAFFIC VOLUMES

EXHIBIT 7: TRIP DISTRIUBUTION

EXHIBIT 8: SCENARIO 1 TRIP ASSIGNMENT

EXHIBIT 9: SCENARIO 2 TRIP ASSIGNMENT

EXHIBIT 10: SHORT-TERM (2027) SCENARIO 1 PEAK HOUR TRAFFIC VOLUMES

EXHIBIT 11: LONG-TERM (2045) SCENARIO 1 PEAK HOUR TRAFFIC VOLUMES

EXHIBIT 12: SCENARIO 1 MITIGATION PLAN

EXHIBIT 13: SHORT-TERM (2027) SCENARIO 2 PEAK HOUR TRAFFIC VOLUMES

EXHIBIT 14: LONG-TERM (2045) SCENARIO 2 PEAK HOUR TRAFFIC VOLUMES

EXHIBIT 15: SCENARIO 2 MITIGATION PLAN

1.0 INTRODUCTION

This report serves as the traffic analysis for the Rich Valley East Industrial Alternative Urban Area Review (AUAR). The Rich Valley East Industrial Area is a proposed development area between 140th Street and 145th Street and east of Driver Avenue.

The forthcoming traffic analysis focused on three analysis years: the existing year (2023), the anticipated opening year of the proposed development (2027), and horizon year (2045).

1.1 REPORT PURPOSE AND OBJECTIVES

The purpose of this study is to address traffic and transportation impacts of the proposed development on surrounding streets and intersections. This traffic impact study was prepared based on criteria set forth by the City of Rosemount. The following information is provided.

- A description and map of the existing and proposed roadway system, including state, regional, and local roads to be affected by the development of the AUAR area. This information includes existing and proposed roadway capacities and existing and projected background (i.e. without the AUAR development) traffic volumes.
- Trip generation data – trip generation rates and trip totals – for the development scenarios broken down by land use zones and/or other relevant subdivisions of the area. As well as the projected distributions onto the roadway system.
- Analysis of impacts of the traffic generated by the AUAR area on the roadway system, including the comparison of peak period capacities and analysis of Level of Service and delay times at study area intersections.
- A discussion of potential improvements and traffic management measures that are proposed to mitigate operational concerns.

Note that the analysis does not include detailed signal warrant analysis for the proposed signal mitigations, as there are many parcels in the area developing concurrently so the traffic levels along the roadways are dependent on traffic intensity which could vary from what is shown in this report. As the parcels develop further and future traffic conditions become clearer, detailed signal warrant analysis should be conducted for each proposed signal. Dakota County typically considers signal installation when Warrant 1A or Warrant 1B are met but Dakota County may require additional justification.

2.0 EXISTING CONDITIONS

2.1 PHYSICAL CHARACTERISTICS

The existing roadway network within the study area includes CSAH 42, US Highway 52, MN Highway 55, Conley Avenue, 140th Street/142nd Street, Driver Avenue, Emery Avenue, and Blaine Avenue.

CSAH 42 (145th Street) is an east-west roadway that runs along the southern boundary of the AUAR development. West of Conley Avenue, CSAH 42 is a four-lane, divided roadway with turn lanes provided at most intersections. East of Conley Avenue, CSAH 42 tapers to a two-lane, undivided roadway with turn lanes provided for some movements. The 2021 Annual Average Daily Traffic (AADT) was 5,740 vehicles per day (VPD) east of US 52 and 15,900 VPD west of US 52 (2019). The speed limit on CSAH 42 is 55 miles per hour (MPH).

US Highway 52 is a north-south roadway that is located west of the AUAR development. US Highway 52 is a four-lane divided roadway with interchanges provided at major intersecting roadways. The 2022 AADT is 35,500 VPD north of CSAH 42 and 29,200 VPD south of CSAH 42. The speed limit on US Highway 52 is 65 MPH.

MN Highway 55 is a primarily east-west roadway that is located northeast of the AUAR development. MN Highway 55 is a two-lane undivided roadway (except west of Pine Bend Trail where it is a four lane divided roadway) with right and left turn lanes provided at major intersections and right-turn lanes provided at most smaller intersections. East of CSAH 42 (145th Street) the 2019 AADT is 14,400 VPD and west of CSAH 42 (145th Street) the 2015 AADT is 12,800 VPD. The speed limit on MN Highway 55 is 55 MPH. Note that despite running primarily east-west, the roadway is considered to be the northbound/southbound approaches of the intersection with CSAH 42 in order to maintain consistency with the orientation of other intersections along CSAH 42.

140th Street/142nd Street is an east-west roadway that runs along the northern boundary of the AUAR development. 140th Street/142nd Street is a two-lane undivided roadway. The 2019 AADT is 135 VPD near the site.

Blaine Avenue is an undivided two-lane roadway that runs in the north-south direction. The road has no turn lanes near the study area. The 2021 AADT of the roadway was 1,650 VPD north of CSAH 42. The posted speed limit is 50 mph north of CSAH 42 and 30 mph south of CSAH 42.

Conley Avenue is an undivided two-lane roadway that runs in the north-south direction. The road has a left turn lane at the intersection with CSAH 42 but no other turn lanes. The 2019 AADT of the roadway was 1,900 VPD north of CSAH 42. The posted speed limit is 35 mph.

Emery Avenue is an undivided two-lane roadway that runs in the north-south direction. The road is unpaved, has no AADT data available and has no posted speed limit. For the purposes of analysis, the speed limit was considered to be 30 mph.

Driver Avenue is a newly constructed road built as a part of the Rich Valley Golf Course redevelopment which runs north-south connecting CSAH 42 (145th Street) to 140th Street, about ½ mile east of Conley Avenue. The border marks the western edge of this AUAR's study area as well as the eastern edge of the RVGC redevelopment area. It is a two-lane, undivided roadway and no traffic data is available at this point.

2.2 STUDY AREA

Based on discussion with City staff, the following intersections were included within the study area for the traffic analysis. The list provides the existing intersection control for each of the study intersections.

- CSAH 42 & US Highway 52 Southbound Ramps
- CSAH 42 & US Highway 52 Northbound Ramps
- CSAH 42 & Conley Avenue
- CSAH 42 & 142nd Street
- MN Highway 55 & CSAH 42 (Signal Installed in 2023)
- CSAH 42 & Emery Avenue
- CSAH 42 & Driver Avenue
- CSAH 42 & Proposed Site Access *(Future Intersection)*
- CSAH 42 & Blaine Avenue
- Blaine Avenue & 140th Street (*Future Connemara Trail Connection*)

All intersections except for TH 55 & CSAH 42 are currently side-street stop controlled and the side street of each intersection is listed second in the list above. **Exhibit 2** provides the existing geometry and intersection control for the study intersections.

2.3 EXISTING VOLUMES

Turning Movement Counts (TMCs) used in the analysis were previously collected at the study area intersections as part of traffic studies at nearby properties. Each study intersection and the traffic study that the data was taken from is listed below.

- **CSAH 42 & US Highway 52 Southbound Ramps** – Rosemount Industrial TIA (2022)
- **CSAH 42 & US Highway 52 Northbound Ramps** – Rosemount Industrial TIA (2022)
- **CSAH 42 & Conley Avenue** – RVGC AUAR (2021)
- **CSAH 42 & 142nd Street** – RVGC AUAR (2021)
- **CSAH 42 & MN Highway 55** – RVGC AUAR (2021)
- **CSAH 42 & Emery Avenue** – RVGC AUAR (2021)
- **CSAH 42 & Driver Avenue** – RVGC AUAR (2021)
- **CSAH 42 & South Access** – Not Collected [Future Intersection Only]
- **CSAH 42 & Blaine Avenue** – Rosemount Industrial TIA (2022)
- **Blaine Avenue & Connemara Tr**ail – Rosemount Industrial Additional Traffic Analysis (2023)

Traffic data collected in 2021 was for the Rich Valley Golf Course AUAR Traffic Analysis which studied the parcel immediately west of the study area. More recent traffic counts for were conducted for the Highway 52 Ramps in 2022 for the Project Channel/Project Bigfoot traffic study. These counts encompass all intersections along CSAH 42 west of Conley Avenue. The intersection of Blaine Avenue & 140th Street was counted separately in 2023 for a supplemental Channel traffic analysis. All traffic counts are provided in **Appendix B**. The 2021 counts were adjusted for COVID-19 because they were recorded during a period of decreased traffic volumes. A COVID-19 adjustment factor of 1.3 was determined to be appropriate so all counts which were taken in 2021 were multiplied by this factor. The adjusted existing (2023) traffic volumes are provided in **Exhibit 3**.

3.0 FUTURE CONDITIONS

The AUAR traffic analysis focuses on two analysis years: Short-Term (2027) and Long-Term (2045). Following is a discussion of planned future roadway and intersection improvements within the project study area and volume development for 2027 and 2045 No-Build conditions.

3.1 FUTURE PLANNED ROADWAY IMPROVEMENTS

MnDOT has previously explored constructing a full cloverleaf interchange at TH 52 & CSAH 42. This interchange reconstruction would significantly alter the access to Conley Avenue and reroute traffic to Driver Avenue on the west side of the site. However, the existing diamond interchange was expanded from a single lane in each direction to its current geometry in 2017. The cloverleaf interchange has no definitive plans or timeline and therefore was not analyzed as part of this study, but it remains a possible mitigation option for the future.

Dakota County is currently updating the CSAH 42 visioning study to determine improvements along the corridor to accommodate future development. Assumptions for the Rich Valley East project site is included in the analysis for the visioning study. The preliminary results of the study show signalization of the Highway 52 & CSAH 42 interchange by 2028 to accommodate growth in the area. In addition, there will likely be changes to the roadway geometry when the intersections are signalized, however, the exact changes to the geometry have not been defined. As developments occur, there will also be the need for signals at CSAH 42 & Blaine Avenue and CSAH 42 & TH 55 in the future.

It should be noted that the Rosemount Industrial AUAR traffic study (Scannell property) recommended signalization of the Highway 52 ramps and CSAH 42 & Blaine Avenue in the Short-Term (2027). Note that a temporary traffic signal is currently installed at CSAH 42 & Blaine Avenue (as of 2024) which may be removed in the future, but a signal at this intersection will be assumed in the Opening Year (2027) scenarios in-line with the recommendation of the Scannell property AUAR traffic study. In addition, the intersection of Blaine Avenue & 140th Street is anticipated to have a west leg completed with the development of the Rosemount Industrial parcel (Scannell property). This leg would be a continuation of Connemara Trail. The intersection of Blaine Avenue & 140th Street would be fully reconstructed and reconfigured for this project. The traffic control at the intersection is assumed to be east-west stop control. An underpass of US Highway 52 is also anticipated to be completed in the future for 140th Street, but this improvement is not anticipated to change traffic patterns to and from the site in a significant way except if CSAH 42 were to see severe congestion issues.

Note that right-of-way constraints are present for the north leg of Blaine Avenue at the intersection with CSAH 42 due to the presence of the cemetery west of Blaine Avenue. The southbound approach of Blaine Avenue is proposed to have a separated right and left turn lane added in the Short-Term (2027) and an additional left turn lane added in the long-term (2045) as background improvements which were previously proposed as mitigations for the Scannell property AUAR traffic study. Right-of-way constraints here should be examined further, along with signal warrants, when the parcels in the area have defined development plans.

Dakota County and City of Rosemount long term plans indicate that TH 55 should be expend to a four-lane roadway. This improvement was assumed to completed by the 2045 Horizon year. Furthermore, the Rich Valley Golf Course AUAR determined the intersection of TH 55 & CSAH 42 may require signalization in the Long-term (2045).

All changes to lane geometry and intersection control assumed for the Short-Term (2027) and Long-Term (2045) Scenarios are shown in **Exhibit 4**.

3.2 FUTURE TRAFFIC FORECASTING

Background traffic volumes for the study intersections during the weekday AM and PM peak hours for both 2027 and 2045 No-Build traffic conditions were developed using data from the TMCs, prior traffic study volume development, the Dakota County 2040 Transportation Plan, and the City of Rosemount Comprehensive plan. The following provides a summary of the background volume development for both analysis years.

2027 No-Build Volume Development

Background traffic volumes for Short-Term (2027) and Long-Term (2045) conditions were developed based on the TMCs recorded in June of 2022 and March 2021.

The growth factor was calculated by comparing existing AADTs to 2040 projected AADTs from the Dakota County 2040 Transportation Plan within the study area. **Table 1** provides the Historical AADTs, Projected AADTs and average growth rate at each location. With the large range of growth rates between differing roadways, individual growth rates were used for each study roadway. The following growth rates were applied to the TMCs.

- A 1.0% growth rate was applied to the US Highway 52 ramp volumes, per the Rosemount Industrial AUAR.
- A 1.5% growth rate was applied to CSAH 42 west of US Highway 52 in order to account for other possible developments in the area (per Rosemount Industrial AUAR).
- A 0.8% growth rate was applied to Minnesota 55, per RVGC AUAR.
- A growth rate was not applied Conley Avenue or 142nd Street in the 2027 No-Build Scenario as these roadways only provide access to the surrounding existing development and the proposed site. However, by 2040 it was assumed that there would be development on adjacent parcels to the project site. The 2040 growth on Conley Avenue & 142nd Street was determined by adding in the trip generation for 750,000 square feet of warehouse.

TABLE 1: PROJECTED GROWTH RATES

Roadway Segment		Dakota County 2040 Transportation Plan Projected Volume	Adjusted Existing		Growth Rate
		2040	Year	AADT	
CSAH 42	West of US 52	17,100	2019	15,900	0.3%
	East of US 52	12,200	2021	9,840*	1.1%
MN Highway 55	West of CSAH 42	15,900	2015	12,800	0.9%
	East of CSAH 42	16,200	2019	14,400	0.6%
US Highway 52	North of CSAH 42	46,100	2022	35,450	1.5%
	South of CSAH 42	37,200	2022	29,180	1.4%

*Adjustment excludes this development and the RVGC from the 2040 build volumes when considering the growth rate.

In addition to background growth, it was assumed that the south half of the RVGC site, Project Bigfoot, and the Rosemount industrial site (Scannell Parcel) would be developed by the short-term year. The same distribution patterns used in the respective sites traffic studies was applied to the study area intersections.

Exhibit 5 provides the Short-Term (2027) Background traffic volumes at the study intersections for weekday AM and PM peak hours.

2045 No-Build Volume Development

Background traffic volumes for Long-Term (2045) conditions were developed based on the same growth rate as Short-Term volume development. The traffic volumes for Long-Term (2045) conditions did not assume any further development beyond which is included in the Short-Term volumes and only considered background growth along the roadways. The same distribution patterns used in the respective sites traffic studies was applied to the study area intersections. It should be noted that background growth rates account for development in the area, however, no reductions to the growth rates were assumed while adding in the additional developments because there are other parcels and ample undeveloped land that is not accounted for in the known added development traffic. While Project Bigfoot and Rosemount Industrial (Scannell Property) were the only background developments added separately from the background growth, other developments such as the Akron Avenue developments accounted for by not reducing growth rates along the corridor while also adding known developments. **Exhibit 6** provides the Long-Term (2045) Background traffic volumes at the study intersections for weekday AM and PM peak hours.

4.0 PROPOSED DEVELOPMENT

4.1 SITE LOCATION

The Rich Valley East Industrial site is on the northwest corner of CSAH 42 and Emery Avenue, east of Driver Avenue, in Rosemount, Minnesota. The overall size of the property is approximately 333 acres. The site is currently utilized for agriculture.

4.2 SITE CIRCULATION

Access to the site is estimated to be provided via three full accesses. One access is on CSAH 42, approximately ½ of a mile east of Driver Avenue and opposite an existing access on the south side of the road. One access would be built off of Driver Avenue opposite on of the existing site accesses and the final site access would be off Ehlers Path E (likely at least ½ a mile west of Emery Avenue E). Proposed land uses for Scenarios 1 and 2 are attached in **Appendix C.**

CSAH 42 is an undivided roadway located adjacent to the site, with a speed limit of 55 mph, and 5,400 vpd. Per the Dakota County access spacing guidelines (page 6-10 of the Dakota County 2040 Transportation Plan), full movement intersections spaced at ½ mile spacing and partial movement intersections spaced ¼ of a mile are permitted. When a detailed site plan is developed, access should meet the Dakota County access spacing guidelines along CSAH 42. Access could also be provided from the local roadway network surrounding the site such as Driver Avenue, 140th Street, or Emory Avenue.

4.3 EXISTING AND FUTURE LAND USE

There are two development plans, with Scenario 1 which would be a data center land use and Scenario 2 consists of a mix of business park, light industrial, and community commercial land uses. **Table 2** provides a summary of the two development scenarios that are considered in this AUAR.

TABLE 2: AUAR DEVELOPMENT SCENARIOS

Full Development Scenario 1	
Land Use	**Size**
Data Center	2,300,000 Square Feet
Full Development Scenario 2	
Land Use	**Size**
Light Industrial	646,667 Square Feet
Business Park	1,293,333 Square Feet
Community Commercial	560,000 Square Feet

For Scenario 1 and 2 full build-out was assumed in both the Short-Term (2027) and Long-Term (2045) Conditions. No partial build conditions were analyzed. The access locations and internal spine road are anticipated to be the same in both scenarios.

4.4 TRIP GENERATION

ANTICIPATED TRIP GENERATION

Trip generation was calculated based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 11th Edition for proposed site. The ITE Trip Generation Manual, 11th Edition Supplement provides truck trips as percentage of total vehicle trips. The truck trips were calculated by applying the AM and PM truck percentages to the total trips generated by the land use.

While Scenario 1 is defined as a data center, to provide a more conservative analysis it was assumed to be warehousing in the ITE code since it generates more trips. **Table 3** provides a summary of the trip generation forecast for Scenario 1. The total trip generation is anticipated to be 3,933 daily trips, 391 trips during the AM peak hour (301 entering and 90 exiting), and 414 trips during the PM peak hour (200 entering and 460 exiting).

TABLE 3: TRIP GENERATION SUMMARY (SCENARIO 1)

Land Use Description	ITE	Intensity (Sq. Ft.)	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	150	2,300,000	3,933	301	90	391	116	298	414

Table 4 provides a detailed summary of the trip generation forecast for the proposed Scenario 2. The total trip generation is anticipated to be 14,667 daily trips, 1,883 trips during the AM peak hour (220 entering and 1,663 exiting), and 1,750 trips during the PM peak hour (252 entering and 1,498 exiting).

TABLE 4: TRIP GENERATION SUMMARY (SCENARIO 2)

Land Use Description	ITE	Intensity (Sq. Ft.)	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
General Light Industrial	110	646,667	3,149	421	58	479	59	361	420
Business Park	770	1,293,000	16,085	1,484	262	1,746	410	1,168	1,578
Office Park	750	560,000	6,199	633	82	745	102	626	728
Total Site Trips			**25,437**	**2,538**	**402**	**2,970**	**571**	**2,155**	**2,726**

TRIP GENERATION COMPARISON

Table 5 provides a summary of the anticipated trips generated by the two development scenarios. These trip estimates are provided for the full build out of the development plans.

TABLE 5: TRIP GENERATION FORECAST

Scenario	AM Peak Hour			PM Peak Hour			Daily
	Total	In	Out	Total	In	Out	
Scenario 1	391	301	190	414	116	298	3,933
Scenario 2	2,970	2,538	402	2,726	571	2,155	25,437

As previously mentioned, based on discussions with the developer, Scenario 1 is the more likely development scenario. Scenario 2 generates more trips in both the AM and PM peak hours and generates more than three times as many daily trips as Scenario 1. Both scenarios are estimated to have one access point off of CSAH 42, one off Driver Avenue, and one off Ehlers Path.

4.5 PROJECT TRIP DISTRIBUTION

The distribution of project traffic onto the study area roadway network and intersections was based on current traffic patterns, surrounding demographics, and a general assessment of the major regional roadways surrounding the study area. All trips were assigned to the network using a single trip distribution pattern. The following global trip distribution was assumed for all passenger vehicle traffic:

- 50% north on US Highway 52
- 15% south on US Highway 52
- 20% west on CSAH 42
- 10% west on Minnesota 55
- 5% east on Minnesota 55

The site trip distribution is shown in **Exhibit 7**.

It was assumed that the proposed site would have access from Driver Avenue, 140th Street, and one full access on CSAH 42. Completion of the underpass for 140th Street is not anticipated to significantly impact the trip distribution.

4.6 TOTAL SITE TRAFFIC ASSIGNMENT

Exhibit 8 provides the Scenario 1 peak hour traffic trip assignment volumes and **Exhibit 9** provides the Scenario 2 peak hour traffic trip assignment volumes. These were determined by applying the distribution patterns in **Exhibit 7** to the respective peak hour trips generated by the applicable land uses.

5.0 INTERSECTION CAPACITY ANALYSIS

5.1 ANALYSIS SCENARIOS

Three analysis periods were analyzed, the Existing Year (2023), and the future years included Short-Term (2027) and Long-Term (2045).

A Road Safety Audit (RSA) was recently completed along Minnesota 55 and CSAH 42. Intersection mitigation options such as a roundabout were proposed at Minnesota 55 & CSAH 42, but no definitive improvement plans were determined as part of the RSA. Therefore, the mitigation in this analysis assumed a signal at Minnesota 55 & CSAH 42 as the roundabout option involved improvements along a two mile stretch of Minnesota 55. **Table 6** describes the conditions analyzed for the AUAR traffic analysis.

TABLE 6: ANALYSIS SCENARIO SUMMARY

CONDITION	VOLUME AND ROADWAY NETWORK ASSUMPTIONS
Condition 1 Existing (2023)	**VOLUMES:** Based on TMCs from 2021 (RVGC AUAR) and 2022 (Project Channel/Bigfoot Traffic Studies)
	ROADWAY NETWORK: Existing geometry and traffic control provided in **Exhibit 2.**
Condition 2 Short-Term (2027) No-Build	**VOLUMES:** Opening Year (2027) Build volumes in the Bigfoot/Channel traffic studies (includes site traffic for the Rich Valley Golf Course AUAR area and full buildout of Project Bigfoot and Rosemount Industrial (Scannell Property)).
	ROADWAY NETWORK: Existing network plus the addition of all mitigations recommended by the Channel AUAR Traffic Analysis and the RVGC AUAR Traffic Analysis for their Short-Term scenarios. See **Exhibit 4**.
Condition 3 Long-Term (2045) No-Build	**VOLUMES:** Condition 2 traffic volumes plus Background Growth to 2045.
	ROADWAY NETWORK: Existing network plus the addition of all mitigations recommended by the Channel AUAR Traffic Analysis and the RVGC AUAR Traffic Analysis for their Long-Term scenarios. See **Exhibit 4**.
Condition 4 Short-Term (2027) Scenario 1	**VOLUMES:** Condition 2 traffic volumes plus Scenario 1 Site Trips.
	ROADWAY NETWORK: Condition 2 roadway control and geometry.
Condition 5 Long-Term (2045) Scenario 1	**VOLUMES:** Condition 3 traffic volumes plus Scenario 1 Site Trips
	ROADWAY NETWORK: Condition 3 roadway control and geometry.
Condition 6 Short-Term (2027) Scenario 2	**VOLUMES:** Condition 2 traffic volumes plus Scenario 2 Site Trips.
	ROADWAY NETWORK: Condition 2 roadway control and geometry.
Condition 7 Long-Term (2045) Scenario 2	**VOLUMES:** Condition 3 traffic volumes plus Scenario 2 Site Trips.
	ROADWAY NETWORK: Condition 3 roadway control and geometry.

5.2 LEVEL OF SERVICE OVERVIEW

An intersection capacity analysis was performed at the study intersections for the nine scenarios listed in **Table 6**. The capacity analysis was performed for the weekday AM and PM peak hours, and Synchro/SimTraffic was used to determine intersection delay and level of service (LOS).

LOS is a quantitative measure used by traffic engineers to describe the operations of an intersection or along a roadway segment. It ranges from A to F, with A being the best and F being the worst level of operation. LOS A conditions are characterized by minimal vehicle delay and free-flow conditions, while LOS F is characterized by long vehicle delay – usually when demand exceeds available roadway capacity. Although LOS E is defined as at-capacity, LOS D is generally the minimum acceptable level of operation at an intersection in the Twin Cities Metro area. Each study intersection was analyzed based on the *Synchro/SimTraffic software.* For unsignalized intersections, LOS was reported as the worst individual movement. This was done to ensure that the mainline LOS did not hide any potential issues on the minor street. The overall intersection LOS was reported for signalized intersections.

Table 7 provides the LOS grading criteria for unsignalized and signalized intersections. For the purposes of this traffic analysis, it was assumed that acceptable level of service for the overall intersection is LOS D or better and the acceptable level of service for an individual movement is LOS E or better.

TABLE 7: LEVEL OF SERVICE GRADING CRITERIA

Level of Service	Average Control Delay (seconds/vehicle) at:	
	Unsignalized Intersections	Signalized Intersections
A	0 – 10	0 – 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F	> 50	> 80

5.3 EXISTING (2023) LEVEL OF SERVICE ANALYSIS

A capacity analysis was conducted for Existing (2023) traffic conditions at the study intersections. The analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes provided in **Exhibit 3**.

Tables 8 & 9 provide a summary of the capacity analysis at the study intersections. The movements that are anticipated to operate at LOS E are shown in yellow and the movements that are anticipated to operate at LOS F are shown in red. Overall intersection delay for side-street stop controlled intersections is reported as the worst side-street movement. The full SimTraffic reports are included in **Appendix D.**

TABLE 8: EXISTING (2023) CONDITIONS AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Side Street Stop	EB	-	-	4.0	A	1.3	A	29.3	D
		WB	4.5	A	1.2	A	-	-		
		NB	-	-	-	-	-	-		
		SB	29.3	D	24.5	C	5.7	A		
US 52 NB Ramps & CSAH 42	Side Street Stop	EB	5.9	A	1.0	A	-	-	66.8	F
		WB	-	-	1.4	A	0.5	A		
		NB	66.8	F	-	-	4.3	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	2.0	A	0.6	A	-	-	8.3	A
		WB	-	-	0.3	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	8.3	A	-	-	2.6	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.6	A	-	-	3.4	A
		WB	-	-	0.4	A	0.5	A		
		NB	-	-	-	-	-	-		
		SB	3.4	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	48.7	D	-	-	5.1	A	3.1	A
		WB	-	-	-	-	-	-		
		NB	3.9	A	1.8	A	-	-		
		SB	-	-	2.1	A	0.3	A		
CSAH 42 & Blaine Avenue	Side Street Stop	EB	3.2	A	0.9	A	-	-	20.2	C
		WB	4.4	A	1.9	A	1.8	A		
		NB	-	-	18.0	C	2.3	A		
		SB	20.2	C	11.6	B	3.6	A		
CSAH 42 & Driver Avenue	Side Street Stop	EB	2.6	A	1.2	A	-	-	7.0	A
		WB	-	-	2.0	A	1.3	A		
		NB	-	-	-	-	-	-		
		SB	7.0	A	-	-	2.8	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	0.8	A	0.5	A	0.0	A	8.7	A
		WB	0.2	A	0.3	A	0.0	A		
		NB	3.2	A	8.7	A	1.2	A		
		SB	3.1	A	6.9	A	1.3	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	-	-	2.7	A
		WB	-	-	-	-	2.7	A		
		NB	-	-	0.7	A	0.7	A		
		SB	0.8	A	0.1	A	-	-		

TABLE 9: EXISTING (2023) CONDITIONS PM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
US 52 SB Ramps & CSAH 42	Side Street Stop	EB	-	-	3.8	A	2.0	A	22.4	C
		WB	5.1	A	2.5	A	-	-		
		NB	-	-	-	-	-	-		
		SB	22.2	C	22.4	C	10.9	B		
US 52 NB Ramps & CSAH 42	Side Street Stop	EB	5.5	A	0.8	A	-	-	47.1	E
		WB	-	-	1.2	A	0.7	A		
		NB	47.1	E	36.7	E	4.2	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	1.9	A	0.5	A	-	-	9.4	A
		WB	-	-	0.4	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	9.4	A	-	-	3.0	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.8	A	-	-	3.9	A
		WB	-	-	1.1	A	-	-		
		NB	-	-	-	-	-	-		
		SB	3.9	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	38.0	D	-	-	17.8	B	9.4	A
		WB	-	-	-	-	-	-		
		NB	25.2	C	2.9	A	-	-		
		SB	-	-	6.3	A	1.7	A		
CSAH 42 & Blaine Avenue	Side Street Stop	EB	7.2	A	0.8	A	0.2	A	21.3	C
		WB	-	-	6.0	A	7.1	A		
		NB	19.0	C	21.3	C	8.6	A		
		SB	18.5	C	19.9	C	11.6	B		
CSAH 42 & Driver Avenue	Side Street Stop	EB	4.6	A	1.2	A	-	-	9.2	A
		WB	-	-	3.5	A	3.8	A		
		NB	-	-	-	-	-	-		
		SB	9.2	A	-	-	6.7	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	3.6	A	0.6	A	0.4	A	9.2	A
		WB	3.4	A	0.4	A	0.4	A		
		NB	9.2	A	5.6	A	5.7	A		
		SB	6.8	A	7.0	A	5.9	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	-	-	1.0	A
		WB	-	-	-	-	-	-		
		NB	-	-	1.0	A	-	-		
		SB	-	-	-	-	-	-		

Under Existing (2023) Conditions, all intersection movements are anticipated to operate at an acceptable LOS except for the following:

- **CSAH 42 & US Highway 52 Northbound Ramps** – the northbound left turn operates at LOS F during the AM peak hour and the northbound through movement operates at LOS E during the PM peak hour. The projected delay on this leg of the intersection is not unusual for a minor-street stop-controlled intersection along a roadway with no nearby signals present. The intersection is currently anticipated to be signalized in the short-term, with the Channel AUAR Traffic Impact Analysis recommending a signal at both US 52 Ramps for 2027.

The 95th percentile queues were reviewed at the study intersections. There are no queuing issues at the study intersections under Existing (2023) conditions.

5.4 SHORT-TERM (2027) NO-BUILD LEVEL OF SERVICE ANALYSIS

A capacity analysis was conducted for 2027 No-Build traffic conditions at the study intersections to determine baseline conditions for the 2027 analysis year. The analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes provided in **Exhibit 5**. All improvements outlined as mitigations in the Rosemount Industrial AUAR report and the RVGC AUAR report as Near-Term improvements were included in the analysis. The future geometry and control changes for the analysis are listed below and shown in **Exhibit 4**. Signals were modeled with optimized timings and cycle lengths being the same for each, assuming coordination along CSAH 42.

- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 southbound ramps.
- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 northbound ramps
- Installation of a traffic signal at the intersection of CSAH 42 & Blaine Avenue
- Add separated northbound and southbound left and right turn lanes and an eastbound right turn lane at CSAH 42 & Blaine Avenue.
- Install stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane.

Note that the signal at CSAH 42 & Blaine Avenue is a temporary signal and may not be in-place in the future. Since only through trips along CSAH 42 are added as a result of this development, the impact of this development will have little effect on the need for traffic control change at this intersection. The intersection and traffic control options will be analyzed in more depth in a future traffic analysis.

Tables 10 & 11 provide a summary of the capacity analysis at the study intersections. Overall intersection delay for side-street stop controlled intersections is reported as the worst side-street movement. The full SimTraffic reports are included in **Appendix D.**

TABLE 10: SHORT-TERM (2027) NO-BUILD CONDITIONS AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	27.8	C	5.6	A	17.6	B
		WB	94.8	F	4.8	A	-	-		
		NB	-	-	-	-	-	-		
		SB	32.2	C	27.8	C	8.8	A		
US 52 NB Ramps & CSAH 42	Signal	EB	26.4	C	5.3	A	-	-	23.0	C
		WB	-	-	37.1	D	13.1	B		
		NB	43.4	D	-	-	5.6	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	3.4	A	2.1	A	-	-	9.6	A
		WB	-	-	0.5	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	9.6	A	-	-	2.8	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.6	A	-	-	3.1	A
		WB	-	-	0.5	A	0.3	A		
		NB	-	-	-	-	-	-		
		SB	3.1	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	46.3	D	0.5	A	4.8	A	3.5	A
		WB	-	-	-	-	-	-		
		NB	4.8	A	2.1	A	-	-		
		SB	-	-	2.3	A	0.5	A		
CSAH 42 & Blaine Avenue	Signal	EB	44.1	D	6.9	A	2.0	A	14.9	B
		WB	27.5	C	17.7	B	12.3	B		
		NB	-	-	-	-	2.6	A		
		SB	30.2	C	30.7	C	6.6	A		
CSAH 42 & Driver Avenue	Side Street Stop	EB	4.4	A	2.4	A	-	-	9.5	A
		WB	-	-	2.6	A	1.3	A		
		NB	-	-	-	-	-	-		
		SB	9.5	A	-	-	3.5	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	0.9	A	0.5	A	0.0	A	11.1	B
		WB	0.6	A	0.3	A	0.0	A		
		NB	2.9	A	11.1	B	1.6	A		
		SB	3.4	A	8.6	A	1.7	A		
Blaine Avenue & 140th Street / Connemara Trail	Side Street Stop	EB	-	-	-	-	2.0	A	7.5	A
		WB	7.5	A	-	-	2.4	A		
		NB	2.8	A	1.7	A	1.5	A		
		SB	0.8	A	0.5	A	-	-		

TABLE 11: SHORT-TERM (2027) NO-BUILD CONDITIONS PM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	42.7	D	10.9	B	25.1	C
		WB	93.3	F	6.3	A	-	-		
		NB	-	-	-	-	-	-		
		SB	36.6	D	48.4	D	6.2	A		
US 52 NB Ramps & CSAH 42	Signal	EB	21.3	C	4.8	A	-	-	24.5	C
		WB	-	-	44.9	D	21.8	C		
		NB	55.2	E	82.3	F	5.7	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	2.5	A	1.4	A	-	-	6.6	A
		WB	-	-	0.4	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	6.6	A	-	-	2.8	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.7	A	-	-	3.3	A
		WB	-	-	1.1	A	-	-		
		NB	-	-	-	-	-	-		
		SB	3.3	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	39.7	D	-	-	20.9	C	11.8	B
		WB	-	-	-	-	-	-		
		NB	33.7	C	3.3	A	-	-		
		SB	-	-	7.4	A	2.2	A		
CSAH 42 & Blaine Avenue	Signal	EB	26.6	C	10.9	B	2.3	A	16.1	B
		WB	-	-	21.2	C	14.8	B		
		NB	17.1	B	12.4	B	7.9	A		
		SB	21.3	C	13.3	B	10.4	B		
CSAH 42 & Driver Avenue	Side Street Stop	EB	4.9	A	1.4	A	-	-	11.2	B
		WB	-	-	3.3	A	2.2	A		
		NB	-	-	-	-	-	-		
		SB	11.2	B	-	-	7.0	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	4.4	A	0.6	A	0.3	A	8.6	A
		WB	3.9	A	0.4	A	0.1	A		
		NB	7.0	A	7.2	A	6.3	A		
		SB	8.6	A	7.5	A	6.5	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	6.5	A	6.5	A
		WB	4.8	A	-	-	5.8	A		
		NB	5.4	A	2.5	A	2.4	A		
		SB	3.6	A	0.2	A	-	-		

Under Short-Term (2027) No-Build Conditions, all intersection movements are anticipated to operate at an acceptable LOS except for the following:

- **CSAH 42 & US Highway 52 Southbound Ramps** – the westbound left turn is expected to operate at LOS F during the AM & PM peak hours. This is not atypical of a movement which is opposed by a high-volume movement (eastbound through) at a busy intersection. Furthermore, the traffic volume of this movement is anticipated to be only about 30 vehicles during both peak hours.

- **CSAH 42 & US Highway 52 Northbound Ramps** – the northbound through movement is expected to operate at LOS F during the PM peak hour. The movement sees a volume of less than 10 during this period and operates as a shared through/left turn lane, so it is not anticipated to be a major concern. The northbound left turn movement is anticipated to operate at LOS E during the PM peak hour. This is not atypical of a side street movement turning onto a busy roadway.

The 95th percentile queues were reviewed at the study intersections. The following potential queueing issues were identified:

- **US 52 NB Ramps & CSAH 42** – the eastbound left turn is expected to be at capacity during the PM peak hour.

5.5 LONG-TERM (2045) NO-BUILD LEVEL OF SERVICE ANALYSIS

A capacity analysis was conducted for 2045 No-Build traffic conditions at the study intersections to determine baseline conditions for the 2045 analysis year. The analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes provided in **Exhibit 6**. All improvements outlined as mitigations in the Rosemount Industrial AUAR report and the RVGC AUAR report as Long-Term improvements were included in the analysis.

The full list of background geometry and signal control changes to the study intersections included in the Horizon Year (2045) No-Build scenario is shown below and in **Exhibit 4**. Signals were modeled with optimized timings and cycle lengths being the same for each, assuming coordination along CSAH 42.

- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 southbound ramps.
- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 northbound ramps
- Installation of a traffic signal at the intersection of CSAH 42 & Blaine Avenue
- Addition of separated northbound and southbound left and right turn lanes and an eastbound right turn lane at CSAH 42 & Blaine Avenue.
- Installation of stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane.
- Installation of an additional southbound left turn lane at CSAH 42 & Blaine Avenue (Rosemount Industrial AUAR mitigation)
- Installation of an additional through lane for each direction along Minnesota 55 (northbound/southbound).

- Installation of an additional eastbound left turn lane at CSAH 42 & US Highway 52 northbound ramps.

Tables 12 & 13 provide a summary of the capacity analysis at the study intersections. Overall intersection delay for side-street stop controlled intersections is reported as the worst side-street movement. The full SimTraffic reports are included in **Appendix D.**

TABLE 12: LONG-TERM (2045) NO-BUILD CONDITIONS AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	26.8	C	13.0	B	18.9	B
		WB	90.8	F	4.4	A	-	-		
		NB	-	-	-	-	-	-		
		SB	33.2	C	45.8	D	13.1	B		
US 52 NB Ramps & CSAH 42	Signal	EB	22.9	C	4.5	A	-	-	23.3	C
		WB	-	-	46.0	D	9.6	A		
		NB	46.5	D	-	-	6.7	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	6.0	A	2.3	A	-	-	13.3	B
		WB	-	-	1.1	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	13.3	B	-	-	3.8	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.6	A	-	-	5.5	A
		WB	-	-	1.9	A	1.3	A		
		NB	-	-	-	-	-	-		
		SB	5.5	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	46.8	D	0.9	A	4.9	A	13.4	B
		WB	-	-	-	-	-	-		
		NB	41.3	D	1.9	A	-	-		
		SB	-	-	7.7	A	3.1	A		
CSAH 42 & Blaine Avenue	Signal	EB	41.1	D	10.7	B	3.1	A	16.9	B
		WB	46.9	D	18.8	B	13.6	B		
		NB	-	-	31.5	C	5.9	A		
		SB	28.4	C	27.0	C	7.8	A		
CSAH 42 & Driver Avenue	Side Street Stop	EB	5.6	A	2.7	A	-	-	12.5	B
		WB	-	-	4.1	A	1.9	A		
		NB	-	-	-	-	-	-		
		SB	12.5	B	-	-	4.1	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	2.4	A	0.8	A	0.0	A	10.3	B
		WB	0.9	A	1.2	A	0.1	A		
		NB	4.5	A	10.3	B	1.2	A		
		SB	4.8	A	9.5	A	1.8	A		
Blaine Avenue & 140th Street / Connemara Trail	Side Street Stop	EB	-	-	-	-	2.1	A	2.7	A
		WB	-	-	-	-	2.1	A		
		NB	2.7	A	1.9	A	1.4	A		
		SB	0.7	A	0.4	A	-	-		

TABLE 13: LONG-TERM (2045) NO-BUILD CONDITIONS PM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	36.2	D	19.1	B	22.9	C
		WB	87.8	F	5.5	A	-	-		
		NB	-	-	-	-	-	-		
		SB	28.5	C	36.2	D	9.2	A		
US 52 NB Ramps & CSAH 42	Signal	EB	23.8	C	4.3	A	-	-	25.1	C
		WB	-	-	47.5	D	14.6	B		
		NB	45.9	D	53.6	D	5.1	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	4.5	A	1.7	A	-	-	16.7	C
		WB	-	-	1.0	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	16.7	C	-	-	3.9	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	1.0	A	-	-	6.3	A
		WB	-	-	1.6	A	-	-		
		NB	-	-	-	-	-	-		
		SB	6.3	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	44.0	D	-	-	14.1	B	13.3	B
		WB	-	-	-	-	-	-		
		NB	50.3	D	2.2	A	-	-		
		SB	-	-	9.3	A	3.3	A		
CSAH 42 & Blaine Avenue	Signal	EB	41.6	D	16.5	B	6.0	A	22.7	C
		WB	53.2	D	29.1	C	18.5	B		
		NB	23.1	C	22.6	C	12.6	B		
		SB	28.0	C	13.1	B	16.0	B		
CSAH 42 & Driver Avenue	Side Street Stop	EB	5.9	A	2.3	A	-	-	11.2	B
		WB	-	-	4.7	A	4.4	A		
		NB	-	-	-	-	-	-		
		SB	11.2	B	-	-	7.8	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	4.9	A	0.9	A	0.5	A	9.3	A
		WB	4.0	A	0.7	A	0.8	A		
		NB	9.3	A	8.6	A	7.0	A		
		SB	7.9	A	6.4	A	6.6	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	6.9	A	6.9	A
		WB	-	-	-	-	5.9	A		
		NB	6.5	A	2.9	A	2.5	A		
		SB	3.5	A	0.3	A	-	-		

Under Long-Term (2045) No-Build Conditions, all intersection movements are anticipated to operate at an acceptable LOS except for the following:

- **CSAH 42 & US Highway 52 Southbound Ramps** – the westbound left turn is expected to operate at LOS F during the AM & PM peak hours. This is not atypical of a movement which is opposed by a high-volume movement (eastbound through) at a busy intersection. Furthermore, the traffic volume of this movement is anticipated to be only about 30 vehicles during both peak hours.

The 95th percentile queues were reviewed at the study intersections. There are no queueing issues at the study intersections in the Long-Term (2045) No-Build scenario.

5.6 SHORT-TERM (2027) SCENARIO 1 LEVEL OF SERVICE ANALYSIS

A capacity analysis was conducted for the Short-Term (2027) Scenario 1 traffic conditions at the study intersections to determine how the study network is expected to operate with additional site traffic. The analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes provided in **Exhibit 10**. The Short-Term (2027) background improvements shown in **Exhibit 4** and listed below are included in the model with no other modifications to the geometry or intersection control assumed for this scenario.

- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 southbound ramps.
- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 northbound ramps
- Installation of a traffic signal at the intersection of CSAH 42 & Blaine Avenue
- Add separated northbound and southbound left and right turn lanes and an eastbound right turn lane at CSAH 42 & Blaine Avenue.
- Install stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane.

Tables 14 & 15 provide a summary of the capacity analysis at the study intersections. Overall intersection delay for side-street stop controlled intersections is reported as the worst side-street movement. The full SimTraffic reports are included in **Appendix D.**

TABLE 14: SHORT-TERM (2027) SCENARIO 1 AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	28.2	C	6.9	A	19.6	B
		WB	87.8	F	4.7	A	-	-		
		NB	-	-	-	-	-	-		
		SB	35.0	C	34.4	C	9.5	A		
US 52 NB Ramps & CSAH 42	Signal	EB	27.3	C	7.2	A	-	-	21.6	C
		WB	-	-	36.7	D	13.0	B		
		NB	46.5	D	-	-	6.8	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	5.2	A	3.8	A	-	-	18.8	C
		WB	-	-	0.5	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	18.8	C	-	-	3.2	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.5	A	-	-	4.0	A
		WB	-	-	0.6	A	0.5	A		
		NB	-	-	-	-	-	-		
		SB	4.0	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	40.6	D	0.3	A	5.3	A	4.1	A
		WB	-	-	-	-	-	-		
		NB	6.0	A	2.5	A	-	-		
		SB	-	-	2.6	A	0.6	A		
CSAH 42 & Blaine Avenue	Signal	EB	40.1	D	7.2	A	1.8	A	15.1	B
		WB	30.4	C	18.4	B	12.0	B		
		NB	-	-	-	-	4.1	A		
		SB	29.3	C	61.4	E	7.4	A		
CSAH 42 & Driver Avenue	Side Street Stop	EB	6.6	A	3.8	A	-	-	17.9	C
		WB	-	-	3.1	A	1.7	A		
		NB	-	-	-	-	-	-		
		SB	17.9	C	-	-	4.5	A		
CSAH 42 & South Access	Side Street Stop	EB	2.7	A	3.5	A	5.3	A	8.4	A
		WB	6.2	A	1.8	A	0.8	A		
		NB	8.4	A	-	-	6.3	A		
		SB	7.5	A	-	-	3.3	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	1.2	A	1.1	A	0.1	A	11.7	B
		WB	0.9	A	0.5	A	0.0	A		
		NB	4.8	A	9.5	A	1.3	A		
		SB	5.0	A	11.7	A	2.0	A		
Blaine Avenue & 140th Street / Connemara Trail	Side Street Stop	EB	-	-	-	-	2.1	A	3.6	A
		WB	3.6	A	-	-	2.4	A		
		NB	2.5	A	1.7	A	1.4	A		
		SB	0.4	A	0.4	A	-	-		

TABLE 15: SHORT-TERM (2027) SCENARIO 1 PM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	42.5	D	11.2	B	26.5	C
		WB	92.0	F	6.9	A	-	-		
		NB	-	-	-	-	-	-		
		SB	37.9	D	40.7	D	6.8	A		
US 52 NB Ramps & CSAH 42	Signal	EB	15.8	B	4.5	A	-	-	24.3	C
		WB	-	-	46.6	D	36.2	D		
		NB	55.6	E	79.4	E	5.5	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	4.8	A	1.3	A	-	-	14.9	B
		WB	-	-	0.6	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	14.9	B	-	-	4.4	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.9	A	-	-	4.5	A
		WB	-	-	1.1	A	1.0	A		
		NB	-	-	-	-	-	-		
		SB	4.5	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	38.3	D	-	-	23.2	C	14.7	B
		WB	-	-	-	-	-	-		
		NB	47.5	D	4.5	A	-	-		
		SB	-	-	8.7	A	2.0	A		
CSAH 42 & Blaine Avenue	Signal	EB	30.3	C	11.0	B	4.9	A	16.6	B
		WB	-	-	21.7	C	15.9	B		
		NB	17.0	B	16.3	B	7.7	A		
		SB	21.7	C	16.2	B	10.3	B		
CSAH 42 & Driver Avenue	Side Street Stop	EB	6.0	A	1.7	A	-	-	14.7	B
		WB	-	-	4.1	A	2.8	A		
		NB	-	-	-	-	-	-		
		SB	14.7	B	-	-	9.5	A		
CSAH 42 & South Access	Side Street Stop	EB	6.7	A	3.6	A	2.6	A	9.6	A
		WB	4.9	A	3.4	A	1.0	A		
		NB	7.9	A	-	-	3.4	A		
		SB	9.6	A	-	-	7.3	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	3.7	A	0.7	A	0.3	A	8.2	A
		WB	3.7	A	0.4	A	0.4	A		
		NB	8.2	A	6.6	A	6.0	A		
		SB	7.9	A	7.9	A	6.6	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	6.5	A	6.5	A
		WB	-	-	-	-	5.7	A		
		NB	6.4	A	2.6	A	2.4	A		
		SB	2.8	A	0.3	A	-	-		

Under Short-Term (2027) Scenario 1 Conditions, all intersection movements are anticipated to operate at an acceptable LOS except for the following:

- **CSAH 42 & US Highway 52 Southbound Ramps** – the westbound left turn is expected to operate at LOS F during the AM & PM peak hours. This is not atypical of a movement which is opposed by a high-volume movement (eastbound through) at a busy intersection. The southbound through movement is anticipated to operate at LOS E during the AM and PM peak hours, though this movement is anticipated to have a volume of less than 10 vehicles during both hours and operates as a shared through/left turn lane.

- **CSAH 42 & US Highway 52 Northbound Ramps** – the northbound left turn and through are expected to operate at LOS E during the PM peak hours. The delay is typical of a side street movement along a busy roadway like CSAH 42 is at the Highway 52 ramps and the through movement sees very little volume.

The 95th percentile queues were reviewed at the study intersections. The existing eastbound left turn lane for the southern site access provides adequate storage capacity. All 95th percentile queues were maintained within their respective storage bays.

5.7 LONG-TERM (2045) SCENARIO 1 LEVEL OF SERVICE ANALYSIS

A capacity analysis was conducted for the Long-Term (2045) Scenario 1 conditions at the study intersections to determine improvements needed to maintain acceptable operations.

The full list of background geometry and signal control changes to the study intersections included in the Horizon Year (2045) Scenario 1 Build condition is shown below and in **Exhibit 4**.

- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 southbound ramps.
- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 northbound ramps
- Installation of a traffic signal at the intersection of CSAH 42 & Blaine Avenue
- Addition of separated northbound and southbound left and right turn lanes and an eastbound right turn lane at CSAH 42 & Blaine Avenue.
- Installation of stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane.
- Installation of an additional southbound left turn lane at CSAH 42 & Blaine Avenue (Rosemount Industrial AUAR mitigation)
- Installation of an additional through lane for each direction along Minnesota 55 (northbound/southbound).
- Installation of an additional eastbound left turn lane at CSAH 42 & US Highway 52 northbound ramps.
- Installation of side street stop control at the site access along CSAH 42.

The analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes provided in **Exhibit 11**. The system was found to operate under acceptable conditions with a side street stop control installed at the site access.

Tables 16 & 17 provide a summary of the capacity analysis at the study intersections. The full SimTraffic reports are included in **Appendix D.**

TABLE 16: LONG-TERM (2045) SCENARIO 1 AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	30.4	C	15.1	B	22.0	C
		WB	89.6	F	4.4	A	-	-		
		NB	-	-	-	-	-	-		
		SB	35.3	D	37.0	D	14.1	B		
US 52 NB Ramps & CSAH 42	Signal	EB	22.3	C	5.6	A	-	-	21.5	C
		WB	-	-	48.2	D	12.0	B		
		NB	45.6	D	-	-	7.0	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	6.0	A	3.2	A	-	-	25.0	C
		WB	-	-	1.1	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	25.0	C	-	-	4.7	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.6	A	-	-	5.9	A
		WB	-	-	1.9	A	1.5	A		
		NB	-	-	-	-	-	-		
		SB	5.9	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	47.0	D	0.9	A	5.2	A	14.8	B
		WB	-	-	-	-	-	-		
		NB	44.5	D	2.2	A	-	-		
		SB	-	-	9.5	A	4.6	A		
CSAH 42 & Blaine Avenue	Signal	EB	42.3	D	11.0	B	3.2	A	17.5	B
		WB	47.0	D	19.9	B	13.9	B		
		NB	-	-	13.7	B	4.4	A		
		SB	29.0	C	24.9	C	9.5	A		
CSAH 42 & Driver Avenue	Side Street Stop	EB	8.1	A	4.2	A	-	-	24.7	C
		WB	-	-	4.3	A	2.5	A		
		NB	-	-	-	-	-	-		
		SB	24.7	C	-	-	5.9	A		
CSAH 42 & South Access	Side Street Stop	EB	3.7	A	4.1	A	6.5	A	13.8	B
		WB	11.2	B	4.1	A	2.8	A		
		NB	10.1	B	-	-	6.5	A		
		SB	13.8	B	-	-	4.2	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	2.3	A	1.6	A	0.1	A	11.6	B
		WB	2.0	A	1.7	A	0.4	A		
		NB	6.4	A	11.6	A	1.7	A		
		SB	7.9	A	10.6	A	3.0	A		
Blaine Avenue & 140th Street / Connemara Trail	Side Street Stop	EB	-	-	-	-	2.2	A	2.9	A
		WB	-	-	-	-	2.2	A		
		NB	2.9	A	1.9	A	1.7	A		
		SB	0.8	A	0.6	A	-	-		

TABLE 17: LONG-TERM (2045) SCENARIO 1 PM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	39.4	D	20.7	C	25.6	C
		WB	88.2	F	5.8	A	-	-		
		NB	-	-	-	-	-	-		
		SB	29.5	C	0.0	A	10.3	B		
US 52 NB Ramps & CSAH 42	Signal	EB	19.9	B	4.3	A	-	-	28.0	C
		WB	-	-	67.6	E	22.9	C		
		NB	43.0	D	76.0	E	5.9	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	8.1	A	1.5	A	-	-	30.9	D
		WB	-	-	1.6	A	0.1	A		
		NB	-	-	-	-	-	-		
		SB	30.9	D	-	-	7.3	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	1.0	A	-	-	5.0	A
		WB	-	-	1.5	A	1.2	A		
		NB	-	-	-	-	-	-		
		SB	5.0	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	41.7	D	1.4	A	13.0	B	13.7	B
		WB	-	-	-	-	-	-		
		NB	47.6	D	2.4	A	-	-		
		SB	-	-	10.3	B	2.9	A		
CSAH 42 & Blaine Avenue	Signal	EB	44.5	D	16.6	B	2.9	A	23.1	C
		WB	50.2	D	29.4	C	18.1	B		
		NB	23.0	C	16.6	B	12.6	B		
		SB	28.1	C	21.0	C	17.6	B		
CSAH 42 & Driver Avenue	Side Street Stop	EB	6.7	A	2.4	A	-	-	17.5	C
		WB	-	-	4.7	A	4.0	A		
		NB	-	-	-	-	-	-		
		SB	17.5	C	-	-	11.1	B		
CSAH 42 & South Access	Side Street Stop	EB	7.5	A	5.0	A	3.9	A	9.8	A
		WB	7.4	A	4.5	A	4.1	A		
		NB	8.1	A	-	-	3.3	A		
		SB	9.8	A	-	-	7.4	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	4.0	A	0.9	A	0.4	A	9.4	A
		WB	4.0	A	0.7	A	0.5	A		
		NB	8.8	A	7.1	A	7.1	A		
		SB	8.8	A	9.4	A	7.2	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	6.8	A	7.1	A
		WB	7.1	A	-	-	6.0	A		
		NB	5.9	A	3.0	A	2.8	A		
		SB	3.5	A	0.3	A	-	-		

Under Long-Term (2045) Scenario 1 Mitigated Conditions, all intersection movements are anticipated to operate at an acceptable LOS except for the following:

- **CSAH 42 & US Highway 52 Southbound Ramps** – the westbound left turn is expected to operate at LOS F during the AM & PM peak hours. This is not atypical of a movement which is opposed by a high-volume movement (eastbound through) at a busy intersection. The operations of this movement are in-line with the Long-Term (2045) No-Build scenario.

- **CSAH 42 & US Highway 52 Northbound Ramps** – the northbound and westbound through movements are anticipated to operate at LOS E during the PM peak hour. The northbound through movement sees a volume of under 10 vehicles during this hour, but the westbound through movement is a critical one. The operations of this movement are due to the very high number of eastbound left turns that are anticipated. Even with dual eastbound left turn lanes, this movement requires a significant portion of each signal cycle which causes worse operations for the westbound through movement. The proposed cloverleaf interchange would solve this issue completely and is something that could be considered, depending on how traffic volumes develop in the area. If the current diamond interchange is maintained, the options for improving these operations are slim. Most likely, it would involve a third westbound through lane which is likely not necessary given the westbound volumes at this intersection. No mitigation at this intersection is recommended if the diamond interchange is maintained.

- **CSAH 42 & South Access** – install a side street stop control. Add turn lanes for the eastbound left, westbound right, and southbound left movements.

The Scenario 1 Mitigation Plan is shown in **Exhibit 12**. The 95th percentile queues were reviewed at the study intersections. There are no queuing issues at the study intersections in the Long-Term (2045) Scenario 1 Mitigated conditions. It should be noted, the existing eastbound left turn lane for the southern site access provides adequate storage capacity.

5.8 SHORT-TERM (2027) SCENARIO 2 LEVEL OF SERVICE ANALYSIS

A capacity analysis was conducted for the Short-Term (2027) Scenario 2 conditions at the study intersections to determine improvements needed to maintain acceptable operations. The Short-Term (2027) background improvements shown in **Exhibit 4** and listed below are included in the model with no other modifications to the geometry or intersection control assumed for this scenario.

- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 southbound ramps.
- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 northbound ramps
- Installation of a traffic signal at the intersection of CSAH 42 & Blaine Avenue
- Add separated northbound and southbound left and right turn lanes and an eastbound right turn lane at CSAH 42 & Blaine Avenue.
- Install stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane.

The analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes provided in **Exhibit 13**.

Tables 18 & 19 provide a summary of the capacity analysis at the study intersections. The full SimTraffic reports are included in **Appendix D.**

TABLE 18: SHORT-TERM (2027) SCENARIO 2 AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	100+	F	100+	F	100+	F
		WB	91.4	F	5.0	A	-	-		
		NB	-	-	-	-	-	-		
		SB	100+	F	37.0	D	26.4	C		
US 52 NB Ramps & CSAH 42	Signal	EB	26.3	C	61.5	E	-	-	74.0	E
		WB	-	-	37.3	D	11.8	B		
		NB	100+	F	-	-	100+	F		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	45.4	E	55.8	F	-	-	100+	F
		WB	-	-	0.5	A	0.0	A		
		NB	-	-	-	-	-	-		
		SB	100+	F	-	-	100+	F		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.5	A	-	-	5.0	A
		WB	-	-	1.0	A	1.1	A		
		NB	-	-	-	-	-	-		
		SB	5.0	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	41.8	D	0.7	A	5.0	A	7.2	A
		WB	-	-	-	-	-	-		
		NB	14.3	B	3.9	A	-	-		
		SB	-	-	4.3	A	2.4	A		
CSAH 42 & Blaine Avenue	Signal	EB	40.7	D	8.7	A	2.3	A	13.3	B
		WB	51.4	D	15.9	B	11.2	B		
		NB	-	-	17.1	B	9.2	A		
		SB	30.4	C	26.9	C	3.5	A		
CSAH 42 & Driver Avenue	Side Street Stop	EB	63.9	F	49.3	E	-	-	100+	F
		WB	-	-	5.1	A	2.7	A		
		NB	-	-	-	-	-	-		
		SB	100+	F	-	-	100+	F		
CSAH 42 & South Access	Side Street Stop	EB	17.2	C	20.5	C	18.5	C	100+	F
		WB	8.8	A	4.8	A	2.0	A		
		NB	100+	F	-	-	100+	F		
		SB	100+	F	-	-	100+	F		
CSAH 42 & Emery Avenue	Side Street Stop	EB	3.9	A	3.6	A	0.5	A	15.6	C
		WB	1.5	A	2.0	A	0.3	A		
		NB	8.8	A	11.0	A	1.4	A		
		SB	9.5	A	15.6	A	3.4	A		
Blaine Avenue & 140th Street / Connemara Trail	Side Street Stop	EB	-	-	-	-	2.0	A	2.9	A
		WB	-	-	-	-	2.1	A		
		NB	2.9	A	2.1	A	1.8	A		
		SB	0.4	A	0.4	A	-	-		

TABLE 19: SHORT-TERM (2027) SCENARIO 2 PM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	100+	F	100+	F	100+	F
		WB	100+	F	6.1	A	-	-		
		NB	-	-	-	-	-	-		
		SB	100+	F	52.7	D	10.5	B		
US 52 NB Ramps & CSAH 42	Signal	EB	41.7	D	6.1	A	-	-	79.2	E
		WB	-	-	100+	F	100+	F		
		NB	100+	F	100+	F	32.7	C		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Side Street Stop	EB	7.4	A	2.8	A	-	-	100+	F
		WB	-	-	100+	F	34.9	D		
		NB	-	-	-	-	-	-		
		SB	100+	F	-	-	100+	F		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	1.6	A	-	-	8.7	A
		WB	-	-	1.1	A	0.9	A		
		NB	-	-	-	-	-	-		
		SB	8.7	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	41.3	D	2.0	A	24.8	C	22.1	C
		WB	-	-	-	-	-	-		
		NB	26.1	C	5.9	A	-	-		
		SB	-	-	24.2	C	6.6	A		
CSAH 42 & Blaine Avenue	Signal	EB	39.9	D	55.2	E	4.1	A	54.4	D
		WB	-	-	19.3	B	13.5	B		
		NB	66.3	E	100+	F	100+	F		
		SB	100+	F	100+	F	100+	F		
CSAH 42 & Driver Avenue	Side Street Stop	EB	15.3	C	2.9	A	-	-	100+	F
		WB	-	-	100+	F	100+	F		
		NB	-	-	-	-	-	-		
		SB	100+	F	-	-	100+	F		
CSAH 42 & South Access	Side Street Stop	EB	8.9	A	6.2	A	4.6	A	100+	F
		WB	100+	F	100+	F	100+	F		
		NB	100+	F	-	-	100+	F		
		SB	100+	F	-	-	100+	F		
CSAH 42 & Emery Avenue	Side Street Stop	EB	4.4	A	1.0	A	0.3	A	34.8	D
		WB	3.3	A	8.7	A	3.3	A		
		NB	21.1	A	7.4	A	15.9	A		
		SB	22.7	A	34.8	A	21.8	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	12.6	B	12.6	B
		WB	7.1	A	-	-	5.9	A		
		NB	5.8	A	2.6	A	2.2	A		
		SB	3.7	A	4.4	A	-	-		

Under Short-Term (2027) Scenario 2 Mitigated Conditions, the network is anticipated to see significantly worsened traffic operations due to the very high amounts of peak hour traffic which are anticipated. The following intersections are anticipated to operate unacceptably:

- CSAH 42 & US Highway 52 Southbound Ramps
- CSAH 42 & US Highway 52 Northbound Ramps
- CSAH 42 & Conley Avenue
- CSAH 42 & Driver Avenue
- CSAH 42 & South Site Access

Major mitigation changes are needed in order to facilitate acceptable traffic operations with Short-Term (2027) Scenario 2 conditions traffic volume.

For the purpose of determining necessary mitigation changes to the network, it was assumed that the existing diamond interchange will be maintained. If this level of traffic volumes were to be realized, it would be worth analyzing the operations of the network with a cloverleaf interchange at the US 52 & CSAH 42 intersections further as it would likely see better operations than the diamond interchange.

The following mitigations are proposed to maintain acceptable operations under the Short-Term (2027) Scenario 2 conditions:

- **CSAH 42 & US Highway 52 Southbound Ramps** – add an additional southbound left turn lane (2-total) and westbound left turn lane (2-total).
- **CSAH 42 & US Highway 52 Northbound Ramps** – add an additional eastbound left turn lane (2-total) and westbound right turn lane (2-total). This would require the addition of another receiving lane on the ramp to US Highway 52 northbound which would then merge down to one lane before reaching the highway. Redo the northbound right turn lane as a channelized right turn lane with free movement into an additional lane.
- **CSAH 42 & Conley Avenue** – install a signal. Add an additional eastbound through lane (3-total).
- **CSAH 42 & Driver Avenue** – install a signal. Restripe the inner eastbound through lane as a left turn lane, while maintaining the existing left turn lane (2-total turn lanes). Add a through lane for westbound direction (fed by the channelized turn at the Proposed South Access) and continue the added eastbound through lane past this intersection (2 through lanes per direction in total). Separate the southbound approach into three (3) lanes, with two right turn lanes and one left turn lane.
    - Regarding the proposed addition of a through lane, CSAH 42 east of Driver Avenue is anticipated to see 47% of the daily site traffic, equating to an increase of about 12,000 daily trips. With the existing ADT here being just under 6,000 and factoring in the growth anticipated from other developments along the corridor, the roadway is anticipated to meet the county's minimum ADT guidelines for 4-lane divided roadways of 18,000 vpd.
- **CSAH 42 & Proposed South Access** – install a signal. Add an eastbound left turn lane and restripe the inner through lane to be an additional left turn lane (2-total). Install a westbound right turn lane (1-total). Install a separate, channelized southbound right turn lane with free movement into a new lane.

- **CSAH 42 & Emery Avenue** – install an eastbound left turn lane, westbound right turn lane, and southbound right turn lane (1 of each, in total).

5.9 SHORT-TERM (2027) SCENARIO 2 WITH MITIGATION LEVEL OF SERVICE ANALYSIS

A capacity analysis was conducted for the Short-Term (2027) Scenario 2 with Mitigation conditions at the study intersections to determine improvements needed to maintain acceptable operations. The Short-Term (2027) Scenario 2 mitigation improvements shown in **Exhibit 14** and listed above were included in the model with no other modifications to the geometry or intersection control assumed for this scenario.

The analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes provided in **Exhibit 13**.

Tables 20 & 21 provide a summary of the capacity analysis at the study intersections. The full SimTraffic reports are included in **Appendix D.**

TABLE 20: SHORT-TERM (2027) SCENARIO 2 MITIGATED AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	59.9	E	19.2	B	47.6	D
		WB	81.8	F	5.5	A	-	-		
		NB	-	-	-	-	-	-		
		SB	61.6	E	65.6	E	25.8	C		
US 52 NB Ramps & CSAH 42	Signal	EB	22.3	C	18.2	B	-	-	22.9	C
		WB	-	-	58.0	E	20.4	C		
		NB	48.6	D	-	-	6.7	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Signal	EB	34.4	C	19.8	B	-	-	19.0	B
		WB	-	-	16.1	B	2.8	A		
		NB	-	-	-	-	-	-		
		SB	45.1	D	-	-	7.4	A		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.6	A	-	-	7.0	A
		WB	-	-	1.5	A	1.6	A		
		NB	-	-	-	-	-	-		
		SB	7.0	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	40.5	D	1.1	A	6.1	A	15.3	B
		WB	-	-	-	-	-	-		
		NB	36.2	D	4.7	A	-	-		
		SB	-	-	13.7	B	8.0	A		
CSAH 42 & Blaine Avenue	Signal	EB	42.7	D	8.8	A	2.6	A	14.4	B
		WB	49.6	D	16.8	B	11.6	B		
		NB	-	-	-	-	8.9	A		
		SB	27.4	C	43.5	D	4.6	A		
CSAH 42 & Driver Avenue	Signal	EB	63.4	E	27.0	C	-	-	44.1	D
		WB	-	-	60.1	E	25.1	C		
		NB	-	-	-	-	-	-		
		SB	36.7	D	-	-	6.0	A		
CSAH 42 & South Access	Signal	EB	54.4	D	24.2	C	23.6	C	39.3	D
		WB	48.3	D	42.1	D	13.2	B		
		NB	29.5	C	-	-	11.3	B		
		SB	36.7	D	-	-	1.9	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	9.0	A	2.9	A	1.0	A	26.1	D
		WB	1.1	A	1.6	A	0.4	A		
		NB	18.6	A	26.1	A	4.5	A		
		SB	19.3	A	18.3	A	3.7	A		
Blaine Avenue & 140th Street / Connemara Trail	Side Street Stop	EB	-	-	-	-	2.1	A	2.7	A
		WB	-	-	-	-	2.1	A		
		NB	2.7	A	1.9	A	1.4	A		
		SB	0.4	A	0.4	A	-	-		

TABLE 21: SHORT-TERM (2027) SCENARIO 2 MITIGATED PM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	28.3	C	12.4	B	26.4	C
		WB	67.4	E	11.3	B	-	-		
		NB	-	-	-	-	-	-		
		SB	49.7	D	53.2	D	11.1	B		
US 52 NB Ramps & CSAH 42	Signal	EB	50.9	D	3.7	A	-	-	32.1	C
		WB	-	-	34.7	C	34.5	C		
		NB	52.1	D	71.3	E	4.7	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Signal	EB	76.1	E	4.1	A	-	-	23.2	C
		WB	-	-	28.7	C	13.9	B		
		NB	-	-	-	-	-	-		
		SB	41.6	D	-	-	39.9	D		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	1.9	A	-	-	12.1	B
		WB	-	-	1.4	A	1.0	A		
		NB	-	-	-	-	-	-		
		SB	12.1	B	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	42.1	D	2.6	A	30.2	C	29.4	C
		WB	-	-	-	-	-	-		
		NB	50.2	D	6.3	A	-	-		
		SB	-	-	32.7	C	7.6	A		
CSAH 42 & Blaine Avenue	Signal	EB	66.4	E	11.9	B	4.7	A	19.8	B
		WB	-	-	24.3	C	17.7	B		
		NB	17.2	B	13.7	B	8.7	A		
		SB	22.6	C	27.9	C	13.4	B		
CSAH 42 & Driver Avenue	Signal	EB	44.6	D	16.0	B	-	-	30.3	C
		WB	-	-	39.8	D	15.7	B		
		NB	-	-	-	-	-	-		
		SB	40.9	D	-	-	21.1	C		
CSAH 42 & South Access	Signal	EB	16.2	B	15.4	B	10.4	B	15.0	B
		WB	33.3	C	33.9	C	9.4	A		
		NB	8.7	A	-	-	4.0	A		
		SB	12.3	B	-	-	4.1	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	4.1	A	0.6	A	0.5	A	12.1	B
		WB	4.1	A	0.7	A	0.4	A		
		NB	10.8	A	11.6	A	7.6	A		
		SB	12.1	A	9.0	A	7.9	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	6.4	A	6.4	A
		WB	-	-	-	-	6.1	A		
		NB	5.8	A	2.9	A	2.6	A		
		SB	4.1	A	0.2	A	-	-		

With the mitigations in place, the Short-Term (2027) Scenario 2 is anticipated to operate under generally acceptable conditions, with all intersections operating at LOS D or better. Some movements are still anticipated to operate at LOS E or F, most notably the eastbound through movement at CSAH 42 & US Highway 52 Southbound ramp and the westbound through movement at CSAH 42 & US Highway 52 Northbound ramp. The operations are unlikely to get much better with further mitigation under the current diamond configuration of the Highway 52 ramps because the intersections have very high traffic levels.

The 95th percentile queues were reviewed at the study intersections. The 95th percentile queues for the movements that exceed their storage capacity or have undesirable levels of delay are listed below.

- **CSAH 42 & US Highway 52 Southbound Ramps** – the southbound left turn movement at capacity in the AM peak hour. These queues are not anticipated to effect US Highway 52 traffic in any way.

5.10 LONG-TERM (2045) SCENARIO 2 WITH MITIGATION LEVEL OF SERVICE ANALYSIS

A capacity analysis was conducted for the Long-Term (2045) Scenario 2 with Mitigation conditions at the study intersections to determine improvements needed to maintain acceptable operations. It was assumed that all mitigation from 2027 would be in place for the 2045 scenario (see **Exhibit 15**). The full list of geometry and signal control changes to the study intersections included in the Horizon Year (2045) Scenario 2 Build condition is shown below.

- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 southbound ramps.
- Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 northbound ramps
- Installation of a traffic signal at the intersection of CSAH 42 & Blaine Avenue
- Addition of separated northbound and southbound left and right turn lanes and an eastbound right turn lane at CSAH 42 & Blaine Avenue.
- Installation of stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane.
- Installation of an additional southbound left turn lane at CSAH 42 & Blaine Avenue (Rosemount Industrial AUAR mitigation)
- Installation of an additional through lane for each direction along Minnesota 55 (northbound/southbound).
- Installation of an additional eastbound left turn lane at CSAH 42 & US Highway 52 northbound ramps.
- Installation of side street stop control at the site access along CSAH 42.
- Installation of a traffic signal at the intersection of CSAH 42 & Conley Avenue. Additionally, install an additional eastbound through lane.
- Installation of a traffic signal at the intersection of CSAH 42 & Driver Avenue. Additionally, install an additional through lane in each direction along CSAH 42, an additional eastbound left turn lane, and two southbound right turn lanes.
- Installation of a traffic signal at the intersection of CSAH 42 & South Access. Additionally, install two eastbound left turn lanes, a westbound right turn lane, and a channelized southbound right turn lane.
- Addition of an eastbound left turn lane, westbound right turn lane, and southbound right turn lane at the intersection of CSAH 42 & Emery Avenue.

- Addition of a second southbound left turn lane and westbound left turn lane at CSAH 42 & US Highway 52 southbound ramps.
- Addition of a second eastbound left turn lane, a second westbound right turn lane, and a channelized northbound right turn lane at CSAH 42 & US Highway 52 northbound ramps.

The analysis was performed for weekday AM and PM peak hours and is based on the traffic volumes provided in **Exhibit 14**.

Tables 22 & 23 provide a summary of the capacity analysis at the study intersections. The full SimTraffic reports are included in **Appendix D.**

TABLE 22: LONG-TERM (2045) SCENARIO 2 MITIGATED AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	100+	F	100+	F	100+	F
		WB	85.0	F	6.5	A	-	-		
		NB	-	-	-	-	-	-		
		SB	59.8	E	51.7	D	26.5	C		
US 52 NB Ramps & CSAH 42	Signal	EB	22.0	C	19.2	B	-	-	25.1	C
		WB	-	-	62.4	E	26.3	C		
		NB	48.7	D	-	-	7.3	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Signal	EB	36.9	D	27.3	C	-	-	26.0	C
		WB	-	-	22.3	C	6.2	A		
		NB	-	-	-	-	-	-		
		SB	41.9	D	-	-	11.2	B		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	0.7	A	-	-	8.2	A
		WB	-	-	1.7	A	1.8	A		
		NB	-	-	-	-	-	-		
		SB	8.2	A	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	40.1	D	1.5	A	5.7	A	15.2	B
		WB	-	-	-	-	-	-		
		NB	34.2	C	2.9	A	-	-		
		SB	-	-	14.8	B	10.9	B		
CSAH 42 & Blaine Avenue	Signal	EB	44.1	D	9.8	A	2.8	A	16.6	B
		WB	100+	F	18.8	B	13.2	B		
		NB	-	-	37.1	D	8.8	A		
		SB	28.5	C	10.6	B	7.4	A		
CSAH 42 & Driver Avenue	Signal	EB	65.6	E	35.3	D	-	-	48.6	D
		WB	-	-	65.6	E	24.5	C		
		NB	-	-	-	-	-	-		
		SB	31.3	C	-	-	6.5	A		
CSAH 42 & South Access	Signal	EB	63.1	E	27.0	C	28.3	C	46.3	D
		WB	60.2	E	53.5	D	17.8	B		
		NB	35.1	D	-	-	11.1	B		
		SB	30.0	C	-	-	1.9	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	12.5	A	3.0	A	1.7	A	41.1	E
		WB	1.4	A	1.7	A	0.3	A		
		NB	28.2	A	18.0	A	2.2	A		
		SB	25.7	A	41.1	A	4.5	A		
Blaine Avenue & 140th Street / Connemara Trail	Side Street Stop	EB	-	-	-	-	2.2	A	3.1	A
		WB	-	-	-	-	2.1	A		
		NB	3.1	A	2.0	A	1.7	A		
		SB	0.7	A	0.4	A	-	-		

TABLE 23: LONG-TERM (2045) SCENARIO 2 PM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
PM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	49.2	D	14.5	B	47.8	D
		WB	67.6	E	12.0	B	-	-		
		NB	-	-	-	-	-	-		
		SB	100+	F	77.9	E	39.1	D		
US 52 NB Ramps & CSAH 42	Signal	EB	97.8	F	4.4	A	-	-	42.6	D
		WB	-	-	36.4	D	35.4	D		
		NB	53.9	D	51.1	D	5.0	A		
		SB	-	-	-	-	-	-		
CSAH 42 & Conley Avenue	Signal	EB	77.7	E	4.5	A	-	-	24.8	C
		WB	-	-	31.4	C	19.0	B		
		NB	-	-	-	-	-	-		
		SB	47.1	D	-	-	40.4	D		
CSAH 42 & 142nd Street	Side Street Stop	EB	-	-	2.0	A	-	-	13.6	B
		WB	-	-	1.6	A	1.1	A		
		NB	-	-	-	-	-	-		
		SB	13.6	B	-	-	-	-		
Minnesota 55 & CSAH 42	Signal	EB	41.9	D	2.5	A	15.4	B	20.8	C
		WB	-	-	-	-	-	-		
		NB	61.4	E	4.8	A	-	-		
		SB	-	-	16.0	B	4.7	A		
CSAH 42 & Blaine Avenue	Signal	EB	100+	F	12.3	B	2.1	A	22.5	C
		WB	47.0	D	27.6	C	20.3	C		
		NB	17.9	B	17.2	B	9.2	A		
		SB	21.1	C	13.1	B	14.8	B		
CSAH 42 & Driver Avenue	Signal	EB	44.9	D	14.0	B	-	-	31.3	C
		WB	-	-	39.3	D	15.9	B		
		NB	-	-	-	-	-	-		
		SB	43.5	D	-	-	26.0	C		
CSAH 42 & South Access	Signal	EB	38.9	D	15.6	B	9.4	A	20.1	C
		WB	41.2	D	41.3	D	10.8	B		
		NB	9.9	A	-	-	2.6	A		
		SB	13.0	B	-	-	5.1	A		
CSAH 42 & Emery Avenue	Side Street Stop	EB	4.5	A	0.6	A	0.4	A	13.2	B
		WB	5.2	A	0.8	A	0.4	A		
		NB	13.2	A	11.9	A	8.2	A		
		SB	12.6	A	12.1	A	8.5	A		
Blaine Avenue & 140th Street	Side Street Stop	EB	-	-	-	-	6.8	A	6.8	A
		WB	0.0	A	-	-	5.9	A		
		NB	5.4	A	2.4	A	2.4	A		
		SB	3.5	A	0.3	A	-	-		

Under Long-Term (2045) Scenario 2 Mitigated Conditions, all intersection movements are anticipated to operate at an acceptable LOS considering their level of traffic except for the intersection of CSAH 42 & US 52 Northbound Ramp which operates at LOS F during the AM peak hour. The eastbound approach in particular operates at LOS F due to high traffic levels. The addition of one more eastbound through lane at this intersection which would serve as storage for a left turn lane at the US 52 Southbound is proposed as the only further mitigation necessary for the network. Results with this mitigation in place were re-analyzed for that intersection during the AM peak hour are shown below in **Table 24**. The proposed mitigation is shown in **Exhibit 15**.

TABLE 24: LONG-TERM (2045) SCENARIO 2 MITIGATED AM PEAK HOUR DELAY AND LOS

Intersection	Control	Approach	Operations by Movement						Overall Intersection	
			Left		Through		Right			
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
AM Peak Hour										
US 52 SB Ramps & CSAH 42	Signal	EB	-	-	66.4	E	14.5	B	51.4	D
		WB	72.3	E	11.9	B	-	-		
		NB	-	-	-	-	-	-		
		SB	100+	F	69.0	E	35.4	D		

With the mitigation implemented, the intersection is anticipated to improve to an overall LOS D. The eastbound through and southbound left movements still see high levels of delay which likely could not be reduced farther without implementation of a cloverleaf interchange.

The 95th percentile queues were reviewed at the study intersections. The 95th percentile queues for the movements that exceed their storage capacity or have undesirable levels of delay are listed below.

- **Minnesota 55 & CSAH 42** – the eastbound right turn movement is at capacity during the PM peak hour.
- **CSAH 42 & US Highway 52 Southbound Ramps** – the southbound left turn movement at capacity in the AM peak hour. These queues are not anticipated to effect US Highway 52 traffic in any way.
- **CSAH 42 & US Highway 52 Northbound Ramps** – the eastbound left turn movement at capacity in the PM peak hour.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The Rich Valley East Industrial AUAR has provided traffic analysis for the Rich Valley East Industrial site, northeast of CSAH 42 & Driver Avenue in Rosemount, MN. No-Build, Scenario 1 Build, and Scenario 2 Build conditions were analyzed for their Short-Term (2027) and Long-Term (2045) traffic impacts. The following provides a summary of the analysis.

6.1 PROJECT TRAFFIC DEVELOPMENT

The Scenario 1 trip generation is anticipated to be 3,933 daily trips, 391 trips during the AM peak hour (301 entering and 90 exiting), and 414 trips during the PM peak hour (116 entering and 298 exiting).

The Scenario 2 trip generation is anticipated to be 25,437 daily trips, 2,970 trips during the AM peak hour (2,538 entering and 402 exiting), and 2,726 trips during the PM peak hour (571 entering and 2,155 exiting).

6.2 SHORT-TERM (2027) NO-BUILD LEVEL OF SERVICE ANALYSIS SUMMARY

A capacity analysis was conducted for 2027 No-Build traffic conditions at the study intersections to determine baseline conditions for the 2027 analysis year. Opening Year mitigation improvements from the RVGC AUAR and Rosemount Industrial AUAR were included in the analysis.

Based on the analysis, all intersections are anticipated to operate at acceptable LOS and there are few queueing issues present. The eastbound left-turn movement at CSAH 42 & Minnesota 55 operates at LOS F in the PM peak hour. During the PM peak hour there are less than ten vehicles making this movement. At CSAH 42 & US Highway 52 Southbound Ramp, the westbound left turn movement is anticipated to operate at LOS F with 90s of delay during both peak hours. This is not unexpected, as there are less than 30 vehicles making this movement during the AM and PM peak hours and there is high eastbound through and southbound left turning traffic which oppose this movement. At CSAH 42 & US Highway 52 Northbound Ramp, the eastbound left turn is anticipated to see queues meet its storage capacity.

6.3 SHORT-TERM (2027) SCENARIO 1 LEVEL OF SERVICE ANALYSIS SUMMARY

2027 Scenario 1 Build traffic conditions were studied with and without mitigation at the study intersections to determine if the additional build project traffic significantly impacts operating conditions of the study intersections and what mitigation measures would be necessary. The first analysis assumed the base geometry and the mitigated analysis utilized the geometry and intersection control from **Table 6,** Condition 6.

Based on the unmitigated analysis, all intersections are still anticipated to operate at an acceptable LOS under Short-Term (2027) Scenario 1 conditions, with some individual movements operating at a less than desirable LOS.

Additionally, the eastbound right turn movement at the intersection of CSAH 42 & Minnesota 55 have 95th percentile queues that extend past the provided storage capacity.

6.4 SHORT-TERM (2027) SCENARIO 2 LEVEL OF SERVICE ANALYSIS SUMMARY

A capacity analysis was performed for 2027 Scenario 2 Build traffic conditions at the study intersections to determine if the additional build project traffic significantly impacts operating conditions of the study intersections and what mitigation measures would be necessary. The analysis utilized the geometry and intersection control from **Exhibit 4**.

Based on the analysis, numerous intersections are anticipated to operate at unacceptable LOS and significant mitigations are required throughout the corridor to ensure acceptable operating conditions.

6.5 LONG-TERM (2045) NO-BUILD LEVEL OF SERVICE ANALYSIS SUMMARY

2045 No-Build traffic conditions were studied with background mitigations at the study intersections to determine the level operations which will result from the background growth and developments after some mitigations are implemented. The background geometry used in the analysis is shown in **Exhibit 4**.

Based on the analysis, all intersection movements are anticipated to operate at an acceptable LOS except for the westbound left turn movement at CSAH 42 & US Highway 52 Southbound Ramps which is anticipated to operate at LOS F during the AM and PM peak hours.

All queues are expected to be within their respective storage capacity.

6.6 LONG-TERM (2045) SCENARIO 1 LEVEL OF SERVICE ANALYSIS SUMMARY

A capacity analysis was performed for 2045 Scenario 1 Build traffic conditions at the study intersections to determine what mitigation measures will be necessary. The mitigated analysis utilized the geometry and intersection control from **Exhibit 12**.

Based on the analysis, all intersections operate at an acceptable LOS during the AM and PM peak hours, with conditions similar to those of the Long-Term (2045) No-Build conditions, but some movements still operate unacceptably.

All queues are expected to be within their respective storage capacity.

6.7 LONG-TERM (2045) SCENARIO 2 LEVEL OF SERVICE ANALYSIS SUMMARY

A capacity analysis was performed for 2045 Scenario 2 Build traffic conditions at the study intersections to determine what mitigation measures will be necessary in addition to the 2027 mitigations to ensure acceptable conditions. The analysis utilized the geometry and control as summarized in **Exhibit 4**.

Based on the mitigated analysis, all intersections operate at an acceptable LOS during the AM and PM peak hours except for the CSAH 42 & US Highway 52 Southbound Ramps which is anticipated to operate at LOS F during the AM peak hour. Some individual movements at other intersections are anticipated to operate unacceptably.

All queues are expected to be within their respective storage capacity.

6.8 LONG-TERM (2045) SCENARIO 2 WITH MITIGATION LEVEL OF SERVICE ANALYSIS SUMMARY

A capacity analysis was performed for 2045 Scenario 2 Build traffic conditions at the intersection of CSAH 42 & US Highway 52 southbound ramps to determine the operations of the intersection during the AM peak hour with added mitigation. The analysis included in the geometry and control all of the mitigations proposed for the Short-Term (2027) Scenario 2 conditions, as summarized in **Exhibit 15**. The intersection was found to operate at LOS D during the AM peak hour.

All queues are expected to be within their respective storage capacity.

6.9 MITIGATION PLAN

The following provides a summary of mitigation improvements that were identified as part of the traffic analysis for the Rich Valley East property. It should be noted that mitigation measures noted in the mitigation plan are only the mitigation measures that are the direct result of the development in addition to the background mitigation. Signal warrant analysis was not included in this report and should instead be analyzed at the time of site development.

Existing (2023) No-Build Conditions

- No Mitigation Necessary

Short-Term (2027) No- Build Conditions

- 2027 background mitigation is sufficient. This includes the following:
  - Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 southbound ramps.
  - Installation of a traffic signal at the intersection of CSAH 42 & US Highway 52 northbound ramps
  - Installation of a traffic signal at the intersection of CSAH 42 & Blaine Avenue
  - Add separated northbound and southbound left and right turn lanes and an eastbound right turn lane at CSAH 42 & Blaine Avenue.
  - Install stop control at the west leg of Blaine Avenue & 140th Street/Connemara Trail. Additionally, install separated northbound and southbound left and right turn lanes and an eastbound right turn lane.

Short-Term (2027) Scenario 1 Conditions (Exhibit 12)

- Short-Term (2027) No-Build mitigations.

Short-Term (2027) Scenario 2 Conditions (Exhibit 15)

- Installation of a traffic signal at the intersection of CSAH 42 & Conley Avenue. Additionally, install an additional eastbound through lane.
- Installation of a traffic signal at the intersection of CSAH 42 & Driver Avenue. Additionally, install an additional through lane in each direction along CSAH 42, an additional eastbound left turn lane, and two southbound right turn lanes.

- Installation of a traffic signal at the intersection of CSAH 42 & South Access. Additionally, install two eastbound left turn lanes, a westbound right turn lane, and a channelized southbound right turn lane.
- Addition of an eastbound left turn lane, westbound right turn lane, and southbound right turn lane at the intersection of CSAH 42 & Emery Avenue.
- Addition of a second southbound left turn lane and westbound left turn lane at CSAH 42 & US Highway 52 southbound ramps.
- Addition of a second eastbound left turn lane, a second westbound right turn lane, and a channelized northbound right turn lane at CSAH 42 & US Highway 52 northbound ramps.

Long-Term (2045) No-Build Conditions

- Install an additional through lane for each direction along Minnesota 55 (northbound/southbound).
- Install an additional eastbound left turn lane at CSAH 42 & US Highway 52 northbound ramps.

Long-Term (2045) Scenario 1 Conditions (Exhibit 12)

- All Modifications from Long-Term (2045) No-Build Conditions

Long-Term (2045) Scenario 2 Conditions (Exhibit 15)

- All modifications from Short-Term (2027) Scenario 2 Conditions and Long-Term (2045) No-Build Conditions
- Extend eastbound left turn lane at CSAH 42 & US Highway 52 northbound ramps through the CSAH 42 & US Highway 52 southbound ramps intersection.

APPENDIX

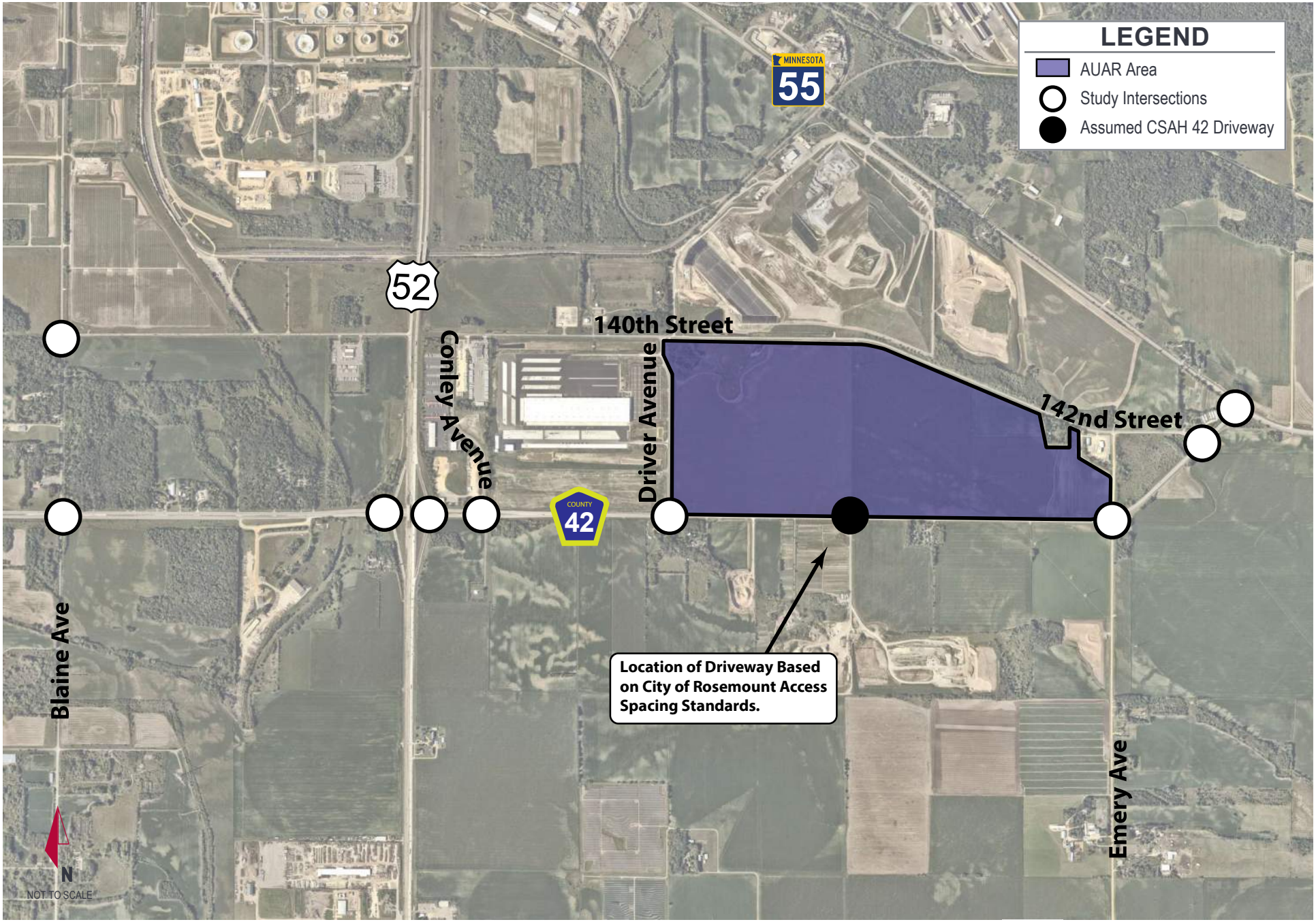
Appendix A: EXHIBITS

Appendix B: TURNING MOVEMENT COUNTS

Appendix C: SITE PLANS

Appendix D: SIMTRAFFIC REPORTS

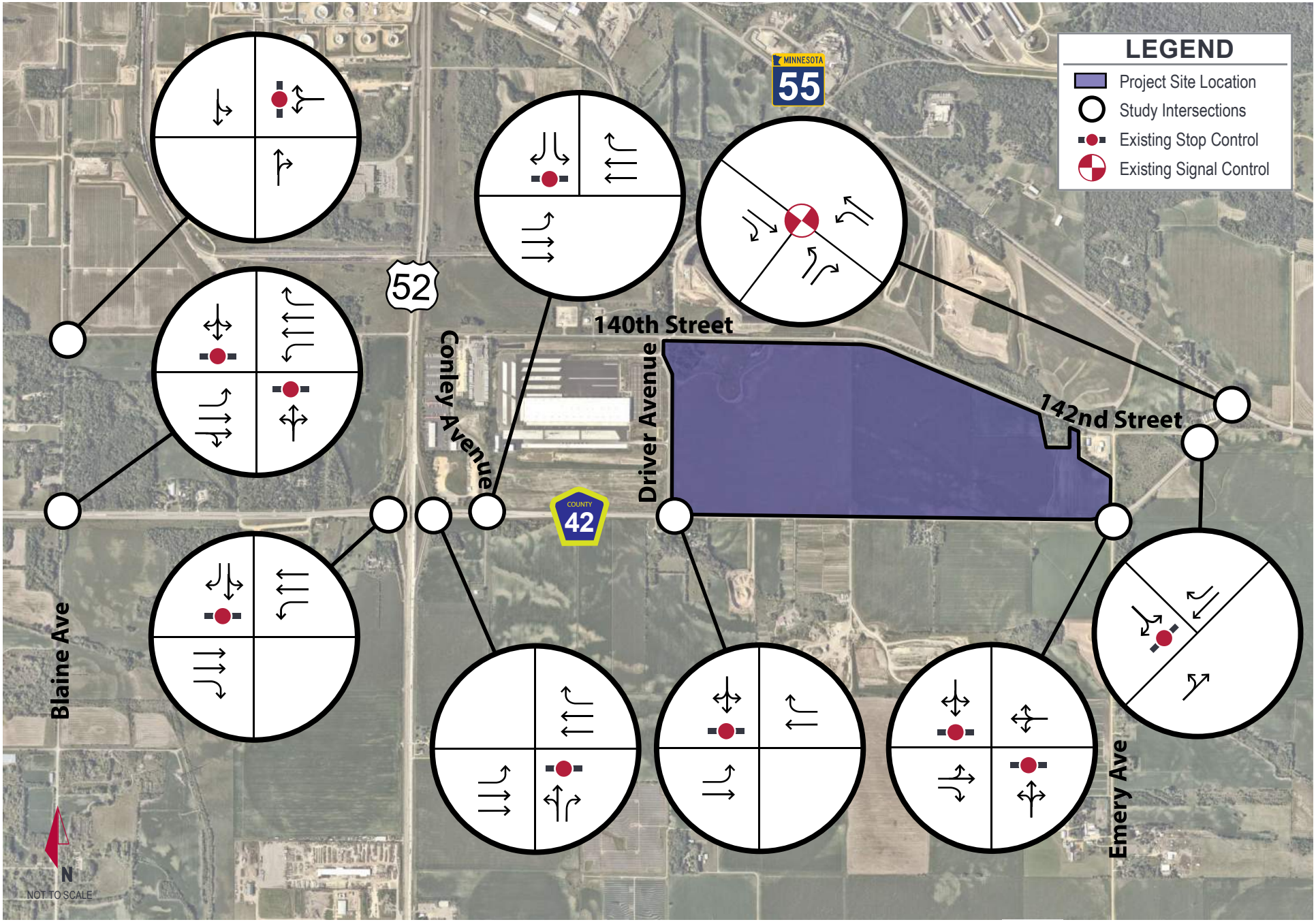
Appendix A: EXHIBITS



Kimley»Horn

EXHIBIT 1

PROJECT SITE LOCATION AND STUDY AREA
ROSEMOUNT, MN

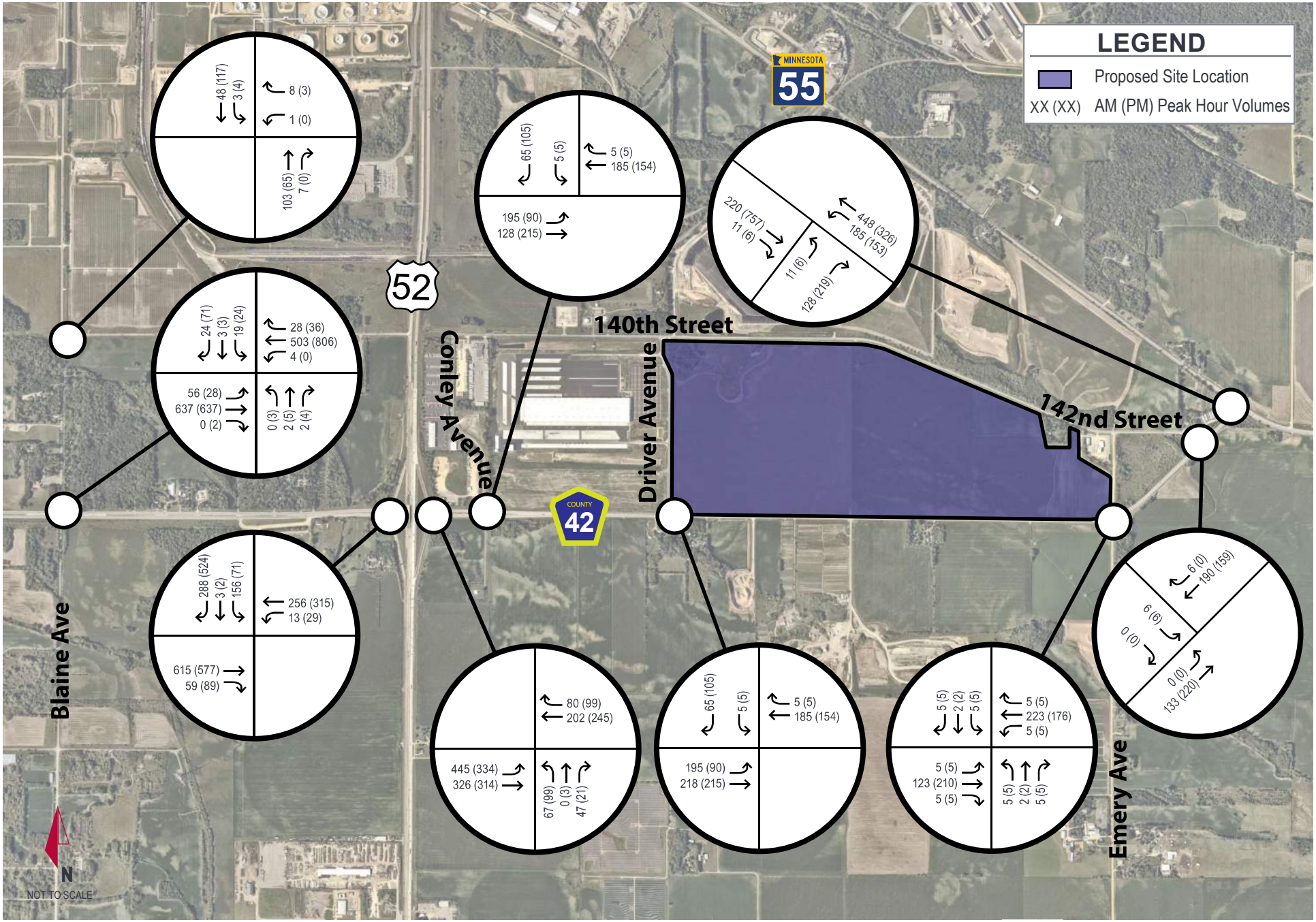


Kimley»Horn

EXHIBIT 2

EXISTING GEOMETRY AND INTERSECTION CONTROL

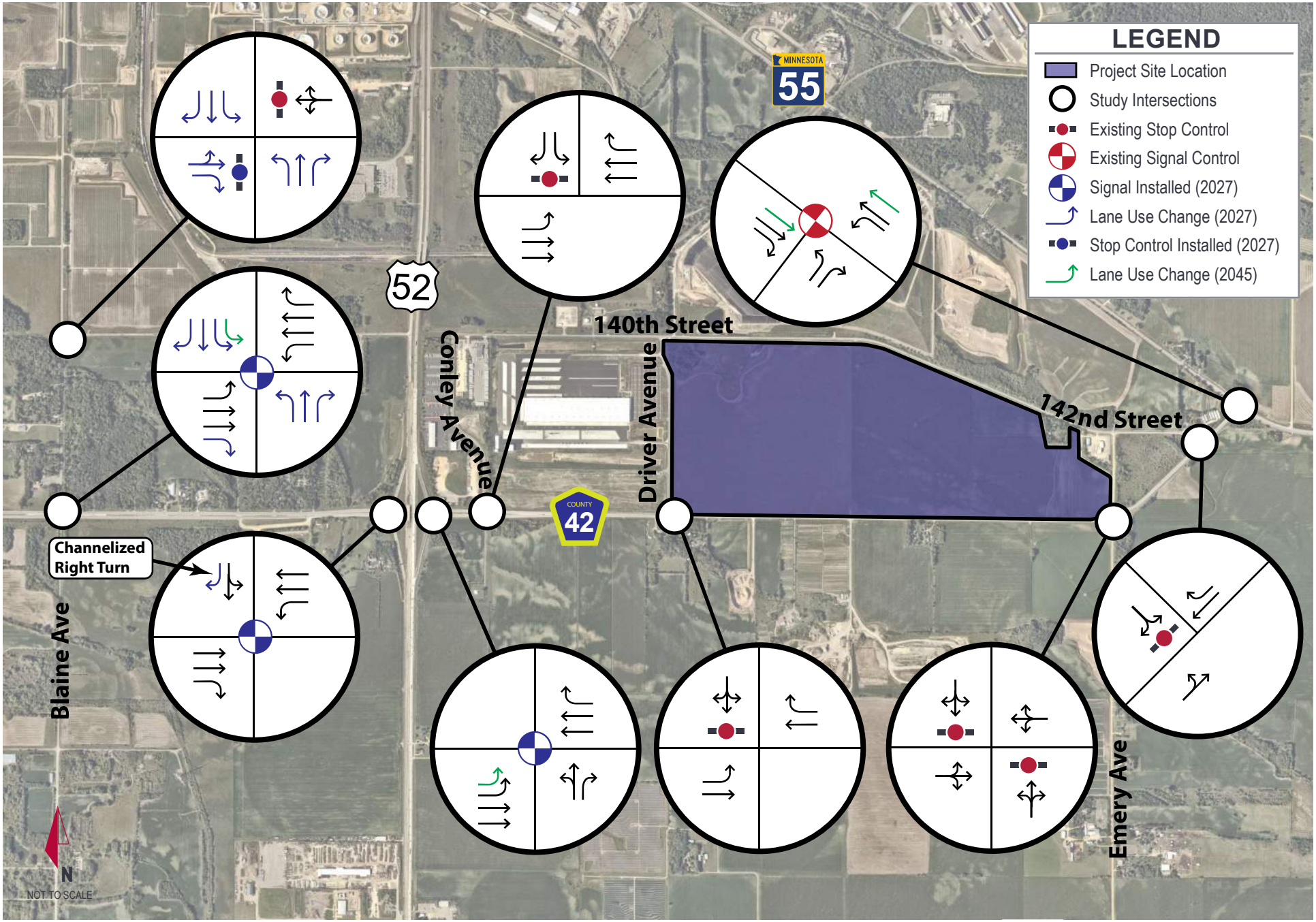
ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 3

EXISTING (2023) PEAK HOUR TRAFFIC VOLUMES
ROSEMOUNT, MN

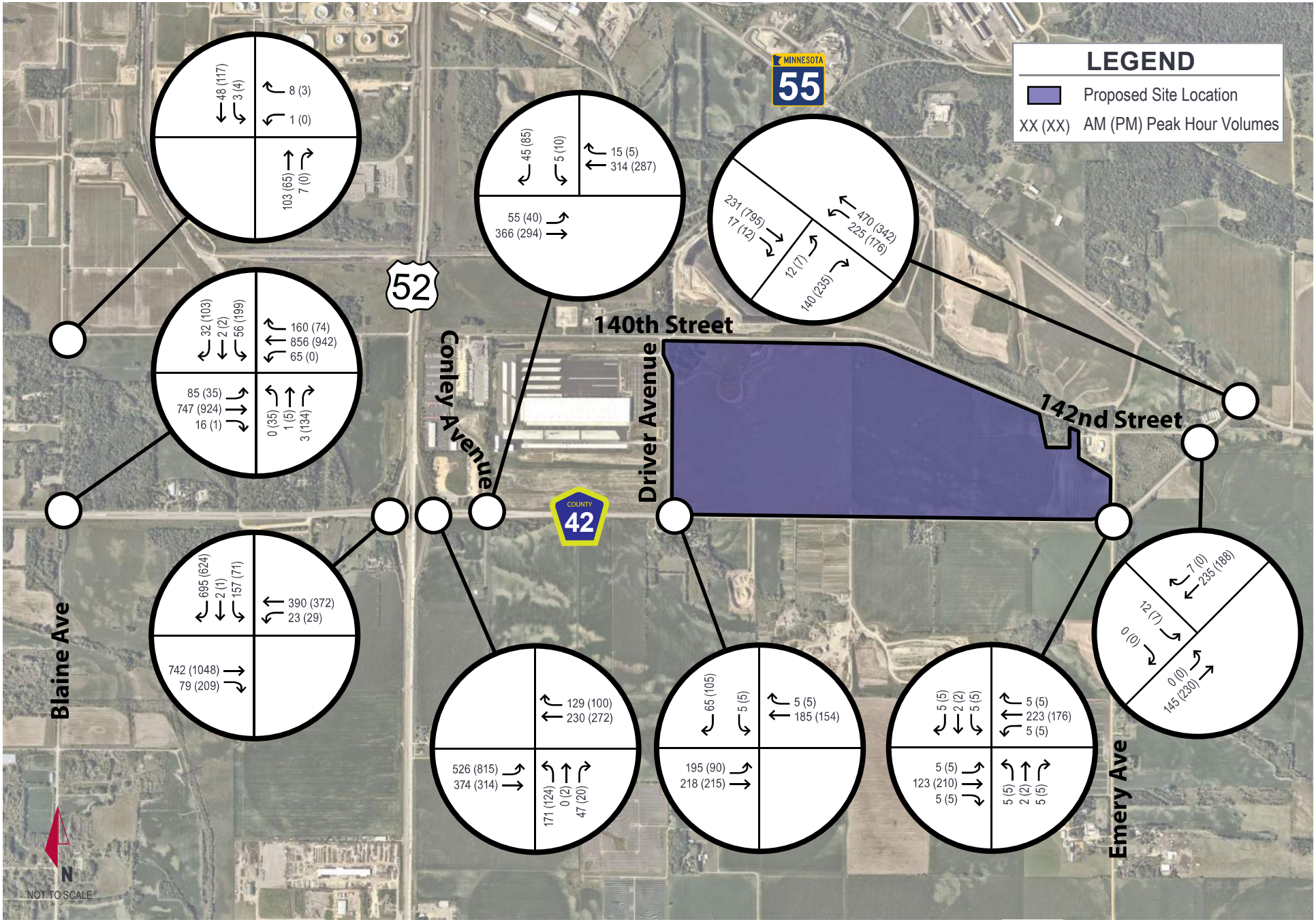


Kimley»Horn

EXHIBIT 4

BACKGROUND GEOMETRY AND INTERSECTION CONTROL CHANGES

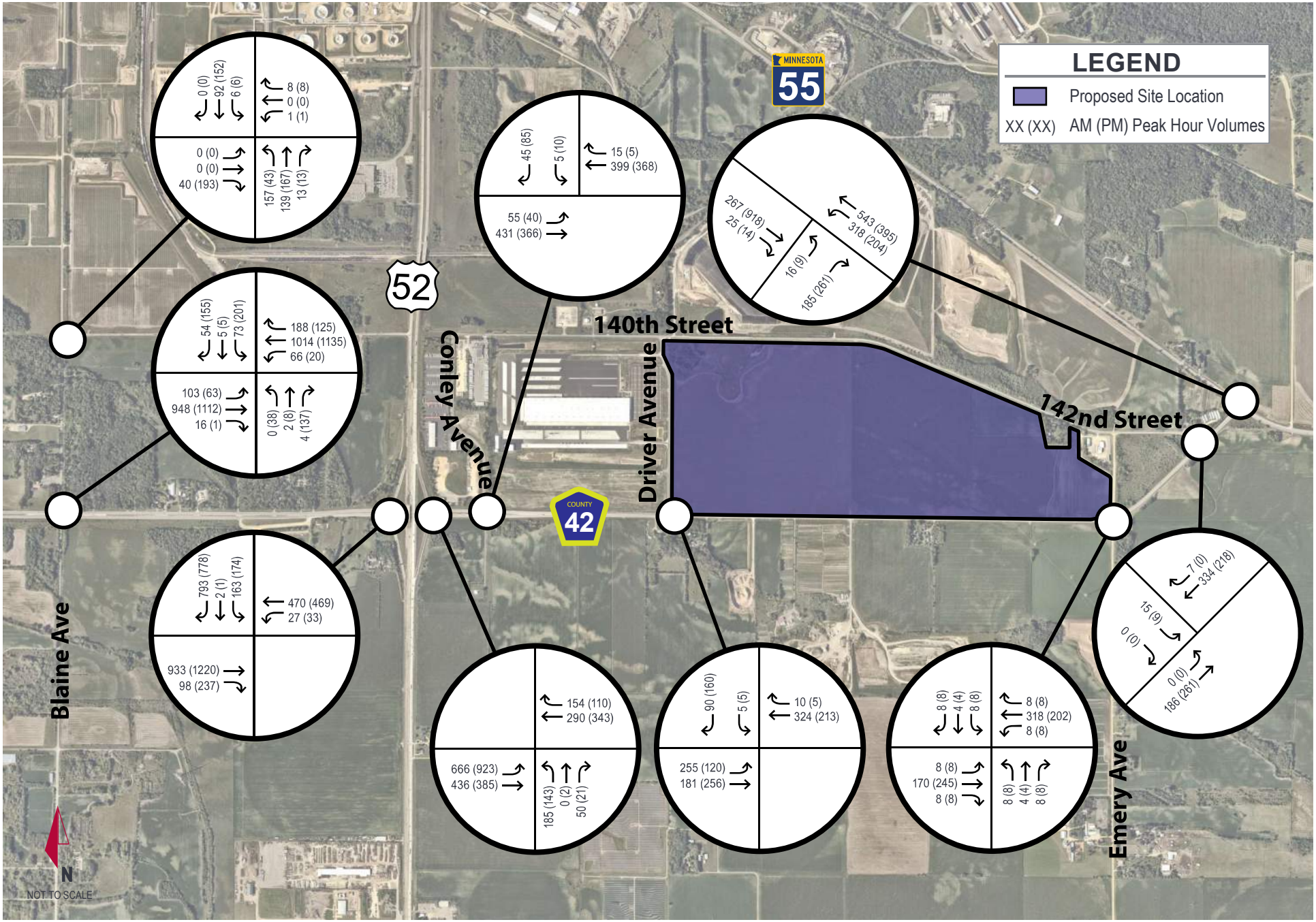
ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 5

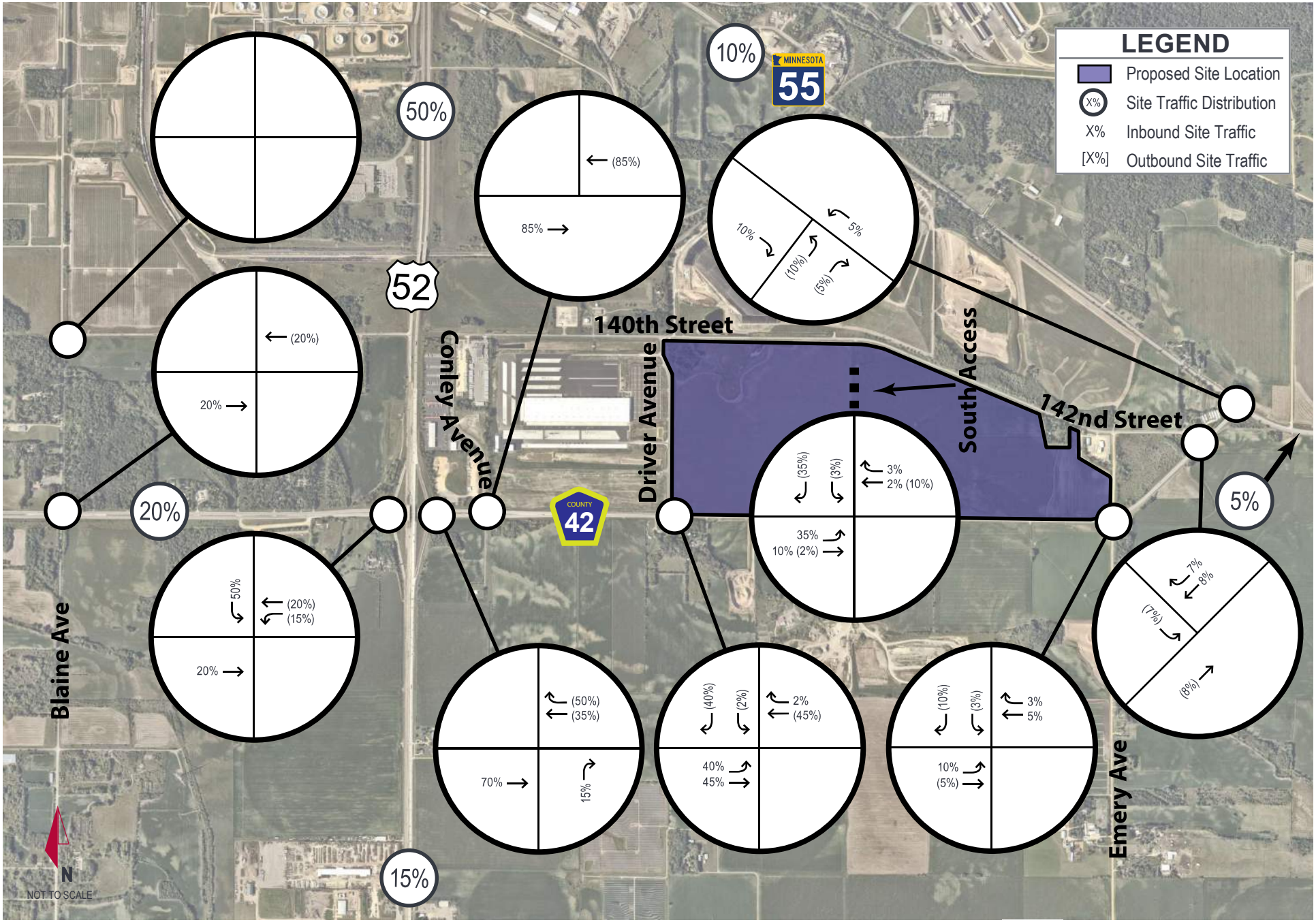
SHORT-TERM (2027) NO-BUILD PEAK HOUR TRAFFIC VOLUMES
ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 6

LONG-TERM (2045) NO-BUILD PEAK HOUR TRAFFIC VOLUMES
ROSEMOUNT, MN

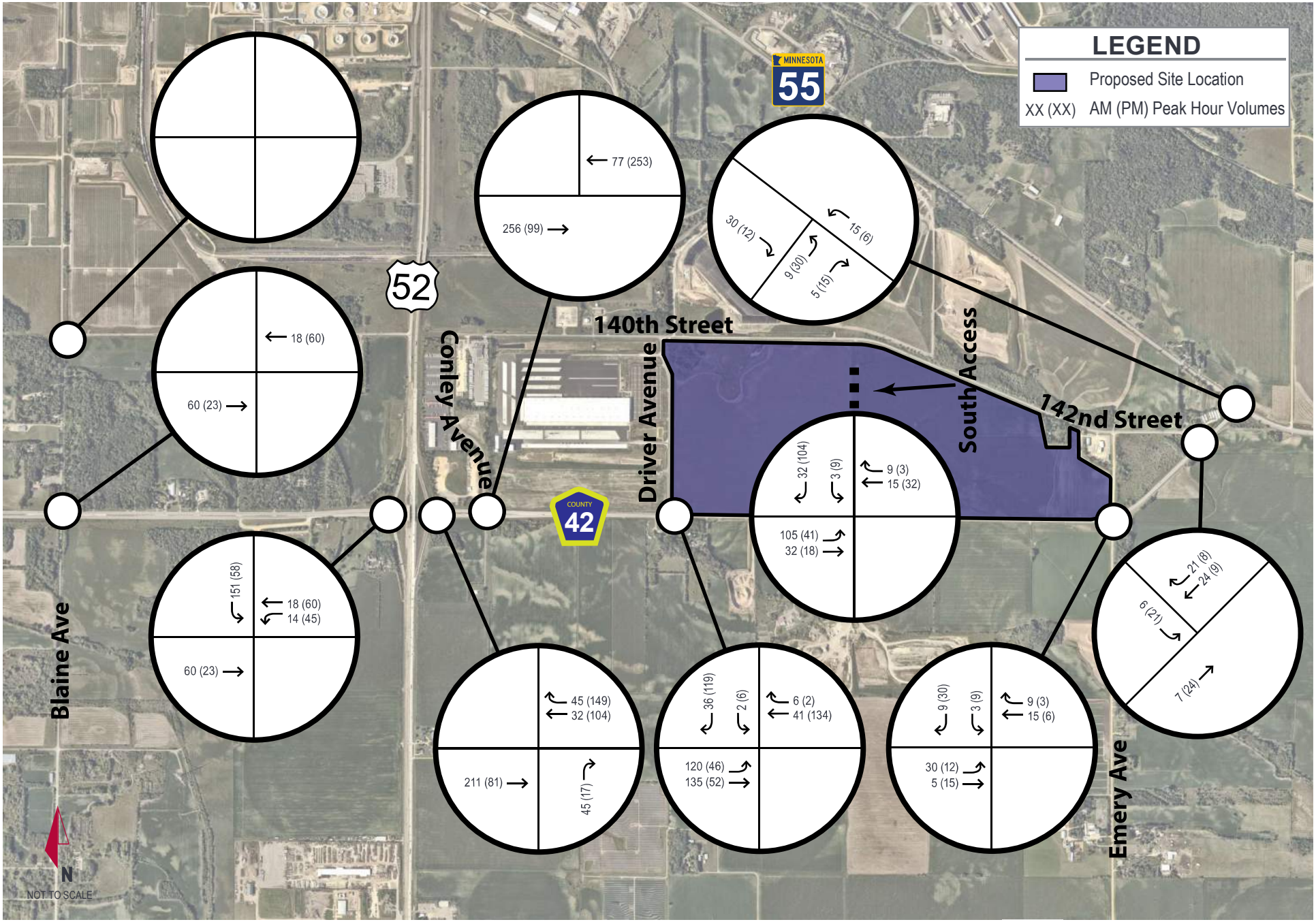


Kimley»Horn

EXHIBIT 7

SITE TRIP DISTRIBUTION

ROSEMOUNT, MN

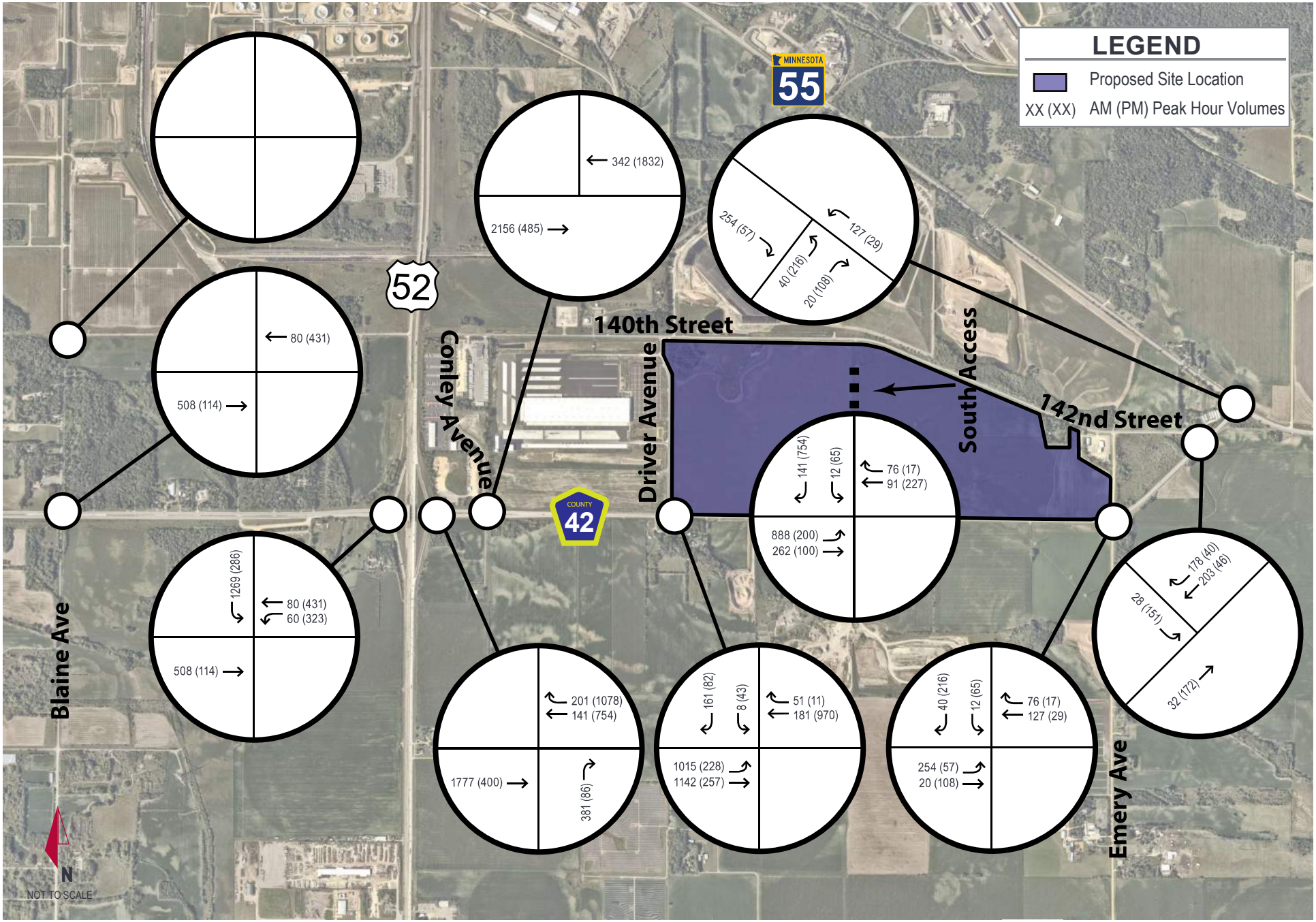


Kimley»Horn

EXHIBIT 8

SCENARIO 1 TRIP ASSIGNMENT

ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 9

SCENARIO 2 TRIP ASSIGNMENT

ROSEMOUNT, MN

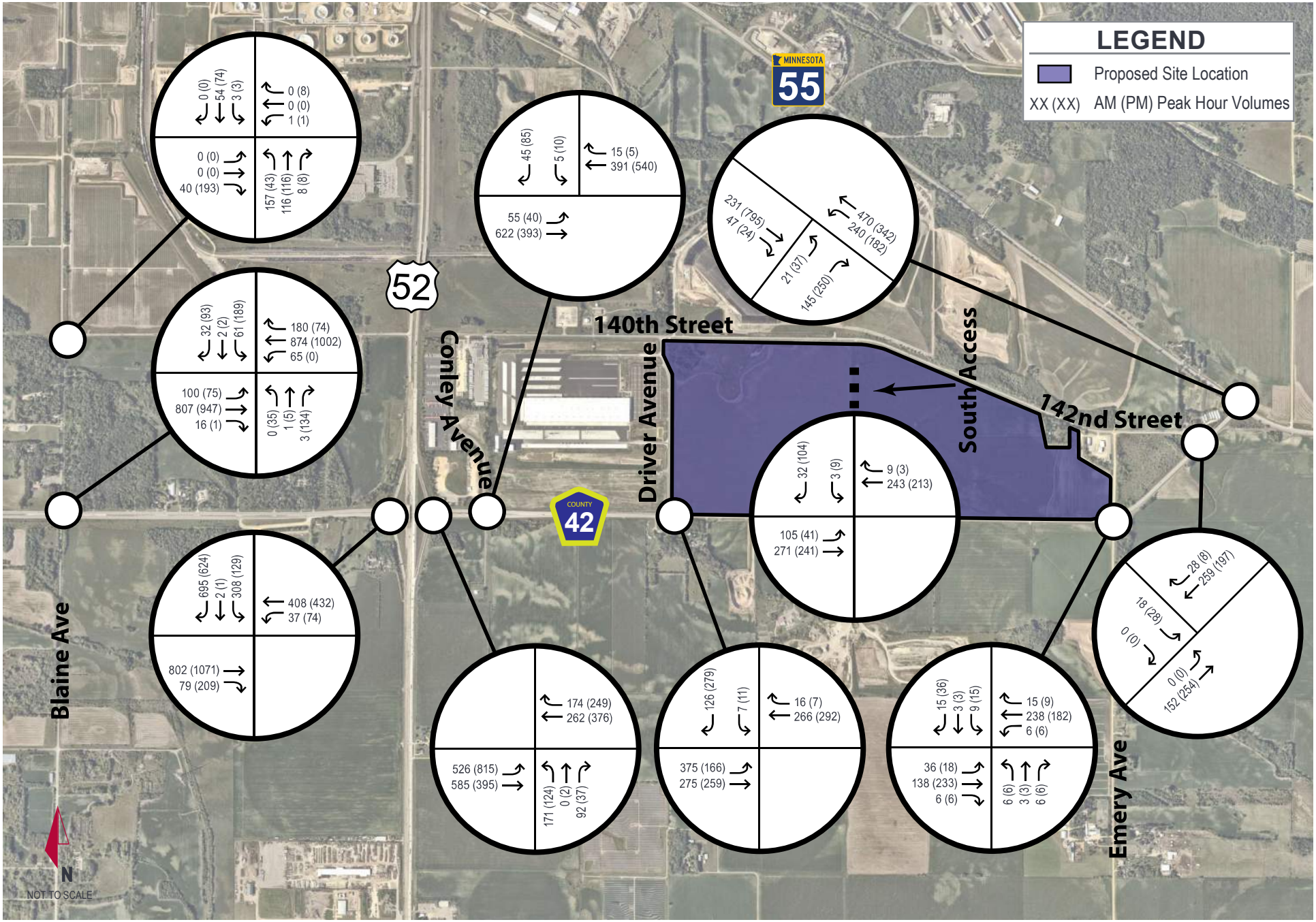


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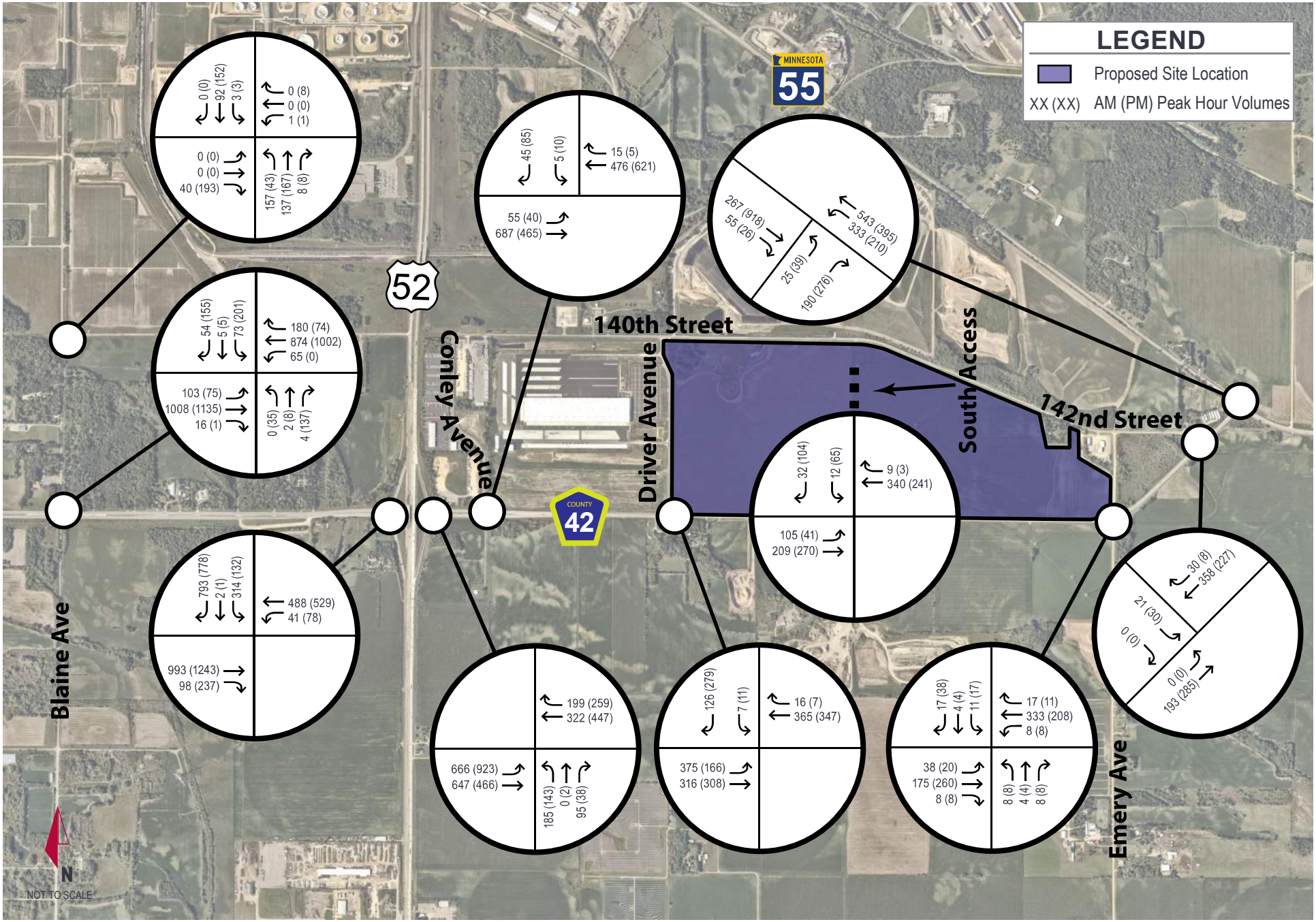
EXHIBIT 10

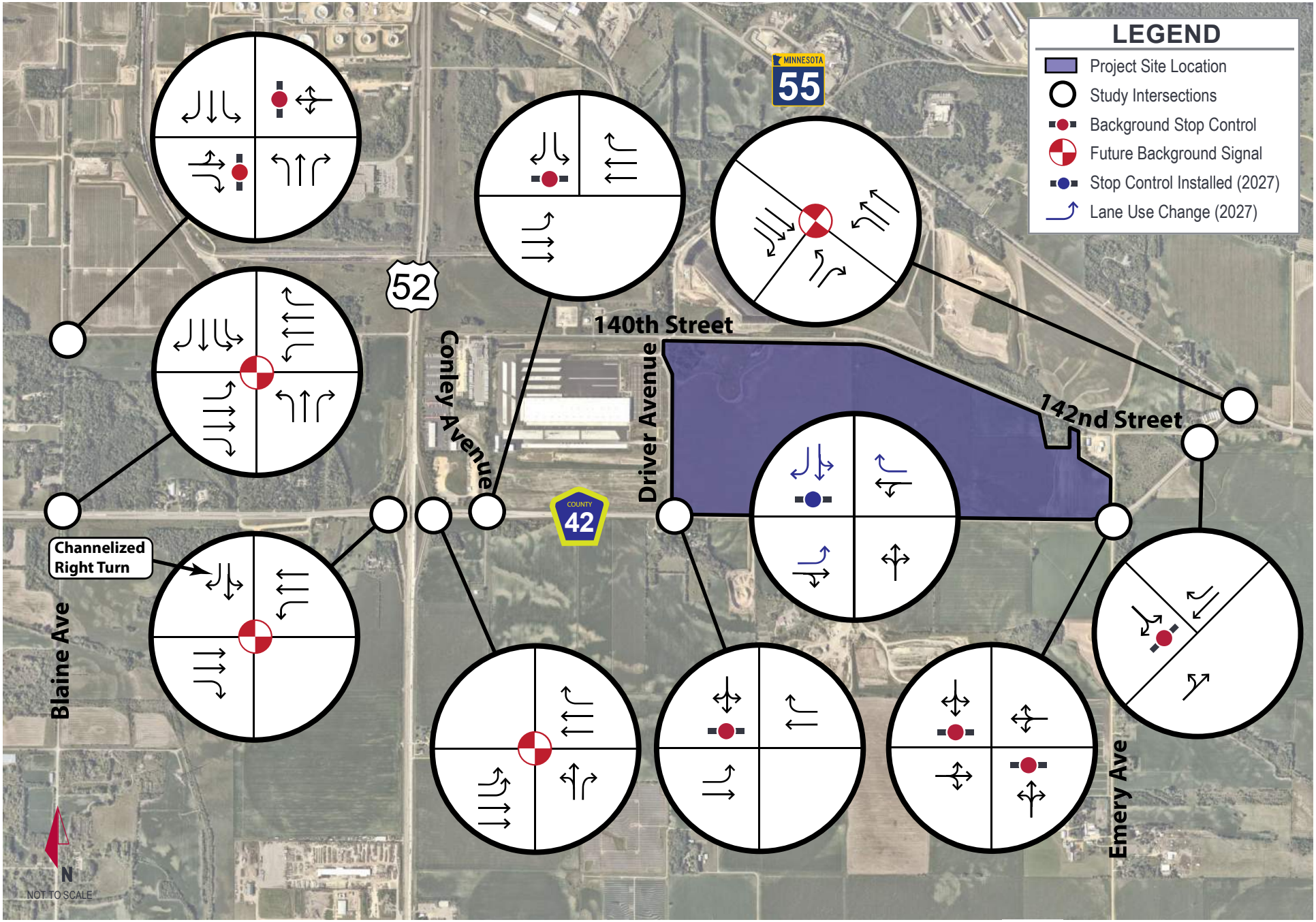
SHORT-TERM (2027) SCENARIO 1 PEAK HOUR TRAFFIC VOLUMES
ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 11

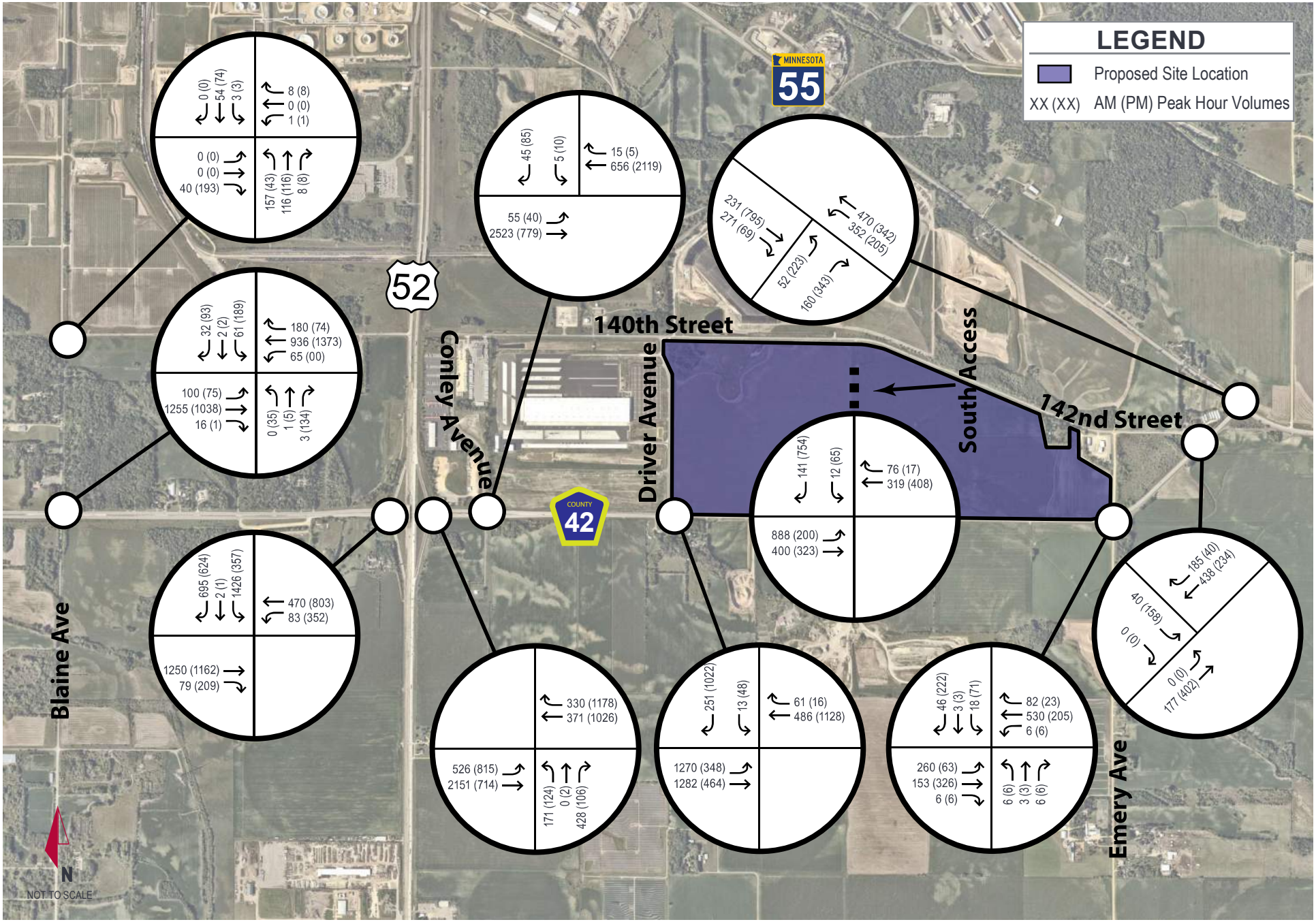
LONG-TERM (2045) SCENARIO 1 PEAK HOUR TRAFFIC VOLUMES
ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 12

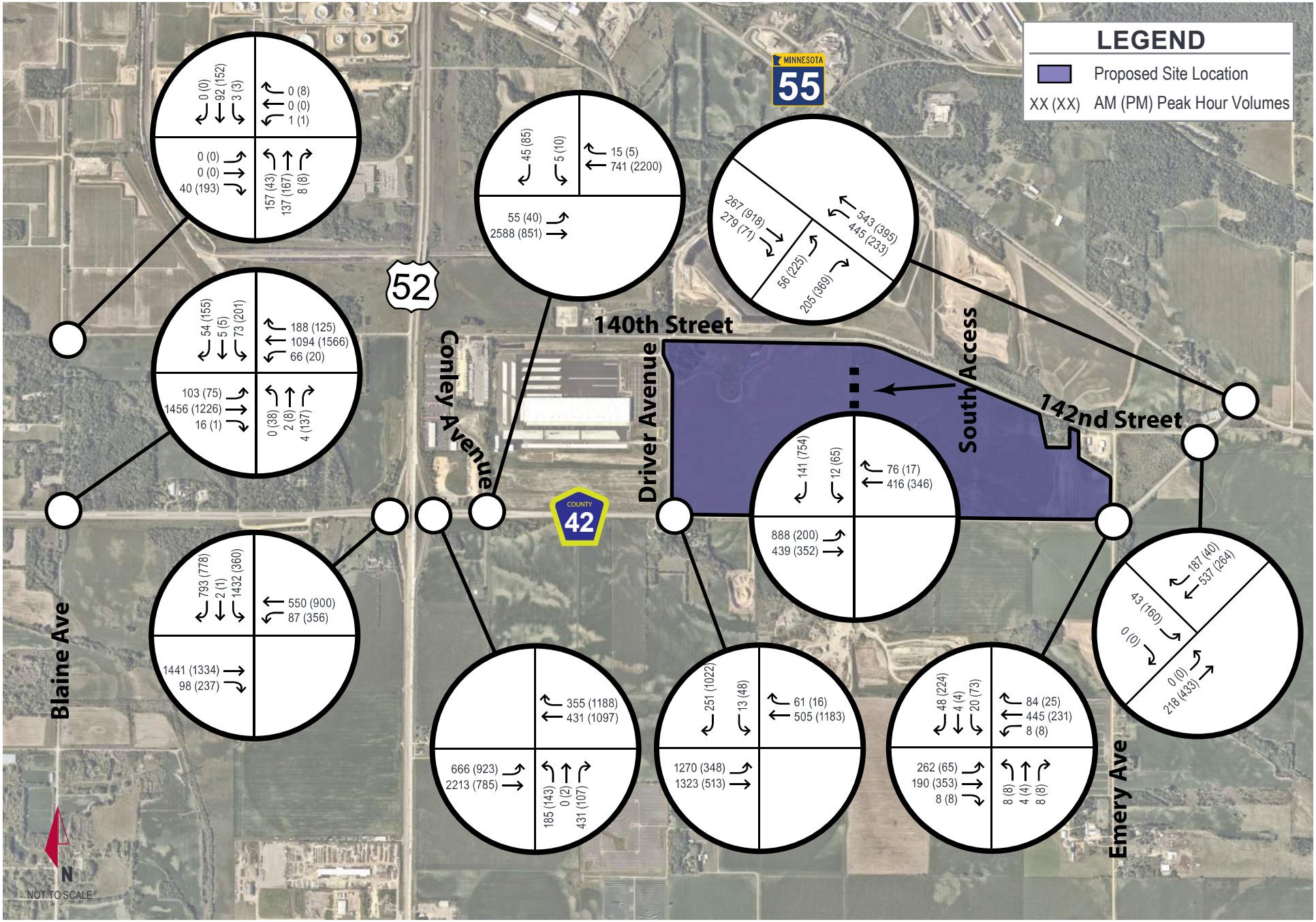
SCENARIO 1 MITIGATION PLAN
ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 13

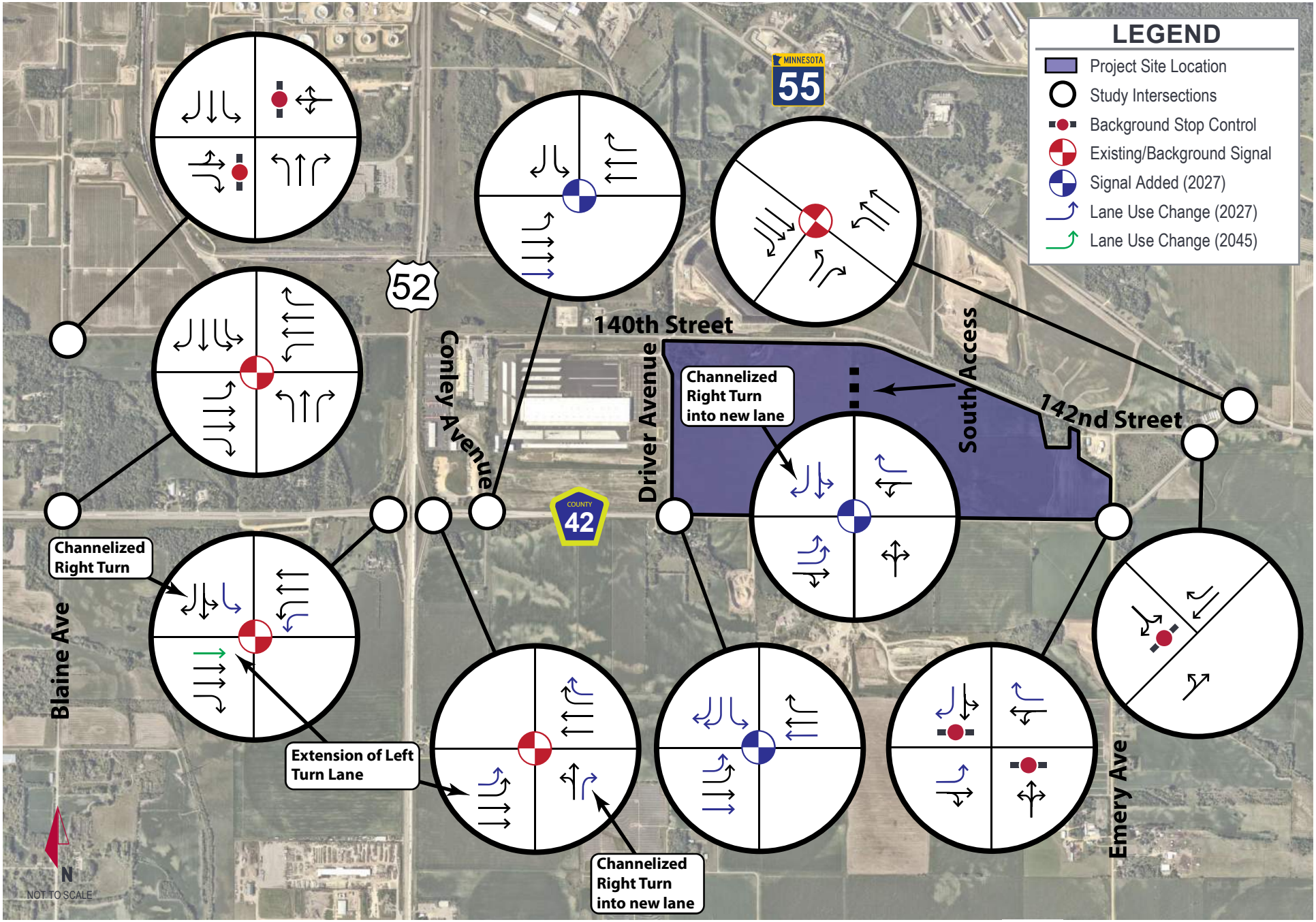
SHORT-TERM (2027) SCENARIO 2 PEAK HOUR TRAFFIC VOLUMES
ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 14

LONG-TERM (2045) SCENARIO 2 PEAK HOUR TRAFFIC VOLUMES
ROSEMOUNT, MN



Kimley»Horn

EXHIBIT 15

SCENARIO 2 MITIGATION PLAN
ROSEMOUNT, MN

Appendix B: TURNING MOVEMENT COUNTS

Count Name: CSAH 42 & US 52 Northbound Ramps
Site Code:
Start Date: 06/02/2022
Page No: 1

Turning Movement Data

Start Time	CSAH 42 Eastbound				CSAH 42 Westbound				US 52 Northbound Off Ramp Northbound				
	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Left	Thru	Right	App. Total	Int. Total
6:00 AM	100	19	0	119	14	5	0	19	14	0	2	16	154
6:15 AM	90	27	0	117	34	3	0	37	18	0	2	20	174
6:30 AM	79	46	0	125	42	11	0	53	20	0	8	28	206
6:45 AM	86	40	0	126	33	12	0	45	21	0	3	24	195
Hourly Total	355	132	0	487	123	31	0	154	73	0	15	88	729
7:00 AM	102	49	0	151	39	20	0	59	16	0	4	20	230
7:15 AM	126	39	0	165	59	18	0	77	12	0	2	14	256
7:30 AM	111	49	0	160	47	19	0	66	22	0	4	26	252
7:45 AM	100	57	0	157	45	21	1	67	16	0	6	22	246
Hourly Total	439	194	0	633	190	78	1	269	66	0	16	82	984
8:00 AM	92	48	0	140	38	14	0	52	19	0	5	24	216
8:15 AM	77	47	0	124	34	25	0	59	9	0	3	12	195
8:30 AM	71	42	0	113	36	22	0	58	17	0	1	18	189
8:45 AM	49	38	0	87	38	13	0	51	18	0	3	21	159
Hourly Total	289	175	0	464	146	74	0	220	63	0	12	75	759
9:00 AM	55	34	0	89	26	14	0	40	12	1	0	13	142
9:15 AM	59	31	0	90	27	20	0	47	11	0	2	13	150
9:30 AM	54	39	0	93	39	29	0	68	11	0	5	16	177
9:45 AM	58	44	0	102	31	21	0	52	10	0	2	12	166
Hourly Total	226	148	0	374	123	84	0	207	44	1	9	54	635
10:00 AM	38	26	0	64	31	20	0	51	12	0	1	13	128
10:15 AM	39	30	0	69	23	8	0	31	15	2	3	20	120
10:30 AM	48	41	0	89	35	17	0	52	10	1	1	12	153
10:45 AM	43	35	0	78	36	23	0	59	9	1	1	11	148
Hourly Total	168	132	0	300	125	68	0	193	46	4	6	56	549
11:00 AM	39	40	0	79	31	24	0	55	17	1	3	21	155
11:15 AM	46	28	0	74	53	23	0	76	8	0	2	10	160
11:30 AM	37	28	0	65	53	27	0	80	10	0	2	12	157
11:45 AM	39	30	0	69	30	16	0	46	11	0	3	14	129
Hourly Total	161	126	0	287	167	90	0	257	46	1	10	57	601
12:00 PM	66	49	0	115	28	22	0	50	9	0	1	10	175
12:15 PM	42	54	0	96	31	18	0	49	10	0	3	13	158
12:30 PM	51	42	0	93	32	23	0	55	12	0	7	19	167
12:45 PM	40	45	0	85	44	16	0	60	19	0	2	21	166
Hourly Total	199	190	0	389	135	79	0	214	50	0	13	63	666
1:00 PM	43	38	0	81	38	17	0	55	13	2	3	18	154
1:15 PM	43	49	0	92	31	14	0	45	9	0	3	12	149
1:30 PM	52	48	0	100	35	13	0	48	9	0	2	11	159
1:45 PM	39	38	0	77	36	23	0	59	24	0	3	27	163

Hourly Total	177	173	0	350	140	67	0	207	55	2	11	68	625
2:00 PM	47	45	0	92	39	20	0	59	12	0	1	13	164
2:15 PM	84	55	0	139	47	29	0	76	16	0	0	16	231
2:30 PM	63	61	0	124	34	20	0	54	15	0	1	16	194
2:45 PM	55	60	0	115	49	20	0	69	19	1	2	22	206
Hourly Total	249	221	0	470	169	89	0	258	62	1	4	67	795
3:00 PM	58	59	0	117	35	11	0	46	21	3	1	25	188
3:15 PM	63	69	0	132	31	8	1	40	16	1	1	18	190
3:30 PM	53	61	1	115	57	22	0	79	17	0	0	17	211
3:45 PM	58	44	0	102	40	17	0	57	24	0	6	30	189
Hourly Total	232	233	1	466	163	58	1	222	78	4	8	90	778
4:00 PM	74	70	0	144	52	16	0	68	23	0	5	28	240
4:15 PM	97	49	0	146	39	16	0	55	20	0	1	21	222
4:30 PM	83	63	0	146	68	3	0	71	28	1	2	31	248
4:45 PM	86	42	0	128	61	8	0	69	13	1	0	14	211
Hourly Total	340	224	0	564	220	43	0	263	84	2	8	94	921
5:00 PM	98	65	0	163	40	11	0	51	24	0	2	26	240
5:15 PM	71	52	0	123	51	6	0	57	32	0	1	33	213
5:30 PM	56	50	0	106	51	7	0	58	20	0	3	23	187
5:45 PM	63	68	0	131	39	3	0	42	21	0	0	21	194
Hourly Total	288	235	0	523	181	27	0	208	97	0	6	103	834
6:00 PM	78	38	1	117	36	6	0	42	16	1	1	18	177
6:15 PM	55	47	0	102	25	5	0	30	20	0	3	23	155
6:30 PM	32	41	0	73	17	1	0	18	14	0	5	19	110
6:45 PM	38	32	0	70	19	0	0	19	12	1	3	16	105
Hourly Total	203	158	1	362	97	12	0	109	62	2	12	76	547
Grand Total	3326	2341	2	5669	1979	800	2	2781	826	17	130	973	9423
Approach %	58.7	41.3	0.0	-	71.2	28.8	0.1	-	84.9	1.7	13.4	-	-
Total %	35.3	24.8	0.0	60.2	21.0	8.5	0.0	29.5	8.8	0.2	1.4	10.3	-
Lights	3046	1968	2	5016	1673	197	1	1871	751	8	78	837	7724
% Lights	91.6	84.1	100.0	88.5	84.5	24.6	50.0	67.3	90.9	47.1	60.0	86.0	82.0
Buses	9	11	0	20	14	12	0	26	9	0	3	12	58
% Buses	0.3	0.5	0.0	0.4	0.7	1.5	0.0	0.9	1.1	0.0	2.3	1.2	0.6
Trucks	271	362	0	633	292	591	1	884	66	9	49	124	1641
% Trucks	8.1	15.5	0.0	11.2	14.8	73.9	50.0	31.8	8.0	52.9	37.7	12.7	17.4

US 52 Northbound On		
Out	In	Total
3251	0	3251
21	0	21
871	0	871
4143	**0**	**4143**

06/02/2022 6:00 AM
Ending At
06/02/2022 7:00 PM

Lights
Buses
Trucks

CSAH 42 [EB]		
Out	In	Total
2426	5016	7442
23	20	43
358	633	991
2807	**5669**	**8476**

1968	3046	2	
11	9	0	
362	271	0	
2341	**3326**	**2**	
T	L	U	

U	T	R	
2	**1979**	**800**	
1	292	591	
0	14	12	
1	1673	197	

CSAH 42 [WB]		
Out	In	Total
2047	1871	3918
14	26	40
412	884	1296
2473	**2781**	**5254**

L	T	R
751	8	78
9	0	3
66	9	49
826	**17**	**130**

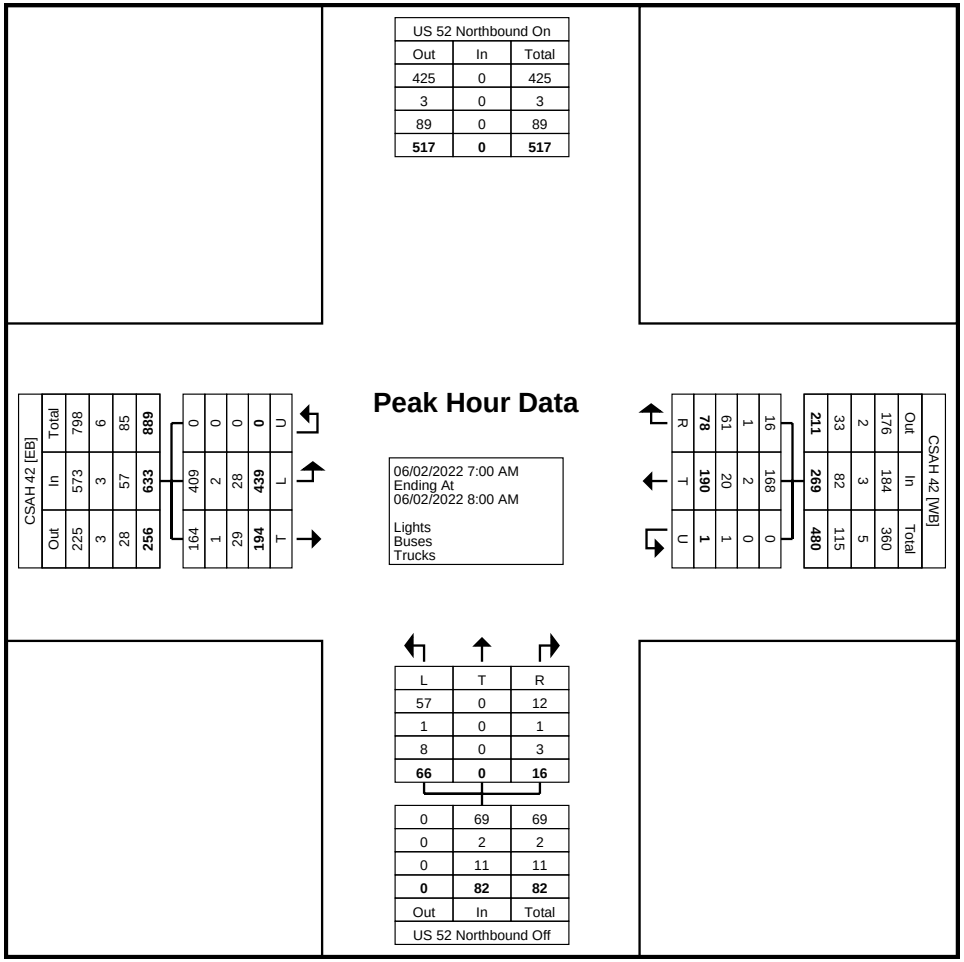
0	837	837
0	12	12
0	124	124
0	**973**	**973**
Out	In	Total
US 52 Northbound Off		

Turning Movement Data Plot

Count Name: CSAH 42 & US 52 Northbound Ramps
Site Code:
Start Date: 06/02/2022
Page No: 4

Turning Movement Peak Hour Data (7:00 AM)

Start Time	CSAH 42 Eastbound				CSAH 42 Westbound				US 52 Northbound Off Ramp Northbound				
	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Left	Thru	Right	App. Total	Int. Total
7:00 AM	102	49	0	151	39	20	0	59	16	0	4	20	230
7:15 AM	126	39	0	165	59	18	0	77	12	0	2	14	256
7:30 AM	111	49	0	160	47	19	0	66	22	0	4	26	252
7:45 AM	100	57	0	157	45	21	1	67	16	0	6	22	246
Total	439	194	0	633	190	78	1	269	66	0	16	82	984
Approach %	69.4	30.6	0.0	-	70.6	29.0	0.4	-	80.5	0.0	19.5	-	-
Total %	44.6	19.7	0.0	64.3	19.3	7.9	0.1	27.3	6.7	0.0	1.6	8.3	-
PHF	0.871	0.851	0.000	0.959	0.805	0.929	0.250	0.873	0.750	0.000	0.667	0.788	0.961
Lights	409	164	0	573	168	16	0	184	57	0	12	69	826
% Lights	93.2	84.5	-	90.5	88.4	20.5	0.0	68.4	86.4	-	75.0	84.1	83.9
Buses	2	1	0	3	2	1	0	3	1	0	1	2	8
% Buses	0.5	0.5	-	0.5	1.1	1.3	0.0	1.1	1.5	-	6.3	2.4	0.8
Trucks	28	29	0	57	20	61	1	82	8	0	3	11	150
% Trucks	6.4	14.9	-	9.0	10.5	78.2	100.0	30.5	12.1	-	18.8	13.4	15.2

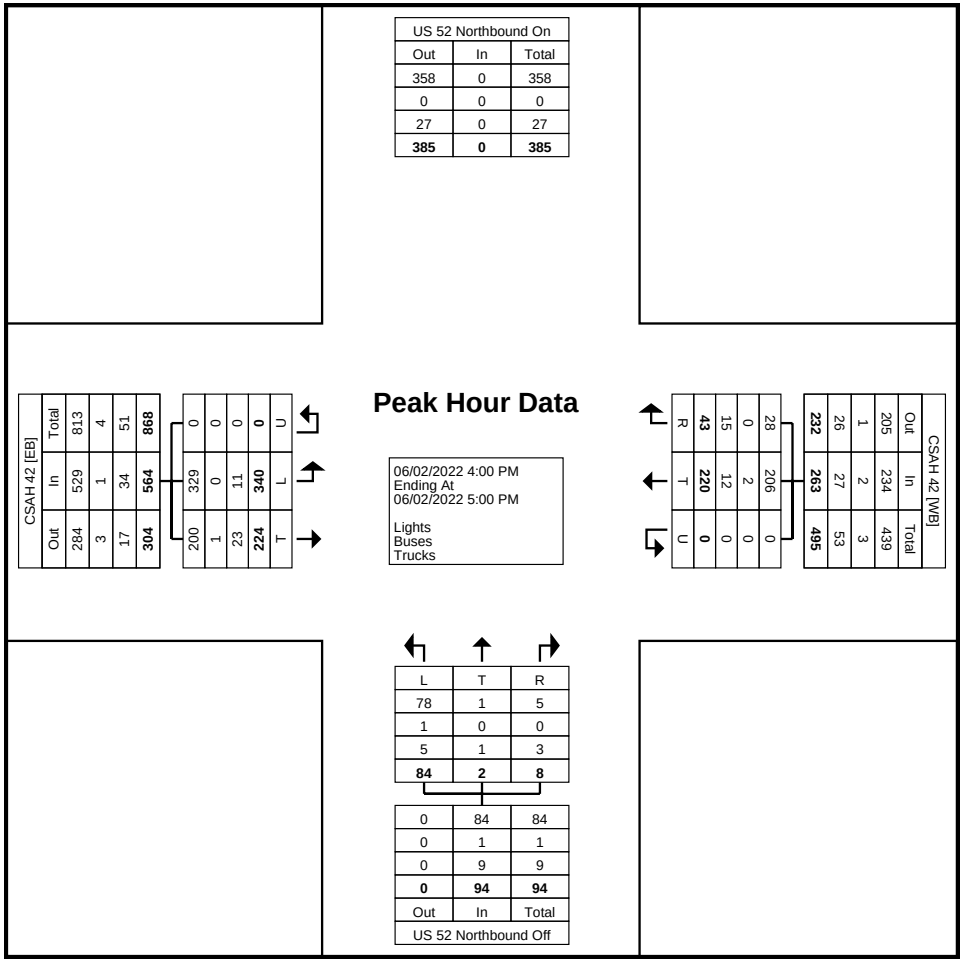


Turning Movement Peak Hour Data Plot (7:00 AM)

Count Name: CSAH 42 & US 52 Northbound Ramps
Site Code:
Start Date: 06/02/2022
Page No: 6

Turning Movement Peak Hour Data (4:00 PM)

Start Time	CSAH 42 Eastbound				CSAH 42 Westbound				US 52 Northbound Off Ramp Northbound				
	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Left	Thru	Right	App. Total	Int. Total
4:00 PM	74	70	0	144	52	16	0	68	23	0	5	28	240
4:15 PM	97	49	0	146	39	16	0	55	20	0	1	21	222
4:30 PM	83	63	0	146	68	3	0	71	28	1	2	31	248
4:45 PM	86	42	0	128	61	8	0	69	13	1	0	14	211
Total	340	224	0	564	220	43	0	263	84	2	8	94	921
Approach %	60.3	39.7	0.0	-	83.7	16.3	0.0	-	89.4	2.1	8.5	-	-
Total %	36.9	24.3	0.0	61.2	23.9	4.7	0.0	28.6	9.1	0.2	0.9	10.2	-
PHF	0.876	0.800	0.000	0.966	0.809	0.672	0.000	0.926	0.750	0.500	0.400	0.758	0.928
Lights	329	200	0	529	206	28	0	234	78	1	5	84	847
% Lights	96.8	89.3	-	93.8	93.6	65.1	-	89.0	92.9	50.0	62.5	89.4	92.0
Buses	0	1	0	1	2	0	0	2	1	0	0	1	4
% Buses	0.0	0.4	-	0.2	0.9	0.0	-	0.8	1.2	0.0	0.0	1.1	0.4
Trucks	11	23	0	34	12	15	0	27	5	1	3	9	70
% Trucks	3.2	10.3	-	6.0	5.5	34.9	-	10.3	6.0	50.0	37.5	9.6	7.6



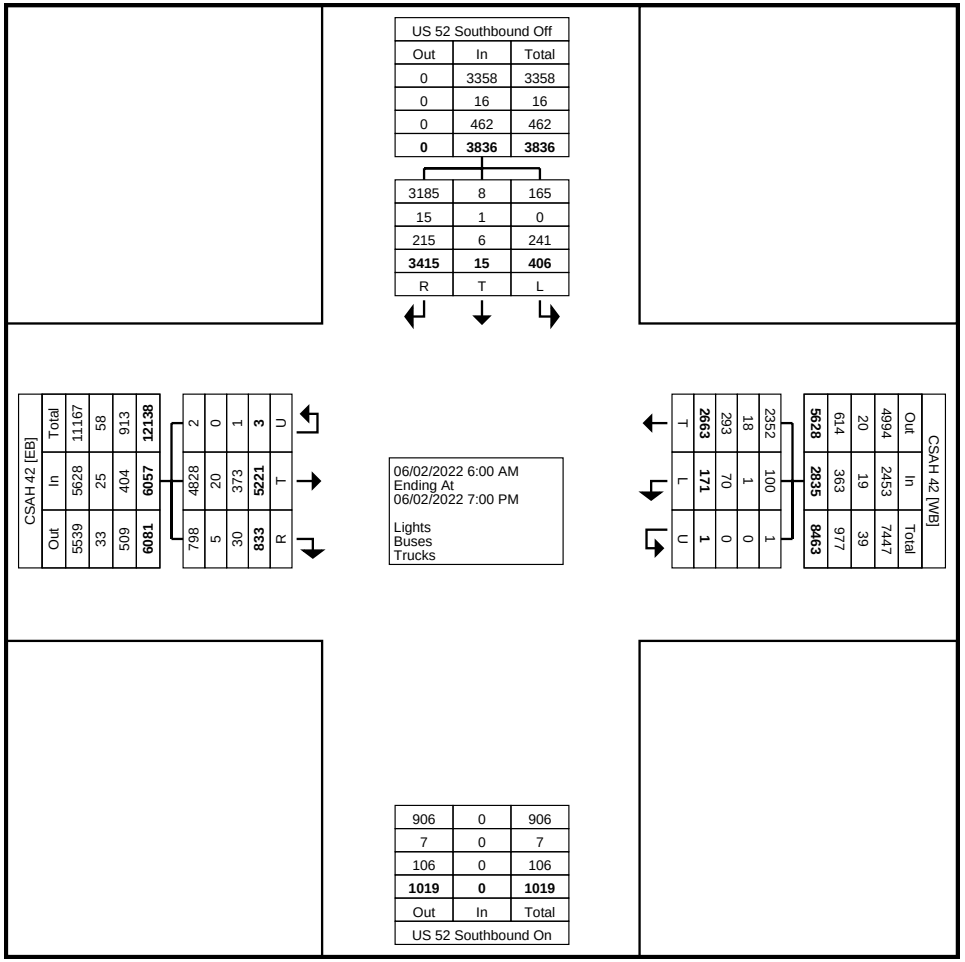
Turning Movement Peak Hour Data Plot (4:00 PM)

Count Name: CSAH 42 & US 52 Southbound Ramps
Site Code:
Start Date: 06/02/2022
Page No: 1

Turning Movement Data

Start Time	CSAH 42 Eastbound				CSAH 42 Westbound				US 52 Southbound Off Ramp Southbound				
	Thru	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Left	Thru	Right	App. Total	Int. Total
6:00 AM	106	10	0	116	0	30	0	30	4	0	39	43	189
6:15 AM	107	10	0	117	2	45	0	47	6	0	43	49	213
6:30 AM	115	16	0	131	2	58	0	60	10	0	64	74	265
6:45 AM	115	13	0	128	2	55	0	57	9	1	81	91	276
Hourly Total	443	49	0	492	6	188	0	194	29	1	227	257	943
7:00 AM	148	21	0	169	2	53	0	55	4	2	48	54	278
7:15 AM	154	20	0	174	2	71	0	73	4	0	62	66	313
7:30 AM	156	10	0	166	3	67	0	70	10	0	95	105	341
7:45 AM	144	7	0	151	5	62	0	67	12	0	78	90	308
Hourly Total	602	58	0	660	12	253	0	265	30	2	283	315	1240
8:00 AM	128	11	0	139	1	50	0	51	8	0	35	43	233
8:15 AM	112	12	0	124	6	40	0	46	9	1	50	60	230
8:30 AM	106	19	0	125	2	51	0	53	9	0	39	48	226
8:45 AM	79	13	1	93	1	58	0	59	11	0	39	50	202
Hourly Total	425	55	1	481	10	199	0	209	37	1	163	201	891
9:00 AM	79	12	0	91	2	35	1	38	7	0	44	51	180
9:15 AM	80	15	0	95	2	36	0	38	7	0	48	55	188
9:30 AM	80	16	0	96	5	48	0	53	11	0	44	55	204
9:45 AM	93	13	0	106	9	32	0	41	6	0	33	39	186
Hourly Total	332	56	0	388	18	151	1	170	31	0	169	200	758
10:00 AM	61	10	1	72	3	38	0	41	4	0	39	43	156
10:15 AM	65	11	0	76	3	39	0	42	6	0	44	50	168
10:30 AM	80	8	0	88	3	42	0	45	8	1	40	49	182
10:45 AM	65	14	0	79	1	43	0	44	10	0	40	50	173
Hourly Total	271	43	1	315	10	162	0	172	28	1	163	192	679
11:00 AM	69	16	0	85	3	47	0	50	14	0	40	54	189
11:15 AM	62	17	0	79	6	57	0	63	13	1	51	65	207
11:30 AM	58	9	0	67	5	53	0	58	2	0	60	62	187
11:45 AM	68	8	0	76	1	40	0	41	5	1	44	50	167
Hourly Total	257	50	0	307	15	197	0	212	34	2	195	231	750
12:00 PM	106	16	0	122	1	39	0	40	8	1	58	67	229
12:15 PM	74	17	0	91	2	40	0	42	13	0	45	58	191
12:30 PM	88	11	0	99	2	37	0	39	14	1	29	44	182
12:45 PM	75	11	0	86	3	62	0	65	11	0	41	52	203
Hourly Total	343	55	0	398	8	178	0	186	46	2	173	221	805
1:00 PM	72	17	1	90	6	46	0	52	8	0	38	46	188
1:15 PM	67	16	0	83	7	36	0	43	23	0	53	76	202
1:30 PM	89	14	0	103	1	43	0	44	13	1	55	69	216
1:45 PM	65	16	0	81	3	54	0	57	12	2	61	75	213

Hourly Total	293	63	1	357	17	179	0	196	56	3	207	266	819
2:00 PM	79	18	0	97	7	47	0	54	9	0	59	68	219
2:15 PM	133	21	0	154	6	57	0	63	8	0	74	82	299
2:30 PM	124	18	0	142	4	44	0	48	4	0	58	62	252
2:45 PM	110	22	0	132	4	66	0	70	3	0	77	80	282
Hourly Total	446	79	0	525	21	214	0	235	24	0	268	292	1052
3:00 PM	102	19	0	121	0	56	0	56	3	0	71	74	251
3:15 PM	121	21	0	142	5	43	0	48	11	0	91	102	292
3:30 PM	110	29	0	139	9	67	0	76	11	1	102	114	329
3:45 PM	94	27	0	121	3	64	0	67	6	0	104	110	298
Hourly Total	427	96	0	523	17	230	0	247	31	1	368	400	1170
4:00 PM	134	26	0	160	6	68	0	74	10	0	84	94	328
4:15 PM	138	23	0	161	3	59	0	62	6	1	124	131	354
4:30 PM	147	31	0	178	5	83	0	88	1	0	102	103	369
4:45 PM	120	28	0	148	4	78	0	82	6	0	126	132	362
Hourly Total	539	108	0	647	18	288	0	306	23	1	436	460	1413
5:00 PM	148	17	0	165	2	61	0	63	4	0	123	127	355
5:15 PM	121	11	0	132	2	84	0	86	4	1	165	170	388
5:30 PM	102	20	0	122	1	67	0	68	8	0	129	137	327
5:45 PM	120	18	0	138	2	60	0	62	8	0	85	93	293
Hourly Total	491	66	0	557	7	272	0	279	24	1	502	527	1363
6:00 PM	116	18	0	134	3	52	0	55	3	0	93	96	285
6:15 PM	100	11	0	111	4	40	0	44	3	0	53	56	211
6:30 PM	63	20	0	83	1	29	0	30	6	0	63	69	182
6:45 PM	73	6	0	79	4	31	0	35	1	0	52	53	167
Hourly Total	352	55	0	407	12	152	0	164	13	0	261	274	845
Grand Total	5221	833	3	6057	171	2663	1	2835	406	15	3415	3836	12728
Approach %	86.2	13.8	0.0	-	6.0	93.9	0.0	-	10.6	0.4	89.0	-	-
Total %	41.0	6.5	0.0	47.6	1.3	20.9	0.0	22.3	3.2	0.1	26.8	30.1	-
Lights	4828	798	2	5628	100	2352	1	2453	165	8	3185	3358	11439
% Lights	92.5	95.8	66.7	92.9	58.5	88.3	100.0	86.5	40.6	53.3	93.3	87.5	89.9
Buses	20	5	0	25	1	18	0	19	0	1	15	16	60
% Buses	0.4	0.6	0.0	0.4	0.6	0.7	0.0	0.7	0.0	6.7	0.4	0.4	0.5
Trucks	373	30	1	404	70	293	0	363	241	6	215	462	1229
% Trucks	7.1	3.6	33.3	6.7	40.9	11.0	0.0	12.8	59.4	40.0	6.3	12.0	9.7

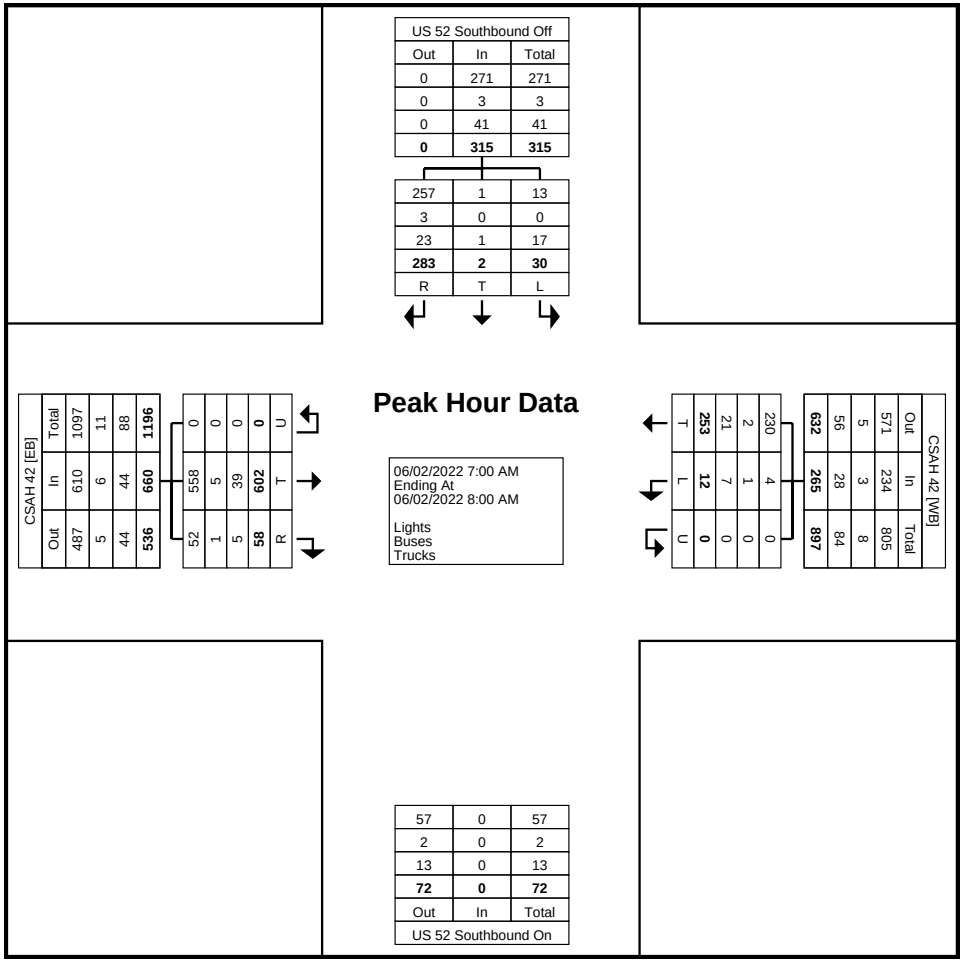


Turning Movement Data Plot

Count Name: CSAH 42 & US 52 Southbound Ramps
Site Code:
Start Date: 06/02/2022
Page No: 4

Turning Movement Peak Hour Data (7:00 AM)

Start Time	CSAH 42 Eastbound				CSAH 42 Westbound				US 52 Southbound Off Ramp Southbound				
	Thru	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Left	Thru	Right	App. Total	Int. Total
7:00 AM	148	21	0	169	2	53	0	55	4	2	48	54	278
7:15 AM	154	20	0	174	2	71	0	73	4	0	62	66	313
7:30 AM	156	10	0	166	3	67	0	70	10	0	95	105	341
7:45 AM	144	7	0	151	5	62	0	67	12	0	78	90	308
Total	602	58	0	660	12	253	0	265	30	2	283	315	1240
Approach %	91.2	8.8	0.0	-	4.5	95.5	0.0	-	9.5	0.6	89.8	-	-
Total %	48.5	4.7	0.0	53.2	1.0	20.4	0.0	21.4	2.4	0.2	22.8	25.4	-
PHF	0.965	0.690	0.000	0.948	0.600	0.891	0.000	0.908	0.625	0.250	0.745	0.750	0.909
Lights	558	52	0	610	4	230	0	234	13	1	257	271	1115
% Lights	92.7	89.7	-	92.4	33.3	90.9	-	88.3	43.3	50.0	90.8	86.0	89.9
Buses	5	1	0	6	1	2	0	3	0	0	3	3	12
% Buses	0.8	1.7	-	0.9	8.3	0.8	-	1.1	0.0	0.0	1.1	1.0	1.0
Trucks	39	5	0	44	7	21	0	28	17	1	23	41	113
% Trucks	6.5	8.6	-	6.7	58.3	8.3	-	10.6	56.7	50.0	8.1	13.0	9.1

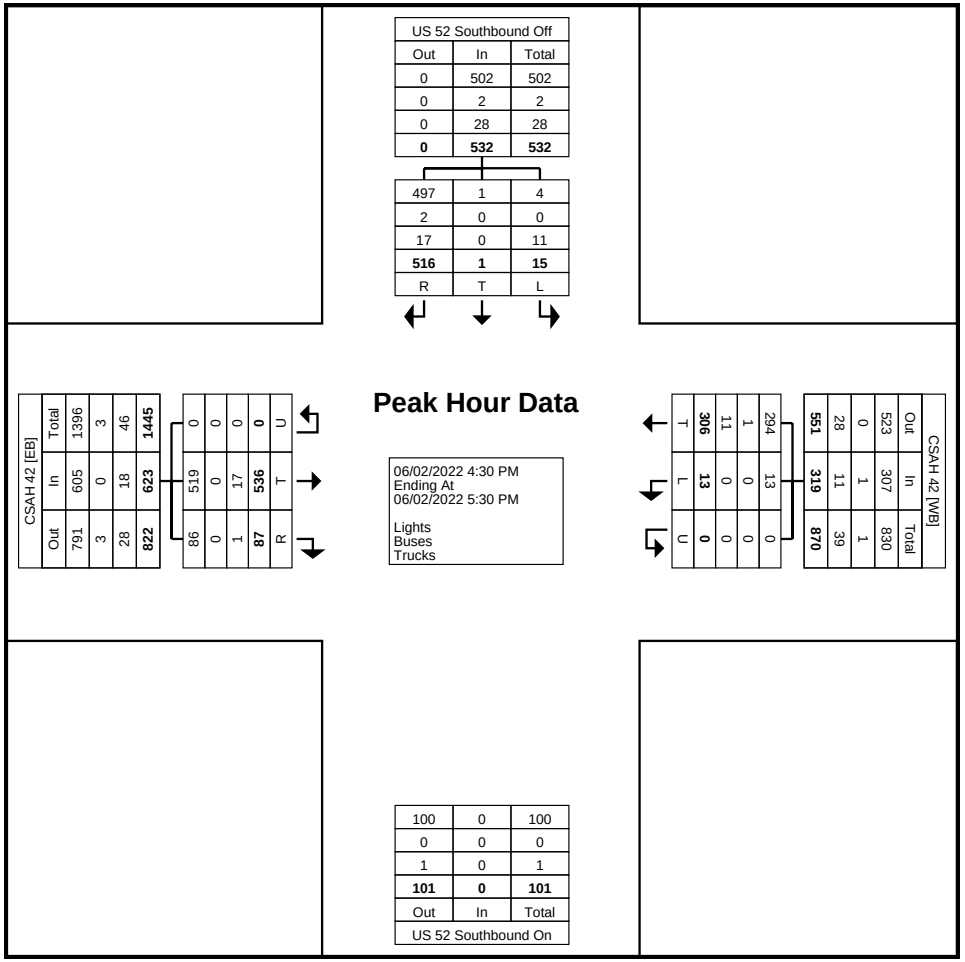


Turning Movement Peak Hour Data Plot (7:00 AM)

Count Name: CSAH 42 & US 52 Southbound Ramps
Site Code:
Start Date: 06/02/2022
Page No: 6

Turning Movement Peak Hour Data (4:30 PM)

Start Time	CSAH 42 Eastbound				CSAH 42 Westbound				US 52 Southbound Off Ramp Southbound				
	Thru	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Left	Thru	Right	App. Total	Int. Total
4:30 PM	147	31	0	178	5	83	0	88	1	0	102	103	369
4:45 PM	120	28	0	148	4	78	0	82	6	0	126	132	362
5:00 PM	148	17	0	165	2	61	0	63	4	0	123	127	355
5:15 PM	121	11	0	132	2	84	0	86	4	1	165	170	388
Total	536	87	0	623	13	306	0	319	15	1	516	532	1474
Approach %	86.0	14.0	0.0	-	4.1	95.9	0.0	-	2.8	0.2	97.0	-	-
Total %	36.4	5.9	0.0	42.3	0.9	20.8	0.0	21.6	1.0	0.1	35.0	36.1	-
PHF	0.905	0.702	0.000	0.875	0.650	0.911	0.000	0.906	0.625	0.250	0.782	0.782	0.950
Lights	519	86	0	605	13	294	0	307	4	1	497	502	1414
% Lights	96.8	98.9	-	97.1	100.0	96.1	-	96.2	26.7	100.0	96.3	94.4	95.9
Buses	0	0	0	0	0	1	0	1	0	0	2	2	3
% Buses	0.0	0.0	-	0.0	0.0	0.3	-	0.3	0.0	0.0	0.4	0.4	0.2
Trucks	17	1	0	18	0	11	0	11	11	0	17	28	57
% Trucks	3.2	1.1	-	2.9	0.0	3.6	-	3.4	73.3	0.0	3.3	5.3	3.9



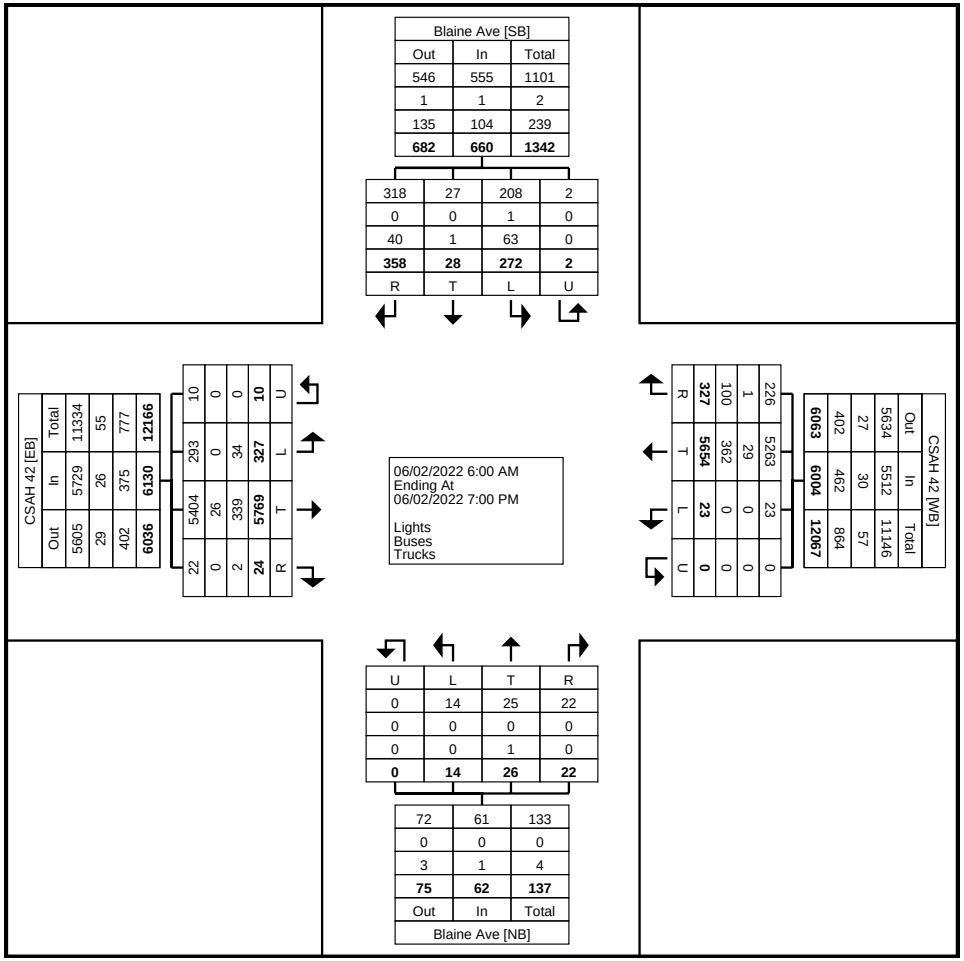
Turning Movement Peak Hour Data Plot (4:30 PM)

Count Name: CSAH 42 & Blaine Avenue
Site Code:
Start Date: 06/02/2022
Page No: 1

Turning Movement Data

Start Time	CSAH 42 Eastbound					CSAH 42 Westbound					Blaine Ave Northbound					Blaine Ave Southbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
6:00 AM	9	105	0	0	114	0	56	7	0	63	0	0	0	0	0	1	2	3	0	6	183
6:15 AM	20	119	0	0	139	1	81	6	0	88	0	0	0	0	0	1	0	1	0	2	229
6:30 AM	24	133	1	0	158	1	96	9	0	106	0	0	1	0	1	5	0	7	0	12	277
6:45 AM	13	125	0	0	138	3	118	9	0	130	0	2	0	0	2	4	0	2	0	6	276
Hourly Total	66	482	1	0	549	5	351	31	0	387	0	2	1	0	3	11	2	13	0	26	965
7:00 AM	19	155	0	0	174	0	90	7	0	97	0	1	0	0	1	11	0	12	0	23	295
7:15 AM	10	174	0	0	184	0	132	4	0	136	0	0	1	0	1	4	0	7	0	11	332
7:30 AM	9	151	0	0	160	2	147	6	0	155	0	0	0	0	0	0	2	0	0	2	317
7:45 AM	17	147	0	0	164	1	126	10	0	137	0	0	0	0	0	3	0	4	0	7	308
Hourly Total	55	627	0	0	682	3	495	27	0	525	0	1	1	0	2	18	2	23	0	43	1252
8:00 AM	4	133	0	0	137	1	71	11	0	83	0	1	0	0	1	9	1	7	0	17	238
8:15 AM	4	112	0	0	116	0	83	7	0	90	0	0	0	0	0	5	1	0	0	6	212
8:30 AM	4	129	1	0	134	1	80	10	0	91	0	0	0	0	0	2	1	3	0	6	231
8:45 AM	7	80	0	0	87	1	85	10	0	96	1	1	1	0	3	6	0	2	0	8	194
Hourly Total	19	454	1	0	474	3	319	38	0	360	1	2	1	0	4	22	3	12	0	37	875
9:00 AM	3	82	0	0	85	0	78	4	0	82	0	1	0	0	1	10	0	2	0	12	180
9:15 AM	5	98	1	0	104	0	82	3	0	85	0	3	0	0	3	0	0	3	0	3	195
9:30 AM	9	92	1	0	102	0	81	7	0	88	1	1	0	0	2	9	0	4	0	13	205
9:45 AM	2	95	0	0	97	0	59	5	0	64	1	0	0	0	1	6	0	5	0	11	173
Hourly Total	19	367	2	0	388	0	300	19	0	319	2	5	0	0	7	25	0	14	0	39	753
10:00 AM	4	72	0	1	77	1	69	6	0	76	1	0	0	0	1	6	0	4	0	10	164
10:15 AM	2	71	1	0	74	2	69	7	0	78	2	0	0	0	2	3	0	5	0	8	162
10:30 AM	3	79	1	0	83	0	74	8	0	82	0	0	2	0	2	7	0	5	1	13	180
10:45 AM	1	70	0	0	71	0	80	4	0	84	0	1	0	0	1	11	1	3	0	15	171
Hourly Total	10	292	2	1	305	3	292	25	0	320	3	1	2	0	6	27	1	17	1	46	677
11:00 AM	2	77	0	0	79	0	80	5	0	85	0	0	0	0	0	8	0	5	0	13	177
11:15 AM	4	69	1	1	75	0	96	10	0	106	0	0	2	0	2	3	2	8	0	13	196
11:30 AM	7	79	1	0	87	0	112	1	0	113	0	0	0	0	0	5	1	9	0	15	215
11:45 AM	3	69	0	0	72	0	79	7	0	86	0	0	0	0	0	4	0	2	0	6	164
Hourly Total	16	294	2	1	313	0	367	23	0	390	0	0	2	0	2	20	3	24	0	47	752
12:00 PM	6	108	1	0	115	0	89	4	0	93	0	1	0	0	1	6	1	4	0	11	220
12:15 PM	0	96	1	0	97	1	74	6	0	81	0	0	0	0	0	4	0	7	0	11	189
12:30 PM	9	91	0	1	101	0	67	4	0	71	0	0	0	0	0	4	2	4	0	10	182
12:45 PM	6	74	0	2	82	0	89	8	0	97	0	0	0	0	0	7	0	7	0	14	193
Hourly Total	21	369	2	3	395	1	319	22	0	342	0	1	0	0	1	21	3	22	0	46	784
1:00 PM	3	95	0	0	98	0	82	3	0	85	0	0	1	0	1	7	1	4	0	12	196
1:15 PM	3	72	0	0	75	0	83	6	0	89	0	0	1	0	1	5	1	5	0	11	176
1:30 PM	2	95	2	0	99	1	86	8	0	95	0	1	0	0	1	8	1	4	0	13	208
1:45 PM	3	81	1	0	85	1	112	7	0	120	0	2	0	0	2	5	1	2	0	8	215
Hourly Total	11	343	3	0	357	2	363	24	0	389	0	3	2	0	5	25	4	15	0	44	795

2:00 PM	5	95	2	0	102	0	100	2	0	102	0	1	1	0	2	2	0	9	1	12	218
2:15 PM	6	145	0	0	151	0	120	3	0	123	2	0	1	0	3	7	0	8	0	15	292
2:30 PM	3	136	0	0	139	0	100	3	0	103	0	0	0	0	0	8	0	6	0	14	256
2:45 PM	3	109	0	0	112	1	135	7	0	143	1	1	0	0	2	5	1	11	0	17	274
Hourly Total	17	485	2	0	504	1	455	15	0	471	3	2	2	0	7	22	1	34	1	58	1040
3:00 PM	3	124	0	1	128	1	112	7	0	120	0	0	0	0	0	6	0	9	0	15	263
3:15 PM	5	133	2	0	140	1	125	5	0	131	0	0	1	0	1	13	0	5	0	18	290
3:30 PM	6	129	0	1	136	0	163	8	0	171	1	0	0	0	1	4	1	7	0	12	320
3:45 PM	10	102	1	0	113	1	161	6	0	168	0	0	1	0	1	7	0	7	0	14	296
Hourly Total	24	488	3	2	517	3	561	26	0	590	1	0	2	0	3	30	1	28	0	59	1169
4:00 PM	5	158	0	1	164	1	146	7	0	154	0	0	0	0	0	9	2	18	0	29	347
4:15 PM	5	171	1	0	177	0	178	5	0	183	0	1	1	0	2	2	0	15	0	17	379
4:30 PM	3	159	0	0	162	0	175	11	0	186	0	2	2	0	4	7	0	19	0	26	378
4:45 PM	8	158	0	0	166	0	194	8	0	202	1	2	0	0	3	7	2	13	0	22	393
Hourly Total	21	646	1	1	669	1	693	31	0	725	1	5	3	0	9	25	4	65	0	94	1497
5:00 PM	9	161	1	0	171	0	181	7	0	188	1	0	1	0	2	5	0	21	0	26	387
5:15 PM	7	115	0	0	122	0	244	9	0	253	0	0	0	0	0	4	0	15	0	19	394
5:30 PM	8	122	0	0	130	1	182	7	0	190	0	0	2	0	2	5	2	27	0	34	356
5:45 PM	5	129	1	0	135	0	136	7	0	143	1	0	3	0	4	1	0	9	0	10	292
Hourly Total	29	527	2	0	558	1	743	30	0	774	2	0	6	0	8	15	2	72	0	89	1429
6:00 PM	9	130	0	0	139	0	133	5	0	138	0	3	0	0	3	3	0	10	0	13	293
6:15 PM	4	104	0	1	109	0	93	2	0	95	0	1	0	0	1	0	0	3	0	3	208
6:30 PM	4	88	1	1	94	0	85	6	0	91	1	0	0	0	1	4	2	6	0	12	198
6:45 PM	2	73	2	0	77	0	85	3	0	88	0	0	0	0	0	4	0	0	0	4	169
Hourly Total	19	395	3	2	419	0	396	16	0	412	1	4	0	0	5	11	2	19	0	32	868
Grand Total	327	5769	24	10	6130	23	5654	327	0	6004	14	26	22	0	62	272	28	358	2	660	12856
Approach %	5.3	94.1	0.4	0.2	-	0.4	94.2	5.4	0.0	-	22.6	41.9	35.5	0.0	-	41.2	4.2	54.2	0.3	-	-
Total %	2.5	44.9	0.2	0.1	47.7	0.2	44.0	2.5	0.0	46.7	0.1	0.2	0.2	0.0	0.5	2.1	0.2	2.8	0.0	5.1	-
Lights	293	5404	22	10	5729	23	5263	226	0	5512	14	25	22	0	61	208	27	318	2	555	11857
% Lights	89.6	93.7	91.7	100.0	93.5	100.0	93.1	69.1	-	91.8	100.0	96.2	100.0	-	98.4	76.5	96.4	88.8	100.0	84.1	92.2
Buses	0	26	0	0	26	0	29	1	0	30	0	0	0	0	0	1	0	0	0	1	57
% Buses	0.0	0.5	0.0	0.0	0.4	0.0	0.5	0.3	-	0.5	0.0	0.0	0.0	-	0.0	0.4	0.0	0.0	0.0	0.2	0.4
Trucks	34	339	2	0	375	0	362	100	0	462	0	1	0	0	1	63	1	40	0	104	942
% Trucks	10.4	5.9	8.3	0.0	6.1	0.0	6.4	30.6	-	7.7	0.0	3.8	0.0	-	1.6	23.2	3.6	11.2	0.0	15.8	7.3

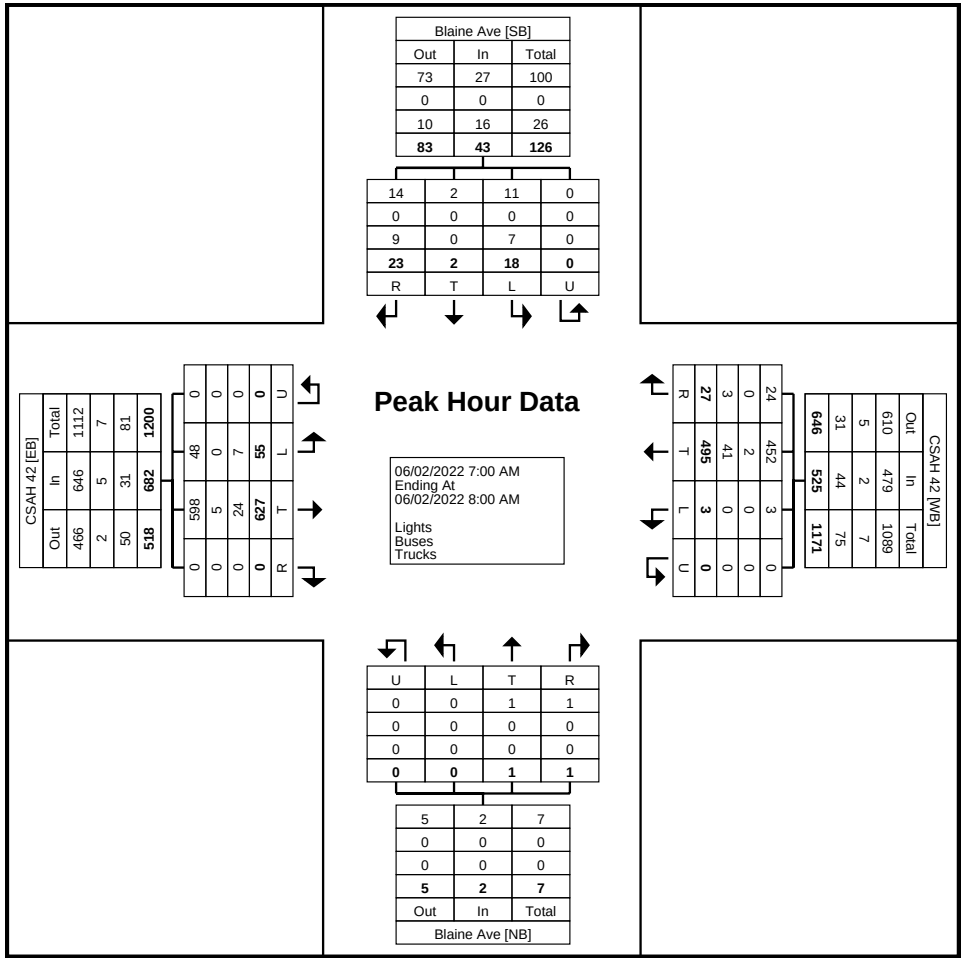


Turning Movement Data Plot

Count Name: CSAH 42 & Blaine Avenue
Site Code:
Start Date: 06/02/2022
Page No: 4

Turning Movement Peak Hour Data (7:00 AM)

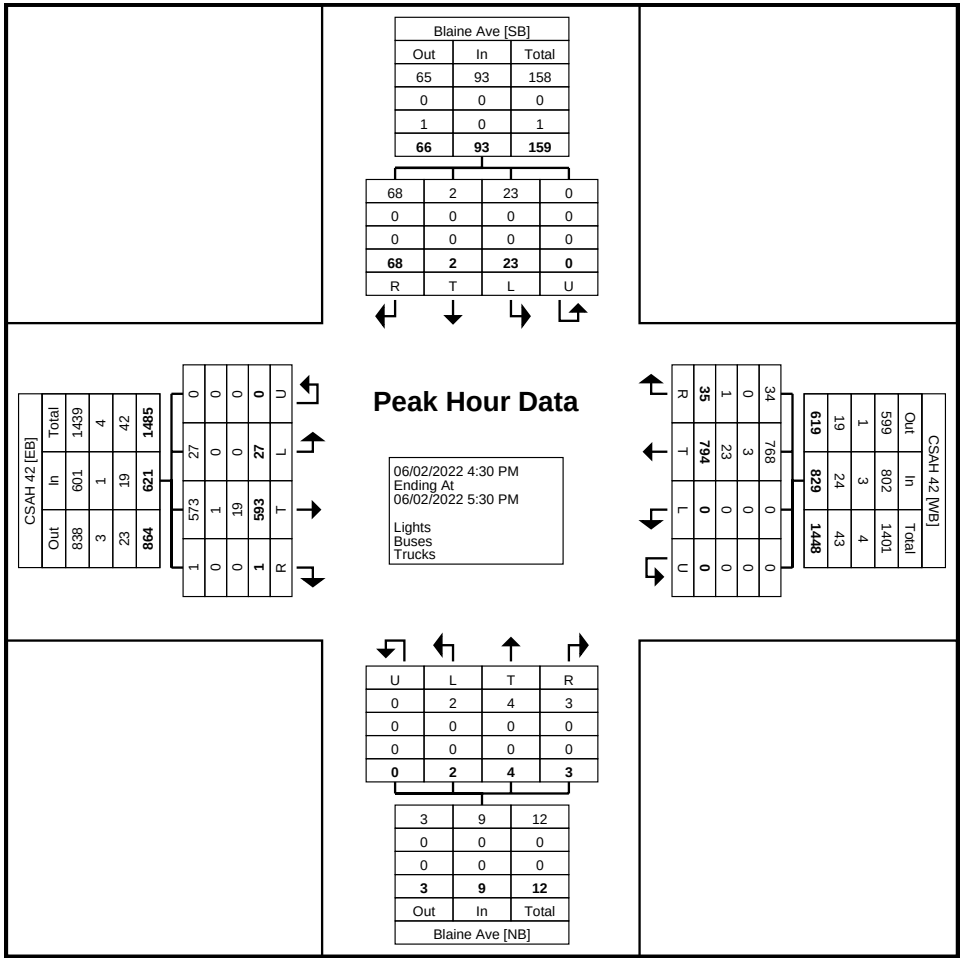
Start Time	CSAH 42 Eastbound					CSAH 42 Westbound					Blaine Ave Northbound					Blaine Ave Southbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
7:00 AM	19	155	0	0	174	0	90	7	0	97	0	1	0	0	1	11	0	12	0	23	295
7:15 AM	10	174	0	0	184	0	132	4	0	136	0	0	1	0	1	4	0	7	0	11	332
7:30 AM	9	151	0	0	160	2	147	6	0	155	0	0	0	0	0	0	2	0	0	2	317
7:45 AM	17	147	0	0	164	1	126	10	0	137	0	0	0	0	0	3	0	4	0	7	308
Total	55	627	0	0	682	3	495	27	0	525	0	1	1	0	2	18	2	23	0	43	1252
Approach %	8.1	91.9	0.0	0.0	-	0.6	94.3	5.1	0.0	-	0.0	50.0	50.0	0.0	-	41.9	4.7	53.5	0.0	-	-
Total %	4.4	50.1	0.0	0.0	54.5	0.2	39.5	2.2	0.0	41.9	0.0	0.1	0.1	0.0	0.2	1.4	0.2	1.8	0.0	3.4	-
PHF	0.724	0.901	0.000	0.000	0.927	0.375	0.842	0.675	0.000	0.847	0.000	0.250	0.250	0.000	0.500	0.409	0.250	0.479	0.000	0.467	0.943
Lights	48	598	0	0	646	3	452	24	0	479	0	1	1	0	2	11	2	14	0	27	1154
% Lights	87.3	95.4	-	-	94.7	100.0	91.3	88.9	-	91.2	-	100.0	100.0	-	100.0	61.1	100.0	60.9	-	62.8	92.2
Buses	0	5	0	0	5	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	7
% Buses	0.0	0.8	-	-	0.7	0.0	0.4	0.0	-	0.4	-	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.6
Trucks	7	24	0	0	31	0	41	3	0	44	0	0	0	0	0	7	0	9	0	16	91
% Trucks	12.7	3.8	-	-	4.5	0.0	8.3	11.1	-	8.4	-	0.0	0.0	-	0.0	38.9	0.0	39.1	-	37.2	7.3



Turning Movement Peak Hour Data Plot (7:00 AM)

Turning Movement Peak Hour Data (4:30 PM)

Start Time	CSAH 42 Eastbound					CSAH 42 Westbound					Blaine Ave Northbound					Blaine Ave Southbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
4:30 PM	3	159	0	0	162	0	175	11	0	186	0	2	2	0	4	7	0	19	0	26	378
4:45 PM	8	158	0	0	166	0	194	8	0	202	1	2	0	0	3	7	2	13	0	22	393
5:00 PM	9	161	1	0	171	0	181	7	0	188	1	0	1	0	2	5	0	21	0	26	387
5:15 PM	7	115	0	0	122	0	244	9	0	253	0	0	0	0	0	4	0	15	0	19	394
Total	27	593	1	0	621	0	794	35	0	829	2	4	3	0	9	23	2	68	0	93	1552
Approach %	4.3	95.5	0.2	0.0	-	0.0	95.8	4.2	0.0	-	22.2	44.4	33.3	0.0	-	24.7	2.2	73.1	0.0	-	-
Total %	1.7	38.2	0.1	0.0	40.0	0.0	51.2	2.3	0.0	53.4	0.1	0.3	0.2	0.0	0.6	1.5	0.1	4.4	0.0	6.0	-
PHF	0.750	0.921	0.250	0.000	0.908	0.000	0.814	0.795	0.000	0.819	0.500	0.500	0.375	0.000	0.563	0.821	0.250	0.810	0.000	0.894	0.985
Lights	27	573	1	0	601	0	768	34	0	802	2	4	3	0	9	23	2	68	0	93	1505
% Lights	100.0	96.6	100.0	-	96.8	-	96.7	97.1	-	96.7	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	97.0
Buses	0	1	0	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	4
% Buses	0.0	0.2	0.0	-	0.2	-	0.4	0.0	-	0.4	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.3
Trucks	0	19	0	0	19	0	23	1	0	24	0	0	0	0	0	0	0	0	0	0	43
% Trucks	0.0	3.2	0.0	-	3.1	-	2.9	2.9	-	2.9	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	2.8



Turning Movement Peak Hour Data Plot (4:30 PM)

Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Blaine Ave & 140th St
Site Code:
Start Date: 03/08/2023
Page No: 1

Turning Movement Data

Start Time	140th St Westbound				Blaine Ave Northbound				Blaine Ave Southbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
12:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
12:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	1	0	1	1	0	0	1	0	0	0	0	2
1:00 AM	0	1	0	1	1	0	0	1	0	0	1	0	2
1:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45 AM	1	1	0	2	0	0	0	0	1	0	0	1	3
Hourly Total	1	2	0	3	1	0	0	1	1	1	1	2	6
2:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	1
2:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1
Hourly Total	0	1	0	1	0	0	0	0	0	2	0	2	3
3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 AM	0	1	0	1	0	1	0	1	0	0	0	0	2
Hourly Total	0	1	0	1	0	1	0	1	0	0	0	0	2
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1
4:45 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
Hourly Total	0	0	0	0	4	0	0	4	0	0	0	0	4
5:00 AM	0	0	0	0	4	0	0	4	0	2	0	2	6
5:15 AM	0	0	0	0	13	1	0	14	0	1	0	1	15
5:30 AM	0	0	0	0	4	1	0	5	0	2	0	2	7
5:45 AM	0	0	0	0	17	2	0	19	0	1	0	1	20
Hourly Total	0	0	0	0	38	4	0	42	0	6	0	6	48
6:00 AM	0	1	0	1	17	0	0	17	1	8	0	9	27
6:15 AM	0	2	0	2	21	1	0	22	1	8	0	9	33
6:30 AM	1	0	0	1	32	0	0	32	1	6	0	7	40
6:45 AM	0	1	0	1	26	0	0	26	1	5	0	6	33
Hourly Total	1	4	0	5	96	1	0	97	4	27	0	31	133
7:00 AM	0	1	0	1	19	2	0	21	0	7	0	7	29

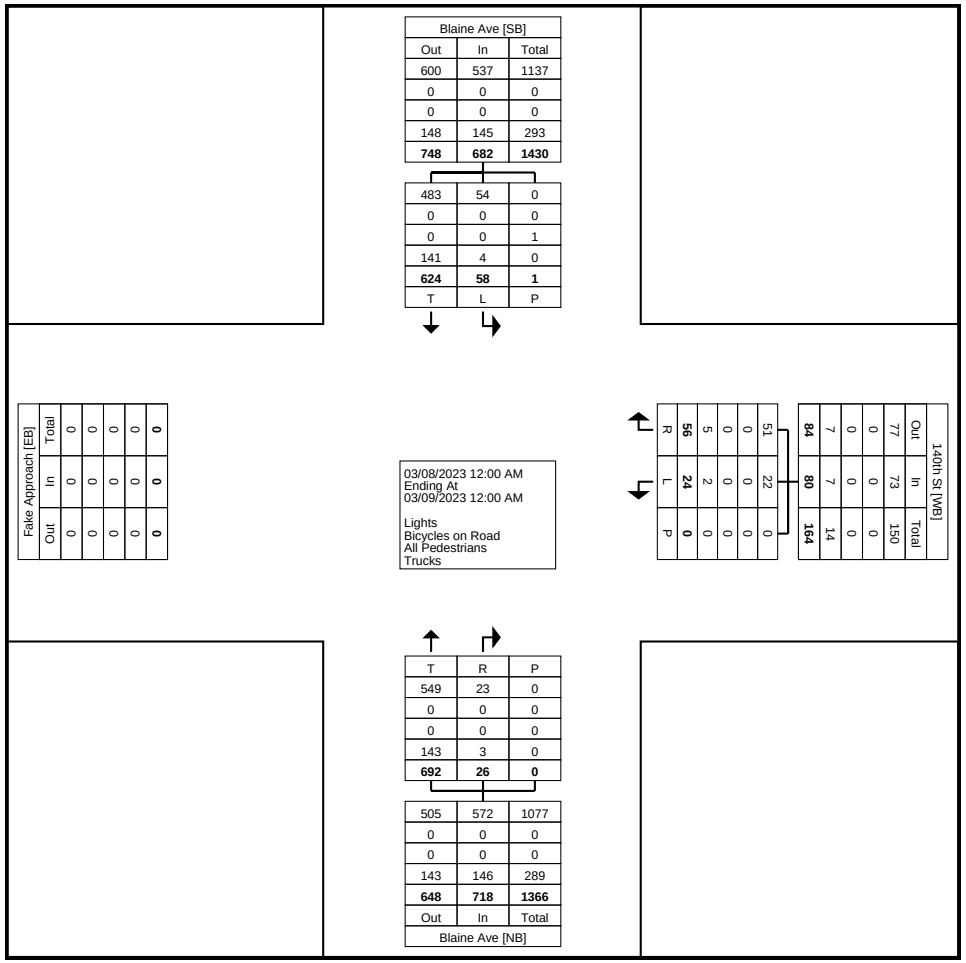
7:15 AM	0	2	0	2	27	0	0	27	0	9	0	9	38
7:30 AM	1	0	0	1	22	1	0	23	1	12	0	13	37
7:45 AM	0	3	0	3	11	2	0	13	1	9	0	10	26
Hourly Total	1	6	0	7	79	5	0	84	2	37	0	39	130
8:00 AM	1	0	0	1	12	0	0	12	3	5	0	8	21
8:15 AM	0	0	0	0	13	2	0	15	1	12	0	13	28
8:30 AM	1	3	0	4	6	0	0	6	0	7	0	7	17
8:45 AM	0	0	0	0	13	0	0	13	1	13	0	14	27
Hourly Total	2	3	0	5	44	2	0	46	5	37	0	42	93
9:00 AM	0	2	0	2	10	0	0	10	1	16	0	17	29
9:15 AM	0	1	0	1	6	0	0	6	2	7	0	9	16
9:30 AM	1	1	0	2	11	0	0	11	0	5	0	5	18
9:45 AM	0	3	0	3	11	1	0	12	1	12	0	13	28
Hourly Total	1	7	0	8	38	1	0	39	4	40	0	44	91
10:00 AM	0	0	0	0	6	1	0	7	1	5	0	6	13
10:15 AM	1	0	0	1	12	1	0	13	0	11	0	11	25
10:30 AM	0	1	0	1	7	0	0	7	2	14	0	16	24
10:45 AM	2	0	0	2	8	1	0	9	1	9	0	10	21
Hourly Total	3	1	0	4	33	3	0	36	4	39	0	43	83
11:00 AM	0	0	0	0	12	0	0	12	2	10	0	12	24
11:15 AM	1	1	0	2	8	0	0	8	3	10	0	13	23
11:30 AM	1	1	0	2	10	0	0	10	1	4	0	5	17
11:45 AM	1	3	0	4	14	0	0	14	1	11	0	12	30
Hourly Total	3	5	0	8	44	0	0	44	7	35	0	42	94
12:00 PM	1	1	0	2	8	1	0	9	3	13	0	16	27
12:15 PM	0	0	0	0	10	1	0	11	1	6	0	7	18
12:30 PM	0	0	0	0	9	1	0	10	1	6	0	7	17
12:45 PM	1	1	0	2	10	1	0	11	1	12	0	13	26
Hourly Total	2	2	0	4	37	4	0	41	6	37	0	43	88
1:00 PM	0	2	0	2	6	0	0	6	2	7	0	9	17
1:15 PM	0	0	0	0	12	0	0	12	0	15	0	15	27
1:30 PM	0	0	0	0	8	0	0	8	2	10	0	12	20
1:45 PM	1	1	0	2	6	0	0	6	0	9	0	9	17
Hourly Total	1	3	0	4	32	0	0	32	4	41	0	45	81
2:00 PM	0	1	0	1	10	3	0	13	1	7	0	8	22
2:15 PM	0	2	0	2	14	0	0	14	1	8	0	9	25
2:30 PM	3	0	0	3	13	0	0	13	4	11	0	15	31
2:45 PM	0	0	0	0	10	0	0	10	1	13	0	14	24
Hourly Total	3	3	0	6	47	3	0	50	7	39	0	46	102
3:00 PM	0	1	0	1	13	1	0	14	0	20	0	20	35
3:15 PM	0	1	0	1	8	0	0	8	0	20	0	20	29
3:30 PM	2	1	0	3	14	0	0	14	0	11	0	11	28
3:45 PM	0	1	0	1	7	1	0	8	1	5	0	6	15
Hourly Total	2	4	0	6	42	2	0	44	1	56	0	57	107
4:00 PM	2	2	0	4	19	0	0	19	1	21	0	22	45
4:15 PM	0	0	0	0	19	0	0	19	0	18	0	18	37
4:30 PM	0	2	0	2	12	0	0	12	2	23	0	25	39
4:45 PM	0	0	0	0	16	0	0	16	1	25	0	26	42
Hourly Total	2	4	0	6	66	0	0	66	4	87	0	91	163
5:00 PM	0	0	0	0	12	0	0	12	0	21	0	21	33
5:15 PM	0	0	0	0	10	0	0	10	0	21	0	21	31
5:30 PM	0	0	0	0	8	0	0	8	1	24	0	25	33

5:45 PM	0	0	0	0	6	0	0	6	0	7	0	7	13
Hourly Total	0	0	0	0	36	0	0	36	1	73	0	74	110
6:00 PM	0	0	0	0	7	0	0	7	0	11	0	11	18
6:15 PM	0	0	0	0	6	0	0	6	1	3	0	4	10
6:30 PM	0	0	0	0	3	0	0	3	0	7	0	7	10
6:45 PM	0	0	0	0	2	0	0	2	0	3	0	3	5
Hourly Total	0	0	0	0	18	0	0	18	1	24	0	25	43
7:00 PM	0	0	0	0	3	0	0	3	0	4	0	4	7
7:15 PM	0	0	0	0	5	0	0	5	0	2	0	2	7
7:30 PM	0	3	0	3	4	0	0	4	0	4	0	4	11
7:45 PM	1	0	0	1	1	0	0	1	0	4	0	4	6
Hourly Total	1	3	0	4	13	0	0	13	0	14	0	14	31
8:00 PM	0	1	0	1	3	0	0	3	1	3	0	4	8
8:15 PM	0	1	0	1	3	0	0	3	0	3	0	3	7
8:30 PM	0	0	0	0	4	0	0	4	0	4	0	4	8
8:45 PM	0	0	0	0	1	0	0	1	0	3	0	3	4
Hourly Total	0	2	0	2	11	0	0	11	1	13	0	14	27
9:00 PM	1	0	0	1	2	0	0	2	1	1	0	2	5
9:15 PM	0	1	0	1	2	0	0	2	0	4	0	4	7
9:30 PM	0	0	0	0	3	0	0	3	0	1	0	1	4
9:45 PM	0	0	0	0	1	0	0	1	0	1	0	1	2
Hourly Total	1	1	0	2	8	0	0	8	1	7	0	8	18
10:00 PM	0	0	0	0	0	0	0	0	0	3	0	3	3
10:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	2
10:30 PM	0	1	0	1	1	0	0	1	0	2	0	2	4
10:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Hourly Total	0	1	0	1	2	0	0	2	0	7	0	7	10
11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15 PM	0	0	0	0	1	0	0	1	1	0	0	1	2
11:30 PM	0	1	0	1	0	0	0	0	3	2	0	5	6
11:45 PM	0	1	0	1	1	0	0	1	1	0	0	1	3
Hourly Total	0	2	0	2	2	0	0	2	5	2	0	7	11
Grand Total	24	56	0	80	692	26	0	718	58	624	1	682	1480
Approach %	30.0	70.0	-	-	96.4	3.6	-	-	8.5	91.5	-	-	-
Total %	1.6	3.8	-	5.4	46.8	1.8	-	48.5	3.9	42.2	-	46.1	-
Lights	22	51	-	73	549	23	-	572	54	483	-	537	1182
% Lights	91.7	91.1	-	91.3	79.3	88.5	-	79.7	93.1	77.4	-	78.7	79.9
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
All Pedestrians	-	-	0	-	-	-	0	-	-	-	1	-	-
% All Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-
Trucks	2	5	-	7	143	3	-	146	4	141	-	145	298
% Trucks	8.3	8.9	-	8.8	20.7	11.5	-	20.3	6.9	22.6	-	21.3	20.1

Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Blaine Ave & 140th St
Site Code:
Start Date: 03/08/2023
Page No: 4



Turning Movement Data Plot

Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

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(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Blaine Ave & 140th St
Site Code:
Start Date: 03/08/2023
Page No: 5

Turning Movement Peak Hour Data (6:30 AM)

Start Time	140th St Westbound				Blaine Ave Northbound				Blaine Ave Southbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
6:30 AM	1	0	0	1	32	0	0	32	1	6	0	7	40
6:45 AM	0	1	0	1	26	0	0	26	1	5	0	6	33
7:00 AM	0	1	0	1	19	2	0	21	0	7	0	7	29
7:15 AM	0	2	0	2	27	0	0	27	0	9	0	9	38
Total	1	4	0	5	104	2	0	106	2	27	0	29	140
Approach %	20.0	80.0	-	-	98.1	1.9	-	-	6.9	93.1	-	-	-
Total %	0.7	2.9	-	3.6	74.3	1.4	-	75.7	1.4	19.3	-	20.7	-
PHF	0.250	0.500	-	0.625	0.813	0.250	-	0.828	0.500	0.750	-	0.806	0.875
Lights	1	2	-	3	95	2	-	97	2	23	-	25	125
% Lights	100.0	50.0	-	60.0	91.3	100.0	-	91.5	100.0	85.2	-	86.2	89.3
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
All Pedestrians	-	-	0	-	-	-	0	-	-	-	0	-	-
% All Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-
Trucks	0	2	-	2	9	0	-	9	0	4	-	4	15
% Trucks	0.0	50.0	-	40.0	8.7	0.0	-	8.5	0.0	14.8	-	13.8	10.7

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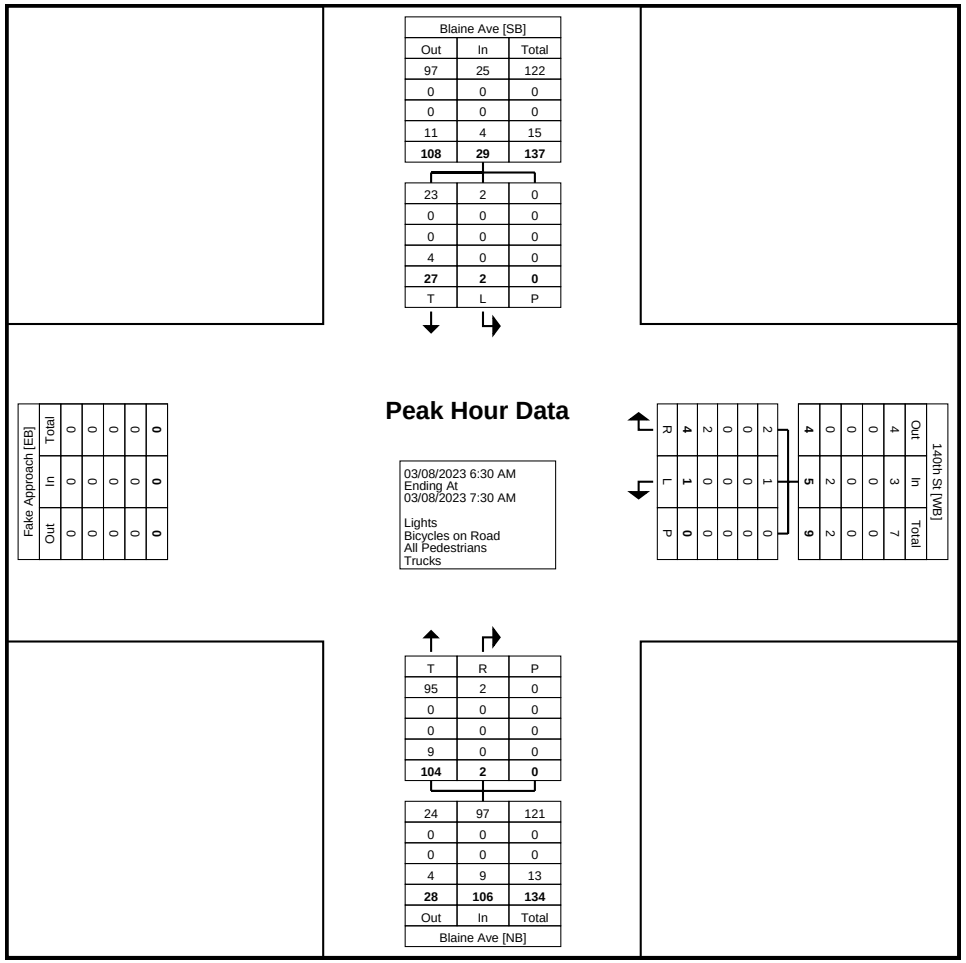
Count Name: Blaine Ave & 140th St
Site Code:
Start Date: 03/08/2023
Page No: 6



Turning Movement Peak Hour Data Plot (6:30 AM)

Kimley-Horn and Associates, Inc.
4201 Winfield Road Suite 600

Warrenville, Illinois, United States 60555
(630) 487-5550 ethan.scowcroft@kimley-horn.com

Count Name: Blaine Ave & 140th St
Site Code:
Start Date: 03/08/2023
Page No: 7

Turning Movement Peak Hour Data (4:00 PM)

Start Time	140th St Westbound				Blaine Ave Northbound				Blaine Ave Southbound				
	Left	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Int. Total
4:00 PM	2	2	0	4	19	0	0	19	1	21	0	22	45
4:15 PM	0	0	0	0	19	0	0	19	0	18	0	18	37
4:30 PM	0	2	0	2	12	0	0	12	2	23	0	25	39
4:45 PM	0	0	0	0	16	0	0	16	1	25	0	26	42
Total	2	4	0	6	66	0	0	66	4	87	0	91	163
Approach %	33.3	66.7	-	-	100.0	0.0	-	-	4.4	95.6	-	-	-
Total %	1.2	2.5	-	3.7	40.5	0.0	-	40.5	2.5	53.4	-	55.8	-
PHF	0.250	0.500	-	0.375	0.868	0.000	-	0.868	0.500	0.870	-	0.875	0.906
Lights	2	4	-	6	48	0	-	48	2	78	-	80	134
% Lights	100.0	100.0	-	100.0	72.7	-	-	72.7	50.0	89.7	-	87.9	82.2
Bicycles on Road	0	0	-	0	0	0	-	0	0	0	-	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	-	-	0.0	0.0	0.0	-	0.0	0.0
All Pedestrians	-	-	0	-	-	-	0	-	-	-	0	-	-
% All Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-
Trucks	0	0	-	0	18	0	-	18	2	9	-	11	29
% Trucks	0.0	0.0	-	0.0	27.3	-	-	27.3	50.0	10.3	-	12.1	17.8

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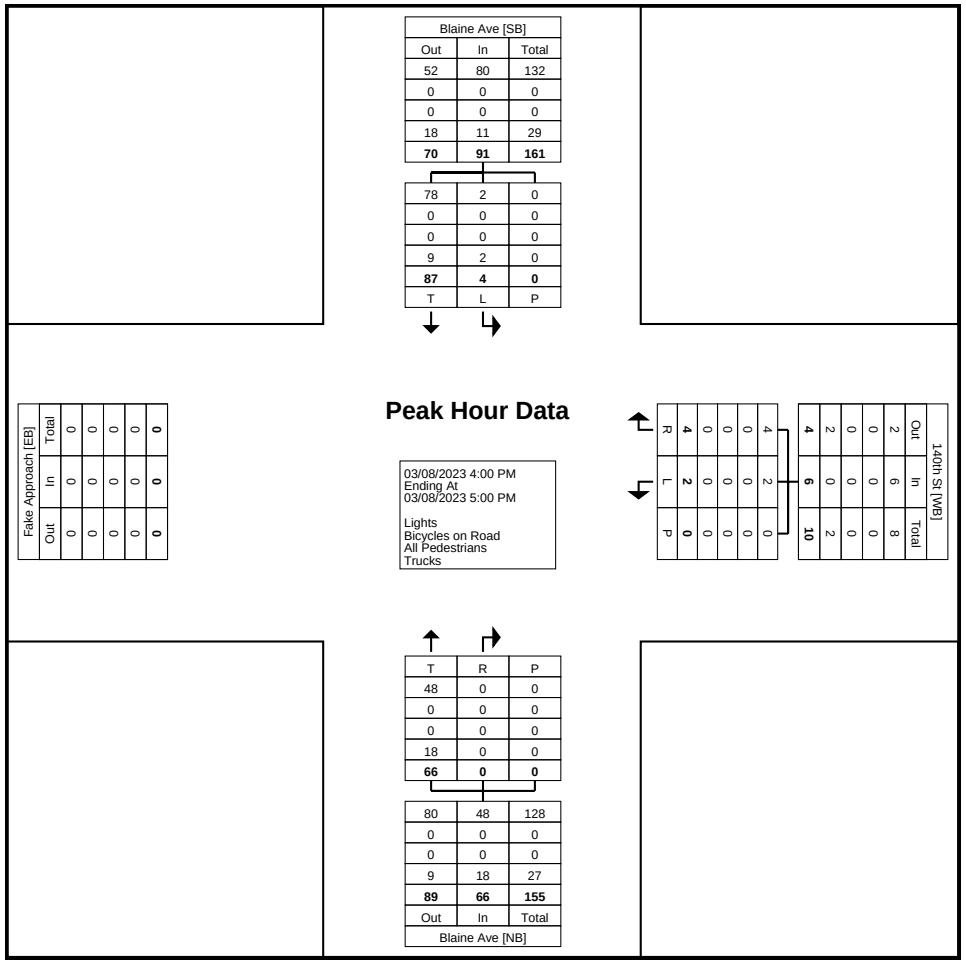
Count Name: Blaine Ave & 140th St
Site Code:
Start Date: 03/08/2023
Page No: 8



Turning Movement Peak Hour Data Plot (4:00 PM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 riley.mitts@kimley-horn.com

Count Name: County Road 42 & 142nd Street East
Site Code:
Start Date: 03/31/2021
Page No: 1

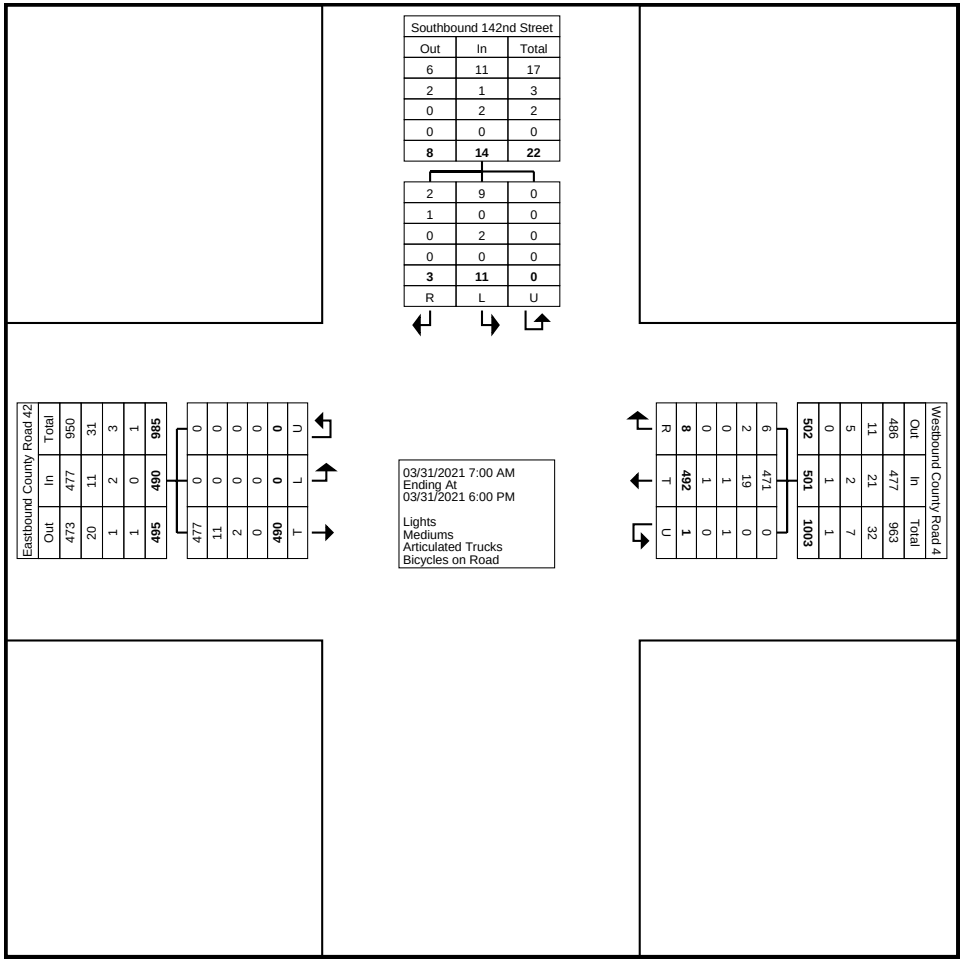
Turning Movement Data

Start Time	Eastbound County Road 42				Westbound County Road 42				Southbound 142nd Street East				
	Eastbound				Westbound				Southbound				
	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Left	Right	U-Turn	App. Total	Int. Total
7:00 AM	0	18	0	18	24	1	0	25	0	0	0	0	43
7:15 AM	0	24	0	24	46	0	0	46	0	0	0	0	70
7:30 AM	0	26	0	26	32	1	0	33	0	1	0	1	60
7:45 AM	0	32	0	32	35	1	0	36	2	0	0	2	70
Hourly Total	0	100	0	100	137	3	0	140	2	1	0	3	243
8:00 AM	0	18	0	18	29	0	1	30	0	1	0	1	49
8:15 AM	0	20	0	20	21	0	0	21	0	0	0	0	41
8:30 AM	0	13	0	13	21	0	0	21	0	0	0	0	34
8:45 AM	0	18	0	18	27	2	0	29	0	0	0	0	47
Hourly Total	0	69	0	69	98	2	1	101	0	1	0	1	171
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	45	0	45	28	0	0	28	2	0	0	2	75
4:15 PM	0	46	0	46	39	0	0	39	0	0	0	0	85
4:30 PM	0	35	0	35	21	1	0	22	1	0	0	1	58
4:45 PM	0	43	0	43	36	0	0	36	2	1	0	3	82
Hourly Total	0	169	0	169	124	1	0	125	5	1	0	6	300
5:00 PM	0	43	0	43	25	0	0	25	0	0	0	0	68
5:15 PM	0	29	0	29	41	0	0	41	2	0	0	2	72
5:30 PM	0	46	0	46	29	1	0	30	0	0	0	0	76
5:45 PM	0	34	0	34	38	1	0	39	2	0	0	2	75
Hourly Total	0	152	0	152	133	2	0	135	4	0	0	4	291
Grand Total	0	490	0	490	492	8	1	501	11	3	0	14	1005
Approach %	0.0	100.0	0.0	-	98.2	1.6	0.2	-	78.6	21.4	0.0	-	-
Total %	0.0	48.8	0.0	48.8	49.0	0.8	0.1	49.9	1.1	0.3	0.0	1.4	-
Lights	0	477	0	477	471	6	0	477	9	2	0	11	965
% Lights	-	97.3	-	97.3	95.7	75.0	0.0	95.2	81.8	66.7	-	78.6	96.0
Mediums	0	11	0	11	19	2	0	21	0	1	0	1	33
% Mediums	-	2.2	-	2.2	3.9	25.0	0.0	4.2	0.0	33.3	-	7.1	3.3
Articulated Trucks	0	2	0	2	1	0	1	2	2	0	0	2	6
% Articulated Trucks	-	0.4	-	0.4	0.2	0.0	100.0	0.4	18.2	0.0	-	14.3	0.6
Bicycles on Road	0	0	0	0	1	0	0	1	0	0	0	0	1
% Bicycles on Road	-	0.0	-	0.0	0.2	0.0	0.0	0.2	0.0	0.0	-	0.0	0.1

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 riley.mitts@kimley-horn.com

Count Name: County Road 42 & 142nd Street East
Site Code:
Start Date: 03/31/2021
Page No: 2



Turning Movement Data Plot

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
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Count Name: County Road 42 & 142nd Street East
Site Code:
Start Date: 03/31/2021

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Eastbound County Road 42				Westbound County Road 42				Southbound 142nd Street East				
	Eastbound				Westbound				Southbound				
	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Left	Right	U-Turn	App. Total	Int. Total
7:15 AM	0	24	0	24	46	0	0	46	0	0	0	0	70
7:30 AM	0	26	0	26	32	1	0	33	0	1	0	1	60
7:45 AM	0	32	0	32	35	1	0	36	2	0	0	2	70
8:00 AM	0	18	0	18	29	0	1	30	0	1	0	1	49
Total	0	100	0	100	142	2	1	145	2	2	0	4	249
Approach %	0.0	100.0	0.0	-	97.9	1.4	0.7	-	50.0	50.0	0.0	-	-
Total %	0.0	40.2	0.0	40.2	57.0	0.8	0.4	58.2	0.8	0.8	0.0	1.6	-
PHF	0.000	0.781	0.000	0.781	0.772	0.500	0.250	0.788	0.250	0.500	0.000	0.500	0.889
Lights	0	93	0	93	132	2	0	134	0	2	0	2	229
% Lights	-	93.0	-	93.0	93.0	100.0	0.0	92.4	0.0	100.0	-	50.0	92.0
Mediums	0	5	0	5	10	0	0	10	0	0	0	0	15
% Mediums	-	5.0	-	5.0	7.0	0.0	0.0	6.9	0.0	0.0	-	0.0	6.0
Articulated Trucks	0	2	0	2	0	0	1	1	2	0	0	2	5
% Articulated Trucks	-	2.0	-	2.0	0.0	0.0	100.0	0.7	100.0	0.0	-	50.0	2.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	-	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

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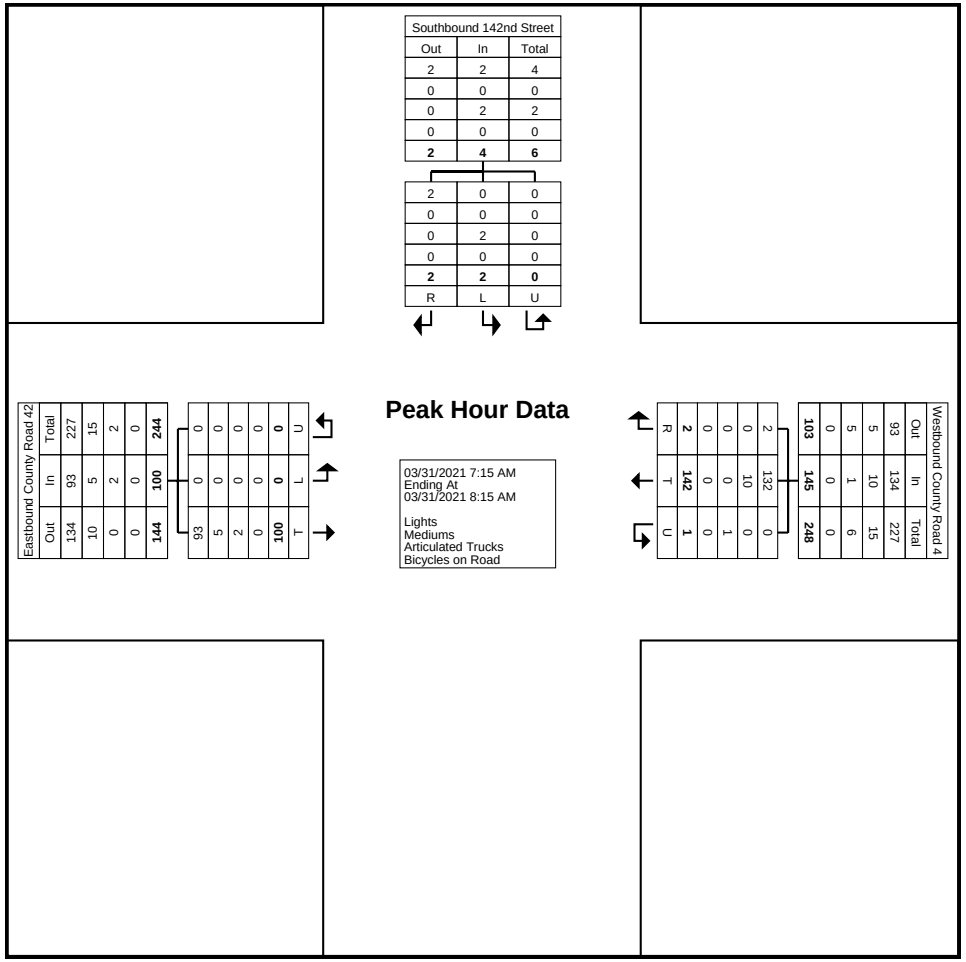
331.481.7332 riley.mitts@kimley-horn.com

Count Name: County Road 42 & 142nd Street East
Site Code:
Start Date: 03/31/2021
Page No: 4



Turning Movement Peak Hour Data Plot (7:15 AM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 riley.mitts@kimley-horn.com

Count Name: County Road 42 & 142nd Street East
Site Code:
Start Date: 03/31/2021

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Eastbound County Road 42				Westbound County Road 42				Southbound 142nd Street East				
	Eastbound				Westbound				Southbound				
	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Left	Right	U-Turn	App. Total	Int. Total
4:00 PM	0	45	0	45	28	0	0	28	2	0	0	2	75
4:15 PM	0	46	0	46	39	0	0	39	0	0	0	0	85
4:30 PM	0	35	0	35	21	1	0	22	1	0	0	1	58
4:45 PM	0	43	0	43	36	0	0	36	2	1	0	3	82
Total	0	169	0	169	124	1	0	125	5	1	0	6	300
Approach %	0.0	100.0	0.0	-	99.2	0.8	0.0	-	83.3	16.7	0.0	-	-
Total %	0.0	56.3	0.0	56.3	41.3	0.3	0.0	41.7	1.7	0.3	0.0	2.0	-
PHF	0.000	0.918	0.000	0.918	0.795	0.250	0.000	0.801	0.625	0.250	0.000	0.500	0.882
Lights	0	168	0	168	121	1	0	122	5	0	0	5	295
% Lights	-	99.4	-	99.4	97.6	100.0	-	97.6	100.0	0.0	-	83.3	98.3
Mediums	0	1	0	1	2	0	0	2	0	1	0	1	4
% Mediums	-	0.6	-	0.6	1.6	0.0	-	1.6	0.0	100.0	-	16.7	1.3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0
% Articulated Trucks	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0
Bicycles on Road	0	0	0	0	1	0	0	1	0	0	0	0	1
% Bicycles on Road	-	0.0	-	0.0	0.8	0.0	-	0.8	0.0	0.0	-	0.0	0.3

Kimley-Horn : Lisle (IL)
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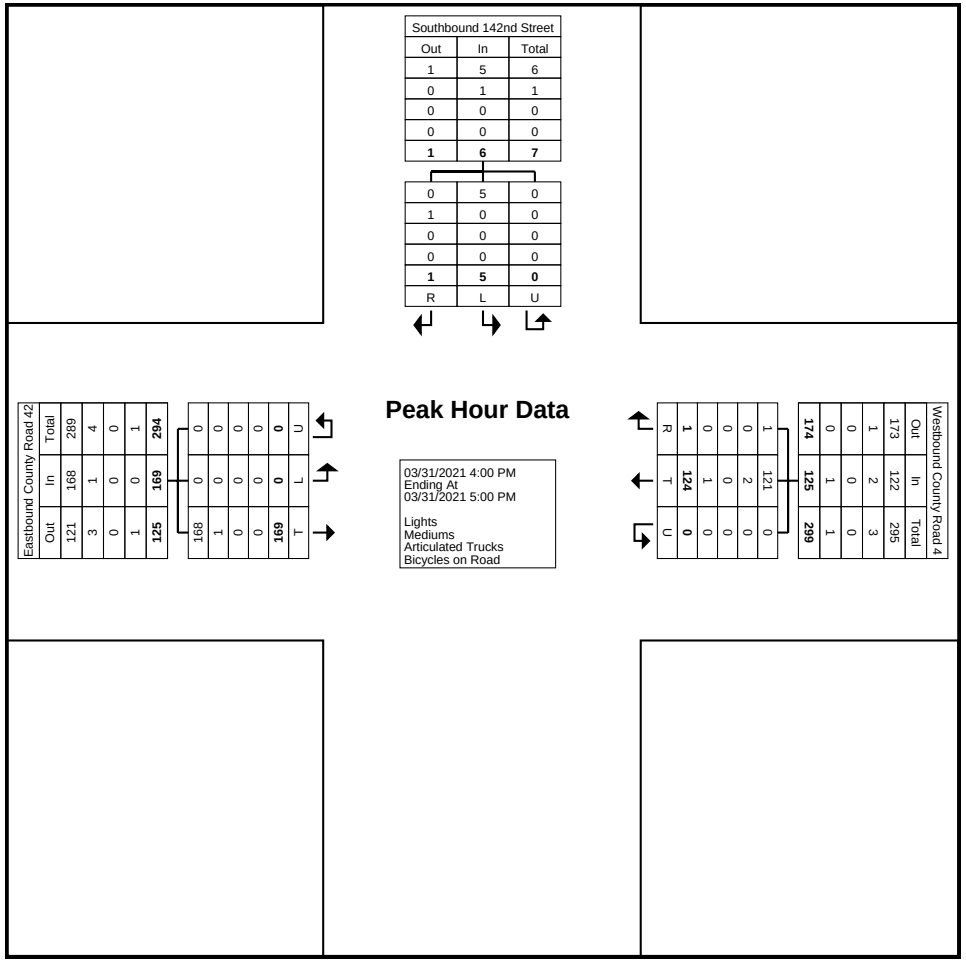
Count Name: County Road 42 & 142nd Street East
Site Code:
Start Date: 03/31/2021
Page No: 6



Turning Movement Peak Hour Data Plot (4:00 PM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 riley.mitts@kimley-horn.com

Count Name: County Road 42 & Conley Avenue
Site Code:
Start Date: 03/31/2021
Page No: 1

Turning Movement Data

Start Time	Eastbound County Road 42					Westbound County Road 42					Norhtbound Conley Avenue					Southbound Conley Avenue					
	Eastbound					Westbound					Northbound					Southbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
12:00 AM	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	6
12:15 AM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	4
12:30 AM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	3	0	3	5
12:45 AM	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	4
Hourly Total	1	6	0	0	7	0	6	0	0	6	0	0	0	0	0	0	0	6	0	6	19
1:00 AM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
1:15 AM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	5
1:30 AM	2	0	0	0	2	0	4	0	0	4	0	0	0	0	0	0	0	1	0	1	7
1:45 AM	1	1	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3
Hourly Total	6	1	0	0	7	0	6	1	0	7	0	0	0	0	0	0	0	4	0	4	18
2:00 AM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	5
2:15 AM	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2:30 AM	2	1	0	0	3	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	5
2:45 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	6
Hourly Total	7	3	0	0	10	0	0	1	0	1	0	0	0	0	0	0	0	9	0	9	20
3:00 AM	1	2	0	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
3:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3
3:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3:45 AM	5	1	0	0	6	0	2	0	0	2	0	0	0	0	0	0	0	2	0	2	10
Hourly Total	7	4	0	0	11	0	3	0	0	3	0	0	0	0	0	0	0	4	0	4	18
4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	4
4:15 AM	5	2	0	0	7	0	6	1	0	7	0	0	0	0	0	0	0	0	0	0	14
4:30 AM	2	1	0	0	3	0	5	1	0	6	0	0	0	0	0	0	0	4	0	4	13
4:45 AM	5	1	0	0	6	1	2	0	0	3	0	0	0	0	0	0	0	6	0	6	15
Hourly Total	12	4	0	0	16	1	13	2	0	16	0	0	0	0	0	0	0	14	0	14	46
5:00 AM	5	4	0	0	9	0	7	1	0	8	0	0	0	0	0	0	0	3	0	3	20
5:15 AM	12	5	0	0	17	0	10	2	0	12	0	0	0	0	0	0	0	4	0	4	33
5:30 AM	6	8	0	0	14	0	10	0	0	10	1	0	0	0	1	0	0	4	0	4	29
5:45 AM	6	4	0	0	10	0	12	1	0	13	0	0	0	0	0	0	0	8	0	8	31
Hourly Total	29	21	0	0	50	0	39	4	0	43	1	0	0	0	1	0	0	19	0	19	113
6:00 AM	2	8	0	0	10	0	14	1	0	15	0	0	0	0	0	0	0	2	0	2	27
6:15 AM	2	12	0	0	14	0	19	0	0	19	0	0	0	0	0	0	0	3	0	3	36
6:30 AM	3	16	0	0	19	0	26	2	0	28	0	0	0	0	0	0	0	3	0	3	50
6:45 AM	4	21	0	0	25	0	35	1	0	36	0	0	0	0	0	0	0	7	0	7	68
Hourly Total	11	57	0	0	68	0	94	4	0	98	0	0	0	0	0	0	0	15	0	15	181
7:00 AM	8	17	0	0	25	0	22	3	0	25	0	0	0	0	0	0	0	3	0	3	53
7:15 AM	5	27	0	0	32	0	41	0	0	41	0	0	0	0	0	0	0	3	0	3	76
7:30 AM	10	28	0	1	39	0	28	4	0	32	0	0	0	0	0	1	0	2	0	3	74
7:45 AM	10	27	0	0	37	0	40	2	0	42	0	0	0	0	0	0	0	10	0	10	89

Hourly Total	33	99	0	1	133	0	131	9	0	140	0	0	0	0	0	1	0	18	0	19	292
8:00 AM	5	17	0	0	22	0	26	1	0	27	0	0	0	0	0	1	0	8	0	9	58
8:15 AM	12	20	0	0	32	0	24	1	0	25	0	0	0	0	0	0	0	11	0	11	68
8:30 AM	6	16	0	1	23	0	25	0	0	25	0	0	0	0	0	1	0	7	0	8	56
8:45 AM	5	16	0	0	21	0	22	0	0	22	0	0	0	0	0	0	0	6	0	6	49
Hourly Total	28	69	0	1	98	0	97	2	0	99	0	0	0	0	0	2	0	32	0	34	231
9:00 AM	6	17	0	0	23	0	22	0	0	22	0	0	0	0	0	1	0	8	0	9	54
9:15 AM	5	21	0	0	26	0	25	0	0	25	0	0	0	0	0	0	0	13	0	13	64
9:30 AM	5	30	0	0	35	0	20	1	0	21	0	0	0	0	0	0	0	12	0	12	68
9:45 AM	5	18	0	0	23	0	29	1	0	30	0	0	0	0	0	2	0	6	0	8	61
Hourly Total	21	86	0	0	107	0	96	2	0	98	0	0	0	0	0	3	0	39	0	42	247
10:00 AM	8	17	0	0	25	0	22	0	0	22	0	0	0	0	0	0	0	6	0	6	53
10:15 AM	4	28	0	0	32	0	21	0	0	21	0	0	0	0	0	0	0	12	0	12	65
10:30 AM	3	19	0	0	22	0	27	0	0	27	0	0	0	0	0	0	0	15	0	15	64
10:45 AM	3	25	0	0	28	0	32	1	0	33	0	0	0	0	0	1	0	7	0	8	69
Hourly Total	18	89	0	0	107	0	102	1	0	103	0	0	0	0	0	1	0	40	0	41	251
11:00 AM	5	29	0	0	34	0	24	1	0	25	0	0	0	0	0	0	0	13	0	13	72
11:15 AM	6	26	0	0	32	0	25	1	0	26	0	0	0	0	0	1	0	12	0	13	71
11:30 AM	4	18	0	0	22	0	17	0	0	17	0	0	0	0	0	0	0	16	0	16	55
11:45 AM	2	30	0	0	32	0	21	2	0	23	0	0	0	0	0	0	0	7	0	7	62
Hourly Total	17	103	0	0	120	0	87	4	0	91	0	0	0	0	0	1	0	48	0	49	260
12:00 PM	6	19	0	0	25	0	31	1	0	32	0	0	0	0	0	0	0	15	0	15	72
12:15 PM	6	20	0	0	26	0	29	2	0	31	0	0	0	0	0	0	0	13	0	13	70
12:30 PM	6	17	0	0	23	0	32	0	0	32	0	0	0	0	0	0	0	12	0	12	67
12:45 PM	11	22	0	0	33	0	15	2	0	17	0	0	0	0	0	1	0	8	0	9	59
Hourly Total	29	78	0	0	107	0	107	5	0	112	0	0	0	0	0	1	0	48	0	49	268
1:00 PM	7	31	0	0	38	0	23	0	0	23	0	0	0	0	0	1	0	11	0	12	73
1:15 PM	2	29	0	0	31	0	24	0	0	24	0	0	0	0	0	1	0	11	0	12	67
1:30 PM	11	40	0	0	51	0	27	1	0	28	0	0	0	0	0	0	0	13	0	13	92
1:45 PM	7	32	0	0	39	0	32	2	0	34	0	0	0	0	0	2	0	19	0	21	94
Hourly Total	27	132	0	0	159	0	106	3	0	109	0	0	0	0	0	4	0	54	0	58	326
2:00 PM	6	30	0	0	36	0	18	1	0	19	0	0	0	0	0	0	0	12	0	12	67
2:15 PM	6	53	0	0	59	0	27	0	0	27	0	0	0	0	0	1	0	8	0	9	95
2:30 PM	4	40	0	0	44	0	32	3	0	35	0	0	0	0	0	0	0	11	0	11	90
2:45 PM	6	28	0	0	34	0	42	1	0	43	0	0	0	0	0	0	0	7	0	7	84
Hourly Total	22	151	0	0	173	0	119	5	0	124	0	0	0	0	0	1	0	38	0	39	336
3:00 PM	8	34	0	0	42	0	26	0	0	26	0	0	0	0	0	4	0	13	0	17	85
3:15 PM	1	31	0	0	32	0	34	0	0	34	0	0	0	0	0	0	0	11	0	11	77
3:30 PM	5	46	0	0	51	0	32	0	0	32	0	0	0	0	0	1	1	10	0	12	95
3:45 PM	7	24	0	0	31	0	26	0	0	26	0	0	0	0	0	0	0	8	0	8	65
Hourly Total	21	135	0	0	156	0	118	0	0	118	0	0	0	0	0	5	1	42	0	48	322
4:00 PM	6	42	0	0	48	0	30	0	0	30	0	0	0	0	0	1	0	8	0	9	87
4:15 PM	6	46	0	0	52	0	39	0	0	39	1	0	0	0	1	1	0	9	0	10	102
4:30 PM	7	38	0	0	45	0	20	1	0	21	0	0	0	0	0	1	0	11	0	12	78
4:45 PM	3	43	0	0	46	0	34	0	0	34	0	0	0	0	0	2	0	13	0	15	95
Hourly Total	22	169	0	0	191	0	123	1	0	124	1	0	0	0	1	5	0	41	0	46	362
5:00 PM	4	40	0	0	44	0	31	0	0	31	0	0	0	0	0	0	0	12	0	12	87
5:15 PM	5	31	0	0	36	0	40	0	0	40	0	0	0	0	0	0	0	8	0	8	84
5:30 PM	1	43	0	0	44	0	27	0	0	27	0	0	0	0	0	3	0	7	0	10	81
5:45 PM	11	34	0	0	45	0	36	0	0	36	0	0	0	0	0	1	0	12	0	13	94
Hourly Total	21	148	0	0	169	0	134	0	0	134	0	0	0	0	0	4	0	39	0	43	346
6:00 PM	4	40	0	0	44	0	26	0	0	26	0	0	0	0	0	1	0	6	0	7	77

6:15 PM	1	30	0	0	31	0	24	1	0	25	0	0	0	0	0	0	0	2	0	2	58
6:30 PM	2	30	0	0	32	0	26	0	0	26	0	0	0	0	0	1	0	4	0	5	63
6:45 PM	3	16	0	0	19	0	17	0	0	17	0	0	0	0	0	0	0	4	0	4	40
Hourly Total	10	116	0	0	126	0	93	1	0	94	0	0	0	0	0	2	0	16	0	18	238
7:00 PM	5	18	0	0	23	0	18	0	0	18	0	0	0	0	0	0	0	3	0	3	44
7:15 PM	1	11	0	1	13	0	13	0	0	13	0	0	0	0	0	2	0	3	0	5	31
7:30 PM	3	22	0	0	25	0	11	0	0	11	0	0	0	0	0	0	0	1	0	1	37
7:45 PM	4	19	0	0	23	0	10	0	0	10	0	0	0	0	0	1	0	2	0	3	36
Hourly Total	13	70	0	1	84	0	52	0	0	52	0	0	0	0	0	3	0	9	0	12	148
8:00 PM	1	7	0	0	8	0	12	0	0	12	0	0	0	0	0	0	0	0	0	0	20
8:15 PM	1	18	0	0	19	0	9	0	0	9	0	0	0	0	0	0	0	3	0	3	31
8:30 PM	4	9	0	0	13	0	11	2	0	13	0	0	0	0	0	1	0	1	0	2	28
8:45 PM	3	8	0	1	12	0	17	0	0	17	0	0	0	0	0	0	0	3	0	3	32
Hourly Total	9	42	0	1	52	0	49	2	0	51	0	0	0	0	0	1	0	7	0	8	111
9:00 PM	0	12	0	0	12	0	10	0	0	10	0	0	0	0	0	0	0	1	0	1	23
9:15 PM	1	7	0	0	8	0	5	0	0	5	0	0	0	0	0	0	0	1	0	1	14
9:30 PM	0	6	0	0	6	0	5	0	0	5	0	0	0	0	0	0	0	2	0	2	13
9:45 PM	2	7	0	0	9	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	11
Hourly Total	3	32	0	0	35	0	22	0	0	22	0	0	0	0	0	0	0	4	0	4	61
10:00 PM	1	4	0	0	5	0	6	0	0	6	0	0	0	0	0	1	0	0	0	1	12
10:15 PM	0	3	0	0	3	0	7	0	0	7	0	0	0	0	0	0	0	1	0	1	11
10:30 PM	0	4	0	0	4	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	10
10:45 PM	2	1	0	0	3	0	4	1	0	5	0	0	0	0	0	0	0	0	0	0	8
Hourly Total	3	12	0	0	15	0	23	1	0	24	0	0	0	0	0	1	0	1	0	2	41
11:00 PM	2	1	0	0	3	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	7
11:15 PM	0	4	0	0	4	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1	8
11:30 PM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	5
11:45 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	4
Hourly Total	5	6	0	0	11	0	8	0	0	8	0	0	0	0	0	0	0	5	0	5	24
Grand Total	375	1633	0	4	2012	1	1628	48	0	1677	2	0	0	0	2	35	1	552	0	588	4279
Approach %	18.6	81.2	0.0	0.2	-	0.1	97.1	2.9	0.0	-	100.0	0.0	0.0	0.0	-	6.0	0.2	93.9	0.0	-	-
Total %	8.8	38.2	0.0	0.1	47.0	0.0	38.0	1.1	0.0	39.2	0.0	0.0	0.0	0.0	0.0	0.8	0.0	12.9	0.0	13.7	-
Lights	219	1572	0	4	1795	1	1526	38	0	1565	2	0	0	0	2	32	1	232	0	265	3627
% Lights	58.4	96.3	-	100.0	89.2	100.0	93.7	79.2	-	93.3	100.0	-	-	-	100.0	91.4	100.0	42.0	-	45.1	84.8
Mediums	21	46	0	0	67	0	58	4	0	62	0	0	0	0	0	0	0	52	0	52	181
% Mediums	5.6	2.8	-	0.0	3.3	0.0	3.6	8.3	-	3.7	0.0	-	-	-	0.0	0.0	0.0	9.4	-	8.8	4.2
Articulated Trucks	135	15	0	0	150	0	44	6	0	50	0	0	0	0	0	3	0	268	0	271	471
% Articulated Trucks	36.0	0.9	-	0.0	7.5	0.0	2.7	12.5	-	3.0	0.0	-	-	-	0.0	8.6	0.0	48.6	-	46.1	11.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	-	-	-	0.0	0.0	0.0	0.0	-	0.0	0.0

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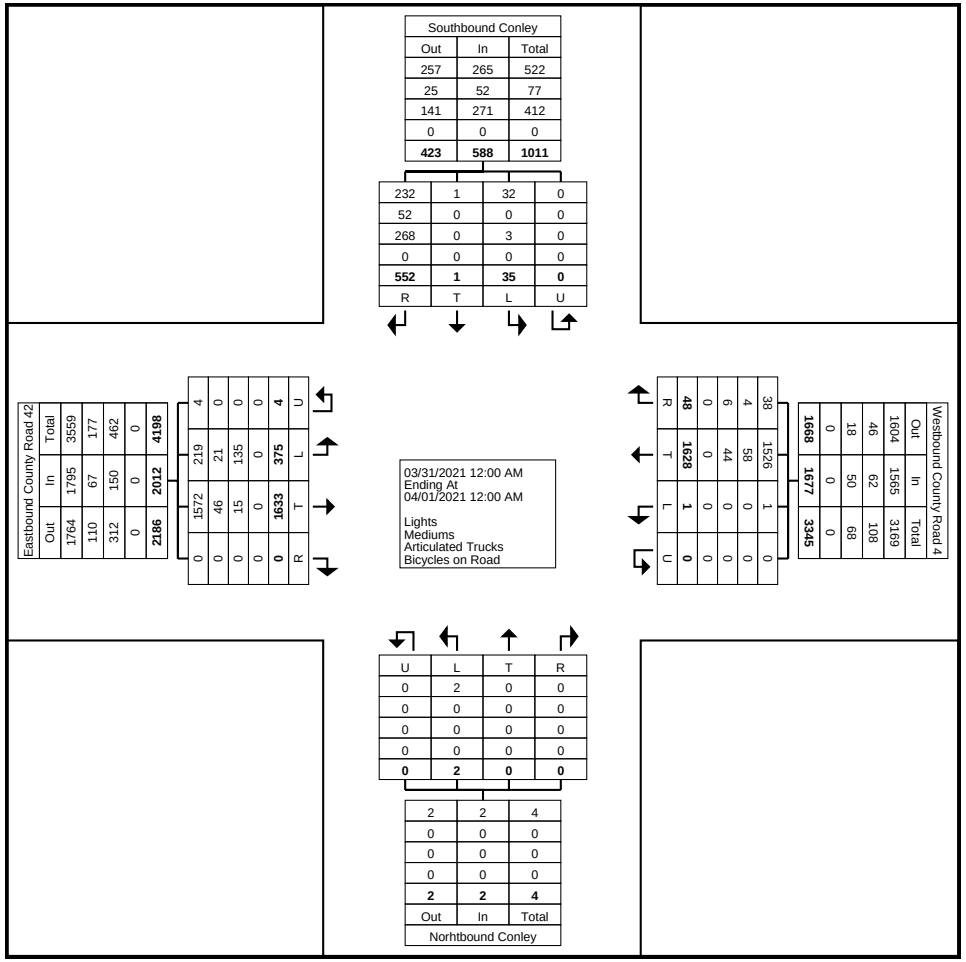
Count Name: County Road 42 & Conley Avenue
Site Code:
Start Date: 03/31/2021
Page No: 4



Turning Movement Data Plot

Kimley-Horn : Lisle (IL)
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Count Name: County Road 42 & Conley Avenue
Site Code:
Start Date: 03/31/2021

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Eastbound County Road 42					Westbound County Road 42					Norhtbound Conley Avenue					Southbound Conley Avenue					
	Eastbound					Westbound					Northbound					Southbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
7:15 AM	5	27	0	0	32	0	41	0	0	41	0	0	0	0	0	0	0	3	0	3	76
7:30 AM	10	28	0	1	39	0	28	4	0	32	0	0	0	0	0	1	0	2	0	3	74
7:45 AM	10	27	0	0	37	0	40	2	0	42	0	0	0	0	0	0	0	10	0	10	89
8:00 AM	5	17	0	0	22	0	26	1	0	27	0	0	0	0	0	1	0	8	0	9	58
Total	30	99	0	1	130	0	135	7	0	142	0	0	0	0	0	2	0	23	0	25	297
Approach %	23.1	76.2	0.0	0.8	-	0.0	95.1	4.9	0.0	-	0.0	0.0	0.0	0.0	-	8.0	0.0	92.0	0.0	-	-
Total %	10.1	33.3	0.0	0.3	43.8	0.0	45.5	2.4	0.0	47.8	0.0	0.0	0.0	0.0	0.0	0.7	0.0	7.7	0.0	8.4	-
PHF	0.750	0.884	0.000	0.250	0.833	0.000	0.823	0.438	0.000	0.845	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.575	0.000	0.625	0.834
Lights	24	93	0	1	118	0	127	7	0	134	0	0	0	0	0	2	0	4	0	6	258
% Lights	80.0	93.9	-	100.0	90.8	-	94.1	100.0	-	94.4	-	-	-	-	-	100.0	-	17.4	-	24.0	86.9
Mediums	1	4	0	0	5	0	7	0	0	7	0	0	0	0	0	0	0	4	0	4	16
% Mediums	3.3	4.0	-	0.0	3.8	-	5.2	0.0	-	4.9	-	-	-	-	-	0.0	-	17.4	-	16.0	5.4
Articulated Trucks	5	2	0	0	7	0	1	0	0	1	0	0	0	0	0	0	0	15	0	15	23
% Articulated Trucks	16.7	2.0	-	0.0	5.4	-	0.7	0.0	-	0.7	-	-	-	-	-	0.0	-	65.2	-	60.0	7.7
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	-	0.0	0.0	-	0.0	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0

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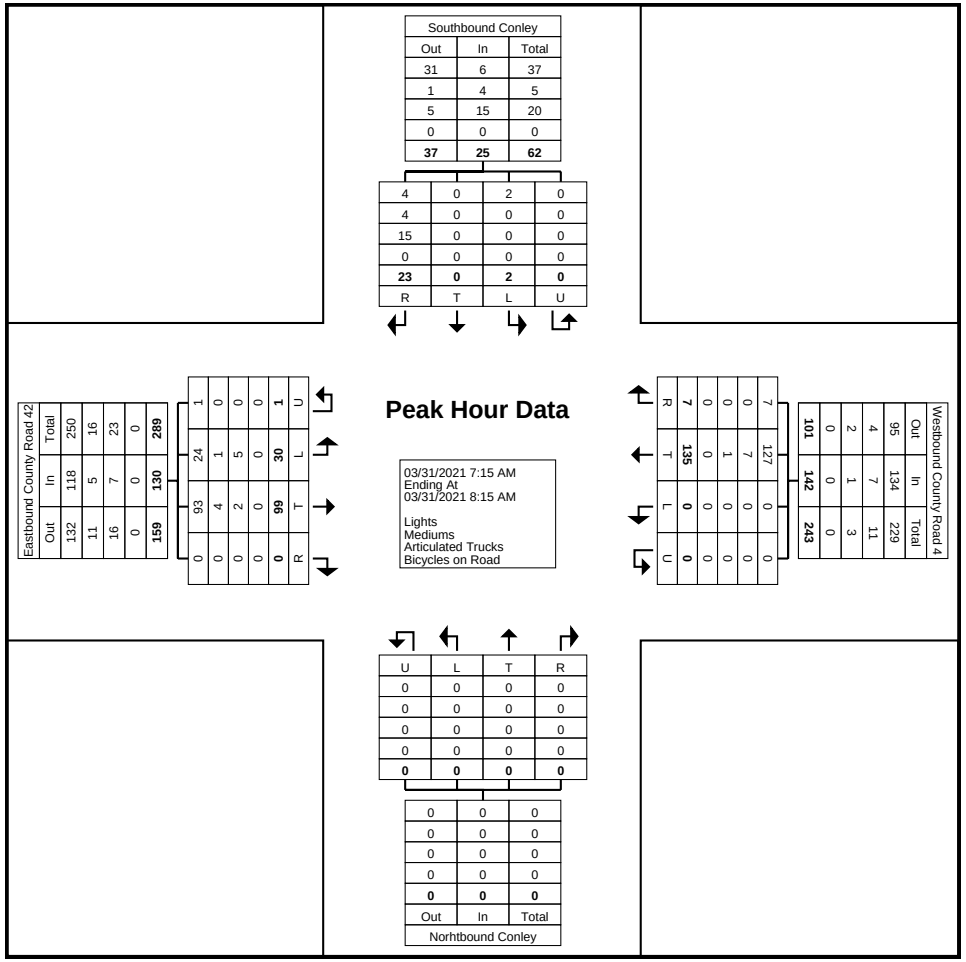

Turning Movement Peak Hour Data Plot (7:15 AM)

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Count Name: County Road 42 & Conley Avenue
Site Code:
Start Date: 03/31/2021

Turning Movement Peak Hour Data (4:00 PM)

Start Time	Eastbound County Road 42					Westbound County Road 42					Norhtbound Conley Avenue					Southbound Conley Avenue					
	Eastbound					Westbound					Northbound					Southbound					
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Int. Total
4:00 PM	6	42	0	0	48	0	30	0	0	30	0	0	0	0	0	1	0	8	0	9	87
4:15 PM	6	46	0	0	52	0	39	0	0	39	1	0	0	0	1	1	0	9	0	10	102
4:30 PM	7	38	0	0	45	0	20	1	0	21	0	0	0	0	0	1	0	11	0	12	78
4:45 PM	3	43	0	0	46	0	34	0	0	34	0	0	0	0	0	2	0	13	0	15	95
Total	22	169	0	0	191	0	123	1	0	124	1	0	0	0	1	5	0	41	0	46	362
Approach %	11.5	88.5	0.0	0.0	-	0.0	99.2	0.8	0.0	-	100.0	0.0	0.0	0.0	-	10.9	0.0	89.1	0.0	-	-
Total %	6.1	46.7	0.0	0.0	52.8	0.0	34.0	0.3	0.0	34.3	0.3	0.0	0.0	0.0	0.3	1.4	0.0	11.3	0.0	12.7	-
PHF	0.786	0.918	0.000	0.000	0.918	0.000	0.788	0.250	0.000	0.795	0.250	0.000	0.000	0.000	0.250	0.625	0.000	0.788	0.000	0.767	0.887
Lights	10	168	0	0	178	0	118	0	0	118	1	0	0	0	1	5	0	37	0	42	339
% Lights	45.5	99.4	-	-	93.2	-	95.9	0.0	-	95.2	100.0	-	-	-	100.0	100.0	-	90.2	-	91.3	93.6
Mediums	3	1	0	0	4	0	5	0	0	5	0	0	0	0	0	0	0	0	0	0	9
% Mediums	13.6	0.6	-	-	2.1	-	4.1	0.0	-	4.0	0.0	-	-	-	0.0	0.0	-	0.0	-	0.0	2.5
Articulated Trucks	9	0	0	0	9	0	0	1	0	1	0	0	0	0	0	0	0	4	0	4	14
% Articulated Trucks	40.9	0.0	-	-	4.7	-	0.0	100.0	-	0.8	0.0	-	-	-	0.0	0.0	-	9.8	-	8.7	3.9
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	-	0.0	-	0.0	0.0	-	0.0	0.0	-	-	-	0.0	0.0	-	0.0	-	0.0	0.0

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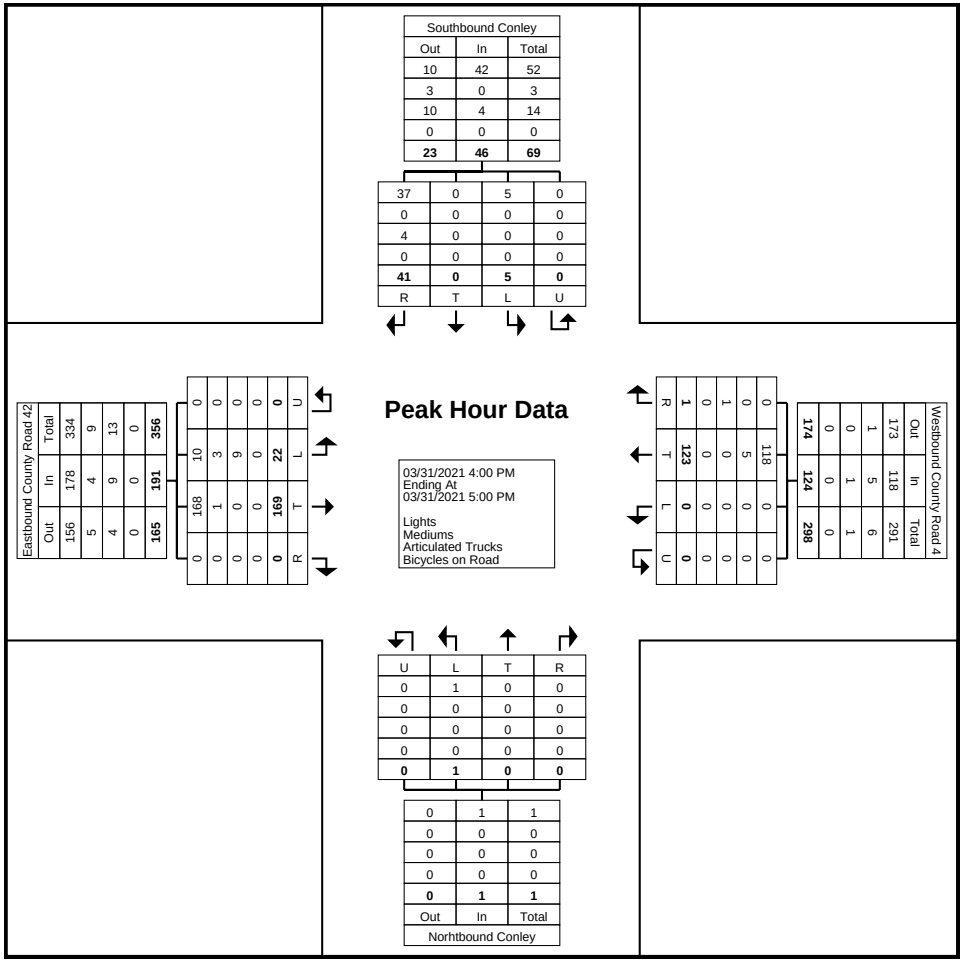
Site Code:
Start Date: 03/31/2021



Turning Movement Peak Hour Data Plot (4:00 PM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 riley.mitts@kimley-horn.com

Count Name: County Road 42 & State Highway 55
Site Code:
Start Date: 03/31/2021
Page No: 1

Turning Movement Data

Start Time	Eastbound County Road 42				Northbound MN Highway 55				Southbound MN Highway 55				
	Eastbound				Northbound				Southbound				
	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Int. Total
7:00 AM	1	18	0	19	24	85	0	109	28	2	0	30	158
7:15 AM	0	24	0	24	42	105	0	147	33	2	0	35	206
7:30 AM	1	25	0	26	35	85	0	120	54	1	0	55	201
7:45 AM	3	29	0	32	33	76	0	109	41	2	0	43	184
Hourly Total	5	96	0	101	134	351	0	485	156	7	0	163	749
8:00 AM	4	15	0	19	28	71	0	99	36	1	0	37	155
8:15 AM	0	20	0	20	19	63	0	82	40	2	0	42	144
8:30 AM	0	13	0	13	21	59	0	80	49	1	0	50	143
8:45 AM	3	17	0	20	22	57	0	79	33	4	0	37	136
Hourly Total	7	65	0	72	90	250	0	340	158	8	0	166	578
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	3	41	0	44	25	66	0	91	115	3	0	118	253
4:15 PM	2	48	0	50	38	56	0	94	149	1	0	150	294
4:30 PM	0	35	0	35	23	61	0	84	125	0	0	125	244
4:45 PM	0	43	0	43	35	55	0	90	136	2	0	138	271
Hourly Total	5	167	0	172	121	238	0	359	525	6	0	531	1062
5:00 PM	1	38	0	39	21	74	0	95	162	2	0	164	298
5:15 PM	2	30	0	32	40	62	0	102	159	1	0	160	294
5:30 PM	1	45	0	46	29	45	0	74	107	1	0	108	228
5:45 PM	2	36	0	38	38	39	0	77	81	1	0	82	197
Hourly Total	6	149	0	155	128	220	0	348	509	5	0	514	1017
Grand Total	23	477	0	500	473	1059	0	1532	1348	26	0	1374	3406
Approach %	4.6	95.4	0.0	-	30.9	69.1	0.0	-	98.1	1.9	0.0	-	-
Total %	0.7	14.0	0.0	14.7	13.9	31.1	0.0	45.0	39.6	0.8	0.0	40.3	-
Lights	16	469	0	485	459	1005	0	1464	1301	16	0	1317	3266
% Lights	69.6	98.3	-	97.0	97.0	94.9	-	95.6	96.5	61.5	-	95.9	95.9
Mediums	2	7	0	9	13	32	0	45	30	7	0	37	91
% Mediums	8.7	1.5	-	1.8	2.7	3.0	-	2.9	2.2	26.9	-	2.7	2.7
Articulated Trucks	5	1	0	6	1	22	0	23	17	3	0	20	49
% Articulated Trucks	21.7	0.2	-	1.2	0.2	2.1	-	1.5	1.3	11.5	-	1.5	1.4
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

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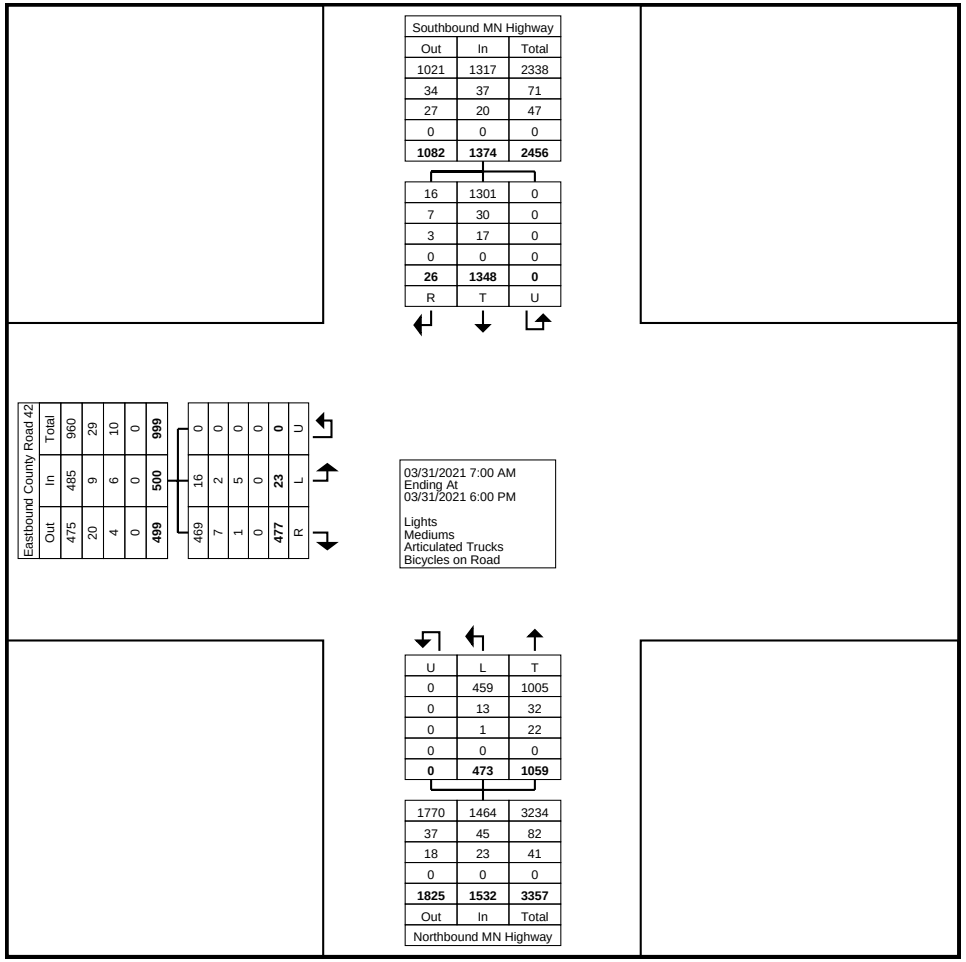
Count Name: County Road 42 & State Highway 55
Site Code:
Start Date: 03/31/2021
Page No: 2



Turning Movement Data Plot

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 riley.mitts@kimley-horn.com

Count Name: County Road 42 & State Highway 55
Site Code:
Start Date: 03/31/2021

Turning Movement Peak Hour Data (7:00 AM)

Start Time	Eastbound County Road 42				Northbound MN Highway 55				Southbound MN Highway 55				
	Eastbound				Northbound				Southbound				
	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Int. Total
7:00 AM	1	18	0	19	24	85	0	109	28	2	0	30	158
7:15 AM	0	24	0	24	42	105	0	147	33	2	0	35	206
7:30 AM	1	25	0	26	35	85	0	120	54	1	0	55	201
7:45 AM	3	29	0	32	33	76	0	109	41	2	0	43	184
Total	5	96	0	101	134	351	0	485	156	7	0	163	749
Approach %	5.0	95.0	0.0	-	27.6	72.4	0.0	-	95.7	4.3	0.0	-	-
Total %	0.7	12.8	0.0	13.5	17.9	46.9	0.0	64.8	20.8	0.9	0.0	21.8	-
PHF	0.417	0.828	0.000	0.789	0.798	0.836	0.000	0.825	0.722	0.875	0.000	0.741	0.909
Lights	2	91	0	93	130	337	0	467	142	3	0	145	705
% Lights	40.0	94.8	-	92.1	97.0	96.0	-	96.3	91.0	42.9	-	89.0	94.1
Mediums	0	4	0	4	4	5	0	9	13	3	0	16	29
% Mediums	0.0	4.2	-	4.0	3.0	1.4	-	1.9	8.3	42.9	-	9.8	3.9
Articulated Trucks	3	1	0	4	0	9	0	9	1	1	0	2	15
% Articulated Trucks	60.0	1.0	-	4.0	0.0	2.6	-	1.9	0.6	14.3	-	1.2	2.0
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0

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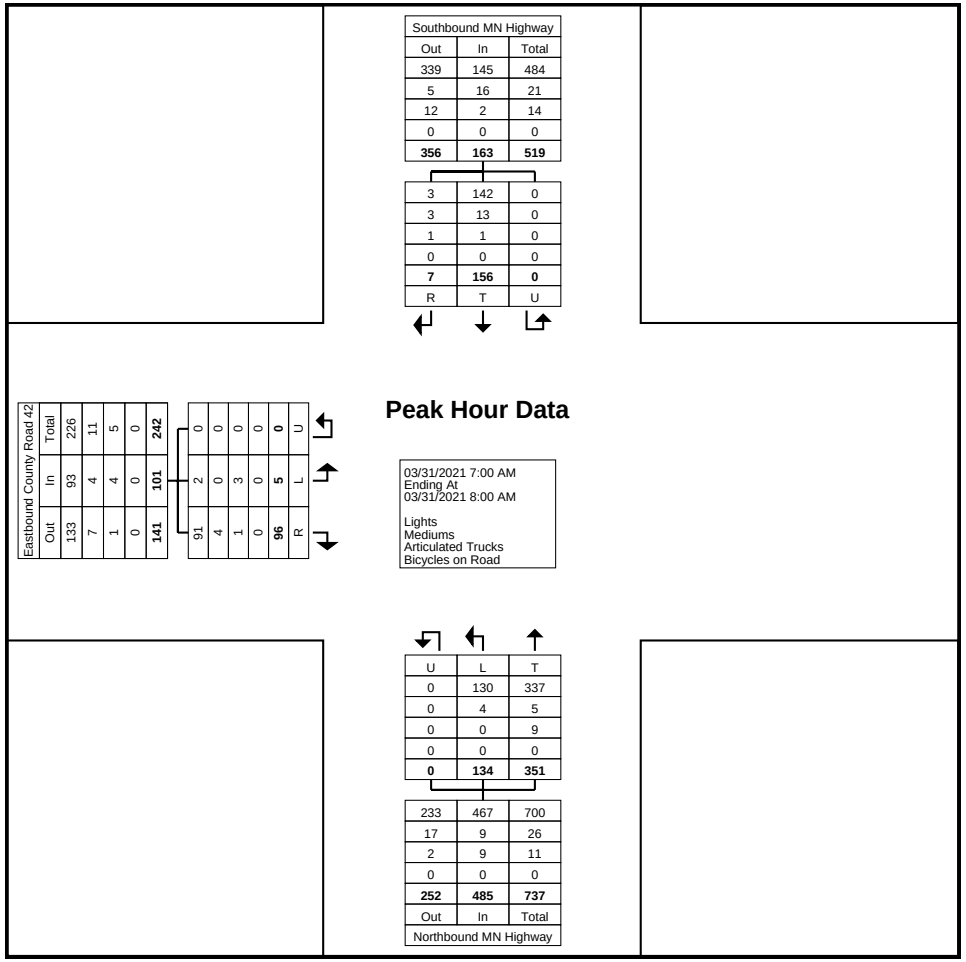
Count Name: County Road 42 & State Highway 55
Site Code:
Start Date: 03/31/2021
Page No: 4



Turning Movement Peak Hour Data Plot (7:00 AM)

Kimley-Horn : Lisle (IL)
1001 Warrenville Road, Suite 350

Lisle, Illinois, United States 60532
331.481.7332 riley.mitts@kimley-horn.com

Count Name: County Road 42 & State Highway 55
Site Code:
Start Date: 03/31/2021

Turning Movement Peak Hour Data (4:15 PM)

Start Time	Eastbound County Road 42				Northbound MN Highway 55				Southbound MN Highway 55				
	Eastbound				Northbound				Southbound				
	Left	Right	U-Turn	App. Total	Left	Thru	U-Turn	App. Total	Thru	Right	U-Turn	App. Total	Int. Total
4:15 PM	2	48	0	50	38	56	0	94	149	1	0	150	294
4:30 PM	0	35	0	35	23	61	0	84	125	0	0	125	244
4:45 PM	0	43	0	43	35	55	0	90	136	2	0	138	271
5:00 PM	1	38	0	39	21	74	0	95	162	2	0	164	298
Total	3	164	0	167	117	246	0	363	572	5	0	577	1107
Approach %	1.8	98.2	0.0	-	32.2	67.8	0.0	-	99.1	0.9	0.0	-	-
Total %	0.3	14.8	0.0	15.1	10.6	22.2	0.0	32.8	51.7	0.5	0.0	52.1	-
PHF	0.375	0.854	0.000	0.835	0.770	0.831	0.000	0.955	0.883	0.625	0.000	0.880	0.929
Lights	3	164	0	167	114	239	0	353	565	5	0	570	1090
% Lights	100.0	100.0	-	100.0	97.4	97.2	-	97.2	98.8	100.0	-	98.8	98.5
Mediums	0	0	0	0	2	6	0	8	3	0	0	3	11
% Mediums	0.0	0.0	-	0.0	1.7	2.4	-	2.2	0.5	0.0	-	0.5	1.0
Articulated Trucks	0	0	0	0	1	1	0	2	4	0	0	4	6
% Articulated Trucks	0.0	0.0	-	0.0	0.9	0.4	-	0.6	0.7	0.0	-	0.7	0.5
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bicycles on Road	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	0.0

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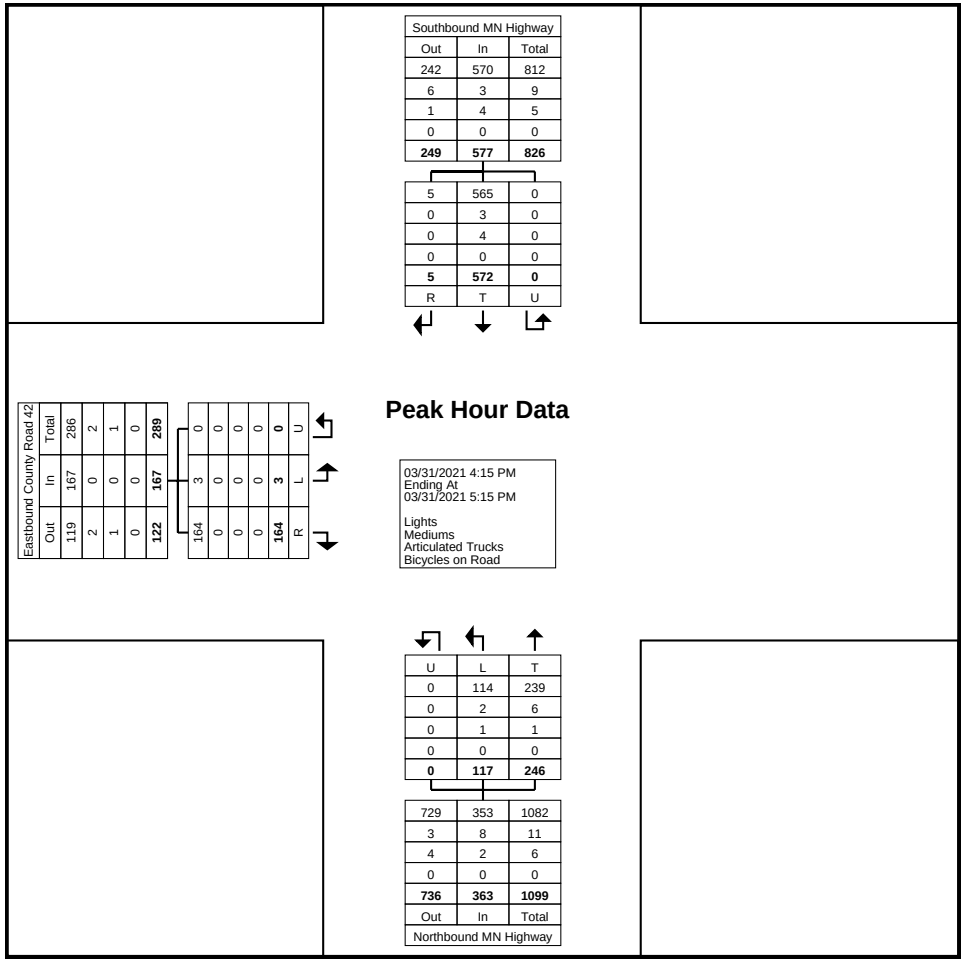
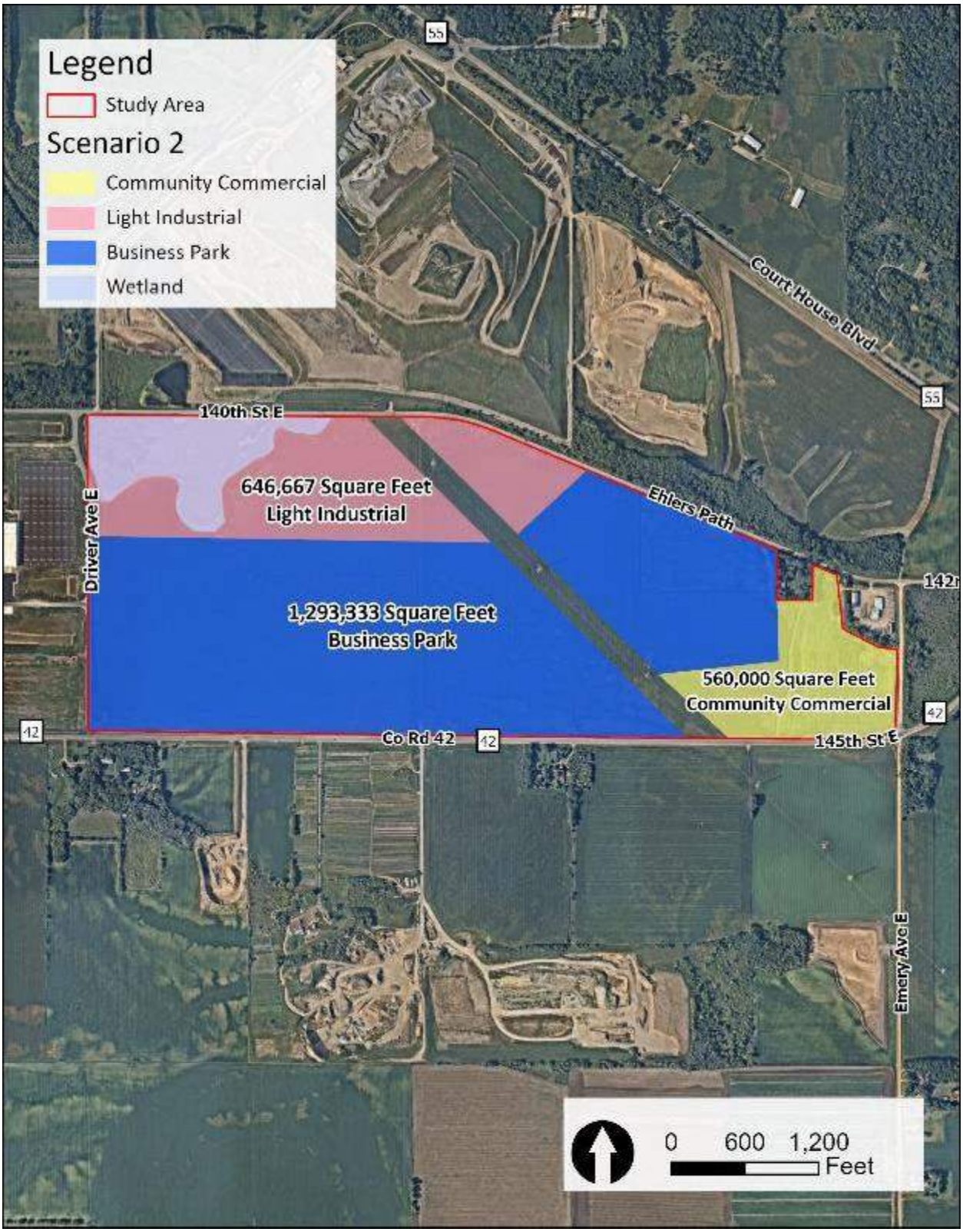
Count Name: County Road 42 & State Highway 55
Site Code:
Start Date: 03/31/2021
Page No: 6



Turning Movement Peak Hour Data Plot (4:15 PM)

Appendix C: SITE PLANS

Legend
Study Area
Scenario 1
Data Center
Wetland
55
Court House Blvd
55
140th St E
Ehlers Path
Driver Ave E
2,300,000 Square
Feet Data Center
142n
42
12
Co Rd 42
12
145th St E
Emery Ave E
0 600 1,200
Feet


Legend
Study Area
Scenario 2
Community Commercial
Light Industrial
Business Park
Wetland
55
Court House Blvd
55
140th St E
646,667 Square Feet
Light Industrial
Ehlers Path
Driver Ave E
1,293,333 Square Feet
Business Park
560,000 Square Feet
Community Commercial
42
42
Co Rd 42
42
145th St E
Emery Ave E
0 600 1,200
Feet

Appendix D: SIMTRAFFIC REPORTS

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	1.1	1.2	3.5	0.9
Total Del/Veh (s)	4.0	1.3	4.5	1.2	29.3	24.5	5.7	6.6

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.4	4.0	0.2
Total Del/Veh (s)	5.9	1.0	1.4	0.5	66.8	4.3	7.0

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	4.1	0.3
Total Del/Veh (s)	2.0	0.6	0.3	0.0	8.3	2.6	0.8

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.6	0.4	0.5	3.4	0.5

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0		0.0	3.2	0.8	0.2	3.8	1.0
Total Del/Veh (s)	48.7		5.1	3.9	1.8	2.1	0.3	3.1

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	3.0	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.3
Total Del/Veh (s)	3.2	0.9	4.4	1.9	1.8	18.0	2.3	20.2	11.6	3.6	1.9

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	2.6	1.2	2.0	1.3	7.0	2.8	2.1

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.8	0.5	0.0	0.2	0.3	0.0	3.2	8.7	1.2	3.1	6.9	1.3

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	0.5

10: Blaine Ave & 140th Street Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)		0.1	0.0	0.0	0.2	0.1	0.1
Total Del/Veh (s)		2.7	0.7	0.7	0.8	0.1	0.7

Total Zone Performance

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	273.9

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	WB	SB	SB
Directions Served	L	LT	R
Maximum Queue (ft)	40	199	86
Average Queue (ft)	5	85	43
95th Queue (ft)	24	166	72
Link Distance (ft)		696	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	485		430
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	WB	NB	NB
Directions Served	L	R	LT	R
Maximum Queue (ft)	148	17	155	62
Average Queue (ft)	69	1	64	24
95th Queue (ft)	123	7	136	52
Link Distance (ft)			703	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	485	300		275
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	63	25	69
Average Queue (ft)	9	3	29
95th Queue (ft)	37	16	64
Link Distance (ft)		772	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300		100
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	36
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	52	82	91	64	43	15
Average Queue (ft)	11	37	30	8	5	1
95th Queue (ft)	37	67	65	37	23	6
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	51	24	26	49
Average Queue (ft)	19	2	3	13
95th Queue (ft)	42	12	16	32
Link Distance (ft)			1146	2570
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	290	280		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	64	48
Average Queue (ft)	21	21
95th Queue (ft)	49	39
Link Distance (ft)		987
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	300	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	15	4	21	20
Average Queue (ft)	1	0	7	6
95th Queue (ft)	7	3	21	19
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & 140th Street

Movement	WB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	36	10
Average Queue (ft)	9	0
95th Queue (ft)	31	5
Link Distance (ft)	1429	846
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	1.4	1.1	3.4	1.2
Total Del/Veh (s)	3.8	2.0	5.1	2.5	22.2	22.4	10.9	6.5

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.3	0.4	3.9	0.1
Total Del/Veh (s)	5.5	0.8	1.2	0.7	47.1	36.7	4.2	6.4

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.3	4.0	0.5
Total Del/Veh (s)	1.9	0.5	0.4	9.4	3.0	0.9

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.8	1.1	3.9	1.0

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	3.4	0.6	0.7	2.6	0.9
Total Del/Veh (s)	38.0	17.8	25.2	2.9	6.3	1.7	9.4

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.0	0.2	0.2	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1	0.1
Total Del/Veh (s)	7.2	0.8	0.2	6.0	7.1	19.0	21.3	8.6	18.5	19.9	11.6	4.5

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	4.6	1.2	3.5	3.8	9.2	6.7	3.5

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	3.6	0.6	0.4	3.4	0.4	0.4	9.2	5.6	5.7	6.8	7.0	5.9

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	1.0

10: Blaine Ave & 140th Street Performance by movement

Movement	NBT	All
Denied Del/Veh (s)	0.0	0.0
Total Del/Veh (s)	1.0	1.0

Total Zone Performance

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	224.6

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	WB	SB	SB
Directions Served	T	R	L	LT	R
Maximum Queue (ft)	2	5	49	106	205
Average Queue (ft)	0	0	10	44	88
95th Queue (ft)	2	2	35	88	160
Link Distance (ft)	4810			696	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		250	485		430
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	R	LT	R
Maximum Queue (ft)	127	6	22	177	60
Average Queue (ft)	54	0	1	65	16
95th Queue (ft)	100	3	10	134	46
Link Distance (ft)		712		703	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	485		300		275
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	58	26	68
Average Queue (ft)	8	6	28
95th Queue (ft)	35	23	53
Link Distance (ft)		772	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300		100
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	4
95th Queue (ft)	21
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	31	172	243	105	178	32
Average Queue (ft)	4	77	78	20	55	2
95th Queue (ft)	20	136	165	66	143	14
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	NB	SB
Directions Served	L	T	LTR	LTR
Maximum Queue (ft)	53	11	38	90
Average Queue (ft)	11	0	11	29
95th Queue (ft)	37	8	36	62
Link Distance (ft)		1308	1146	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	290			
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	53	65
Average Queue (ft)	10	28
95th Queue (ft)	35	50
Link Distance (ft)		987
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	300	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	9	11	23	22
Average Queue (ft)	0	1	9	7
95th Queue (ft)	7	7	26	24
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & 140th Street

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Zone Summary

Zone wide Queuing Penalty: 0

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	1.8	2.0	3.4	1.3
Total Del/Veh (s)	27.8	5.6	94.8	4.8	32.2	27.8	8.8	17.6

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.4	3.7	0.2
Total Del/Veh (s)	26.4	5.3	37.1	13.1	43.4	5.6	23.0

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.4	4.1	0.2
Total Del/Veh (s)	3.4	2.1	0.5	0.0	9.6	2.8	1.6

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.6	0.5	0.3	3.1	0.6

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	3.2	0.9	0.3	3.7	1.2
Total Del/Veh (s)	46.3	0.5	4.8	4.8	2.1	2.3	0.5	3.5

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.7	0.3	2.4	0.1	0.0	0.1		4.2	0.0	0.0	0.0	0.3
Total Del/Veh (s)	44.1	6.9	2.0	27.5	17.7	12.3		2.6	30.2	30.7	6.6	14.9

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.2	0.1	0.1
Total Del/Veh (s)	4.4	2.4	2.6	1.3	9.5	3.5	3.3

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	0.9	0.5	0.0	0.6	0.3	0.0	2.9	11.1	1.6	3.4	8.6	1.7

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	0.6

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	4.1		0.1	0.0	0.0	0.0	3.6	0.1	0.5
Total Del/Veh (s)	2.0		2.4	2.8	1.7	1.5	0.8	0.5	2.1

Total Zone Performance

Denied Del/Veh (s)	1.6
Total Del/Veh (s)	706.8

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	496	373	67	81	58	11	212	290
Average Queue (ft)	233	93	20	28	8	0	108	103
95th Queue (ft)	396	242	50	62	34	6	191	234
Link Distance (ft)	4805	4805			533	533	696	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			250	485				430
Storage Blk Time (%)		0						0
Queuing Penalty (veh)		0						0

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R
Maximum Queue (ft)	471	340	13	139	140	119	224	66
Average Queue (ft)	296	29	1	63	63	39	122	21
95th Queue (ft)	437	147	12	115	122	86	201	53
Link Distance (ft)		533	533	712	712		703	
Upstream Blk Time (%)		1						
Queuing Penalty (veh)		2						
Storage Bay Dist (ft)	485					300		275
Storage Blk Time (%)	1							
Queuing Penalty (veh)	1							

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	WB	SB	SB
Directions Served	L	R	L	R
Maximum Queue (ft)	63	4	25	66
Average Queue (ft)	14	0	3	29
95th Queue (ft)	45	3	17	62
Link Distance (ft)			772	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	300	300		100
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	6
95th Queue (ft)	21
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	52	72	106	65	43	29
Average Queue (ft)	10	36	37	9	5	1
95th Queue (ft)	38	64	75	39	24	12
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	T	R	L	T
Maximum Queue (ft)	155	128	105	16	73	178	190	70	10	20	78	10
Average Queue (ft)	67	68	34	1	31	87	99	26	0	2	32	1
95th Queue (ft)	119	116	80	9	64	152	160	54	6	10	68	7
Link Distance (ft)		1291	1291			4805	4805		1142			2562
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190		250	250	
Storage Blk Time (%)							0					
Queuing Penalty (veh)							0					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB
Directions Served	R
Maximum Queue (ft)	34
Average Queue (ft)	5
95th Queue (ft)	20
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	WB	SB
Directions Served	L	R	LR
Maximum Queue (ft)	76	4	61
Average Queue (ft)	34	0	27
95th Queue (ft)	67	3	46
Link Distance (ft)			987
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300	300	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	19	13	21	21
Average Queue (ft)	1	0	6	6
95th Queue (ft)	9	5	20	20
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	41	22	44	10
Average Queue (ft)	16	5	7	1
95th Queue (ft)	31	19	27	6
Link Distance (ft)		658		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 4

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	1.6		3.4	1.0
Total Del/Veh (s)	42.7	10.9	93.3	6.3	36.6		6.2	25.1

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.2	0.3	0.3	3.8	0.1
Total Del/Veh (s)	21.3	4.8	44.9	21.8	55.2	82.3	5.7	24.5

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	4.0	0.4
Total Del/Veh (s)	2.5	1.4	0.4	0.0	6.6	2.8	1.3

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.7	1.1	3.3	0.9

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.1	3.4	0.7	0.7	3.0	0.9
Total Del/Veh (s)	39.7	20.9	33.7	3.3	7.4	2.2	11.8

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.1	0.3	1.4	0.0	0.0	3.1	0.4	3.1	0.1	0.0	0.2	0.4
Total Del/Veh (s)	26.6	10.9	2.3	21.2	14.8	17.1	12.4	7.9	21.3	13.3	10.4	16.1

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.2	0.2	0.1
Total Del/Veh (s)	4.9	1.4	3.3	2.2	11.2	7.0	3.9

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1
Total Del/Veh (s)	4.4	0.6	0.3	3.9	0.4	0.1	7.0	7.2	6.3	8.6	7.5	6.5

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	1.0

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	3.9	0.1	0.1	0.3	0.0	0.3	4.4	0.2	1.8
Total Del/Veh (s)	6.5	4.8	5.8	5.4	2.5	2.4	3.6	0.2	4.2

Total Zone Performance

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	786.4

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	810	586	79	80	51	15	158	190
Average Queue (ft)	398	148	34	32	3	1	54	60
95th Queue (ft)	789	517	64	66	23	11	124	150
Link Distance (ft)	4805	4805			533	533	696	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			250	485				430
Storage Blk Time (%)		0						
Queuing Penalty (veh)		0						

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R
Maximum Queue (ft)	508	479	6	168	175	134	216	63
Average Queue (ft)	316	66	0	81	84	43	101	15
95th Queue (ft)	515	343	4	138	141	101	179	46
Link Distance (ft)		533	533	712	712		703	
Upstream Blk Time (%)		1						
Queuing Penalty (veh)		7						
Storage Bay Dist (ft)	485					300		275
Storage Blk Time (%)	3							
Queuing Penalty (veh)	4							

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	59	26	62
Average Queue (ft)	11	7	25
95th Queue (ft)	42	25	46
Link Distance (ft)		772	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300		100
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	38
Average Queue (ft)	5
95th Queue (ft)	22
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	39	200	226	98	200	48
Average Queue (ft)	4	89	96	26	74	2
95th Queue (ft)	21	163	194	74	177	18
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	T	T	R	L	T	R	L	T
Maximum Queue (ft)	107	192	206	11	251	290	215	57	27	91	142	7
Average Queue (ft)	42	122	101	0	142	158	26	16	2	40	69	0
95th Queue (ft)	84	177	171	5	227	250	104	45	14	72	120	5
Link Distance (ft)		1291	1291		4805	4805			1142			2562
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290			190	250		250	250	
Storage Blk Time (%)					0	3						
Queuing Penalty (veh)					0	2						

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB
Directions Served	R
Maximum Queue (ft)	67
Average Queue (ft)	20
95th Queue (ft)	51
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	54	67
Average Queue (ft)	14	32
95th Queue (ft)	43	54
Link Distance (ft)		987
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	300	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	24	34	31	30
Average Queue (ft)	2	2	10	6
95th Queue (ft)	13	15	29	23
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	68	26	21	12
Average Queue (ft)	30	8	1	0
95th Queue (ft)	53	25	11	6
Link Distance (ft)		658		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 14

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	2.2	3.1	3.4	1.2
Total Del/Veh (s)	26.8	13.0	90.8	4.4	33.2	45.8	13.1	18.9

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.4	3.6	0.2
Total Del/Veh (s)	22.9	4.5	46.0	9.6	46.5	6.7	23.3

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.4	4.0	0.2
Total Del/Veh (s)	6.0	2.3	1.1	0.0	13.3	3.8	2.1

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.6	1.9	1.3	5.5	1.6

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	2.8	0.3	0.1	3.6	0.9
Total Del/Veh (s)	46.8	0.9	4.9	41.3	1.9	7.7	3.1	13.4

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.5	0.3	2.4	0.0	0.0	0.0	0.1	4.6	0.0	0.0	0.0	0.2
Total Del/Veh (s)	41.1	10.7	3.1	46.9	18.8	13.6	31.5	5.9	28.4	27.0	7.8	16.9

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	5.6	2.7	4.1	1.9	12.5	4.1	4.3

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	2.4	0.8	0.0	0.9	1.2	0.1	4.5	10.3	1.2	4.8	9.5	1.8

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	1.4

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	4.1		0.1	0.2	0.0	0.2	4.4	0.1	0.5
Total Del/Veh (s)	2.1		2.1	2.7	1.9	1.4	0.7	0.4	1.9

Total Zone Performance

Denied Del/Veh (s)	1.4
Total Del/Veh (s)	762.3

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	285	352	72	82	46	23	297	422
Average Queue (ft)	141	198	26	31	9	1	112	164
95th Queue (ft)	264	339	58	72	34	10	225	333
Link Distance (ft)	4813	4813		515	515	515	702	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			250					430
Storage Blk Time (%)		5						0
Queuing Penalty (veh)		5						1

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	T	R	LT	R
Maximum Queue (ft)	337	332	70	35	196	315	100	263	69
Average Queue (ft)	194	192	20	1	25	170	47	139	25
95th Queue (ft)	292	288	55	15	105	293	88	242	56
Link Distance (ft)	515	515	515	515	712	712		703	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)							300		275
Storage Blk Time (%)						1		0	
Queuing Penalty (veh)						1		0	

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	WB	SB	SB
Directions Served	L	R	L	R
Maximum Queue (ft)	84	4	30	85
Average Queue (ft)	23	0	4	30
95th Queue (ft)	65	3	20	68
Link Distance (ft)			772	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	300	300		100
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	39
Average Queue (ft)	8
95th Queue (ft)	27
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	59	82	354	44	57	104	55	41
Average Queue (ft)	14	42	196	8	9	46	11	6
95th Queue (ft)	43	70	314	31	36	93	38	27
Link Distance (ft)	713			1415	1415	874	874	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		260	365					300
Storage Blk Time (%)			0					
Queuing Penalty (veh)			1					

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	T	R	L	L
Maximum Queue (ft)	129	175	195	19	120	210	224	104	18	20	44	68
Average Queue (ft)	61	94	91	2	41	109	121	28	1	2	11	21
95th Queue (ft)	111	159	164	11	89	180	190	68	8	12	35	51
Link Distance (ft)		1285	1285			4813	4813		1142			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			290		250	250	250
Storage Blk Time (%)							1					
Queuing Penalty (veh)							1					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	24	52
Average Queue (ft)	2	9
95th Queue (ft)	11	28
Link Distance (ft)	2562	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	96	60
Average Queue (ft)	34	28
95th Queue (ft)	78	50
Link Distance (ft)		987
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	300	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	EB	WB	NB	SB
Directions Served	LT	R	LTR	LTR	LTR
Maximum Queue (ft)	40	3	18	22	26
Average Queue (ft)	2	0	1	10	10
95th Queue (ft)	15	2	9	25	26
Link Distance (ft)	572		530	576	561
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		250			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	36	22	39	15
Average Queue (ft)	15	5	8	0
95th Queue (ft)	32	19	29	5
Link Distance (ft)		652		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 10

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	1.9	1.3	3.4	1.0
Total Del/Veh (s)	36.2	19.1	87.8	5.5	28.5	36.2	9.2	22.9

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.3	1.4	3.7	0.1
Total Del/Veh (s)	23.8	4.3	47.5	14.6	45.9	53.6	5.1	25.1

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	4.1	0.4
Total Del/Veh (s)	4.5	1.7	1.0	0.0	16.7	3.9	1.9

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.0	1.6	6.3	1.4

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0		0.0	3.1	0.2	0.2	2.7	0.5
Total Del/Veh (s)	44.0		14.1	50.3	2.2	9.3	3.3	13.3

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.0	0.2	2.4	0.1	0.0	0.0	3.4	0.6	3.4	0.2	0.0	0.1
Total Del/Veh (s)	41.6	16.5	6.0	53.2	29.1	18.5	23.1	22.6	12.6	28.0	13.1	16.0

6: Blaine Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.4
Total Del/Veh (s)	22.7

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.2	0.2	0.0
Total Del/Veh (s)	5.9	2.3	4.7	4.4	11.2	7.8	4.7

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1
Total Del/Veh (s)	4.9	0.9	0.5	4.0	0.7	0.8	9.3	8.6	7.0	7.9	6.4	6.6

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	1.4

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	3.8		0.1	0.2	0.0	0.8	3.7	0.2	1.4
Total Del/Veh (s)	6.9		5.9	6.5	2.9	2.5	3.5	0.3	3.8

Total Zone Performance

Denied Del/Veh (s)	1.3
Total Del/Veh (s)	1040.6

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	398	437	320	94	46	6	146	316
Average Queue (ft)	222	268	52	39	7	0	51	114
95th Queue (ft)	358	404	158	85	30	4	118	246
Link Distance (ft)	4813	4813		515	515	515	702	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			250					430
Storage Blk Time (%)		13						
Queuing Penalty (veh)		30						

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	R	LT	R
Maximum Queue (ft)	384	397	62	186	330	118	206	49
Average Queue (ft)	259	260	11	29	196	45	106	10
95th Queue (ft)	361	365	40	109	302	91	183	36
Link Distance (ft)	515	515	515	712	712		703	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)						300		275
Storage Blk Time (%)					1		0	
Queuing Penalty (veh)					1		0	

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	70	30	70
Average Queue (ft)	15	8	25
95th Queue (ft)	49	27	51
Link Distance (ft)		772	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300		100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	24
Average Queue (ft)	4
95th Queue (ft)	18
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	33	230	272	79	51	217	200	34
Average Queue (ft)	6	91	145	17	10	104	64	4
95th Queue (ft)	23	174	235	55	37	182	140	24
Link Distance (ft)	713			1415	1415	874	874	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		260	365					300
Storage Blk Time (%)		0						
Queuing Penalty (veh)		0						

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	157	350	357	8	156	401	424	140	76	30	126	97
Average Queue (ft)	47	179	180	0	19	202	218	65	23	4	48	38
95th Queue (ft)	109	285	294	6	87	339	354	107	59	19	96	80
Link Distance (ft)		1285	1285			4813	4813			1142		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190	250		250	250
Storage Blk Time (%)		1	1			3	11					
Queuing Penalty (veh)		0	0			1	14					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	105	10	132
Average Queue (ft)	51	1	46
95th Queue (ft)	87	7	99
Link Distance (ft)		2562	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	250		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	WB	SB
Directions Served	L	T	LR
Maximum Queue (ft)	59	4	86
Average Queue (ft)	16	0	37
95th Queue (ft)	48	3	66
Link Distance (ft)		2638	987
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	50	26	27	26
Average Queue (ft)	3	1	13	10
95th Queue (ft)	23	13	31	28
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	75	22	30	18
Average Queue (ft)	32	7	6	1
95th Queue (ft)	57	23	24	10
Link Distance (ft)		652		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Zone Summary

Zone wide Queuing Penalty: 46

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.0	2.2	2.9	3.5	1.3
Total Del/Veh (s)	28.2	6.9	87.8	4.7	35.0	34.4	9.5	19.6

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.1	0.6	3.7	0.3
Total Del/Veh (s)	27.3	7.2	36.7	13.0	46.5	6.8	21.6

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.2	4.1	0.2
Total Del/Veh (s)	5.2	3.8	0.5	0.0	18.8	3.2	2.7

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.5	0.6	0.5	4.0	0.7

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	3.2	1.0	0.3	3.7	1.3
Total Del/Veh (s)	40.6	0.3	5.3	6.0	2.5	2.6	0.6	4.1

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.7	0.3	2.4	0.0	0.0	0.1		4.2	0.0	0.0	0.0	0.3
Total Del/Veh (s)	40.1	7.2	1.8	30.4	18.4	12.0		4.1	29.3	61.4	7.4	15.1

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.2	0.2	0.1
Total Del/Veh (s)	6.6	3.8	3.1	1.7	17.9	4.5	4.8

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.0
Total Del/Veh (s)	2.7	3.5	5.3	6.2	1.8	0.8	8.4	6.3	7.5	3.3	2.8

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	1.2	1.1	0.1	0.9	0.5	0.0	4.8	9.5	1.3	5.0	11.7	2.0

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	1.0

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	4.1	0.5	0.1	0.0	0.0	0.0	3.9	0.1	0.5
Total Del/Veh (s)	2.1	3.6	2.4	2.5	1.7	1.4	0.4	0.4	1.9

Total Network Performance

Denied Del/Veh (s)	1.7
Total Del/Veh (s)	37.5

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	441	305	64	109	34	12	420	359
Average Queue (ft)	234	118	22	42	4	0	193	106
95th Queue (ft)	383	241	53	93	22	6	313	247
Link Distance (ft)	4805	4805			533	533	696	
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			250	485				430
Storage Blk Time (%)		0					0	0
Queuing Penalty (veh)		0					0	1

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R
Maximum Queue (ft)	472	269	101	143	164	118	275	86
Average Queue (ft)	288	61	13	70	74	48	131	38
95th Queue (ft)	431	186	57	122	130	95	223	72
Link Distance (ft)		533	533	712	712		703	
Upstream Blk Time (%)		0						
Queuing Penalty (veh)		0						
Storage Bay Dist (ft)	485					300		275
Storage Blk Time (%)	0						0	
Queuing Penalty (veh)	1						0	

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	57	26	66
Average Queue (ft)	18	3	26
95th Queue (ft)	49	17	60
Link Distance (ft)		772	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300		100
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	38
Average Queue (ft)	10
95th Queue (ft)	29
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	77	97	96	76	60	29
Average Queue (ft)	18	36	45	15	9	3
95th Queue (ft)	55	70	83	54	35	17
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	T	R	L	T
Maximum Queue (ft)	152	153	136	17	103	191	201	135	5	20	91	16
Average Queue (ft)	63	76	44	2	35	94	105	28	0	2	31	1
95th Queue (ft)	122	133	97	9	74	163	174	77	3	12	70	6
Link Distance (ft)		1291	1291			4805	4805		1142			2562
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190		250	250	
Storage Blk Time (%)							0					
Queuing Penalty (veh)							1					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB
Directions Served	R
Maximum Queue (ft)	50
Average Queue (ft)	7
95th Queue (ft)	27
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	WB	SB
Directions Served	L	R	LR
Maximum Queue (ft)	106	16	80
Average Queue (ft)	49	1	35
95th Queue (ft)	87	7	63
Link Distance (ft)			987
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300	300	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: South Access & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	68	16	36	58
Average Queue (ft)	17	1	14	24
95th Queue (ft)	46	9	39	52
Link Distance (ft)	2638	3167	434	681
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	32	18	21	30
Average Queue (ft)	4	0	7	11
95th Queue (ft)	20	6	22	27
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB
Directions Served	R	LTR	L
Maximum Queue (ft)	36	27	37
Average Queue (ft)	15	6	5
95th Queue (ft)	30	23	22
Link Distance (ft)		658	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	250		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 3

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	1.7	1.0	3.4	0.9
Total Del/Veh (s)	42.5	11.2	92.0	6.9	37.9	40.7	6.8	26.5

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.4	0.3	0.6	3.9	0.2
Total Del/Veh (s)	15.8	4.5	46.6	36.2	55.6	79.4	5.5	24.3

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.3	4.0	0.3
Total Del/Veh (s)	4.8	1.3	0.6	0.0	14.9	4.4	1.4

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	0.9	1.1	1.0	4.5	1.2

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.1	3.3	0.7	0.8	3.1	1.0
Total Del/Veh (s)	38.3	23.2	47.5	4.5	8.7	2.0	14.7

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	1.9	0.3	1.3	0.0	0.0	3.1	0.4	3.1	0.2	0.0	0.2	0.4
Total Del/Veh (s)	30.3	11.0	4.9	21.7	15.9	17.0	16.3	7.7	21.7	16.2	10.3	16.6

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	0.3	0.2	0.1
Total Del/Veh (s)	6.0	1.7	4.1	2.8	14.7	9.5	5.3

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.0
Total Del/Veh (s)	6.7	3.6	2.6	4.9	3.4	1.0	7.9	3.4	9.6	7.3	4.5

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	3.7	0.7	0.3	3.7	0.4	0.4	8.2	6.6	6.0	7.9	7.9	6.6

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	1.7

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	3.8		0.1	0.3	0.0	0.2	3.6	0.2	1.7
Total Del/Veh (s)	6.5		5.7	6.4	2.6	2.4	2.8	0.3	4.3

Total Network Performance

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	46.0

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	LT	R
Maximum Queue (ft)	748	463	105	157	39	217	224
Average Queue (ft)	420	169	41	77	3	96	72
95th Queue (ft)	681	411	79	139	22	186	169
Link Distance (ft)	4805	4805			533	696	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			250	485			430
Storage Blk Time (%)		0					
Queuing Penalty (veh)		0					

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	R	LT	R
Maximum Queue (ft)	446	262	207	263	306	210	62
Average Queue (ft)	214	14	115	124	140	94	18
95th Queue (ft)	399	128	185	209	254	169	42
Link Distance (ft)		533	712	712		703	
Upstream Blk Time (%)		0					
Queuing Penalty (veh)		0					
Storage Bay Dist (ft)	485				300		275
Storage Blk Time (%)	0			0	0		
Queuing Penalty (veh)	0			0	1		

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	76	30	85
Average Queue (ft)	18	6	27
95th Queue (ft)	54	24	53
Link Distance (ft)		772	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300		100
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	48
Average Queue (ft)	13
95th Queue (ft)	35
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	104	210	254	160	285	33
Average Queue (ft)	28	100	108	40	89	4
95th Queue (ft)	78	174	222	110	197	20
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)		0	0		0	
Queuing Penalty (veh)		0	0		0	

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	T	T	R	L	T	R	L	T
Maximum Queue (ft)	127	212	210	4	280	298	199	55	28	82	140	14
Average Queue (ft)	45	124	101	0	147	167	31	19	3	39	69	1
95th Queue (ft)	90	182	172	3	237	252	123	50	16	71	123	5
Link Distance (ft)		1291	1291		4805	4805			1142			2562
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290			190	250		250	250	
Storage Blk Time (%)					0	3						
Queuing Penalty (veh)					0	2						

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB
Directions Served	R
Maximum Queue (ft)	66
Average Queue (ft)	18
95th Queue (ft)	48
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	75	147
Average Queue (ft)	28	55
95th Queue (ft)	64	104
Link Distance (ft)		987
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	300	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: South Access & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	70	57	35	68
Average Queue (ft)	6	4	10	39
95th Queue (ft)	33	27	33	60
Link Distance (ft)	2638	3167	434	681
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	19	31	27	57
Average Queue (ft)	1	1	10	22
95th Queue (ft)	10	14	29	42
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB
Directions Served	R	LTR	L
Maximum Queue (ft)	68	22	36
Average Queue (ft)	29	5	3
95th Queue (ft)	51	20	19
Link Distance (ft)		658	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	250		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 4

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.3	0.0	0.0	2.6	2.2	3.7	1.4
Total Del/Veh (s)	30.4	15.1	89.6	4.4	35.3	37.0	14.1	22.0

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.5	3.6	0.2
Total Del/Veh (s)	22.3	5.6	48.2	12.0	45.6	7.0	21.5

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.2	4.0	0.2
Total Del/Veh (s)	6.0	3.2	1.1	0.0	25.0	4.7	2.7

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.6	1.9	1.5	5.9	1.6

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.1	2.9	0.3	0.1	3.5	0.9
Total Del/Veh (s)	47.0	0.9	5.2	44.5	2.2	9.5	4.6	14.8

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.5	0.3	2.6	0.0	0.0	0.0	0.1	4.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	42.3	11.0	3.2	47.0	19.9	13.9	13.7	4.4	29.0	24.9	9.5	17.5

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	8.1	4.2	4.3	2.5	24.7	5.9	5.7

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.1	0.1	0.0
Total Del/Veh (s)	3.7	4.1	6.5	11.2	4.1	2.8	10.1	6.5	13.8	4.2	4.3

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Total Del/Veh (s)	2.3	1.6	0.1	2.0	1.7	0.4	6.4	11.6	1.7	7.9	10.6	3.0

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	2.0

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	4.2		0.1	0.2	0.0	0.2	3.8	0.2	0.6
Total Del/Veh (s)	2.2		2.2	2.9	1.9	1.7	0.8	0.6	2.0

Total Network Performance

Denied Del/Veh (s)	1.5
Total Del/Veh (s)	44.8

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	345	423	75	98	38	12	402	407
Average Queue (ft)	162	231	27	45	10	1	213	170
95th Queue (ft)	299	388	60	84	34	7	379	348
Link Distance (ft)	4813	4813		515	515	515	702	
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			250					430
Storage Blk Time (%)		9					0	1
Queuing Penalty (veh)		9					0	2

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	T	R	LT	R
Maximum Queue (ft)	313	273	124	98	232	341	198	265	102
Average Queue (ft)	186	184	42	9	31	181	63	139	37
95th Queue (ft)	267	257	100	48	133	314	138	227	80
Link Distance (ft)	515	515	515	515	712	712		703	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)							300		275
Storage Blk Time (%)						3		0	
Queuing Penalty (veh)						5		0	

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	SB	SB
Directions Served	L	L	R
Maximum Queue (ft)	70	26	81
Average Queue (ft)	18	4	30
95th Queue (ft)	52	19	66
Link Distance (ft)		772	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300		100
Storage Blk Time (%)			0
Queuing Penalty (veh)			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	37
Average Queue (ft)	10
95th Queue (ft)	28
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	85	104	345	116	57	115	87	66
Average Queue (ft)	23	43	203	17	11	53	13	13
95th Queue (ft)	65	78	316	70	39	102	50	44
Link Distance (ft)	713			1415	1415	874	874	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		260	365					300
Storage Blk Time (%)			0					
Queuing Penalty (veh)			1					

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	T	R	L	L
Maximum Queue (ft)	140	175	178	20	106	207	228	142	18	20	55	68
Average Queue (ft)	70	92	93	3	42	112	124	29	1	2	13	25
95th Queue (ft)	121	158	168	13	84	184	194	79	7	11	41	57
Link Distance (ft)		1285	1285			4813	4813		1142			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190		250	250	250
Storage Blk Time (%)							1					
Queuing Penalty (veh)							1					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	18	51
Average Queue (ft)	2	11
95th Queue (ft)	10	32
Link Distance (ft)	2562	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	WB	SB
Directions Served	L	R	LR
Maximum Queue (ft)	171	12	112
Average Queue (ft)	61	0	34
95th Queue (ft)	124	7	72
Link Distance (ft)			987
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	300	300	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 8: South Access & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	83	36	45	54
Average Queue (ft)	22	2	14	22
95th Queue (ft)	61	18	41	50
Link Distance (ft)	2638	3167	434	681
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	68	68	30	34
Average Queue (ft)	9	4	9	12
95th Queue (ft)	36	29	26	28
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	30	22	47	15
Average Queue (ft)	17	6	8	0
95th Queue (ft)	30	21	31	5
Link Distance (ft)		652		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 18

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	2.2		3.5	1.0
Total Del/Veh (s)	39.4	20.7	88.2	5.8	29.5		10.3	25.6

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	1.9	0.3	0.5	3.8	0.3
Total Del/Veh (s)	19.9	4.3	67.6	22.9	43.0	76.0	5.9	28.0

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.4	3.9	0.3
Total Del/Veh (s)	8.1	1.5	1.6	0.1	30.9	7.3	2.4

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.1	0.0
Total Del/Veh (s)	1.0	1.5	1.2	5.0	1.4

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	3.2	0.2	0.2	2.6	0.5
Total Del/Veh (s)	41.7	1.4	13.0	47.6	2.4	10.3	2.9	13.7

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.0	0.2	2.5	0.0	0.0	0.0	3.4	0.4	3.5	0.1	0.0	0.2
Total Del/Veh (s)	44.5	16.6	2.9	50.2	29.4	18.1	23.0	16.6	12.6	28.1	21.0	17.6

6: Blaine Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.4
Total Del/Veh (s)	23.1

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.3	0.3	0.1
Total Del/Veh (s)	6.7	2.4	4.7	4.0	17.5	11.1	6.1

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.2	0.0
Total Del/Veh (s)	7.5	5.0	3.9	7.4	4.5	4.1	8.1	3.3	9.8	7.4	5.4

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1
Total Del/Veh (s)	4.0	0.9	0.4	4.0	0.7	0.5	8.8	7.1	7.1	8.8	9.4	7.2

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	1.9

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	3.9	0.1	0.1	0.4	0.0	0.2	3.8	0.2	1.4
Total Del/Veh (s)	6.8	7.1	6.0	5.9	3.0	2.8	3.5	0.3	3.8

Total Network Performance

Denied Del/Veh (s)	1.4
Total Del/Veh (s)	51.8

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	LT	R
Maximum Queue (ft)	398	440	319	164	54	177	336
Average Queue (ft)	243	289	56	80	6	83	120
95th Queue (ft)	388	424	162	145	29	159	259
Link Distance (ft)	4813	4813		515	515	702	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			250				430
Storage Blk Time (%)		16					0
Queuing Penalty (veh)		37					0

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	T	R	LT	R
Maximum Queue (ft)	354	353	83	31	391	516	389	203	67
Average Queue (ft)	229	234	14	1	113	299	153	100	22
95th Queue (ft)	326	329	50	17	335	526	364	177	57
Link Distance (ft)	515	515	515	515	712	712		703	
Upstream Blk Time (%)						0			
Queuing Penalty (veh)						1			
Storage Bay Dist (ft)							300		275
Storage Blk Time (%)						19	0		
Queuing Penalty (veh)						49	1		

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	WB	SB	SB
Directions Served	L	T	L	R
Maximum Queue (ft)	67	27	41	84
Average Queue (ft)	21	2	8	31
95th Queue (ft)	56	27	31	62
Link Distance (ft)		493	772	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	300			100
Storage Blk Time (%)				0
Queuing Penalty (veh)				0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	42
Average Queue (ft)	13
95th Queue (ft)	34
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	105	188	248	80	51	220	180	43
Average Queue (ft)	34	85	135	16	10	118	69	7
95th Queue (ft)	81	154	224	54	37	206	154	27
Link Distance (ft)	713			1415	1415	874	874	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		260	365					300
Storage Blk Time (%)								
Queuing Penalty (veh)								

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	152	343	344	7	64	372	405	240	67	31	122	89
Average Queue (ft)	45	180	184	0	19	209	228	58	24	4	44	39
95th Queue (ft)	99	292	292	4	50	350	375	186	59	20	86	83
Link Distance (ft)		1285	1285			4813	4813			1142		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190	250		250	250
Storage Blk Time (%)		1	1			3	12					
Queuing Penalty (veh)		0	0			1	15					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	118	13	113
Average Queue (ft)	51	2	42
95th Queue (ft)	93	10	89
Link Distance (ft)		2562	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	250		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	SB
Directions Served	L	LR
Maximum Queue (ft)	78	163
Average Queue (ft)	30	60
95th Queue (ft)	66	116
Link Distance (ft)		987
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	300	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: South Access & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	75	76	31	76
Average Queue (ft)	9	6	14	39
95th Queue (ft)	41	42	39	62
Link Distance (ft)	2638	3167	434	681
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	33	29	31	48
Average Queue (ft)	2	1	12	20
95th Queue (ft)	15	16	31	40
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	62	22	35	18
Average Queue (ft)	30	5	5	1
95th Queue (ft)	52	20	24	8
Link Distance (ft)		652		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 104

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.3	0.1	0.0	0.0	1404.1	3052.5	1400.1	811.4
Total Del/Veh (s)	209.8	132.1	91.4	5.0	120.9		26.4	141.5

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	3.4	5.5	0.0	0.0	595.0	605.1	126.2
Total Del/Veh (s)	26.3	61.5	37.3	11.8	152.3	255.5	74.0

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	11.6	2.9	0.0	0.0	0.4	7.1	2.5
Total Del/Veh (s)	45.4	55.8	0.5	0.0	1563.9	143.3	49.9

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	0.5	1.0	1.1	5.0	1.1

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	3.2	1.3	0.9	3.4	1.9
Total Del/Veh (s)	41.8	0.7	5.0	14.3	3.9	4.3	2.4	7.2

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.4	0.3	2.1	0.1	0.0	0.2	0.1	5.0	0.0	0.0	0.0	0.3
Total Del/Veh (s)	40.7	8.7	2.3	51.4	15.9	11.2	17.1	9.2	30.4	26.9	3.5	13.3

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	8.9	7.3	0.0	0.0	974.9	1256.5	142.4
Total Del/Veh (s)	63.9	49.3	5.1	2.7	2524.1	1703.9	109.3

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	81.8	55.3	6.1
Total Del/Veh (s)	17.2	20.5	18.5	8.8	4.8	2.0	271.0	101.9	283.4	200.0	35.3

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.1
Total Del/Veh (s)	3.9	3.6	0.5	1.5	2.0	0.3	8.8	11.0	1.4	9.5	15.6	3.4

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	2.8

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	4.1	0.1	0.0	0.0	0.0	3.5	0.1	0.6
Total Del/Veh (s)	2.0	2.1	2.9	2.1	1.8	0.4	0.4	2.0

Total Network Performance

Denied Del/Veh (s)	600.6
Total Del/Veh (s)	212.7

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	2102	2058	465	148	34	17	755	560
Average Queue (ft)	1192	1157	227	70	4	1	724	486
95th Queue (ft)	2300	2299	592	139	21	8	745	782
Link Distance (ft)	4805	4805			533	533	696	
Upstream Blk Time (%)							57	
Queuing Penalty (veh)							0	
Storage Bay Dist (ft)			250	485				430
Storage Blk Time (%)		53					63	
Queuing Penalty (veh)		42					435	

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R
Maximum Queue (ft)	510	580	593	155	160	166	764	400
Average Queue (ft)	374	505	492	71	67	57	719	398
95th Queue (ft)	653	639	656	130	129	130	860	420
Link Distance (ft)		533	533	712	712		703	
Upstream Blk Time (%)		7	4				81	
Queuing Penalty (veh)		99	56				0	
Storage Bay Dist (ft)	485					300		275
Storage Blk Time (%)	0	19					1	90
Queuing Penalty (veh)	1	98					5	154

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	EB	EB	SB	SB
Directions Served	L	T	T	L	R
Maximum Queue (ft)	450	766	790	343	106
Average Queue (ft)	278	736	742	107	29
95th Queue (ft)	629	760	792	423	84
Link Distance (ft)		712	712	772	
Upstream Blk Time (%)		20	14	1	
Queuing Penalty (veh)		258	174	0	
Storage Bay Dist (ft)	300				100
Storage Blk Time (%)		55		20	0
Queuing Penalty (veh)		30		9	0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	54
Average Queue (ft)	17
95th Queue (ft)	39
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	105	74	202	86	74	98
Average Queue (ft)	36	33	92	24	14	28
95th Queue (ft)	85	60	165	71	49	68
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	T	R	L	T
Maximum Queue (ft)	144	169	153	15	88	156	157	70	14	12	94	13
Average Queue (ft)	65	100	76	1	24	58	69	18	1	1	32	1
95th Queue (ft)	120	158	141	9	65	128	139	48	6	8	72	6
Link Distance (ft)		1291	1291			4805	4805		1142			2562
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190		250	250	
Storage Blk Time (%)							0					
Queuing Penalty (veh)							0					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB
Directions Served	R
Maximum Queue (ft)	28
Average Queue (ft)	5
95th Queue (ft)	17
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	EB	B18	B16	B16	WB	SB
Directions Served	L	T	T	T		R	LR
Maximum Queue (ft)	349	1622	182	562	100	34	1018
Average Queue (ft)	212	226	15	73	4	5	924
95th Queue (ft)	362	1127	112	373	73	21	1260
Link Distance (ft)		1889	185	493	493		987
Upstream Blk Time (%)		2	2	1	0		87
Queuing Penalty (veh)		60	60	8	0		0
Storage Bay Dist (ft)	300					300	
Storage Blk Time (%)	9						
Queuing Penalty (veh)	115						

Intersection: 8: South Access & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	398	43	91	570
Average Queue (ft)	142	4	31	243
95th Queue (ft)	287	20	93	655
Link Distance (ft)	2638	3167	434	681
Upstream Blk Time (%)				16
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	85	23	27	60
Average Queue (ft)	30	2	7	19
95th Queue (ft)	66	11	23	39
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB
Directions Served	R	LTR	L
Maximum Queue (ft)	36	22	52
Average Queue (ft)	16	6	5
95th Queue (ft)	31	21	26
Link Distance (ft)		658	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	250		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 1604

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.4	1.4	30.1	19.0	230.4		248.0	95.0
Total Del/Veh (s)	205.1	147.1	250.5	6.1	105.9		10.5	130.4

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	14.4	12.8	6.7	57.7	182.9	860.0	198.7	38.4
Total Del/Veh (s)	41.7	6.1	117.9	222.9	164.7	923.7	32.7	79.2

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	470.9	397.5	29.0
Total Del/Veh (s)	7.4	2.8	175.9	34.9	1377.6	1305.3	138.4

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	1.6	1.1	0.9	8.7	2.9

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	3.2	0.8	1.0	3.0	1.0
Total Del/Veh (s)	41.3	2.0	24.8	26.1	5.9	24.2	6.6	22.1

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	102.4	79.7	1.5	0.0	0.0	32.0	118.3	49.1	0.7	0.0	0.2	42.6
Total Del/Veh (s)	39.9	55.2	4.1	19.3	13.5	66.3	138.6	116.2	135.1	151.0	114.6	54.4

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.0	1863.8	1846.0	896.3
Total Del/Veh (s)	15.3	2.9	525.5	367.3	1002.3	1173.1	326.7

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.2	1057.4	1084.6	533.4
Total Del/Veh (s)	8.9	6.2	4.6	362.5	340.2	345.3	220.9	117.3	432.3	353.4	219.9

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	6.5	9.2	5.0
Total Del/Veh (s)	4.4	1.0	0.3	3.3	8.7	3.3	21.1	7.4	15.9	22.7	34.8	21.8

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	1.9
Total Del/Veh (s)	10.9

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	3.8		0.1	0.3	0.0	0.4	4.1	0.1	2.0
Total Del/Veh (s)	12.6		5.9	5.8	2.6	2.2	3.7	4.4	8.1

Total Network Performance

Denied Del/Veh (s)	497.0
Total Del/Veh (s)	341.3

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	T	T	R	L	T	T	LT	R
Maximum Queue (ft)	1604	1507	153	406	254	112	672	485
Average Queue (ft)	1151	978	44	258	124	4	403	85
95th Queue (ft)	3525	3472	138	487	506	78	711	354
Link Distance (ft)	4805	4805			533	533	696	
Upstream Blk Time (%)	11	11			19	0	17	
Queuing Penalty (veh)	79	79			108	0	0	
Storage Bay Dist (ft)			250	485				430
Storage Blk Time (%)		2		4			23	
Queuing Penalty (veh)		5		15			142	

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	NB	NB
Directions Served	L	T	T	T	T	R	LT	R
Maximum Queue (ft)	500	387	79	650	729	475	324	77
Average Queue (ft)	268	146	14	303	689	456	201	31
95th Queue (ft)	507	490	55	723	928	604	562	68
Link Distance (ft)		533	533	712	712		703	
Upstream Blk Time (%)		18		11	62		15	
Queuing Penalty (veh)		134		119	685		0	
Storage Bay Dist (ft)	485					300		275
Storage Blk Time (%)	18				6	78	17	
Queuing Penalty (veh)	64				68	400	18	

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	WB	WB	WB	B16	B16	B18	SB	SB
Directions Served	L	T	T	R	T	T	T	L	R
Maximum Queue (ft)	53	137	606	288	204	288	1904	798	122
Average Queue (ft)	9	58	543	21	26	255	1779	608	115
95th Queue (ft)	35	333	749	181	145	296	2376	1019	133
Link Distance (ft)		493	493		185	185	1889	772	
Upstream Blk Time (%)		8	93	0	6	87	38	53	
Queuing Penalty (veh)		91	1000	0	64	935	810	0	
Storage Bay Dist (ft)	300			300					100
Storage Blk Time (%)			92					1	95
Queuing Penalty (veh)			5					1	10

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	87
Average Queue (ft)	43
95th Queue (ft)	75
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	264	255	206	111	512	224
Average Queue (ft)	126	118	87	45	241	31
95th Queue (ft)	245	212	158	97	467	142
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)	1	0			5	
Queuing Penalty (veh)	3	0			4	

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	T	T	R	L	T	R	L	T
Maximum Queue (ft)	86	446	436	8	232	225	77	54	252	125	184	520
Average Queue (ft)	35	257	237	0	106	124	12	15	105	59	99	193
95th Queue (ft)	76	835	821	2	205	219	59	44	622	164	218	1206
Link Distance (ft)		1291	1291		4805	4805			1142			2562
Upstream Blk Time (%)		9	9						7			3
Queuing Penalty (veh)		0	0						0			8
Storage Bay Dist (ft)	290			290			190	250		250	250	
Storage Blk Time (%)		11	11			1			10	10	11	
Queuing Penalty (veh)		8	0			1			17	4	10	

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB
Directions Served	R
Maximum Queue (ft)	64
Average Queue (ft)	18
95th Queue (ft)	47
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	EB	WB	WB	SB
Directions Served	L	T	T	R	LR
Maximum Queue (ft)	233	69	2652	320	1038
Average Queue (ft)	77	2	2082	31	998
95th Queue (ft)	196	50	3717	209	1020
Link Distance (ft)		1889	2638		987
Upstream Blk Time (%)			35		100
Queuing Penalty (veh)			407		0
Storage Bay Dist (ft)	300			300	
Storage Blk Time (%)	1		82		
Queuing Penalty (veh)	3		13		

Intersection: 8: South Access & CSAH 42

Movement	EB	WB	B24	NB	SB
Directions Served	LTR	LTR	T	LTR	LTR
Maximum Queue (ft)	133	2602	158	95	732
Average Queue (ft)	34	1032	32	24	696
95th Queue (ft)	93	2788	246	73	719
Link Distance (ft)	2638	3167	572	434	681
Upstream Blk Time (%)		8	3		100
Queuing Penalty (veh)		32	14		0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB
Directions Served	LT	LTR	LTR	LTR
Maximum Queue (ft)	55	123	31	238
Average Queue (ft)	9	16	10	81
95th Queue (ft)	40	154	29	244
Link Distance (ft)	572	530	576	561
Upstream Blk Time (%)		0		3
Queuing Penalty (veh)		1		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	EB	WB	NB	SB	SB
Directions Served	LT	R	LTR	L	L	T
Maximum Queue (ft)	102	102	22	21	6	28
Average Queue (ft)	5	35	6	1	0	2
95th Queue (ft)	82	91	23	10	4	23
Link Distance (ft)	557		658			654
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		250		250	250	
Storage Blk Time (%)		2				
Queuing Penalty (veh)		0				

Network Summary

Network wide Queuing Penalty: 5357

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	537.4	561.4	542.4	293.4
Total Del/Veh (s)	59.9	19.2	81.8	5.5	61.6	65.6	25.8	47.6

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.3	0.0	0.0	1.3	3.4	0.6
Total Del/Veh (s)	22.3	18.2	58.0	20.4	48.6	6.7	22.9

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.3	0.3	0.0	0.1	0.1	4.1	0.3
Total Del/Veh (s)	34.4	19.8	16.1	2.8	45.1	7.4	19.0

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	0.6	1.5	1.6	7.0	1.6

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	3.2	1.2	0.9	3.5	1.9
Total Del/Veh (s)	40.5	1.1	6.1	36.2	4.7	13.7	8.0	15.3

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.3	0.4	2.3	0.1	0.0	0.1	3.9	0.0	0.0	0.0	0.3
Total Del/Veh (s)	42.7	8.8	2.6	49.6	16.8	11.6	8.9	27.4	43.5	4.6	14.4

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.7	3.8	0.3
Total Del/Veh (s)	63.4	27.0	60.1	25.1	36.7	6.0	44.1

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	3.9	0.3
Total Del/Veh (s)	54.4	24.2	23.6	48.3	42.1	13.2	29.5	11.3	36.7	1.9	39.3

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.3	0.2	4.0
Total Del/Veh (s)	9.0	2.9	1.0	1.1	1.6	0.4	18.6	26.1	4.5	19.3	18.3	3.7

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	4.3

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	4.1		0.1	0.0	0.0	0.0	4.1	0.1	0.5
Total Del/Veh (s)	2.1		2.1	2.7	1.9	1.4	0.4	0.4	2.0

Total Network Performance

Denied Del/Veh (s)	184.3
Total Del/Veh (s)	98.3

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LT	R
Maximum Queue (ft)	723	697	385	74	91	49	22	487	497	251
Average Queue (ft)	395	382	73	26	48	6	2	358	381	62
95th Queue (ft)	648	637	298	61	84	30	15	452	471	160
Link Distance (ft)	4786	4786				528	528		1673	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250	485	485			430		430
Storage Blk Time (%)		28						1	2	
Queuing Penalty (veh)		22						8	33	

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	T	R	R	LT	R
Maximum Queue (ft)	168	446	512	512	303	299	162	164	247	104
Average Queue (ft)	90	137	232	231	125	126	79	83	129	11
95th Queue (ft)	158	283	410	401	248	238	144	150	216	76
Link Distance (ft)			528	528	718	718			1044	
Upstream Blk Time (%)		0	0	0						
Queuing Penalty (veh)		0	5	6						
Storage Bay Dist (ft)	485	485					300	300		275
Storage Blk Time (%)			1			1			0	
Queuing Penalty (veh)			4			2			0	

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	T	R	L	R
Maximum Queue (ft)	317	755	754	777	312	465	209	24	80
Average Queue (ft)	45	201	196	183	65	96	10	3	27
95th Queue (ft)	172	635	653	632	212	290	104	16	65
Link Distance (ft)		718	718	718	734	734		772	
Upstream Blk Time (%)		2	2	2					
Queuing Penalty (veh)		14	17	17					
Storage Bay Dist (ft)	300						300		100
Storage Blk Time (%)		6				4			0
Queuing Penalty (veh)		4				1			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	63
Average Queue (ft)	20
95th Queue (ft)	47
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	123	106	346	103	133	174
Average Queue (ft)	46	35	186	24	61	68
95th Queue (ft)	105	73	288	73	125	139
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)			0			
Queuing Penalty (veh)			1			

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	SB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	R	L	T	R
Maximum Queue (ft)	137	172	172	20	115	182	206	113	22	82	11	29
Average Queue (ft)	67	100	76	2	39	87	97	25	3	30	0	5
95th Queue (ft)	121	152	136	12	87	157	166	68	14	70	4	17
Link Distance (ft)		1291	1291			4786	4786				2562	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190	250	250		250
Storage Blk Time (%)							0					
Queuing Penalty (veh)							0					

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	EB	EB	EB	B18	B18	B18	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	R	L	R
Maximum Queue (ft)	549	1057	922	668	11	150	154	285	304	108	51	85
Average Queue (ft)	409	493	233	212	0	10	6	141	170	39	8	31
95th Queue (ft)	625	934	606	532	8	152	112	238	270	83	30	62
Link Distance (ft)		1865	1865	1865	734	734	734	2626	2626		971	
Upstream Blk Time (%)						0	0					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (ft)	500									300		250
Storage Blk Time (%)	3	5							1			
Queuing Penalty (veh)	17	33							0			

Intersection: 7: CSAH 42 & Driver Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	72
Average Queue (ft)	27
95th Queue (ft)	55
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: South Access & CSAH 42

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	L	TR	LT	R	LTR	LT	R
Maximum Queue (ft)	300	1054	817	351	251	39	61	83
Average Queue (ft)	203	320	122	179	48	9	12	12
95th Queue (ft)	360	728	358	311	162	32	42	55
Link Distance (ft)		2626	2626	3156		422	657	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250			250
Storage Blk Time (%)	6	11		4				
Queuing Penalty (veh)	25	48		3				

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	WB	NB	SB	SB
Directions Served	L	LT	R	LTR	LT	R
Maximum Queue (ft)	188	43	27	42	30	52
Average Queue (ft)	60	2	2	7	10	12
95th Queue (ft)	141	17	14	25	27	30
Link Distance (ft)		524		570	542	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	250		250			250
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB
Directions Served	R	LTR	L
Maximum Queue (ft)	45	22	30
Average Queue (ft)	16	5	4
95th Queue (ft)	33	19	19
Link Distance (ft)		658	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	250		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 262

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	2.7	1.8	3.5	0.9
Total Del/Veh (s)	28.3	12.4	67.4	11.3	49.7	53.2	11.1	26.4

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.6	0.6	1.4	3.8	0.3
Total Del/Veh (s)	50.9	3.7	34.7	34.5	52.1	71.3	4.7	32.1

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0	0.2	4.0	0.1
Total Del/Veh (s)	76.1	4.1	28.7	13.9	41.6	39.9	23.2

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	1.9	1.4	1.0	12.1	3.7

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.2	0.0	0.0	3.3	0.8	1.0	3.1	1.0
Total Del/Veh (s)	42.1	2.6	30.2	50.2	6.3	32.7	7.6	29.4

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	1.9	0.3	0.5	0.0	0.0	3.1	0.3	3.1	0.2	0.3	0.1	0.3
Total Del/Veh (s)	66.4	11.9	4.7	24.3	17.7	17.2	13.7	8.7	22.6	27.9	13.4	19.8

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	2.6	3.5	1.2
Total Del/Veh (s)	44.6	16.0	39.8	15.7	40.9	21.1	30.3

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.7	3.3	1.4
Total Del/Veh (s)	16.2	15.4	10.4	33.3	33.9	9.4	8.7	4.0	12.3	4.1	15.0

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.7	1.2	3.7
Total Del/Veh (s)	4.1	0.6	0.5	4.1	0.7	0.4	10.8	11.6	7.6	12.1	9.0	7.9

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.9
Total Del/Veh (s)	3.6

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	3.8		0.1	0.2	0.0	0.3	4.7	0.1	1.7
Total Del/Veh (s)	6.4		6.1	5.8	2.9	2.6	4.1	0.2	4.2

Total Network Performance

Denied Del/Veh (s)	2.2
Total Del/Veh (s)	82.4

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LT	R
Maximum Queue (ft)	448	315	104	253	250	139	116	268	234	302
Average Queue (ft)	256	167	42	153	160	57	59	156	129	95
95th Queue (ft)	402	277	83	226	233	107	98	242	218	206
Link Distance (ft)	4786	4786				528	528		1673	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250	485	485			430		430
Storage Blk Time (%)		1								
Queuing Penalty (veh)		2								

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	T	R	R	LT
Maximum Queue (ft)	438	435	295	62	630	710	475	388	183
Average Queue (ft)	301	310	29	10	321	368	371	321	95
95th Queue (ft)	415	421	181	40	503	655	529	448	158
Link Distance (ft)			528	528	718	718			1044
Upstream Blk Time (%)			0		0	0			
Queuing Penalty (veh)			0		0	2			
Storage Bay Dist (ft)	485	485					300	300	
Storage Blk Time (%)	0	0				5	14	2	
Queuing Penalty (veh)	1	0				54	74	12	

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	B18	B18	SB	SB
Directions Served	L	T	T	T	T	T	R	T	T	L	R
Maximum Queue (ft)	121	70	82	74	692	777	397	84	150	73	119
Average Queue (ft)	41	19	22	14	344	514	12	6	14	9	52
95th Queue (ft)	96	52	61	49	606	763	127	83	115	39	108
Link Distance (ft)		718	718	718	734	734		1865	1865	772	
Upstream Blk Time (%)					0	2					
Queuing Penalty (veh)					0	24					
Storage Bay Dist (ft)	300						300				100
Storage Blk Time (%)						21					3
Queuing Penalty (veh)						1					0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	126
Average Queue (ft)	50
95th Queue (ft)	97
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	L	T	T	R
Maximum Queue (ft)	331	310	263	124	616	299
Average Queue (ft)	150	157	132	47	309	33
95th Queue (ft)	282	280	225	97	516	156
Link Distance (ft)	725			1413	876	
Upstream Blk Time (%)					0	
Queuing Penalty (veh)					0	
Storage Bay Dist (ft)		260	365			300
Storage Blk Time (%)	3	2			11	
Queuing Penalty (veh)	9	4			8	

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	T	T	R	L	T	R	L	T
Maximum Queue (ft)	171	230	232	8	300	333	240	68	28	102	139	15
Average Queue (ft)	69	135	118	0	176	201	41	16	2	42	76	1
95th Queue (ft)	142	198	196	4	273	297	160	48	15	76	125	6
Link Distance (ft)		1291	1291		4786	4786			1142			2562
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290			190	250		250	250	
Storage Blk Time (%)					0	6						
Queuing Penalty (veh)					0	5						

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB
Directions Served	R
Maximum Queue (ft)	74
Average Queue (ft)	24
95th Queue (ft)	57
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	L	L	T	T	T	T	R	L	R	R
Maximum Queue (ft)	212	212	207	222	492	518	183	567	299	275
Average Queue (ft)	115	134	83	91	305	351	14	84	185	184
95th Queue (ft)	184	192	179	188	444	489	94	329	305	292
Link Distance (ft)		1865	1865	1865	2626	2626		971		
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	500						300		250	250
Storage Blk Time (%)						14		0	3	2
Queuing Penalty (veh)						2		0	1	1

Intersection: 8: South Access & CSAH 42

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	L	TR	LT	R	LTR	LT	R
Maximum Queue (ft)	76	94	202	340	188	35	121	260
Average Queue (ft)	26	55	102	190	15	8	28	94
95th Queue (ft)	63	85	175	301	86	30	84	210
Link Distance (ft)		2626	2626	3156		422	657	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250			250
Storage Blk Time (%)				4				0
Queuing Penalty (veh)				1				0

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	WB	NB	SB	SB
Directions Served	L	LT	R	LTR	LT	R
Maximum Queue (ft)	32	33	4	27	66	81
Average Queue (ft)	8	2	0	9	27	33
95th Queue (ft)	29	14	3	27	52	61
Link Distance (ft)		524		570	542	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	250		250			250
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	62	22	32	6
Average Queue (ft)	29	6	2	0
95th Queue (ft)	50	21	16	4
Link Distance (ft)		658		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 202

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	3.4	5.2	0.0	0.0	620.5	423.4	626.7	320.6
Total Del/Veh (s)	248.1	196.2	85.0	6.5	59.8	51.7	26.5	124.7

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.2	0.3	0.0	0.0	1.4	3.4	0.6
Total Del/Veh (s)	22.0	19.2	62.4	26.3	48.7	7.3	25.1

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.3	0.0	0.0	0.2	4.1	0.3
Total Del/Veh (s)	36.9	27.3	22.3	6.2	41.9	11.2	26.0

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	0.7	1.7	1.8	8.2	1.8

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	2.8	0.4	0.2	3.3	1.4
Total Del/Veh (s)	40.1	1.5	5.7	34.2	2.9	14.8	10.9	15.2

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.2	0.4	2.2	0.0	0.0	0.0	0.1	4.2	0.0	0.0	0.0	0.3
Total Del/Veh (s)	44.1	9.8	2.8	116.2	18.8	13.2	37.1	8.8	28.5	10.6	7.4	16.6

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.6	3.7	0.3
Total Del/Veh (s)	65.6	35.3	65.6	24.5	31.3	6.5	48.6

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	3.9	0.3
Total Del/Veh (s)	63.1	27.0	28.3	60.2	53.5	17.8	35.1	11.1	30.0	1.9	46.3

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	4.0
Total Del/Veh (s)	12.5	3.0	1.7	1.4	1.7	0.3	28.2	18.0	2.2	25.7	41.1	4.5

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	5.3

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	4.0		0.1	0.2	0.0	0.3	4.2	0.1	0.5
Total Del/Veh (s)	2.2		2.1	3.1	2.0	1.7	0.7	0.4	2.1

Total Network Performance

Denied Del/Veh (s)	204.2
Total Del/Veh (s)	150.5

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LT	R
Maximum Queue (ft)	2581	2596	465	103	106	58	37	446	464	256
Average Queue (ft)	1615	1609	272	32	55	10	3	343	351	88
95th Queue (ft)	2902	2909	629	75	94	37	20	426	445	196
Link Distance (ft)	4780	4780				528	528		1673	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250	485	485			430		430
Storage Blk Time (%)		59						0	1	
Queuing Penalty (veh)		58						6	15	

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	T	R	R	LT	R
Maximum Queue (ft)	202	334	528	550	400	385	288	250	252	163
Average Queue (ft)	107	153	234	236	165	163	98	101	141	18
95th Queue (ft)	172	302	448	460	332	328	216	202	232	117
Link Distance (ft)			528	528	718	718			1044	
Upstream Blk Time (%)		0	1	1						
Queuing Penalty (veh)		0	7	11						
Storage Bay Dist (ft)	485	485					300	300		275
Storage Blk Time (%)		0	1			4	0	0	1	0
Queuing Penalty (veh)		0	7			13	0	0	2	1

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	T	R	L	R
Maximum Queue (ft)	378	764	763	795	387	554	389	20	90
Average Queue (ft)	61	273	261	251	94	147	27	1	26
95th Queue (ft)	228	760	761	750	310	443	199	10	73
Link Distance (ft)		718	718	718	734	734		772	
Upstream Blk Time (%)		3	3	4					
Queuing Penalty (veh)		23	30	38					
Storage Bay Dist (ft)	300						300		100
Storage Blk Time (%)		13				6			1
Queuing Penalty (veh)		7				1			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	59
Average Queue (ft)	20
95th Queue (ft)	44
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	141	96	393	62	61	145	102	194
Average Queue (ft)	46	39	219	13	15	65	20	83
95th Queue (ft)	107	74	335	43	46	122	63	161
Link Distance (ft)	713			1415	1415	874	874	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		260	365					300
Storage Blk Time (%)			1					
Queuing Penalty (veh)			2					

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	T	R	L	L
Maximum Queue (ft)	155	189	175	19	156	205	225	81	21	21	50	61
Average Queue (ft)	72	114	91	2	64	104	115	26	2	2	13	22
95th Queue (ft)	130	170	155	11	137	179	194	58	11	13	38	47
Link Distance (ft)		1285	1285			4780	4780		1142			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190		250	250	250
Storage Blk Time (%)							1					
Queuing Penalty (veh)							1					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	14	28
Average Queue (ft)	1	7
95th Queue (ft)	6	20
Link Distance (ft)	2562	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	EB	EB	EB	B18	B18	WB	WB	WB	SB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	R	L	R	R
Maximum Queue (ft)	549	1186	772	754	288	277	382	406	209	30	83	76
Average Queue (ft)	406	475	268	261	15	10	188	222	38	6	32	26
95th Queue (ft)	637	881	657	627	181	145	328	360	118	23	65	53
Link Distance (ft)		1865	1865	1865	734	734	2626	2626		971		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500								300		250	250
Storage Blk Time (%)	3	4						5				
Queuing Penalty (veh)	16	29						3				

Intersection: 8: South Access & CSAH 42

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	L	TR	LT	R	LTR	LT	R
Maximum Queue (ft)	300	1208	796	597	300	56	48	86
Average Queue (ft)	208	365	139	257	60	15	11	13
95th Queue (ft)	377	882	450	473	205	43	37	55
Link Distance (ft)		2626	2626	3156		422	657	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250			250
Storage Blk Time (%)	8	13		14				
Queuing Penalty (veh)	34	60		11				

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	T	LT	R	LTR	LT	R
Maximum Queue (ft)	214	103	38	35	34	48	43
Average Queue (ft)	72	7	2	2	11	13	13
95th Queue (ft)	174	104	20	15	28	34	31
Link Distance (ft)		571	524		570	542	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	250			250			250
Storage Blk Time (%)	0						
Queuing Penalty (veh)	0						

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	42	22	45	11
Average Queue (ft)	16	6	8	0
95th Queue (ft)	33	21	30	5
Link Distance (ft)		652		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 375

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	11.5	13.6	12.9	3.6
Total Del/Veh (s)	49.2	14.5	67.6	12.0	151.4	77.9	39.1	47.8

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	0.8	0.2	0.0	0.6	0.5	0.5	3.7	0.5
Total Del/Veh (s)	97.8	4.4	36.4	35.4	53.9	51.1	5.0	42.6

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.2	0.0	0.3	3.9	0.3
Total Del/Veh (s)	77.7	4.5	31.4	19.0	47.1	40.4	24.8

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.2	0.0
Total Del/Veh (s)	2.0	1.6	1.1	13.6	3.9

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.0	3.1	0.2	0.2	2.7	0.5
Total Del/Veh (s)	41.9	2.5	15.4	61.4	4.8	16.0	4.7	20.8

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.8	0.3	2.0	0.0	0.0	0.0	3.3	0.5	3.2	0.1	0.0	0.1
Total Del/Veh (s)	150.2	12.3	2.1	47.0	27.6	20.3	17.9	17.2	9.2	21.1	13.1	14.8

6: Blaine Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	22.5

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	2.7	4.0	1.4
Total Del/Veh (s)	44.9	14.0	39.3	15.9	43.5	26.0	31.3

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.8	3.4	1.4
Total Del/Veh (s)	38.9	15.6	9.4	41.2	41.3	10.8	9.9	2.6	13.0	5.1	20.1

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.6	1.0	3.7
Total Del/Veh (s)	4.5	0.6	0.4	5.2	0.8	0.4	13.2	11.9	8.2	12.6	12.1	8.5

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.9
Total Del/Veh (s)	3.7

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	3.9		0.1	0.4	0.0	0.2	3.8	0.2	1.4
Total Del/Veh (s)	6.8		5.9	5.4	2.4	2.4	3.5	0.3	3.6

Total Network Performance

Denied Del/Veh (s)	3.6
Total Del/Veh (s)	98.7

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	L	LT	R
Maximum Queue (ft)	869	643	318	255	257	149	128	521	1216	498
Average Queue (ft)	467	235	56	155	158	63	60	343	453	225
95th Queue (ft)	835	455	165	223	232	122	109	618	1329	461
Link Distance (ft)	4780	4780				528	528		1673	
Upstream Blk Time (%)									6	
Queuing Penalty (veh)									0	
Storage Bay Dist (ft)			250	485	485			430		430
Storage Blk Time (%)		4						29	0	1
Queuing Penalty (veh)		9						282	4	3

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	T	R	R	LT
Maximum Queue (ft)	497	510	598	264	580	709	475	388	222
Average Queue (ft)	457	466	391	22	338	403	390	337	101
95th Queue (ft)	573	588	815	120	511	690	540	448	178
Link Distance (ft)			528	528	718	718			1044
Upstream Blk Time (%)		0	13	0		0			
Queuing Penalty (veh)		0	106	0		2			
Storage Bay Dist (ft)	485	485					300	300	
Storage Blk Time (%)	7	16	1			8	16	2	0
Queuing Penalty (veh)	27	64	7			98	87	13	0

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	B18	B18	SB	SB
Directions Served	L	T	T	T	T	T	R	T	T	L	R
Maximum Queue (ft)	125	84	102	98	711	822	205	355	371	59	114
Average Queue (ft)	44	21	27	19	373	542	12	31	46	7	52
95th Queue (ft)	104	60	69	68	658	836	127	240	283	36	106
Link Distance (ft)		718	718	718	734	734		1865	1865	772	
Upstream Blk Time (%)					0	5					
Queuing Penalty (veh)					1	59					
Storage Bay Dist (ft)	300						300				100
Storage Blk Time (%)						22					3
Queuing Penalty (veh)						1					0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	121
Average Queue (ft)	55
95th Queue (ft)	109
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	291	199	312	123	79	242	206	63
Average Queue (ft)	152	99	170	30	25	159	107	21
95th Queue (ft)	256	169	289	64	60	223	187	53
Link Distance (ft)	713			1415	1415	874	874	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		260	365					300
Storage Blk Time (%)	1	0	0					
Queuing Penalty (veh)	4	0	0					

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	T	R	L
Maximum Queue (ft)	195	244	225	8	51	309	380	240	67	27	99	87
Average Queue (ft)	86	150	137	0	13	208	231	78	24	5	39	35
95th Queue (ft)	188	213	207	4	40	302	334	235	57	21	78	68
Link Distance (ft)		1285	1285			4780	4780			1142		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190	250		250	250
Storage Blk Time (%)	0					1	11	0				
Queuing Penalty (veh)	1					0	14	0				

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	96	17	101
Average Queue (ft)	41	2	42
95th Queue (ft)	75	10	89
Link Distance (ft)		2562	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	250		250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	L	L	T	T	T	T	R	L	R	R
Maximum Queue (ft)	220	219	247	265	505	511	399	634	300	275
Average Queue (ft)	122	141	76	87	311	355	28	158	208	199
95th Queue (ft)	188	201	183	204	453	496	180	530	332	313
Link Distance (ft)		1865	1865	1865	2626	2626		971		
Upstream Blk Time (%)								0		
Queuing Penalty (veh)								0		
Storage Bay Dist (ft)	500						300		250	250
Storage Blk Time (%)						14		0	5	4
Queuing Penalty (veh)						2		1	2	2

Intersection: 8: South Access & CSAH 42

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	L	TR	LT	R	LTR	LT	R
Maximum Queue (ft)	125	132	228	408	246	36	241	268
Average Queue (ft)	52	77	109	231	24	9	40	105
95th Queue (ft)	106	120	189	381	137	32	157	244
Link Distance (ft)		2626	2626	3156		422	657	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250			250
Storage Blk Time (%)				11				1
Queuing Penalty (veh)				2				1

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB	SB
Directions Served	L	LT	LTR	LT	R
Maximum Queue (ft)	45	48	40	71	96
Average Queue (ft)	10	3	14	27	38
95th Queue (ft)	35	21	35	54	73
Link Distance (ft)		524	570	542	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	250				250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	75	22	35	18
Average Queue (ft)	30	6	4	1
95th Queue (ft)	56	22	20	11
Link Distance (ft)		652		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 792

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.2	0.0	0.0	683.8	1125.1	680.7	353.8
Total Del/Veh (s)	93.7	32.5	80.5	11.6	69.5	25.2	39.0	65.5

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.4	0.0	0.0	1.4	3.4	0.6
Total Del/Veh (s)	18.3	16.5	60.4	26.1	49.4	6.9	23.0

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	1.8	0.2	0.0	0.0	0.1	4.2	0.2
Total Del/Veh (s)	37.1	18.4	14.2	3.3	55.3	9.5	17.5

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.2	0.1	0.0
Total Del/Veh (s)	0.8	1.7	1.7	7.9	1.8

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	2.8	0.4	0.2	3.3	1.4
Total Del/Veh (s)	41.0	1.0	6.1	33.9	3.0	14.4	11.0	15.2

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	2.3	0.3	1.9	0.1	0.0	0.0	0.1	4.4	0.0	0.0	0.0	0.3
Total Del/Veh (s)	44.5	9.1	2.7	79.1	18.5	13.2	18.3	4.6	27.5	19.3	5.9	15.6

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.5	3.8	0.3
Total Del/Veh (s)	59.6	26.1	61.5	25.6	31.1	6.9	42.4

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.5	3.8	0.3
Total Del/Veh (s)	51.8	22.9	24.5	60.6	53.2	18.1	29.5	7.8	33.5	1.9	40.5

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.3	4.0
Total Del/Veh (s)	10.1	2.7	1.2	1.7	1.6	0.3	23.0	26.4	3.4	19.1	29.4	4.8

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	4.4

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	4.1		0.1	0.2	0.0	0.1	3.7	0.2	0.5
Total Del/Veh (s)	2.2		2.4	2.9	1.8	1.9	1.0	0.5	1.9

Total Network Performance

Denied Del/Veh (s)	226.1
Total Del/Veh (s)	107.1

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	L	L	T	T	L	LT	R
Maximum Queue (ft)	817	854	844	465	106	118	101	87	558	1281	560
Average Queue (ft)	467	501	502	174	34	55	29	25	359	536	173
95th Queue (ft)	840	824	832	504	77	97	74	65	583	1012	449
Link Distance (ft)	4785	4785	4785				528	528		1675	
Upstream Blk Time (%)										1	
Queuing Penalty (veh)										0	
Storage Bay Dist (ft)				250	485	485			430		430
Storage Blk Time (%)			50						2	12	
Queuing Penalty (veh)			50						30	175	

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	T	R	R	LT	R
Maximum Queue (ft)	277	295	485	483	330	332	205	220	253	117
Average Queue (ft)	125	150	184	183	154	152	99	103	135	9
95th Queue (ft)	219	247	364	359	284	283	180	189	216	72
Link Distance (ft)		528	528	528	720	720			1047	
Upstream Blk Time (%)	0	0	0	0						
Queuing Penalty (veh)	0	0	3	3						
Storage Bay Dist (ft)	485						300	300		275
Storage Blk Time (%)		0				1	0	0	0	0
Queuing Penalty (veh)		0				4	0	0	0	0

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB
Directions Served	L	T	T	T	T	T	R	L	R
Maximum Queue (ft)	273	744	752	669	382	489	117	40	85
Average Queue (ft)	46	182	185	168	76	107	7	3	27
95th Queue (ft)	180	618	643	611	249	343	75	21	70
Link Distance (ft)		720	720	720	734	734		772	
Upstream Blk Time (%)		1	2	2					
Queuing Penalty (veh)		9	15	20					
Storage Bay Dist (ft)	300						300		100
Storage Blk Time (%)		7				3			0
Queuing Penalty (veh)		4				0			0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	66
Average Queue (ft)	19
95th Queue (ft)	46
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	120	126	378	78	70	141	109	218
Average Queue (ft)	46	43	213	15	16	62	20	85
95th Queue (ft)	100	90	332	51	50	120	66	171
Link Distance (ft)	713			1415	1415	874	874	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		260	365					300
Storage Blk Time (%)			1					0
Queuing Penalty (veh)			2					0

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	T	R	L	L
Maximum Queue (ft)	149	180	176	24	125	189	200	135	21	25	60	63
Average Queue (ft)	70	110	92	2	51	100	109	29	1	3	12	25
95th Queue (ft)	126	158	154	11	107	170	180	78	11	16	38	55
Link Distance (ft)		1285	1285			4785	4785		1136			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			290	280			190		250	250	250
Storage Blk Time (%)							0					
Queuing Penalty (veh)							1					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	20	38
Average Queue (ft)	2	7
95th Queue (ft)	10	20
Link Distance (ft)	2562	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	EB	EB	EB	B18	B18	B18	WB	WB	WB	SB	SB
Directions Served	L	L	T	T	T	T	T	T	T	R	L	R
Maximum Queue (ft)	549	984	804	691	280	280	143	367	407	280	34	99
Average Queue (ft)	387	432	244	226	10	14	9	175	203	39	6	35
95th Queue (ft)	596	772	596	549	147	171	132	313	345	135	24	73
Link Distance (ft)		1865	1865	1865	734	734	734	2626	2626		971	
Upstream Blk Time (%)					0	0						
Queuing Penalty (veh)					0	0						
Storage Bay Dist (ft)	500									300		250
Storage Blk Time (%)	2	3							4			
Queuing Penalty (veh)	12	22							2			

Intersection: 7: CSAH 42 & Driver Ave

Movement	SB
Directions Served	R
Maximum Queue (ft)	76
Average Queue (ft)	30
95th Queue (ft)	59
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	250
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 8: South Access & CSAH 42

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	L	TR	LT	R	LTR	LT	R
Maximum Queue (ft)	300	924	661	538	300	48	52	64
Average Queue (ft)	201	276	127	265	74	13	12	12
95th Queue (ft)	340	594	397	464	236	40	40	53
Link Distance (ft)		2626	2626	3156		422	657	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250			250
Storage Blk Time (%)	5	9		16				
Queuing Penalty (veh)	22	42		12				

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	WB	NB	SB	SB
Directions Served	L	LT	R	LTR	LT	R
Maximum Queue (ft)	180	42	26	34	44	52
Average Queue (ft)	63	2	2	9	12	13
95th Queue (ft)	139	17	15	26	31	33
Link Distance (ft)		524		570	542	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	250		250			250
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	35	22	45	20
Average Queue (ft)	15	6	9	1
95th Queue (ft)	33	21	30	7
Link Distance (ft)		652		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 430

1: US 52 SB Ramps & CSAH 42 Performance by movement

Movement	EBT	EBR	WBL	WBT	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	3.6	2.7	4.3	1.2
Total Del/Veh (s)	66.4	14.5	72.3	11.9	132.5	69.0	35.4	51.4

2: US 52 NB Ramps & CSAH 42 Performance by movement

Movement	EBL	EBT	WBT	WBR	NBL	NBT	NBR	All
Denied Del/Veh (s)	1.0	0.3	0.0	0.6	0.6	0.1	3.7	0.6
Total Del/Veh (s)	103.3	4.0	36.8	35.7	56.3	57.4	5.3	44.0

3: CSAH 42 & Conley Avenue Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.1	0.0	0.1	0.0	0.4	4.0	0.2
Total Del/Veh (s)	84.0	5.2	34.6	17.1	38.1	39.1	27.4

4: CSAH 42 & 142nd Street Performance by movement

Movement	EBT	WBT	WBR	SBL	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.2	0.0
Total Del/Veh (s)	1.9	1.5	1.2	12.2	3.6

5: Minnesota 55 & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	3.2	0.2	0.2	2.7	0.6
Total Del/Veh (s)	39.2	2.3	15.5	54.9	4.2	15.2	4.5	19.6

6: Blaine Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	1.8	0.3	0.2	0.1	0.0	0.0	3.1	0.2	3.1	0.1	0.0	0.1
Total Del/Veh (s)	145.6	12.8	1.5	47.1	29.2	22.1	15.1	13.5	6.5	21.9	22.4	16.1

6: Blaine Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	23.6

7: CSAH 42 & Driver Ave Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	2.2	3.5	1.2
Total Del/Veh (s)	45.3	12.4	40.1	15.0	46.9	25.0	31.4

8: South Access & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SBL	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	1.8	3.3	1.4
Total Del/Veh (s)	37.8	15.5	10.2	41.8	39.4	13.7	8.3	4.1	13.3	5.5	19.5

9: Emery Ave & CSAH 42 Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.7	0.8	3.7
Total Del/Veh (s)	4.5	0.5	0.3	4.3	0.7	0.3	8.0	14.0	7.7	12.2	14.7	8.7

9: Emery Ave & CSAH 42 Performance by movement

Movement	All
Denied Del/Veh (s)	0.9
Total Del/Veh (s)	3.8

10: Blaine Ave & Connemara Trl/140th St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	3.8	0.1	0.1	0.4	0.0	0.4	4.2	0.2	1.4
Total Del/Veh (s)	7.1	3.1	5.4	6.2	2.7	2.2	3.2	0.3	3.8

Total Network Performance

Denied Del/Veh (s)	2.3
Total Del/Veh (s)	102.7

Intersection: 1: US 52 SB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	L	L	T	T	L	LT	R
Maximum Queue (ft)	999	941	841	128	288	299	155	128	444	1017	502
Average Queue (ft)	565	421	269	59	160	170	58	63	261	397	284
95th Queue (ft)	1063	1018	795	108	242	253	107	105	518	1049	555
Link Distance (ft)	4785	4785	4785				528	528		1675	
Upstream Blk Time (%)										2	
Queuing Penalty (veh)										0	
Storage Bay Dist (ft)				250	485	485			430		430
Storage Blk Time (%)			0						15	8	4
Queuing Penalty (veh)			0						147	74	13

Intersection: 2: US 52 NB Ramps & CSAH 42

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	T	T	R	R	LT
Maximum Queue (ft)	510	565	319	116	598	710	475	388	235
Average Queue (ft)	485	519	44	17	356	413	374	322	117
95th Queue (ft)	574	618	202	71	534	690	534	443	204
Link Distance (ft)		528	528	528	720	720			1047
Upstream Blk Time (%)	0	14	0		0	0			
Queuing Penalty (veh)	0	78	0		0	3			
Storage Bay Dist (ft)	485						300	300	
Storage Blk Time (%)	7	20				9	15	3	0
Queuing Penalty (veh)	34	94				112	82	15	0

Intersection: 3: CSAH 42 & Conley Avenue

Movement	EB	EB	EB	EB	WB	WB	WB	B18	B18	SB	SB
Directions Served	L	T	T	T	T	T	R	T	T	L	R
Maximum Queue (ft)	131	126	129	127	768	821	218	498	305	89	117
Average Queue (ft)	41	24	23	16	424	593	8	21	33	8	52
95th Queue (ft)	100	71	70	63	719	888	103	263	174	44	107
Link Distance (ft)		720	720	720	734	734		1865	1865	772	
Upstream Blk Time (%)					1	7					
Queuing Penalty (veh)					6	75					
Storage Bay Dist (ft)	300						300				100
Storage Blk Time (%)						24					3
Queuing Penalty (veh)						1					0

Intersection: 4: CSAH 42 & 142nd Street

Movement	SB
Directions Served	LR
Maximum Queue (ft)	116
Average Queue (ft)	52
95th Queue (ft)	98
Link Distance (ft)	520
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 5: Minnesota 55 & CSAH 42

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	280	217	296	172	73	252	219	70
Average Queue (ft)	140	97	159	30	22	154	107	20
95th Queue (ft)	234	180	253	100	57	232	197	54
Link Distance (ft)	713			1415	1415	874	874	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		260	365					300
Storage Blk Time (%)	1		0					
Queuing Penalty (veh)	4		0					

Intersection: 6: Blaine Ave & CSAH 42

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	L	T	T	R	L	T	R	L	L
Maximum Queue (ft)	209	260	242	64	370	403	240	58	34	90	82	96
Average Queue (ft)	91	150	150	13	225	242	83	17	4	40	33	51
95th Queue (ft)	196	221	222	42	328	354	243	46	22	72	69	85
Link Distance (ft)		1285	1285		4785	4785			1136			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	290			280			190	250		250	250	250
Storage Blk Time (%)		0			2	14	0					
Queuing Penalty (veh)		0			0	18	0					

Intersection: 6: Blaine Ave & CSAH 42

Movement	SB	SB
Directions Served	T	R
Maximum Queue (ft)	21	108
Average Queue (ft)	2	43
95th Queue (ft)	11	89
Link Distance (ft)	2562	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		250
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: CSAH 42 & Driver Ave

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	L	L	T	T	T	T	R	L	R	R
Maximum Queue (ft)	214	234	213	234	535	558	324	616	300	275
Average Queue (ft)	126	147	67	80	325	366	22	117	211	200
95th Queue (ft)	196	214	166	179	460	502	143	411	330	317
Link Distance (ft)		1865	1865	1865	2626	2626		971		
Upstream Blk Time (%)								0		
Queuing Penalty (veh)								0		
Storage Bay Dist (ft)	500						300		250	250
Storage Blk Time (%)						17		0	5	4
Queuing Penalty (veh)						3		1	2	2

Intersection: 8: South Access & CSAH 42

Movement	EB	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	L	TR	LT	R	LTR	LT	R
Maximum Queue (ft)	112	134	255	474	246	35	157	289
Average Queue (ft)	47	73	103	230	24	9	29	115
95th Queue (ft)	96	117	180	401	138	32	97	242
Link Distance (ft)		2626	2626	3156		422	657	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250			250
Storage Blk Time (%)				10				1
Queuing Penalty (veh)				2				1

Intersection: 9: Emery Ave & CSAH 42

Movement	EB	WB	NB	SB	SB
Directions Served	L	LT	LTR	LT	R
Maximum Queue (ft)	50	40	35	63	85
Average Queue (ft)	11	2	12	29	37
95th Queue (ft)	37	20	32	52	71
Link Distance (ft)		524	570	542	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	250				250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 10: Blaine Ave & Connemara Trl/140th St

Movement	EB	WB	NB	SB
Directions Served	R	LTR	L	L
Maximum Queue (ft)	74	22	40	12
Average Queue (ft)	34	7	9	0
95th Queue (ft)	62	23	32	7
Link Distance (ft)		652		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	250		250	250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 770

Appendix C

Greenhouse Gas Quantifaction

EPA Simplified GHG Emissions Calculator (SGEC)

Version 7 June 2021

The EPA Simplified GHG Emissions Calculator ("the Calculator") is designed as a simplified calculation tool to help organizations estimate and inventory their annual greenhouse gas (GHG) emissions for US-based operations. All methodologies and default values provided are based on the most current Center for Corporate Climate Leadership Greenhouse *Gas Inventory Guidance Documents* and the *Emission Factors Hub*. The Calculator will quantify the direct and indirect emissions from sources at an organization when activity data are entered into the various sections of the workbook for one annual period.

Before entering data, please: 1) Enable Macros and 2) Familiarize yourself with the *Guide to Greenhouse Gas Management for Small Business & Low Emitters.*

Download the guide: https://www.epa.gov/climateleadership/center-corporate-climate-leadership-small-business-and-low-emitters-guide

There are three primary steps in completing a GHG inventory. Each emissions source also has these three steps.

(1) **DEFINE**: The first step in completing a GHG inventory is to determine the boundaries and emissions sources included within those boundaries. After you have defined your organizational and operational boundaries, you can use the questions on the "Boundary Questions" worksheet to help you determine which emissions sources are relevant to your business.

Go to Boundary Questions

(2) **COLLECT**: The second step is to collect data for the defined annual period. This step is typically the most time consuming, since the data can be difficult to gather. This Calculator has help sheets with suggestions and guidance for each emissions source and a general help sheet for data management. **Click the drop down menu boxes below to navigate to these sheets**.

Help - Data Management

(3) **QUANTIFY**: The third step is to calculate emissions. This Calculator is designed to complete the emissions quantification step for you. Once the user enters data in this MS Excel spreadsheet, the emissions will be calculated and totaled on the "Summary" sheet.

Calculator Guidance - Important Information

(A) Navigate to the data entry sheets using the drop down menu in the dark grey cell below and then clicking on the "Go To Data Entry Sheet" button. On the data entry sheets enter data in ORANGE cells only.

(B) This Calculator has several "Tool Sheets" with useful reference data such as unit conversions, heat contents, and emission factors. Click on the buttons below to go to the appropriate Tool Sheet.

(C) Data must be entered in the units specified on the data entry sheets. Use the "Unit Conversions" or "Heat Content" sheets if unit conversion is necessary prior to entering data into the Calculator.

(D) If more guidance is needed, you can reference the emission factor data sources found on the "Emission Factors" sheet.

Tool Sheets	Quick Data Entry Navigation
Unit Conversions	Fire Suppression
Heat Content	
Emission Factors	

Calculator Notes

Emission sources of all seven major GHGs are accounted for in the inventory and in this Calculator: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The Calculator allows the user to estimate GHG emissions from scope 1 (direct), scope 2 (indirect), and some scope 3 (other indirect) sources.

The Calculator uses U.S.-specific cross-sector emission factors from the *Emission Factors Hub*. Many industrial sectors also have process-related emissions sources that are specific to their sector. EPA's Greenhouse Gas Reporting Program provides guidance and tools that can aid in the calculation and reporting of these emissions:

https://www.epa.gov/ghgreporting

The GHG Protocol also provides guidance on calculating emissions from industrial processes.

Back to Intro | Back to Summary | Heat Content | Help

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Scope 1 Emissions from Stationary Combustion Sources

Guidance

(A) Enter annual data for each combustion unit, facility, or site (by fuel type) in ORANGE cells on **Table 1**. Example entry is shown in first row (*GREEN Italics*).
- Select "Fuel Combusted" from drop down box.
- Enter "Quantity Combusted" and choose the appropriate units from the drop down box in the unit column. If it's necessary to convert units, common heat contents can be found on the "Heat Content" sheet and unit conversions on the "Unit Conversion" sheet.

(B) If fuel is consumed in a facility but stationary fuel consumption data are not available, an estimate should be made for completeness. See the "Items to Note" section of the Help sheet for suggested estimation approaches.

(C) Biomass CO_2 emissions are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Stationary Source Fuel Combustion

Source ID	Source Description	Source Area (sq ft)	Fuel Combusted	Quantity Combusted	Units
BLR-012	*East Power Plant*	*12,517*	*Natural Gas*	*10,000*	*MMBtu*
Generator	Diesel Use	N/A	Distillate Fuel Oil No. 2	475,200	Gallons

GHG Emissions

Total Organization-Wide Stationary Source Combustion by Fuel Type

Fuel Type	Quantity Combusted	Units
Anthracite Coal	0	short tons
Bituminous Coal	0	short tons
Sub-bituminous Coal	0	short tons
Lignite Coal	0	short tons
Natural Gas	0	scf
Distillate Fuel Oil No. 2	475,200	gallons
Residual Fuel Oil No. 6	0	gallons
Kerosene	0	gallons
Liquefied Petroleum Gases (LPG)	0	gallons
Wood and Wood Residuals	0	short tons
Landfill Gas	0	scf

Total Organization-Wide CO_2, CH_4 and N_2O Emissions from Stationary Source Fuel Combustion

Fuel Type	CO_2 (kg)	CH_4 (g)	N_2O (g)
Anthracite Coal	0.0	0.0	0.0
Bituminous Coal	0.0	0.0	0.0
Sub-bituminous Coal	0.0	0.0	0.0
Lignite Coal	0.0	0.0	0.0
Natural Gas	0.0	0.0	0.0
Distillate Fuel Oil No. 2	4,851,792.0	194,832.0	38,016.0
Residual Fuel Oil No. 6	0.0	0.0	0.0
Kerosene	0.0	0.0	0.0
Liquefied Petroleum Gases (LPG)	0.0	0.0	0.0
Total Fossil Fuel Emissions	**4,851,792.0**	**194,832.0**	**38,016.0**
Wood and Wood Residuals	0.0	0.0	0.0
Landfill Gas	0.0	0.0	0.0
Total Non-Fossil Fuel Emissions	**0.0**	**0.0**	**0.0**
Total Emissions for all Fuels	**4,851,792.0**	**194,832.0**	**38,016.0**

Total CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**4,868.0**
Total Biomass CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**0.0**

Back to Intro | Back to Summary | Help

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Scope 1 Emissions from Mobile Sources

Guidance

(A) Enter annual data for each vehicle or group of vehicles (grouped by vehicle type, vehicle year, and fuel type) in ORANGE cells in **Table 1**. Example entry is shown in first row (GREEN INDICE). Only enter vehicles owned or leased by your organization on this sheet. All other vehicle use such as employee commuting or business travel is considered a scope 3 emissions source and should be reported in the corresponding scope 3 sheets.
- Select "On-Road" or "Non-Road" from drop down box to determine the Vehicle Types available.
- Select "Vehicle Type" from drop down box (closest type available).
- Enter "Fuel Usage" in appropriate units (units appear when vehicle type is selected).
- If mileage or fuel usage is unknown, estimate using approximate fuel economy values (see **Reference Table** below).
- Vehicle year and Miles traveled are not necessary for non-road equipment.

(B) When using biofuels, typically the biofuel (biodiesel or ethanol) is mixed with a petroleum fuel (diesel or gasoline) for use in vehicles. Enter the biodiesel and ethanol percentages of the fuel if known, or leave default values.

Biodiesel Percent:	20	%
Ethanol Percent:	85	%

(C) Biomass CO_2 emissions from biodiesel and ethanol are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Mobile Source Fuel Combustion and Miles Traveled

Source ID	Source Description	On-Road or Non-Road?	Vehicle Type	Vehicle Year	Fuel Usage	Units	Miles Traveled
Heat-012	*Oil Heat*	*Nonroad*	*Ships and Boats - Diesel*	*2007*	*500*	*gal*	*7,275*
Construction Equipment (non-road	Construction Equipment	Nonroad	Construction/Mining Equipment - Gasoline (2 stroke)	2007	440,412	gal	0
Passenger Cars	Construction Equipment	Onroad	Passenger Cars - Gasoline	2007	1,498	gal	4,365
Construction Equipment (non-road	Construction Equipment	Nonroad	Construction/Mining Equipment - Diesel	2007	1,572,888	gal	0
Medium- and Heavy- Duty Trucks	Construction Equipment	Onroad	Medium- and Heavy-Duty Vehicles - Diesel	2007	3,145	gal	1,565
Light Trucks	Construction Equipment	Onroad	Light-Duty Trucks - Gasoline	2007	2,938	gal	1,565

Reference Table: Average Fuel Economy by Vehicle Type

Vehicle Type	Average Fuel Economy (mpg)
Passenger Cars	24.1
Motorcycles	46.6
Diesel Buses (Diesel Heavy-Duty Vehicles)	7.3
Other 2-axle, 4-Tire Vehicles	17.6
Single unit 2-Axle 6-Tire or More Trucks	7.6
Combination Trucks	6.1

GHG Emissions

Total Organization-Wide Mobile Source Fuel Usage and CO_2 Emissions (On-Road and Off-Road Vehicles)

Fuel Type	Fuel Usage	Units	CO_2 (kg)	
Motor Gasoline	444,845	gallons	3,905,762.0	
Diesel Fuel	1,576,044	gallons	16,091,412.2	
Residual Fuel Oil	0	gallons	0.0	
Aviation Gasoline	0	gallons	0.0	
Kerosene-Type Jet Fuel	0	gallons	0.0	
Liquefied Petroleum Gas (LPG)	0	gallons	0.0	
Ethanol	0	gallons	0.0	*Note: emissions here are only for the gasoline portion of the*
Biodiesel	0	gallons	0.0	*Note: emissions here are only for the diesel portion of the fu*
Liquefied Natural Gas (LNG)	0	gallons	0.0	
Compressed Natural Gas (CNG)	0	scf	0.0	

Total Organization-Wide On-Road Gasoline Mobile Source Mileage and CH_4/N_2O Emissions

Vehicle Type	Vehicle Year	Mileage (miles)	CH_4 (g)	N_2O (g)
Passenger Cars - Gasoline	1994-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	4,365	31.4	87.3
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
Light-Duty Trucks - Gasoline (Vans, Pickup Trucks, SUVs)	1987-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	1,565	16.1	6.3
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
Heavy-Duty Vehicles - Gasoline	1985-86	0	0.0	0.0
	1987	0	0.0	0.0
	1988-1989	0	0.0	0.0
	1990-1993	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	0	0.0	0.0
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
Motorcycles - Gasoline	1960-1995	0	0.0	0.0
	1996-present	0	0.0	0.0

Total Organization-Wide On-Road Non-Gasoline Mobile Source Mileage and CH_4/N_2O Emissions

Vehicle Type	Fuel Type	Vehicle Year	Mileage (miles)	CH_4 (g)	N_2O (g)
Passenger Cars - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-1995	0	0.0	0.0
		1996-2006	0	0.0	0.0
		2007-2018	0	0.0	0.0
Light-Duty Trucks - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-1995	0	0.0	0.0
		1996-2006	0	0.0	0.0
		2007-2018	0	0.0	0.0
Medium- and Heavy-Duty Vehicles	Diesel	1960-2006	0	0.0	0.0
		2007-2018	1,565	14.8	47.2
Light-Duty Cars	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Light-Duty Trucks	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Medium-Duty Trucks	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Heavy-Duty Trucks	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Buses	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0

Total Organization-Wide Non-Road Mobile Source Fuel Usage and CH_4/N_2O Emissions

Vehicle Type	Fuel Type	Fuel Usage (gallons)	CH_4 (g)	N_2O (g)
Ships and Boats	Residual Fuel Oil	-	-	-
	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
Locomotives	Diesel	-	-	-
Aircraft	Jet Fuel	-	-	-
	Aviation Gasoline	-	-	-
Agricultural Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Agricultural Offroad Trucks	Gasoline	-	-	-
	Diesel	-	-	-
Construction/Mining Equipment	Gasoline (2 stroke)	440,412	5,469,912	30,826
	Gasoline (4 stroke)	-	-	-
	Diesel	1,572,888	314,580	739,258
	LPG	-	-	-
Construction/Mining Offroad Trucks	Gasoline	-	-	-
	Diesel	-	-	-
Lawn and Garden Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Airport Equipment	Gasoline	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Industrial/Commercial Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Logging Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
Railroad Equipment	Gasoline	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Recreational Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-

Total CO_2 Equivalent Emissions (metric tons) - Mobile Sources	**20,371.3**
Total Biomass CO_2 Equivalent Emissions (metric tons) - Mobile Sources	**0.0**

Notes:
1. Average mpg values from the U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2019 (Nov 2020), Table VM-1.

Back to Intro | Back to Summary | Help

Scope 1 Emissions from Refrigeration and Air Conditioning Equipment

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Guidance

(A) HFC, PFC, CO_2, and SF_6 refrigerants from facilities and vehicles are required to be included in the GHG inventory. Ozone depleting substances, such as CFCs and HCFCs, are regulated internationally and are typically excluded from a GHG inventory or reported as a memo item.

(B) Select ONE of the three options with which to estimate emissions. Options range from most preferred method (Option 1) to least preferred method (Option 3). If option 3, screening method, is used and emissions are determined to be significant when compared to other emission sources, then one of the other methods should be applied to calculate emissions more accurately.

(C) Enter annual data in ORANGE cells as appropriate for the selected option.

Option 1. Material Balance Method: Enter organization-wide total gases stored and transferred (by gas) in Table 1.
- Choose the appropriate gas from the Gas drop down menu.
- Inventory Change = difference of gas stored in inventory from beginning to end of reporting period. (Includes only gas stored on-site (i.e. cylinders) and not gas contained within equipment).
- Transferred Amount = gas purchased minus gas sold/disposed during reporting period.
  - -- Gas purchased includes: Purchases for inventory, as part of equipment servicing (not from inventory), within purchased equipment, and gas returned to the site after off-site recycling.
  - -- Gas sold/disposed includes: Returns to supplier, sales or disposals (including within equipment), and gas sent off-site for recycling, reclamation, or destruction.
- Capacity Change = capacity of all units at beginning minus capacity of all units at end of reporting period. (can be assumed to be capacity of new units minus capacity of retired units).

Table 1. Organization-Wide Refrigeration Gas CO_2 Equivalent Emissions - Material Balance

Gas	Gas GWP	Inventory Change (lb)	Transferred Amount (lb)	Capacity Change (lb)	CO_2 Equivalent Emissions (lb)
R-410A	2,088	22.5			46,980.0
R-410A	2,088	303.3			633,215.2

Option 2. Material Balance Method (Simplified): Enter organization-wide total gases in units (by gas) in Table 2.
- Choose the appropriate gas from the drop down menu.
- New units are those installed during reporting period (do not include any data for new units pre-charged by supplier), disposed units were disposed of during the reporting period, and existing units are all others.
- Charge/Recharge = gas added to units by organization or a contractor (do not include pre-charge by manufacturer).
- Capacity = sum of the full capacity for all units (do not include new units pre-charged by manufacturer).
- Amount recovered = total gas recovered from all retired units.

Table 2. Organization-Wide Refrigeration Gas CO_2 Equivalent Emissions - Simplified Material Balance

Gas	Gas GWP	New Units		Existing Units	Disposed Units		CO_2 Equivalent Emissions (lb)
		Charge (lb)	Capacity (lb)	Recharge (lb)	Capacity (lb)	Recovered (lb)	

Option 3. Screening Method: Enter refrigerant information for each unit or group of units (by refrigerant) in **Table 3.**
- Select the "Type of Equipment" (closest available) and "Gas" from the drop down box.
- Enter amount of refrigerant added to new units by the organization (not pre-charged amount from manufacturer).
- Enter refrigerant capacity (by equipment type and refrigerant) for all units operating and disposed during reporting period.
  - -- For each unit added or removed during reporting period, multiply its capacity by a usage factor (0.0 to 1.0). For example, if the equipment was installed in June, multiply by 0.5 or (6/12), if it was installed in September you would multiply by 0.33 (4/12).
  - -- If data entered for multiple units, sum the capacities or charge quantity for all like units.
  - -- If capacity of unit(s) is not known, use upper value of default capacity provided in the **Reference Table** below.
- See example entry in first row (*GREEN Italics*).

Table 3. Source Level Refrigeration Gas CO_2 Equivalent Emissions - Screening Method

Source ID	Type of Equipment	Gas	Gas GWP	New Units Charge (kg)	Capacity		CO_2 Equivalent Emissions (kg)
					Operating Units (kg)	Disposed Units (kg)	
Bldg-012	*Domestic Refrigeration*	*HFC-32*	675	*1000*	*0.5*	*0.25*	*6,792.2*

Reference Table: Type of Equipment and Default Capacity Ranges (Lower to Upper Range) for Table 3

Domestic Refrigeration	Domestic refrigeration units (capacity 0.05 to 0.5 kg)
Stand-Alone Commercial	Stand alone commercial applications (capacity 0.2 to 6 kg)
Medium/Large Commercial	Medium and large commercial refrigeration units (capacity 50 to 2,000 kg)
Transport Refrigeration	Transportation refrigeration units (capacity 3 to 8 kg)
Industrial Refrigeration	Industrial, food processing and cold storage units (capacity 10 to 10,000 kg)
Chillers	Commercial chillers (default capacity 10 to 2,000 kg)
Residential/Commercial A/C	Residential and commercial units, including heat pumps (capacity 0.5 to 100 kg)
Car A/C Units	Passenger car A/C units (capacity 0.5 kg)
Light-Duty Truck A/C Units	Light-duty truck A/C units (capacity 1.5 kg)

GHG Emissions

Total CO_2 Equivalent Emissions (metric tons) - Refrigeration and AC Equipment	**308.5**

Notes:
1. CO_2 emissions estimated using emission factors provided in Table 3 of the Center for Corporate Climate Leadership *Greenhouse Gas Inventory Guidance Direct Fugitive Emissions from Refrigeration, Air Conditioning, Fire Suppression and Industrial Gases. (Dec 2020).*
2. GWPs are from *Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (2007).*

Back to Intro | Back to Summary | Help

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Scope 1 Emissions from Combustion of Waste Gases

Guidance

(A) Enter annual data in ORANGE cells as appropriate. Data should be entered as an organization-wide value (all operations combined prior to entry into this table).
(B) Enter total amount waste stream gas combusted.
(C) Enter gas total number of moles per ft^3.
- This number is based on specific temperature and pressure conditions.
- If no data are available use 0.00255 lb-mole/ft^3 as a default value, based on conditions of 25°C and 1 atm.

(D) Enter molar fraction (as a percentage) for each gas component in **Table 1.**
- This number is based on either volume or molar mass percentage for each gas component.
- It is assumed that the remainder of the waste stream will be made up of compounds not containing carbon.

Waste Stream Gas Combusted: 5,000 ft^3
Gas total number of moles per unit volume: 0.00255 lb-mole/ft^3

Table 1. Determining Emission Factor for Gas Waste Stream

Component	Chemical Formula	Molar Fraction (%)	Total Moles (lb-mole/ft^3)	Molecular Weight	Percent Carbon (%)	Carbon Content (lb/ft^3)
Carbon Monoxide	CO			28	43%	
Carbon Dioxide	CO_2			44	27%	
Methane	CH_4			16	75%	
Acetylene	C_2H_2			26	92%	
Ethylene	C_2H_4			28	86%	
Ethane	C_2H_6			30	80%	
Propylene	C_3H_6			42	86%	
Propane	C_3H_8			44	82%	
n-Butane	C_4H_{10}			58	83%	
Benzene	C_6H_6			78	92%	
Hexane	C_6H_{14}			86	84%	
Toluene	C_7H_8			92	91%	
Octane	C_8H_{18}			114	84%	
Ethanol	C_2H_5OH			46	52%	
Acetone	CH_3COCH_3			58	62%	
Tetrahydrofuran	C_4H_8O			72	67%	
Other non-carbon					0%	
Total for all Components		0.00%	0			0.0000

Step 4. Enter Oxidation Factor 100 %
- If oxidation factor value is not known, use 100% as default value.

GHG Emissions

Total CO_2 Equivalent Emissions (metric tons) - Waste Gas Combustion 0.0

Notes:
1. This tool is designed to apply the CO_2 emission factor calculation methodology for a gas waste stream as provided in the *Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance - Direct Emissions from Stationary Combustion Sources (January 2016)*. This tool can also be used to approximate emissions for other combustion sources such as gas welding and gas metal cutting.

Back to Intro | Back to Summary | Help

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Scope 3 Emissions from Waste

Guidance

(A) Enter annual waste data in ORANGE cells. Example entry is shown in first row (*GREEN Italics*).

(B) Choose the appropriate material and disposal method from the drop down options. For the average-data method, use one of the mixed material types, such as mixed MSW. If the exact waste material is not available, consider an appropriate proxy. For example, dimensional lumber can be used as a proxy for wood furniture.

(C) Choose an appropriate disposal method. Note that not all disposal methods are available for all materials. If there is a #NA or # Value error in the emissions column, you must pick a new material type or appropriate disposal method.

Table 1. Waste Disposal Weight by Waste Material and Disposal Method (CO_2, CH_4 and N_2O)

Source ID	Source Description	Waste Material	Disposal Method	Weight	Unit	CO_2e Emissions (kg)
Bldg-012	*East Power Plant Finished Goods*	*Steel Cans*	*Landfilled*	*1,000*	*metric ton*	*22,040*
Data Center	Data Center Waste	Mixed Recyclables	Recycled	1,276	metric ton	*126,590*
Data Center	Data Center Waste	Mixed MSW municipal solid waste	Landfilled	11,913	metric ton	*6,826,471*
Data Center	Data Center Waste	Mixed Electronics	Landfilled	49	metric ton	*1,082*

GHG Emissions

Total Emissions by Disposal Method

Waste Material	CO_2e (kg)
Recycled	126,590
Landfilled	6,827,553
Combusted	-
Composted	-
Anaerobically Digested (Dry Digestate with Curing)	-
Anaerobically Digested (Wet Digestate with Curing)	-

Total CO_2 Equivalent Emissions (metric tons) - Waste **6,954.1**

Back to Intro | Back to Summary | Help | Help - Market-Based Method

Scope 2 Emissions from Purchase of Electricity

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U.S. Environmental Protection Agency

Guidance

The Indirect Emissions from Purchased Electricity Guidance document provides guidance for quantifying two scope 2 emissions totals, using a **location-based method** and a **market-based method**. The organization should quantify and report both totals in its GHG inventory. The location-based method considers average emission factors for the electricity grids that provide electricity. The market-based method considers contractual arrangements under which the organization procures electricity from specific sources, such as renewable energy.

(A) Enter total annual electricity purchased in kWh and each eGRID subregion for each facility or site in ORANGE cells of **Table 1**.
(B) If electricity consumption data are not available for a facility, an estimate should be made for completeness.
See the "Items to Note" section of the Help sheet for suggested estimation approaches.
(C) Select "eGRID subregion" from drop box and enter "Electricity Purchased."
- Use map (Figure 1) at bottom of sheet to determine appropriate eGRID subregion. If subregion cannot be determined from the map, find the correct subregion by entering the location's zip code into EPA's Power Profiler:
https://www.epa.gov/egrid/power-profiler#/
(D) See the market-based emission factor hierarchy on the market-based method Help sheet. If any of the first four types of emission factors are applicable, enter the factors in the yellow cells marked as "<enter factor>". If not, leave the yellow cells as is, and eGRID subregion factors will be used for market-based emissions.
Example entry is shown in first row (*GREEN Italics*) for a facility that purchases RECs for 100% of its consumption, and therefore has a market-based emission factor of 0.

Help - Market-Based Method

Tips: Enter electricity usage by location and then look up the eGRID subregion for each location.
If you purchase renewable energy that is less than 100% of your site's electricity, see the example in the market-based method Help sheet.

Table 1. Total Amount of Electricity Purchased by eGRID Subregion

					Market-Based *Use these cells to enter applicable market-based emission factors*						Location-Based		
					Emission Factors			Emissions			Emissions		
Source ID	Source Description	Source Area (sq ft)	eGRID Subregion *where electricity is consumed*	Electricity Purchased (kWh)	CO_2 Emissions (lb/MWh)	CH_4 Emissions (lb/MWh)	N_2O Emissions (lb/MWh)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)
Bldg-012	*East Power Plant*	*12,517*	*HIMS (HICC Miscellaneous)*	*200,000*	*0*	*0*	*0*	*0.0*	*0.0*	*0.0*	*237,120.0*	*28.6*	*4.4*
Data Cente	Utility grid	2,300,000	MROW (MRO West)	347,000,000	0	0	0	0.0	0.0	0.0	381,144,800.0	41,293.0	5,899.0
					<enter factor>	<enter factor>	<enter factor>						
					<enter factor>	<enter factor>	<enter factor>						
					<enter factor>	<enter factor>	<enter factor>						
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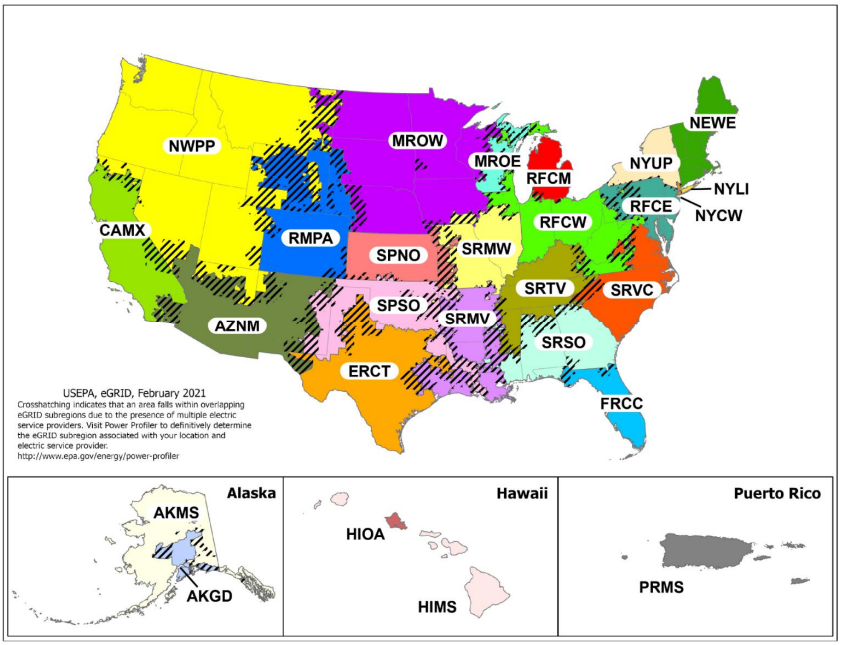
					<enter factor>	<enter factor>	<enter factor>						
					<enter factor>	<enter factor>	<enter factor>						
					<enter factor>	<enter factor>	<enter factor>						
					<enter factor>	<enter factor>	<enter factor>						
Total Emissions for All Sources				347,000,000				0.0	0.0	0.0	381,144,800.0	41,293.0	5,899.0

GHG Emissions

CO_2 Equivalent Emissions (metric tons)	
Location-Based Electricity Emissions	174,152.9
Market-Based Electricity Emissions	0.0

Notes:
1. CO_2, CH_4 and N_2O emissions are estimated using methodology provided in EPA's Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance - Indirect Emissions from Purchased Electricity (January 2016).

Figure 1. EPA eGRID2019, February 2021.



EPA Simplified GHG Emissions Calculator (SGEC)

Version 7 June 2021

The EPA Simplified GHG Emissions Calculator ("the Calculator") is designed as a simplified calculation tool to help organizations estimate and inventory their annual greenhouse gas (GHG) emissions for US-based operations. All methodologies and default values provided are based on the most current Center for Corporate Climate Leadership Greenhouse *Gas Inventory Guidance Documents* and the *Emission Factors Hub*. The Calculator will quantify the direct and indirect emissions from sources at an organization when activity data are entered into the various sections of the workbook for one annual period.

Before entering data, please: 1) Enable Macros and 2) Familiarize yourself with the *Guide to Greenhouse Gas Management for Small Business & Low Emitters.*

Download the guide: https://www.epa.gov/climateleadership/center-corporate-climate-leadership-small-business-and-low-emitters-guide

There are three primary steps in completing a GHG inventory. Each emissions source also has these three steps.

(1) **DEFINE**: The first step in completing a GHG inventory is to determine the boundaries and emissions sources included within those boundaries. After you have defined your organizational and operational boundaries, you can use the questions on the "Boundary Questions" worksheet to help you determine which emissions sources are relevant to your business.

Go to Boundary Questions

(2) **COLLECT**: The second step is to collect data for the defined annual period. This step is typically the most time consuming, since the data can be difficult to gather. This Calculator has help sheets with suggestions and guidance for each emissions source and a general help sheet for data management. **Click the drop down menu boxes below to navigate to these sheets**.

Help - Data Management

(3) **QUANTIFY**: The third step is to calculate emissions. This Calculator is designed to complete the emissions quantification step for you. Once the user enters data in this MS Excel spreadsheet, the emissions will be calculated and totaled on the "Summary" sheet.

Calculator Guidance - Important Information

(A) Navigate to the data entry sheets using the drop down menu in the dark grey cell below and then clicking on the "Go To Data Entry Sheet" button. On the data entry sheets enter data in ORANGE cells only.

(B) This Calculator has several "Tool Sheets" with useful reference data such as unit conversions, heat contents, and emission factors. Click on the buttons below to go to the appropriate Tool Sheet.

(C) Data must be entered in the units specified on the data entry sheets. Use the "Unit Conversions" or "Heat Content" sheets if unit conversion is necessary prior to entering data into the Calculator.

(D) If more guidance is needed, you can reference the emission factor data sources found on the "Emission Factors" sheet.

Tool Sheets	Quick Data Entry Navigation
Unit Conversions	Fire Suppression
Heat Content	
Emission Factors	

Calculator Notes

Emission sources of all seven major GHGs are accounted for in the inventory and in this Calculator: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The Calculator allows the user to estimate GHG emissions from scope 1 (direct), scope 2 (indirect), and some scope 3 (other indirect) sources.

The Calculator uses U.S.-specific cross-sector emission factors from the *Emission Factors Hub*. Many industrial sectors also have process-related emissions sources that are specific to their sector. EPA's Greenhouse Gas Reporting Program provides guidance and tools that can aid in the calculation and reporting of these emissions:

https://www.epa.gov/ghgreporting

The GHG Protocol also provides guidance on calculating emissions from industrial processes.

Back to Intro | Back to Summary | Heat Content | Help

Scope 1 Emissions from Stationary Combustion Sources

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Guidance

(A) Enter annual data for each combustion unit, facility, or site (by fuel type) in ORANGE cells on **Table 1**. Example entry is shown in first row (*GREEN Italics*).
- Select "Fuel Combusted" from drop down box.
- Enter "Quantity Combusted" and choose the appropriate units from the drop down box in the unit column. If it's necessary to convert units, common heat contents can be found on the "Heat Content" sheet and unit conversions on the "Unit Conversion" sheet.

(B) If fuel is consumed in a facility but stationary fuel consumption data are not available, an estimate should be made for completeness. See the "Items to Note" section of the Help sheet for suggested estimation approaches.

(C) Biomass CO_2 emissions are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Stationary Source Fuel Combustion

Source ID	Source Description	Source Area (sq ft)	Fuel Combusted	Quantity Combusted	Units
BLR-012	*East Power Plant*	*12,517*	*Natural Gas*	*10,000*	*MMBtu*
Business P	Natural Gas Use	1,293,333	Natural Gas	34,661	MMBtu
Light Indust	Natural Gas Use	646,667	Natural Gas	12,545	MMBtu
Community	Natural Gas Use	560,000	Natural Gas	12,040	MMBtu

GHG Emissions

Total Organization-Wide Stationary Source Combustion by Fuel Type

Fuel Type	Quantity Combusted	Units
Anthracite Coal	0	short tons
Bituminous Coal	0	short tons
Sub-bituminous Coal	0	short tons
Lignite Coal	0	short tons
Natural Gas	57,745,287	scf
Distillate Fuel Oil No. 2	0	gallons
Residual Fuel Oil No. 6	0	gallons
Kerosene	0	gallons
Liquefied Petroleum Gases (LPG)	0	gallons
Wood and Wood Residuals	0	short tons
Landfill Gas	0	scf

Total Organization-Wide CO_2, CH_4 and N_2O Emissions from Stationary Source Fuel Combustion

Fuel Type	CO_2 (kg)	CH_4 (g)	N_2O (g)
Anthracite Coal	0.0	0.0	0.0
Bituminous Coal	0.0	0.0	0.0
Sub-bituminous Coal	0.0	0.0	0.0
Lignite Coal	0.0	0.0	0.0
Natural Gas	3,143,653.4	59,477.6	5,774.5
Distillate Fuel Oil No. 2	0.0	0.0	0.0
Residual Fuel Oil No. 6	0.0	0.0	0.0
Kerosene	0.0	0.0	0.0
Liquefied Petroleum Gases (LPG)	0.0	0.0	0.0
Total Fossil Fuel Emissions	**3,143,653.4**	**59,477.6**	**5,774.5**
Wood and Wood Residuals	0.0	0.0	0.0
Landfill Gas	0.0	0.0	0.0
Total Non-Fossil Fuel Emissions	**0.0**	**0.0**	**0.0**
Total Emissions for all Fuels	**3,143,653.4**	**59,477.6**	**5,774.5**

Total CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**3,146.9**
Total Biomass CO_2 Equivalent Emissions (metric tons) - Stationary Combustion	**0.0**

Back to Intro | Back to Summary | Help

CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Scope 1 Emissions from Mobile Sources

Guidance

(A) Enter annual data for each vehicle or group of vehicles (grouped by vehicle type, vehicle year, and fuel type) in ORANGE cells in **Table 1**. Example entry is shown in first row (GREEN *Italics*). Only enter vehicles owned or leased by your organization on this sheet. All other vehicle use such as employee commuting or business travel is considered a scope 3 emissions source and should be reported in the corresponding scope 3 sheets.
- Select "On-Road" or "Non-Road" from drop down box to determine the Vehicle Types available.
- Select "Vehicle Type" from drop down box (closest type available).
- Enter "Fuel Usage" in appropriate units (units appear when vehicle type is selected).
  - If mileage or fuel usage is unknown, estimate using approximate fuel economy values (see **Reference Table** below).
  - Vehicle year and Miles traveled are not necessary for non-road equiment.

(B) When using biofuels, typically the biofuel (biodiesel or ethanol) is mixed with a petroleum fuel (diesel or gasoline) for use in vehicles. Enter the biodiesel and ethanol percentages of the fuel if known, or leave default values.

Biodiesel Percent: 20 %
Ethanol Percent: 80 %

(C) Biomass CO_2 emissions from biodiesel and ethanol are not reported in the total emissions, but are reported separately at the bottom of the sheet.

Table 1. Mobile Source Fuel Combustion and Miles Traveled

Source ID	Source Description	On-Road or Non-Road?	Vehicle Type	Vehicle Year	Fuel Usage	Units	Miles Traveled
Fleet-012	*HQ Fleet*	*NonRoad*	*Ships and Boats - Diesel*	*1990*	*500*	*gal*	*3,670*
Construction Equipment (non-road g	Construction Equipment	NonRoad	Construction/Mining Equipment - Gasoline (2 stroke)	2007	478,708	gal	0
Passenger Cars	Construction Equipment	OnRoad	Passenger Cars - Gasoline	2007	1,628	gal	4,368
Construction Equipment (non-road d	Construction Equipment	NonRoad	Construction/Mining Equipment - Diesel	2007	1,709,672	gal	0
Medium- and Heavy- Duty Trucks	Construction Equipment	OnRoad	Medium- and Heavy-Duty Vehicles - Diesel	2007	3,419	gal	1,560
Light Trucks	Construction Equipment	OnRoad	Light-Duty Trucks - Gasoline	2007	3,191	gal	1,560

Reference Table: Average Fuel Economy by Vehicle Type

Vehicle Type	Average Fuel Economy (mpg)
Passenger Cars	24.1
Motorcycles	44.0
Diesel Buses (Diesel Heavy-Duty Vehicles)	7.3
Other 2-axle, 4-Tire Vehicles	17.6
Single unit 2-Axle 6-Tire or More Trucks	7.5
Combination Trucks	6.1

GHG Emissions

Total Organization-Wide Mobile Source Fuel Usage and CO_2 Emissions (On-Road and Off-Road Vehicles)

Fuel Type	Fuel Usage	Units	CO_2 (kg)	
Motor Gasoline	483,528	gallons	4,245,372.4	
Diesel Fuel	1,713,092	gallons	17,490,666.1	
Residual Fuel Oil	0	gallons	0.0	
Aviation Gasoline	0	gallons	0.0	
Kerosene-Type Jet Fuel	0	gallons	0.0	
Liquefied Petroleum Gas (LPG)	0	gallons	0.0	
Ethanol	0	gallons	0.0	*Note: emissions here are only for the gasoline portion of the fuel, biogenic CO2 em*
Biodiesel	0	gallons	0.0	*Note: emissions here are only for the diesel portion of the fuel, biogenic CO2 emis*
Liquefied Natural Gas (LNG)	0	gallons	0.0	
Compressed Natural Gas (CNG)	0	scf	0.0	

Total Organization-Wide On-Road Gasoline Mobile Source Mileage and CH_4/N_2O Emissions

Vehicle Type	Vehicle Year	Mileage (miles)	CH_4 (g)	N_2O (g)
Passenger Cars - Gasoline	1984-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	4,368	31.4	22.7
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
Light-Duty Trucks - Gasoline (Vans, Pickup Trucks, SUVs)	1987-93	0	0.0	0.0
	1994	0	0.0	0.0
	1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	1,560	16.1	9.5
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
Heavy-Duty Vehicles - Gasoline	1985-86	0	0.0	0.0
	1987	0	0.0	0.0
	1988-1989	0	0.0	0.0
	1990-1995	0	0.0	0.0
	1996	0	0.0	0.0
	1997	0	0.0	0.0
	1998	0	0.0	0.0
	1999	0	0.0	0.0
	2000	0	0.0	0.0
	2001	0	0.0	0.0
	2002	0	0.0	0.0
	2003	0	0.0	0.0
	2004	0	0.0	0.0
	2005	0	0.0	0.0
	2006	0	0.0	0.0
	2007	0	0.0	0.0
	2008	0	0.0	0.0
	2009	0	0.0	0.0
	2010	0	0.0	0.0
	2011	0	0.0	0.0
	2012	0	0.0	0.0
	2013	0	0.0	0.0
	2014	0	0.0	0.0
	2015	0	0.0	0.0
	2016	0	0.0	0.0
	2017	0	0.0	0.0
	2018	0	0.0	0.0
Motorcycles - Gasoline	1960-1995	0	0.0	0.0
	1996-present	0	0.0	0.0

Total Organization-Wide On-Road Non-Gasoline Mobile Source Mileage and CH_4/N_2O Emissions

Vehicle Type	Fuel Type	Vehicle Year	Mileage (miles)	CH_4 (g)	N_2O (g)
Passenger Cars - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-1995	0	0.0	0.0
		1996-2006	0	0.0	0.0
		2007-2018	0	0.0	0.0
Light-Duty Trucks - Diesel	Diesel	1960-1982	0	0.0	0.0
		1983-1995	0	0.0	0.0
		1996-2006	0	0.0	0.0
		2007-2018	0	0.0	0.0
Medium- and Heavy-Duty Vehicles -	Diesel	1960-2006	0	0.0	0.0
		2007-2018	1,560	14.8	67.2
Light-Duty Cars	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Light-Duty Trucks	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Medium-Duty Trucks	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Heavy-Duty Trucks	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0
Buses	Methanol		0	0.0	0.0
	Ethanol		0	0.0	0.0
	CNG		0	0.0	0.0
	LPG		0	0.0	0.0
	LNG		0	0.0	0.0
	Biodiesel		0	0.0	0.0

Total Organization-Wide Non-Road Mobile Source Fuel Usage and CH_4/N_2O Emissions

Vehicle Type	Fuel Type	Fuel Usage (gallons)	CH_4 (g)	N_2O (g)
Ships and Boats	Residual Fuel Oil	-	-	-
	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
Locomotives	Diesel	-	-	-
Aircraft	Jet Fuel	-	-	-
	Aviation Gasoline	-	-	-
Agricultural Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Agricultural Offroad Trucks	Gasoline	-	-	-
	Diesel	-	-	-
Construction/Mining Equipment	Gasoline (2 stroke)	478,708	5,945,557	33,510
	Gasoline (4 stroke)	-	-	-
	Diesel	1,709,672	341,934	803,546
	LPG	-	-	-
Construction/Mining Offroad Trucks	Gasoline	-	-	-
	Diesel	-	-	-
Lawn and Garden Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Airport Equipment	Gasoline	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Industrial/Commercial Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Logging Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
Railroad Equipment	Gasoline	-	-	-
	Diesel	-	-	-
	LPG	-	-	-
Recreational Equipment	Gasoline (2 stroke)	-	-	-
	Gasoline (4 stroke)	-	-	-
	Diesel	-	-	-
	LPG	-	-	-

Total CO_2 Equivalent Emissions (metric tons) - Mobile Sources	**22,142.7**
Total Biomass CO_2 Equivalent Emissions (metric tons) - Mobile Sources	**0.0**

Notes:
1. Average mpg values from the U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2019 (Nov 2020), Table VM-1.

Back to Intro | Back to Summary | Help

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Scope 1 Emissions from Combustion of Waste Gases

Guidance

(A) Enter annual data in ORANGE cells as appropriate. Data should be entered as an organization-wide value (all operations combined prior to entry into this table).
(B) Enter total amount waste stream gas combusted.
(C) Enter gas total number of moles per ft^3.
- This number is based on specific temperature and pressure conditions.
- If no data are available use 0.00255 lb-mole/ft^3 as a default value, based on conditions of 25°C and 1 atm.

(D) Enter molar fraction (as a percentage) for each gas component in **Table 1.**
- This number is based on either volume or molar mass percentage for each gas component.
- It is assumed that the remainder of the waste stream will be made up of compounds not containing carbon.

Waste Stream Gas Combusted: 5,000 ft^3
Gas total number of moles per unit volume: 0.00255 lb-mole/ft^3

Table 1. Determining Emission Factor for Gas Waste Stream

Component	Chemical Formula	Molar Fraction (%)	Total Moles (lb-mole/ft^3)	Molecular Weight	Percent Carbon (%)	Carbon Content (lb/ft^3)
Carbon Monoxide	CO			28	43%	
Carbon Dioxide	CO_2			44	27%	
Methane	CH_4			16	75%	
Acetylene	C_2H_2			26	92%	
Ethylene	C_2H_4			28	86%	
Ethane	C_2H_6			30	80%	
Propylene	C_3H_6			42	86%	
Propane	C_3H_8			44	82%	
n-Butane	C_4H_{10}			58	83%	
Benzene	C_6H_6			78	92%	
Hexane	C_6H_{14}			86	84%	
Toluene	C_7H_8			92	91%	
Octane	C_8H_{18}			114	84%	
Ethanol	C_2H_5OH			46	52%	
Acetone	CH_3COCH_3			58	62%	
Tetrahydrofuran	C_4H_8O			72	67%	
Other non-carbon					0%	
Total for all Components		0.00%	0			0.0000

Step 4. Enter Oxidation Factor 100 %
- If oxidation factor value is not known, use 100% as default value.

GHG Emissions

Total CO_2 Equivalent Emissions (metric tons) - Waste Gas Combustion **0.0**

Notes:
1. This tool is designed to apply the CO_2 emission factor calculation methodology for a gas waste stream as provided in the *Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance - Direct Emissions from Stationary Combustion Sources (January 2016)* . This tool can also be used to approximate emissions for other combustion sources such as gas welding and gas metal cutting.

Back to Intro | Back to Summary | Help

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Scope 3 Emissions from Waste

Guidance

(A) Enter annual waste data in ORANGE cells. Example entry is shown in first row (*GREEN Italics*).

(B) Choose the appropriate material and disposal method from the drop down options. For the average-data method, use one of the mixed material types, such as mixed MSW. If the exact waste material is not available, consider an appropriate proxy. For example, dimensional lumber can be used as a proxy for wood furniture.

(C) Choose an appropriate disposal method. Note that not all disposal methods are available for all materials. If there is a #NA or # Value error in the emissions column, you must pick a new material type or appropriate disposal method.

Table 1. Waste Disposal Weight by Waste Material and Disposal Method (CO_2, CH_4 and N_2O)

Source ID	Source Description	Waste Material	Disposal Method	Weight	Unit	CO_2e Emissions (kg)
Bldg-012	*East Power Plant Finished Goods*	*Steel Cans*	*Landfilled*	*1,000*	*metric ton*	*22,040*
Nonresidential Buildings	Nonresidential Waste	Mixed MSW municipal solid waste	Combusted	14,250	metric ton	*6,752,505*
Residential	Residential Waste	Mixed MSW municipal solid waste	Combusted	0	metric ton	*0*
Nonresidential Buildings	Nonresidential Recycling	Mixed Recyclables	Recycled	22,500	metric ton	*2,231,550*
Residential	Residential Recycling	Mixed Recyclables	Recycled	0	metric ton	*0*

GHG Emissions

Total Emissions by Disposal Method

Waste Material	CO_2e (kg)
Recycled	2,231,550
Landfilled	-
Combusted	6,752,505
Composted	-
Anaerobically Digested (Dry Digestate with Curing)	-
Anaerobically Digested (Wet Digestate with Curing)	-

Total CO_2 Equivalent Emissions (metric tons) - Waste **8,984.1**

Back to Intro | Back to Summary | Help | Help - Market-Based Method

Scope 2 Emissions from Purchase of Electricity

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Guidance

The Indirect Emissions from Purchased Electricity Guidance document provides guidance for quantifying two scope 2 emissions totals, using a **location-based method** and a **market-based method**. The organization should quantify and report both totals in its GHG inventory. The location-based method considers average emission factors for the electricity grids that provide electricity. The market-based method considers contractual arrangements under which the organization procures electricity from specific sources, such as renewable energy.

(A) Enter total annual electricity purchased in kWh and each eGRID subregion for each facility or site in ORANGE cells of **Table 1**.
(B) If electricity consumption data are not available for a facility, an estimate should be made for completeness.
See the "Items to Note" section of the Help sheet for suggested estimation approaches.
(C) Select "eGRID subregion" from drop box and enter "Electricity Purchased."
- Use map (Figure 1) at bottom of sheet to determine appropriate eGRID subregion. If subregion cannot be determined from the map, find the correct subregion by entering the location's zip code into EPA's Power Profiler:
https://www.epa.gov/egrid/power-profiler#/
(D) See the market-based emission factor hierarchy on the market-based method Help sheet. If any of the first four types of emission factors are applicable, enter the factors in the yellow cells marked as "<enter factor>". If not, leave the yellow cells as is, and eGRID subregion factors will be used for market-based emissions.
Example entry is shown in first row (*GREEN Italics*) for a facility that purchases RECs for 100% of its consumption, and therefore has a market-based emission factor of 0.

Help - Market-Based Method

Tips: Enter electricity usage by location and then look up the eGRID subregion for each location.
If you purchase renewable energy that is less than 100% of your site's electricity, see the example in the market-based method Help sheet.

Table 1. Total Amount of Electricity Purchased by eGRID Subregion

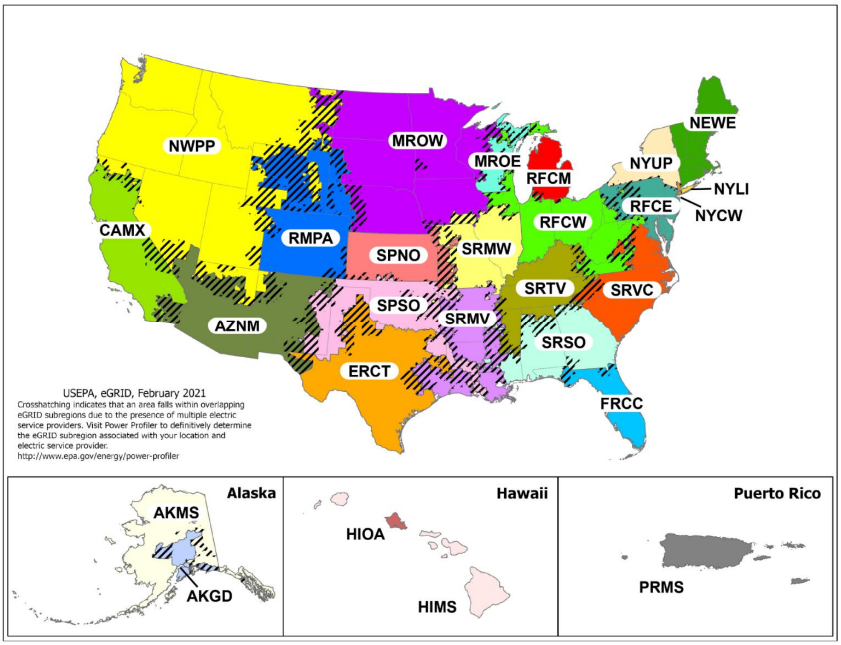
					Market-Based *Use these cells to enter applicable market-based emission factors*						Location-Based		
					Emission Factors			Emissions			Emissions		
Source ID	Source Description	Source Area (sq ft)	eGRID Subregion *where electricity is consumed*	Electricity Purchased (kWh)	CO_2 Emissions (lb/MWh)	CH_4 Emissions (lb/MWh)	N_2O Emissions (lb/MWh)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)	CO_2 Emissions (lb)	CH_4 Emissions (lb)	N_2O Emissions (lb)
Bldg-012	*East Power Plant*	*12,517*	*HIMS (HICC Miscellaneous)*	*200,000*	*0*	*0*	*0*	*0.0*	*0.0*	*0.0*	*237,120.0*	*28.6*	*4.4*
Business Pl	Electricity Use	1,293,333	MROW (MRO West)	19,787,995	<enter factor>	<enter factor>	<enter factor>	21,735,133.6	2,354.8	336.4	21,735,133.6	2,354.8	336.4
Light Indust	Electricity Use	646,667	MROW (MRO West)	4,268,002	<enter factor>	<enter factor>	<enter factor>	4,687,973.6	507.9	72.6	4,687,973.6	507.9	72.6
Community	Electricity Use	560,000	MROW (MRO West)	7,896,000	<enter factor>	<enter factor>	<enter factor>	8,672,966.4	939.6	134.2	8,672,966.4	939.6	134.2
Total Emissions for All Sources				31,951,997				35,096,073.6	3,802.3	543.2	35,096,073.6	3,802.3	543.2

GHG Emissions

CO_2 Equivalent Emissions (metric tons)	
Location-Based Electricity Emissions	16,036.1
Market-Based Electricity Emissions	16,036.1

Notes:
1. CO_2, CH_4 and N_2O emissions are estimated using methodology provided in EPA's Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance - Indirect Emissions from Purchased Electricity (January 2016).

Figure 1. EPA eGRID2019, February 2021.



Appendix D

Agency Project Correspondence

Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

January 4, 2024
Correspondence # MCE 2023-00798

Koehl Simmons
Kimley-Horn and Associates, Inc.

RE: Natural Heritage Review of the proposed **Rosemount Data Center,**
T115N R18W Sections 28, 29, and 30; Dakota County

Dear Koehl Simmons,

As requested, the Minnesota Natural Heritage Information System has been reviewed to determine if the proposed project has the potential to impact any rare species or other significant natural features. Based on the project details provided with the request, the following rare features may be impacted by the proposed project:

State-listed Species

- The loggerhead shrike (*Lanius ludovicianus*), a state-listed endangered bird, has been documented in the vicinity of the project site. Loggerhead shrikes use grasslands that contain short grass and scattered perching sites such as hedgerows, shrubs, or small trees. They can be found in native prairie, pastures, shelterbelts, old fields or orchards, cemeteries, grassy roadsides, and farmyards. Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and 6134) prohibit the take of endangered or threatened plants or animals, including their parts or seeds, without a permit. Given the potential for this species to be found in the vicinity of the project, **tree and shrub removal is required to be avoided during the breeding season, April through July.**

  If avoiding tree removal from April through July is not feasible, a qualified surveyor needs to conduct a survey for active nests before any trees or shrubs will be removed. Please contact the NH Review team at Review.NHIS@state.mn.us with subject line MCE-2023-00798 **if seasonal avoidance is not feasible as a survey may be required.** Requirements for surveys and lists of DNR certified lists of surveyors can be found at the Natural Heritage Review website. Survey results

should be sent to the NH Review Team at Reports.NHIS@state.mn.us with subject line MCE-2023-00798.

- Several bird species of special concern including marbled godwit (*Limosa fedoa*), Bell's vireo (*Vireo bellii*), common gallinule (*Gallinula galeata*), and lark sparrow (*Chondestes grammacus*) have been documented in the wetland area within the project vicinity. **We recommend avoiding development within this wetland area. If disturbance will occur in the wetland area, we recommend avoiding initial disturbance to grassland areas and tree/shrub removal from May through August to avoid disturbance of nesting birds.**

- The Natural Heritage Information System (NHIS) tracks bat roost trees and hibernacula plus some acoustic data, but this information is not exhaustive. Even if there are no bat records listed nearby, all seven of Minnesota's bats, including the federally endangered northern long-eared bat (*Myotis septentrionalis*), can be found throughout Minnesota. During the active season (approximately April-November) bats roost underneath bark, in cavities, or in crevices of both live and dead trees. Tree removal can negatively impact bats by destroying roosting habitat, especially during the pup rearing season when females are forming maternity roosting colonies and the pups cannot yet fly. To minimize these impacts, **the DNR recommends that tree removal be avoided from June 1 through August 15.**

- Please visit the DNR Rare Species Guide for more information on the habitat use of these species and recommended measures to avoid or minimize impacts.

Federally Protected Species

- The area of interest overlaps with a U.S Fish and Wildlife Service (USFWS) Rusty Patched Bumble Bee High Potential Zone. The rusty patched bumble bee *(Bombus affinis)* is federally listed as endangered and is likely to be present in suitable habitat within High Potential Zones. From April through October this species uses underground nests in upland grasslands, shrublands, and forest edges, and forages where nectar and pollen are available. From October through April the species overwinters under tree litter in upland forests and woodlands. The rusty patched bumble bee may be impacted by a variety of land management activities including, but not limited to, prescribed fire, tree-removal, haying, grazing, herbicide use, pesticide use, land-clearing, soil disturbance or compaction, or use of non-native bees. If applicable, **the DNR recommends reseeding disturbed soils with native species of grasses and forbs using BWSR Seed Mixes or MnDOT Seed Mixes.**

  To ensure compliance with federal law, please conduct a federal regulatory review using the U.S. Fish and Wildlife Service's online **Information for Planning and Consultation (IPaC) tool**. Please note that all projects, regardless of whether there is a federal nexus, are subject to federal take prohibitions. The IPaC review will determine if prohibited take is likely to occur and, if not, will

generate an automated letter. The USFWS RPBB guidance provides guidance on avoiding impacts to rusty patched bumble bee and a key for determining if actions are likely to affect the species; the determination key can be found in the appendix.

Environmental Review and Permitting

- Please include a copy of this letter and the MCE-generated Final Project Report in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, **the results of this Natural Heritage Review are valid for one year**; the results are only valid for the project location and project description provided with the request. If project details change or the project has not occurred within one year, please resubmit the project for review within one year of initiating project activities.

The Natural Heritage Review does not constitute project approval by the Department of Natural Resources. Instead, it identifies issues regarding known occurrences of rare features and potential impacts to these rare features. Visit the Natural Heritage Review website for additional information regarding this process, survey guidance, and other related information. For information on the environmental review process or other natural resource concerns, you may contact your DNR Regional Environmental Assessment Ecologist.

Thank you for consulting us on this matter and for your interest in preserving Minnesota's rare natural resources.

Sincerely,

Molly Barrett
Natural Heritage Review Specialist
Molly.Barrett@state.mn.us

Cc: Melissa Collins, Regional Environmental Assessment Ecologist, Region 3 (Central)

Subject: FW: SHPO Database Search
Attachments: Archaeology.xls; History.xls

From: MN_MNIT_Data Request SHPO <DataRequestSHPO@state.mn.us>
Sent: Wednesday, November 15, 2023 9:38 AM
To:
Subject: RE: SHPO Database Search

See attached for the results of your search request.

Later this year, SHPO will launch the Minnesota Statewide Historic Property Inventory Portal (MnSHIP) where you will be able to obtain information about aboveground historic properties. Please visit our MnSHIP website to learn more.

The OSA Portal is a web viewer for archaeological site information. Please note that information on whether a site is listed in the National Register of Historic Places, Determined Eligible for Listing, or SHPO has concurred a site is eligible must be obtained from SHPO and is not currently available via the OSA Portal.

Lucy Harrington
Environmental Review Archaeologist | (651) 201-3283

DEPARTMENT OF ADMINISTRATION
STATE HISTORIC PRESERVATION OFFICE

SHPO Data Requests
Minnesota State Historic Preservation Office
50 Sherburne Avenue, Suite 203
Saint Paul, MN 55155
datarequestshpo@state.mn.us

Notice: This email message simply reports the results of the cultural resources database search you requested. The database search is only for previously known archaeological sites and historic properties. IN NO CASE DOES THIS DATABASE SEARCH OR EMAIL MESSAGE CONSTITUTE A PROJECT REVIEW UNDER STATE OR FEDERAL PRESERVATION LAWS – please see our Environmental Review Program Website for further information regarding our Environmental Review Process.
Because the majority of archaeological sites in the state and many historic/architectural properties have not been recorded, important sites or properties may exist within the search area and may be affected by development projects within that area. Additional research, including field surveys, may be necessary to adequately assess the area's potential to contain historic properties or archaeological sites.
Properties that are listed in the National Register of Historic Places (NRHP) or have been determined eligible for listing in the NRHP are indicated on the reports you have received, if any. The following codes may be on those reports:
NR – National Register listed. The properties may be individually listed or may be within the boundaries of a National Register District.
CEF – Considered Eligible Findings are made when a federal agency has recommended that a property is eligible for listing in the National Register and MN SHPO has accepted the recommendation for the purposes of the Environmental Review Process. These properties need to be further assessed before they are officially listed in the National Register.
SEF – Staff eligible Findings are those properties the MN SHPO staff considers eligible for listing in the National Register, in circumstances other than the Environmental Review Process.

DOE – Determination of Eligibility is made by the National Park Service and are those properties that are eligible for listing in the National Register, but have not been officially listed.
CNEF – Considered Not Eligible Findings are made during the course of the Environmental Review Process. For the purposes of the review a property is considered not eligible for listing in the National Register. These properties may need to be reassessed for eligibility under additional or alternate contexts.
Properties without NR, CEF, SEF, DOE, or CNEF designations in the reports may not have been evaluated and therefore no assumption to their eligibility can be made. Integrity and contexts change over time, therefore any eligibility determination made ten (10) or more years from the date of the current survey are considered out of date and the property will need to be reassessed.
If you require a comprehensive assessment of a project's potential to impact archaeological sites or historic/architectural properties, you may need to hire a qualified archaeologist and/or historian. If you need assistance with a project review, please contact Kelly Gragg-Johnson, Environmental Review Specialist @ 651-201-3285 or by email at kelly.graggjohnson@state.mn.us.
The Minnesota SHPO Archaeology and Historic/Architectural Survey Manuals can be found at https://mn.gov/admin/shpo/identification-evaluation/.

Please subscribe to receive SHPO notices for the most current updates regarding office hours, accessing research files, or changes in submitting materials to the SHPO.

To access historic resource information please visit our webpage on Using SHPO's Files.

From: Simmons, Koehl <Koehl.Simmons@kimley-horn.com>
Sent: Tuesday, October 17, 2023 2:18 PM
To: MN_MNIT_Data Request SHPO <DataRequestSHPO@state.mn.us>
Subject: SHPO Database Search

This message may be from an external email source.
Do not select links or open attachments unless verified. Report all suspicious emails to Minnesota IT Services Security Operations Center.

Hello,

We are preparing environmental reports for the following 5 (five) sites. I am writing to request a search of the Minnesota Statewide Inventory Database for the site located in the following section(s), township(s), and range(s):

Site 1 (Becker, Sherburne County, Minnesota):

Section(s)	Township	Range
36	34N	29W

Site 2 (Farmington, Dakota County, Minnesota)

Section(s)	Township	Range
04	113N	19W

Site 3 (Eagan, Dakota County, Minnesota)

Section(s)	Township	Range
13	27N	23W

Site 4 (Rosemount, Dakota County, Minnesota)

Section(s)	Township	Range
29	115N	18W
30	115N	18W

Site 5: (North Mankato, Nicollet County, Minnesota)

Section(s)	Township	Range
33	109N	27W
34	109N	27W

Please let me know if you have any questions or need additional information.

Thank you,

Koehl Simmons

Koehl Simmons, AICP
Kimley-Horn | 767 Eustis Street, Suite 100, St. Paul, MN 55114
Direct: 612 474 4945 | www.kimley-horn.com

Celebrating 14 years as one of FORTUNE's 100 Best Companies to Work For

COUNTY	SITENUM	TOW	RAN	SEC	ACR	WORI	DESCRIPT	TRADIT	CONTEX
Dakota									
	21DK0045	115	18	29	6	1	LS		
	21DK0075	113	19	4	0.1	1	SR	RA-1	
		113	19	4	0.1	1	SR	RA-1	

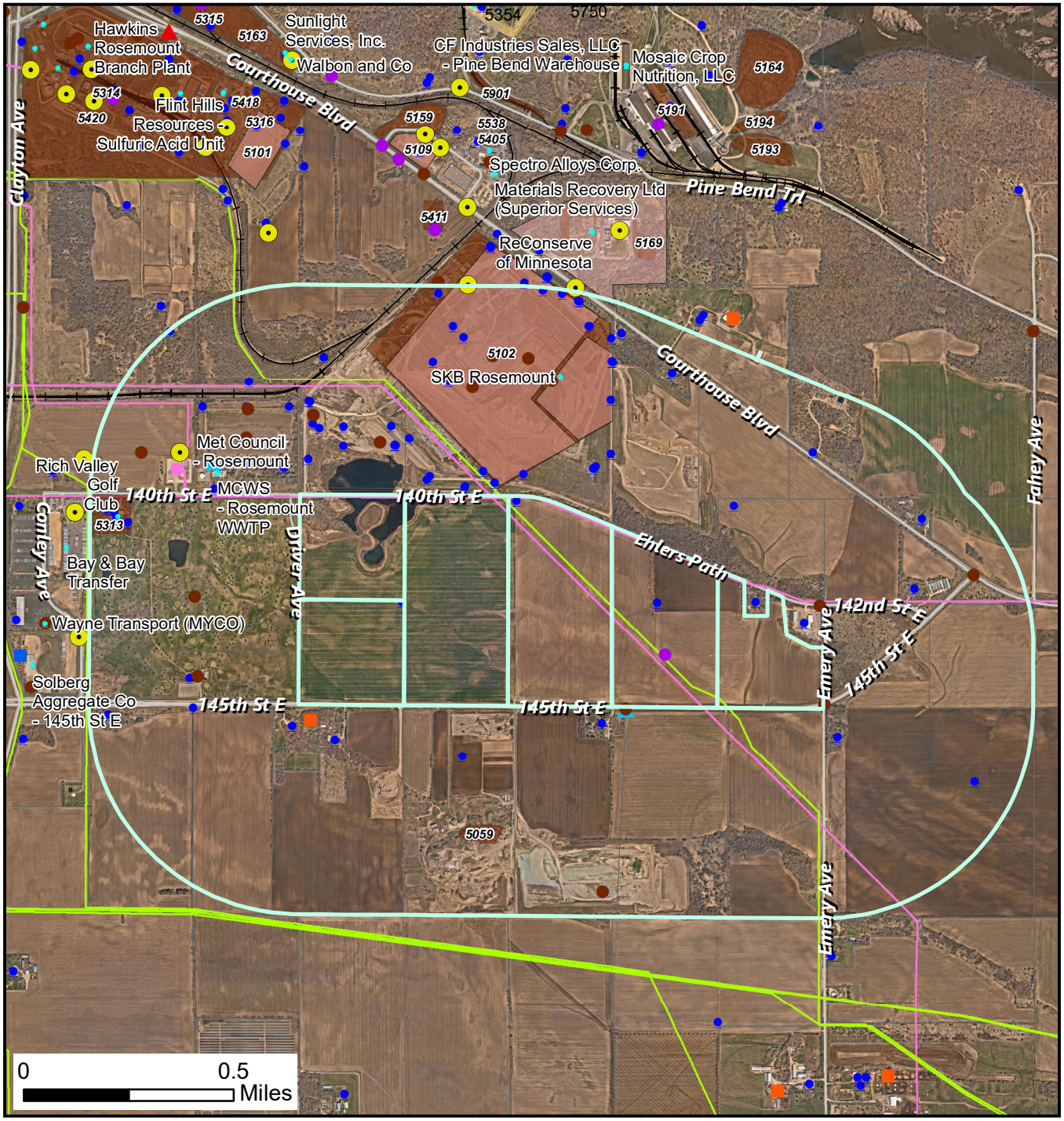
ReportNum	Natı CEF DOE
DK-1993-02	
MULT-2007-02	
MULT-2007-01	

COUNTY	CITYTWP	PROPNAME	ADDRESS	TOWN	RANGI	SEC	QUARTER	USGS	REPORTNUM	NRH	CE DOI	INVENTNUM
Dakota												
	Eagan											
		Mendota-Wabasha Military Rd.: Eagan Section	Mn. Hwy. 149, off Mn. Hwy. 55	27	23	13		Inver Grove Heights	xx-89-4H			DK-EGC-016
	Rosemount											
		Edmund Knodt Farm	15102 Coates Blvd.	115	18	30			DK-2011-2H	Y		DK-RSC-024
		Edmund Knodt Farm		115	18	30			DK-2011-1H	Y		DK-RSC-024
		Edmund Knodt Farm		115	18	30			DK-93-1H	Y		DK-RSC-024
Freeborn												
		Trunk Highway 65	Iowa Border 1 mile south of Gordonsville (Freeborn Co.) to Albert Lea	27	23	13			XX-2021-26H			XX-ROD-178
Multiple												
		Trunk Highway/U.S. Highway 14 (formerly Trunk Highway 7)	TH 14	109	27	33		Mankato West	XX-2018-5H			XX-ROD-016
		Trunk Highway 10: Anoka to St. Cloud	TH 47 in Anoka to TH 23 in St. Cloud	34	29	36			XX-2020-4H			XX-ROD-035
		Trunk Highway 10: Anoka to Little Falls Segment	TH 47 in Anoka to Hilton Rd in Little Falls	34	29	36			XX-2020-4H			XX-ROD-037
		Trunk Highway 10	TH 10	34	29	36			XX-2020-4H			XX-ROD-040
		Trunk Highway 25	TH 25	34	29	36			XX-2020-10H			XX-ROD-113
Multiple												
	Multiple											
		Former Trunk Highway 3: Anoka to St. Cloud Segment	TH 47 in Anoka to TH 23 in St. Cloud	34	29	36			XX-2020-4H			XX-ROD-034
Nicollet												
	Belgrade Twp.											
		Meyer Farmstead	49047 431st St.	109	27	33	NW-SW-SE	Mankato West	NL-2005-1H			NL-BEL-005
		farmstead	51384 405th Ave.	109	27	33	NW-SE-NE	Mankato West	NL-2005-1H			NL-BEL-014
		Budde Farmstead	51841 405th Ave.	109	27	33	SW-SE	Mankato West	NL-2005-1H	Y		NL-BEL-015
		farmstead	51897 405th Ave.	109	27	33	SE-SW-NW	Mankato West	NL-2005-1H			NL-BEL-016
Sherburne												
		Minnesota Hwy 10, Elk River to St. Cloud	Minnesota Hwy 10	34	29	36		Cable	XX-2009-6H	Y		SH-XXX-002

Appendix E

Environmental Review Map

Environmental Review Map



5135-4765 145th St
Rosemount, MN
Review Date: December 7, 2023

- Hazardous Waste Generators
- Wells

MPCA WIMN Sites

- Multiple Programs
- Air Quality
- Environmental Review
- Feedlots
- Hazardous Waste
- Investigation and Cleanup
- Pollution Prevention
- Solid Waste
- Stormwater
- SSTS
- Tanks
- Water Quality
- DC Site Inventory
- DC Solid Waste Facilities
- DC GOW Sites
- NPMS Pipelines
- Electric Transmission Lines
- Railroads
- Parcels
- Municipal Boundary

Copyright 2023, Dakota County
This drawing is neither a legally recorded map nor a survey and is not intended to be used as one. This drawing is a compilation of records, information and data located in various city, county, and state offices and other sources, affecting the area shown, and is to be used for reference purposes only. Dakota County is not responsible for any inaccuracies herein contained. If discrepancies are found please contact the Dakota County Environmental Resources Department.

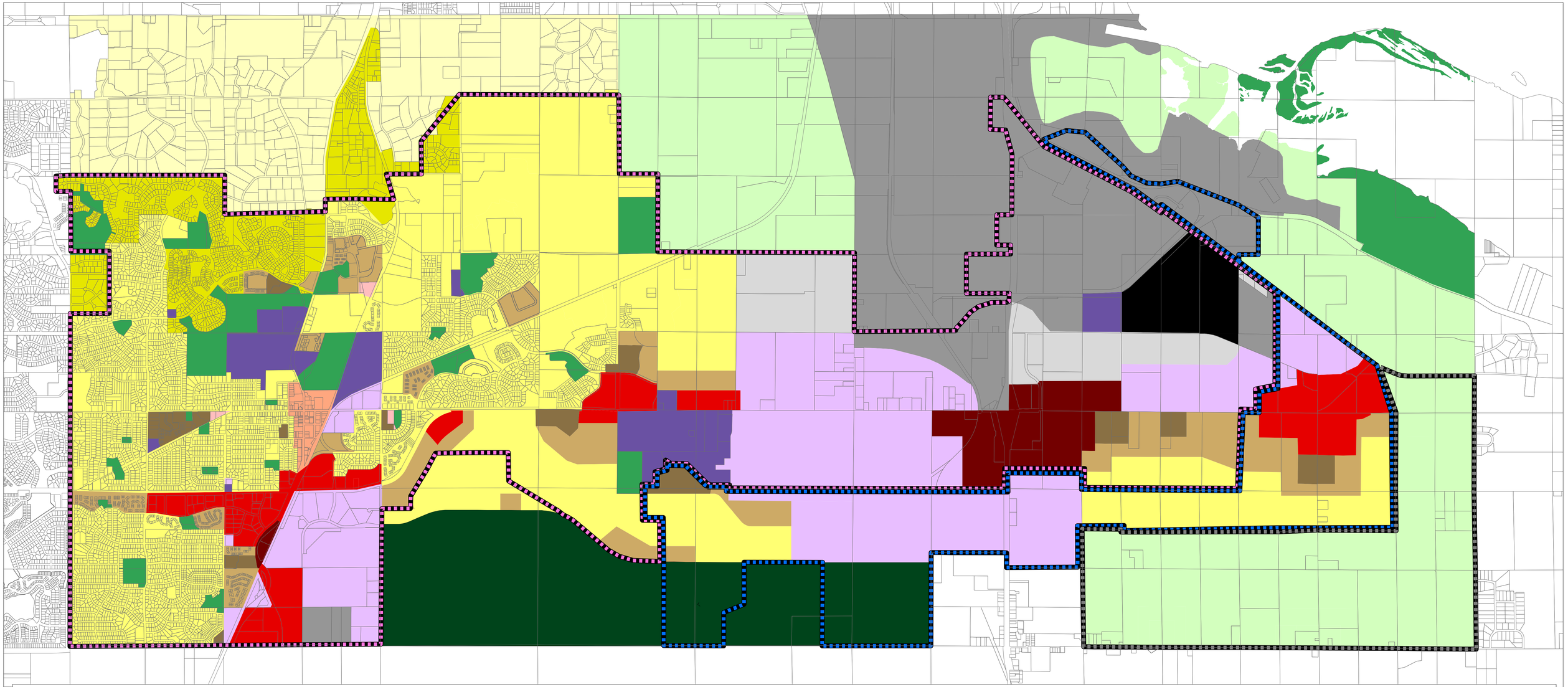
Appendix F

City of Rosemount Sanitary Sewer Plans

Figure 3-1 Land Use Plan

July 2019

BOLTON & MENK
Real People. Real Solutions.



Legend

Parcel Boundary

MUSA Boundary

- 2030
- 2040
- 2050

Land Use

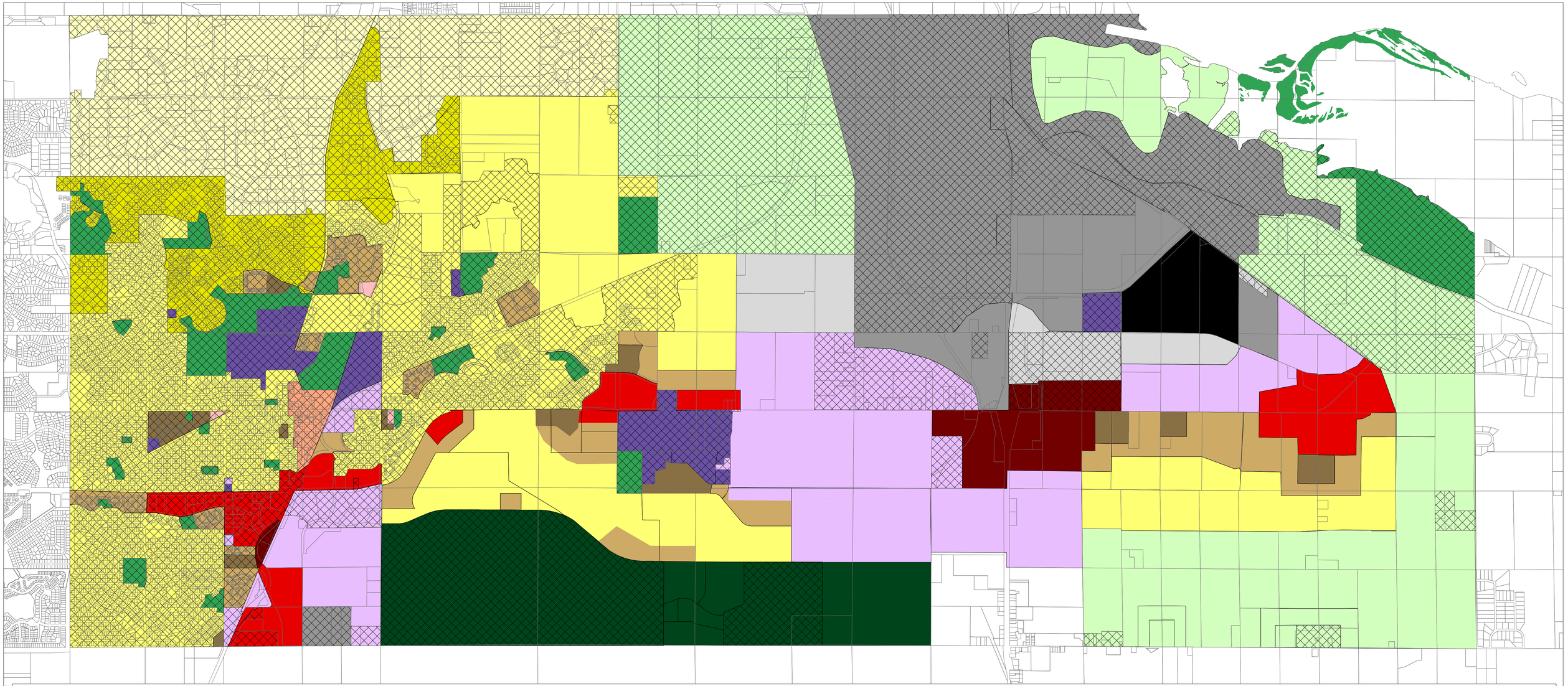
- AG Agriculture (Max 1 Unit/40 Ac.)
- FP Floodplain
- DT Downtown (20 - 40 Res. Units/Ac.)
- NC Neighborhood Commercial
- RC Regional Commercial
- CC Community Commercial
- AGR Agricultural Research (Max 1 Unit/40 Ac.)
- RR Rural Residential (Max 1 Unit/5 Ac.)
- LDR Low Density Residential (1.5 - 6 Units/Ac.)
- TR Transitional Residential (Max 1 Unit/3 Ac.)
- MDR Medium Density Residential (6 - 12 Units/Ac.)
- HDR High Density Residential (12 - 30 Units/Ac.)
- PI Public/Institutional
- PO Parks/Open Space
- BP Business Park
- LI Light Industrial
- GI General Industrial
- WM Waste Management

0 1,500 Feet

Source:

Figure 3-2 Gross Developable Land

July 2019



Legend

Undeveloped

Developed

Land Use

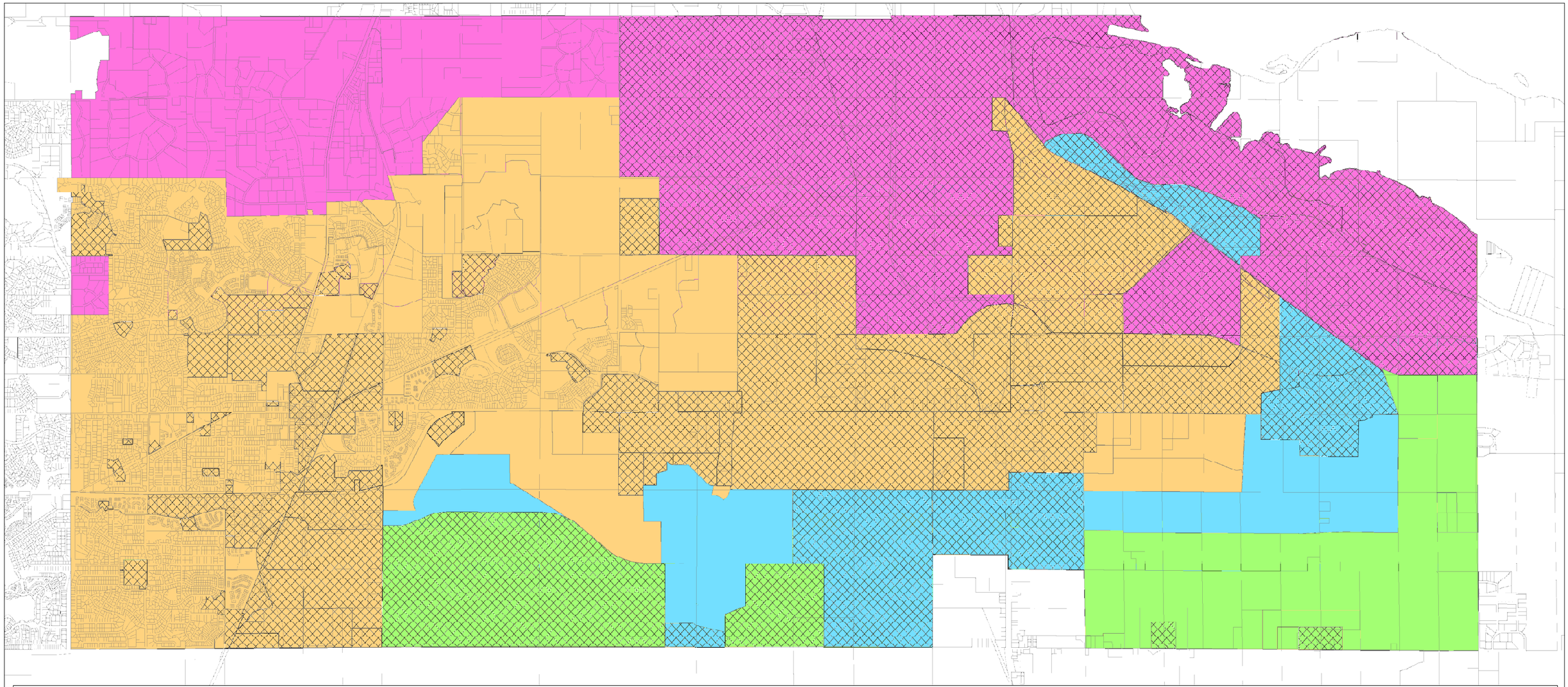
- AG Agriculture (Max 1 Unit/40 Ac.)
- FP Floodplain
- DT Downtown (20 - 40 Res. Units/Ac.)
- NC Neighborhood Commercial
- RC Regional Commercial
- CC Community Commercial
- AGR Agricultural Research (Max 1 Unit/40 Ac.)
- RR Rural Residential (Max 1 Unit/5 Ac.)
- LDR Low Density Residential (1.5 - 6 Units/Ac.)
- TR Transitional Residential (Max 1 Unit/3 Ac.)
- MDR Medium Density Residential (6 - 12 Units/Ac.)
- HDR High Density Residential (12 - 30 Units/Ac.)
- PI Public/Institutional
- PO Parks/Open Space
- BP Business Park
- LI Light Industrial
- GI General Industrial
- WM Waste Management

0 1,500 Feet

Source:

Figure 4-2 Potential Ultimate Service Area

August, 2018



Legend

- 2020 Residential
- 2030 Residential
- 2040 Residential
- 2050 Residential
- 2020 Non-Residential
- 2030 Non-Residential
- 2040 Non-Residential
- 2050 Non-Residential

0 1,500 Feet

Source:

Figure 5-1 Existing Sanitary Swer System
August, 2018

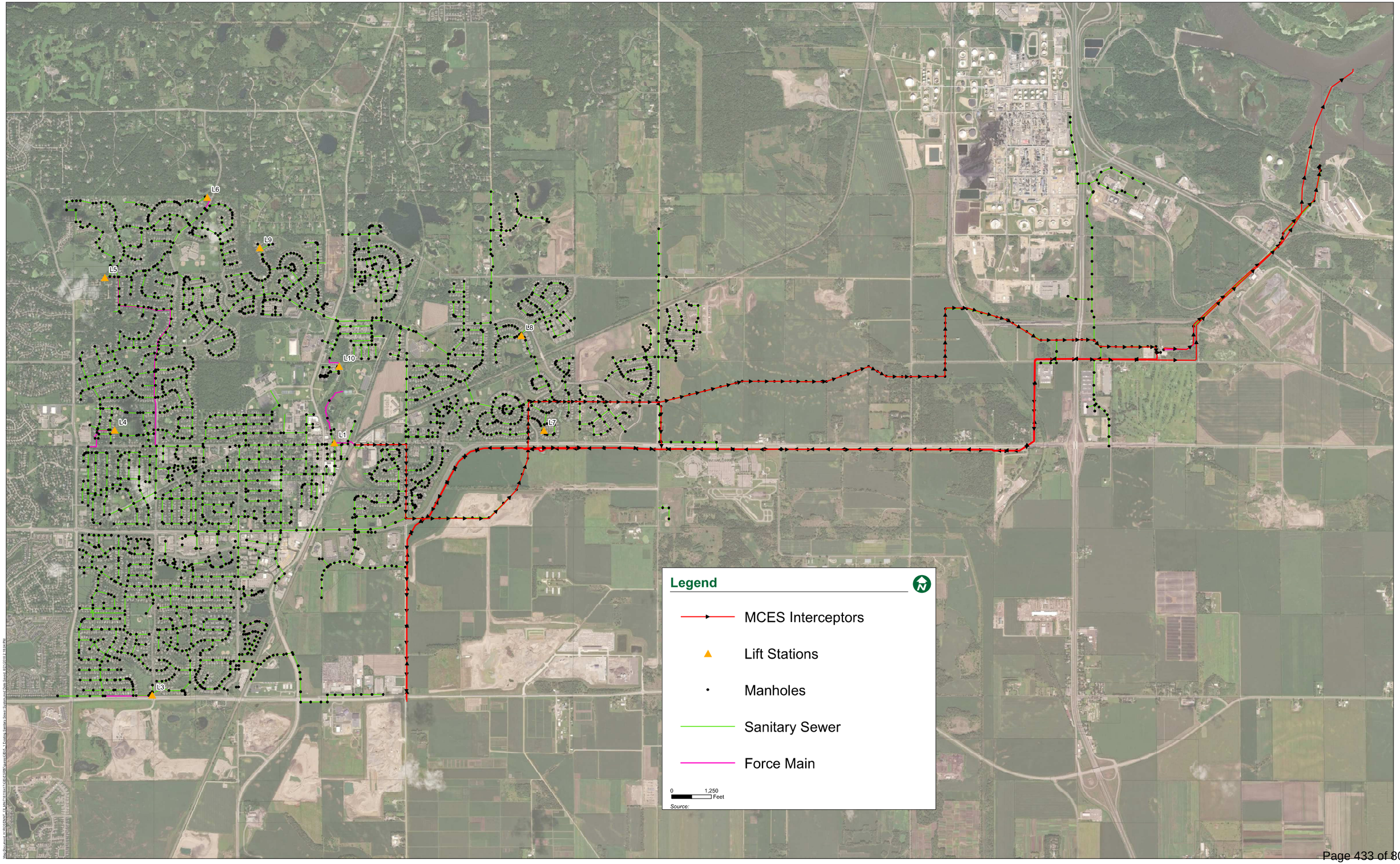


Figure 5-2 Existing SSTS

July, 2019

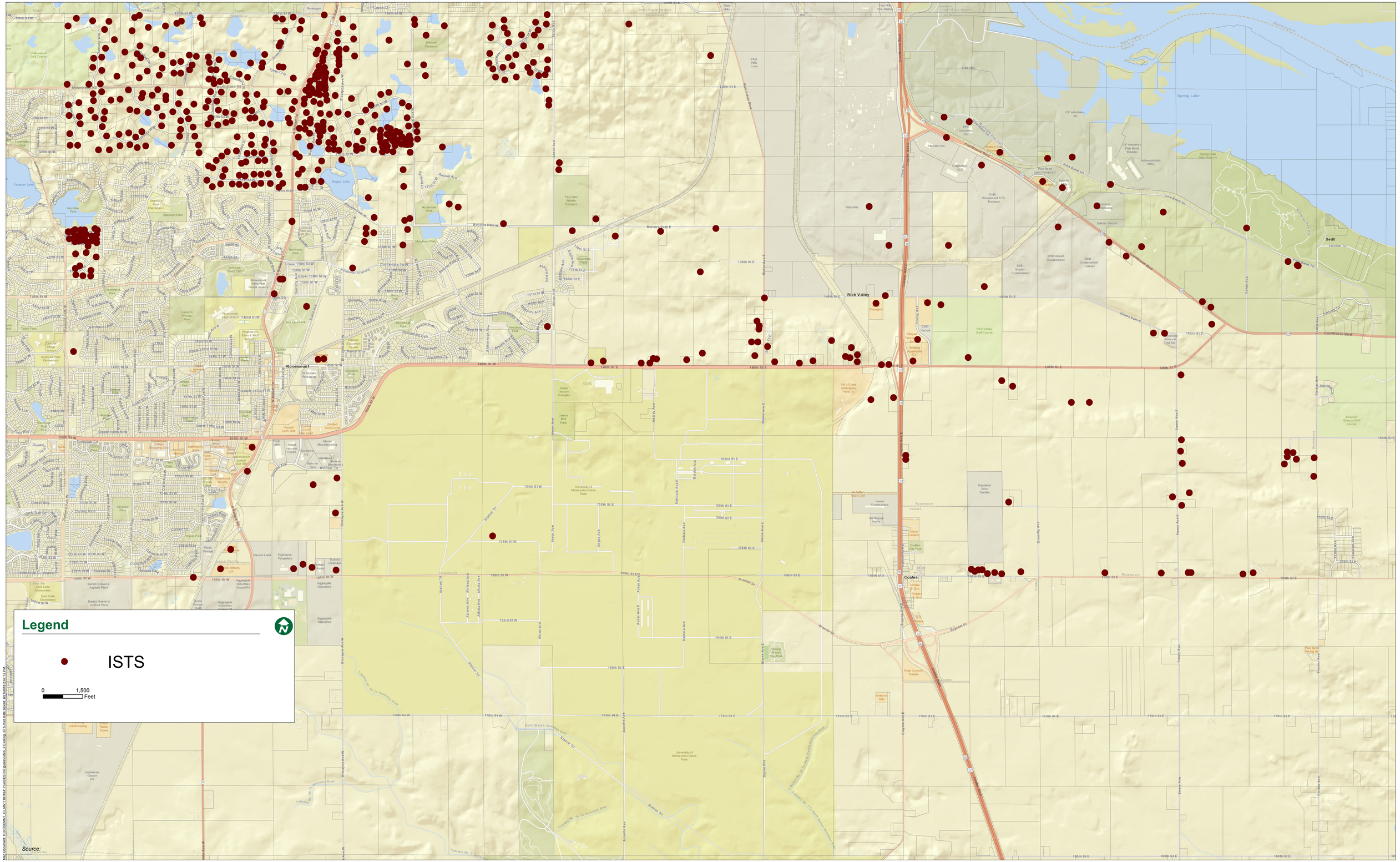
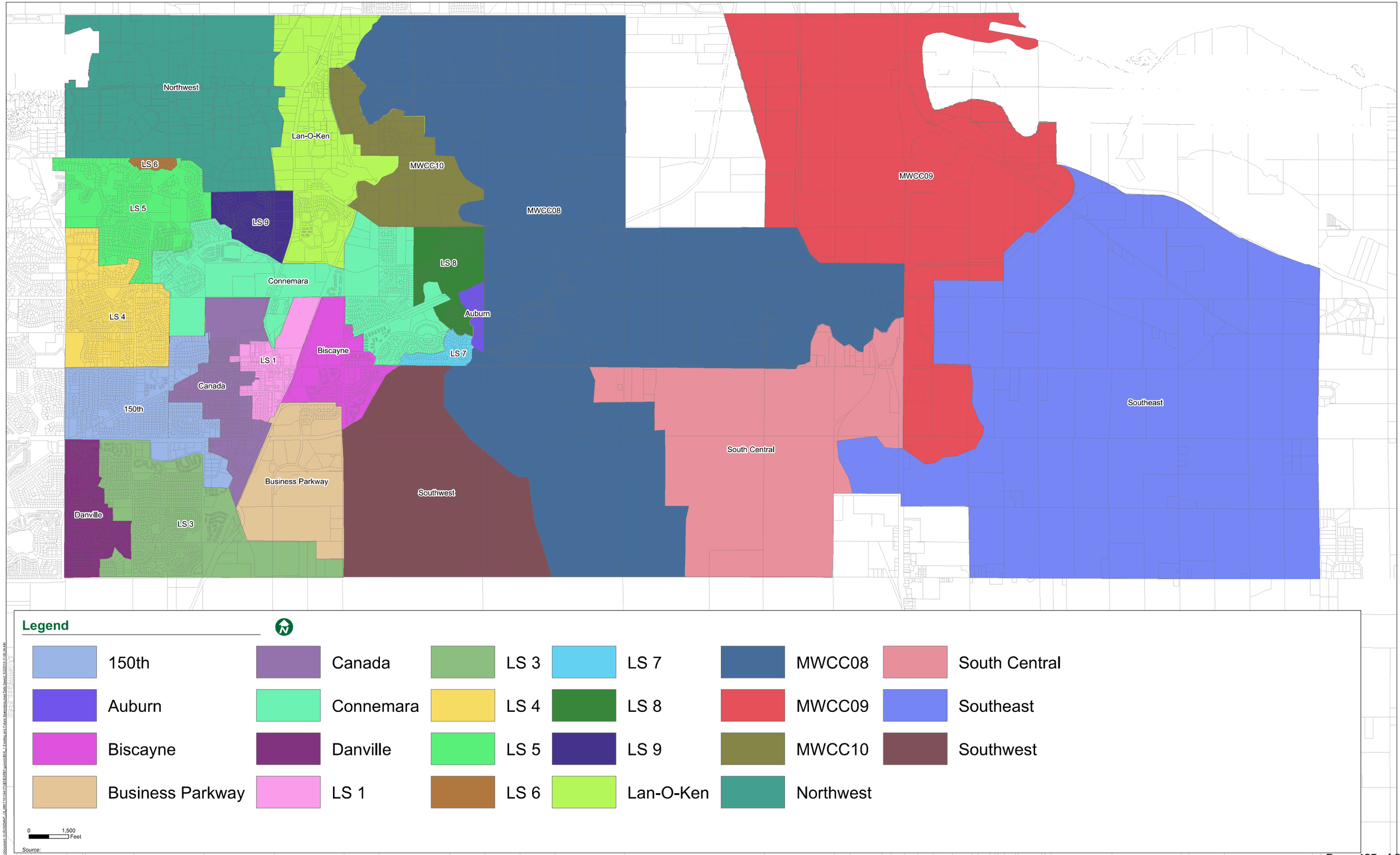
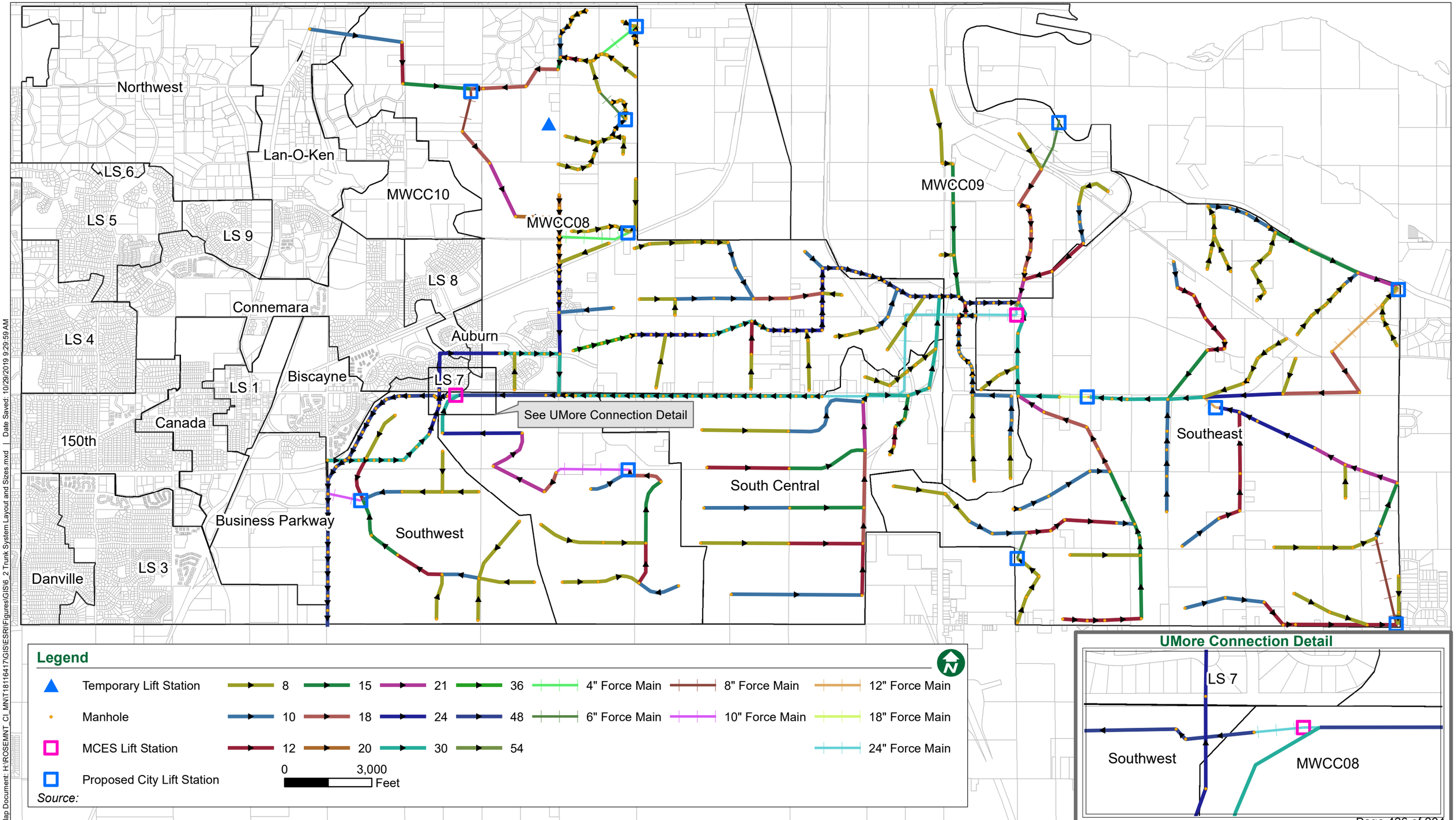


Figure 6-1 Existing and Future Sewersheds

May, 2019





Map Document: H:\ROSEMNT_CI_MN\T18116417\GIS\ESRI\Figures\GIS\6_2 Trunk System Layout and Sizes.mxd | Date Saved: 10/29/2019 9:29:59 AM

Appendix G

Agency Comment Responses

1. Introduction

Pursuant to Minnesota Rules, part 4410.3610, subpart 5c, the Responsible Governmental Unit (RGU) shall revise the environmental analysis document based on comments received during the comment period. The RGU shall include in the document a section specifically responding to each timely, substantive comment received that indicates in what way the comment has been addressed.

The 30-day Alternative Urban Areawide Review (AUAR) comment period began February 13, 2024, and comments were accepted through March 14, 2024. Two (2) comment letters were received from government agencies. Responses to those comments are included in the following sections, and copies of the comment letters are included in Appendix H.

2. Dakota County

Comment	Response
Transportation	
The traffic impact study assumes a short-term (2027) background mitigation of a traffic signal at County State Aid Highway (CSAH) 42 & CSAH 71 (Blaine Avenue). Although a temporary traffic signal is being constructed in 2024 at this intersection, the temporary signal may not be present (removed) by 2027. Similarly, the background mitigations assume geometry improvements on the southbound approach. The southbound approach geometry improvements are anticipated to be driven by area development north and west of the intersection which may not be in place in 2027. The traffic impact study should account for condition where these assumed short-term background mitigations are not in place at CSAH 42 and CSAH 71 (Blaine Avenue) as a worst-case condition.	Noted in the report that it is a temporary condition that should be reevaluated as parcels west of TH 52 are developed.
The Short-Term (2027) Scenario 2 mitigations include recommendation for an additional through lane in each direction (two through lanes per direction total) on CSAH 42 past Driver Avenue without providing anticipated ADT volumes in comparison to capacity thresholds for two- versus four-lane roadways. Please provide the proposed ADT volumes and corresponding capacity threshold comparison following Dakota County Transportation Policy Plan guidelines.	Added to the report.

Comment	Response
The Short-Term (2027) Scenario 2 mitigations also include recommendation for dual eastbound left-turn lanes on CSAH 42 at Driver Avenue and at the proposed south access location to the site. Further analysis is likely needed to determine the applicable time of if/when these second turn lanes are needed.	Noted.
The Long-Term (2045) Build condition identified installation of dual southbound left-turn lanes at CSAH 42 & CSAH 71 (Blaine Avenue) as a mitigation. Please explain if this mitigation is feasible considering potential right-of-way constraints associated with the adjacent cemetery.	Right-of-way was not factored into mitigation analysis. This mitigation is the result of a different development and should be evaluated in more depth when that project moves forward.
The AUAR and associated TIA did not include signal warrant analysis calculations for any of the study intersections being recommended for signalization. Decisions about traffic control devices are made very carefully by the County in consideration of the safety impact and recognition that crash rates and severity rates typically increase as higher levels of traffic control are added to a given location. Signals require increased decision making by drivers and therefore provide the greatest chance for driver error. For these reasons, the County looks carefully at the traffic conditions throughout the day prior to considering a change in intersection control. The County typically considers signal installation when Warrant 1a or 1b are met, however meeting a warrant does not necessarily mean a signal is justified.	Noted. We the variability of development on the study parcel and adjacent development. Signal warrants were not completed. It is recommended to evaluate signal warrants with each individual development.
MnDOT concurrence will be needed for AUAR mitigation recommendations at the Trunk Highway (TH) 52 ramp intersections.	Noted.

Comment	Response
During review of the draft AUAR for Rich Valley East, the County provided the following comments and reiterates these comments to apply to this AUAR review: The traffic impact study should include analysis considerations for a roadway network that includes a 140th street connection under TH 52. With the current in-place roadway network, traffic impacts associated with the proposed site development are focused onto CSAH 42. Providing a connection from the proposed site development to CSAH 71 (Blaine Avenue) via 140th Street has the potential for mitigating impacts on CSAH 42, depending upon final development scenario. The AUAR and associated Traffic Impact Analysis does not appear to have included analysis consideration of a 140th Street connection under TH 52. As we noted, we will examine this in more depth for 2026 renewal.	Noted. Upon review of access to the proposed site and connections to the regional network. It is not anticipated that the 140th street connection would have significant impacts on the developments travel patterns.
Greenways	
Please consider incorporating the Rosemount Greenway into the proposed development, creating separation from the road and incorporating stormwater management. An illustration of this concept is included below. Please feel free to contact John Mertens in the Dakota County Planning Office at 952-891-7036 if you would like to discuss the County's greenway plans and design standards.	Comment noted.
Environmental Resources	
Environmental Resources staff completed an environmental review and provided comments on the draft scoping AUAR in November 2023. A Phase I ESA was completed in December 2023, which responded to information identified by our department from November. We do not have any new comments on his draft AUAR. Please Contact Environmental Resources at 952-891-7000 or environ@co.dakota.mn.us for additional information.	Comment noted, thank you for your review.

3. Minnesota Pollution Control Agency

Comment	Response
Water Resources-Wastewater	
The estimated gallons per day of wastewater identified for Scenario 1 and Scenario 2 should identify the estimated volume of industrial and domestic wastewater that will be generated under each scenario. In addition, the basis for the estimated flows should be provided.	The volumes of domestic and industrial wastewater generated under each scenario have been identified in the final AUAR.
The design average wet weather flow for the MCES Empire WWTP is 28.61 MGD, not 24 MGD.	Comment noted. The design average wet weather flow for MCES Empire WWTP has been revised in the final AUAR.
The average influent wastewater flow at the MCES Empire WWTP for years 2021, 2022, and 2023 is 10.73 MGD.	Comment noted. The average influent wastewater flow at the MCES Empire WWTP has been revised in the final AUAR.
The major sewer system features in the area should be shown on a map and the expected flows should be identified.	Maps of major sewer system features in the City of Rosemount have been added in Appendix F of the final AUAR.
Regarding water appropriation, it is indicated that MCES is interested in providing reclaimed water to the region and their effluent pipe is located in the northwest corner of the site. It is also indicated that MCES completed a study in 2018 that explored siting the potential treatment plant at the existing MCES lift station L74 site which is 1000 feet from the site. Some additional information should be provided on the 2018 study and the potential treatment plant and how that relates to water reclamation potential in the area.	Additional information about the 2018 study and potential reclamation facility has been added to the final AUAR.
Water Resources-Wetlands	
For Section 8. Cover Types, of 20.5 acres of existing wetland identified, there are no changes in both Scenario 1 and 2. It does not appear that wetlands will be impacted.	Comment noted.

Comment	Response
However, Section 9 Permits and Approvals Required includes the USACE Section 404 Permit and the MPCA Section 401 Water Quality Certification. If the USACE 404 permit is required, the 401 Water Quality Certification must also be included and becomes an enforceable component of the associated federal license or permit. The scope of a CWA Section 401 certification is limited to assuring that a discharge from a federally licensed or permitted activity will comply with water quality requirements. Along with an Antidegradation Assessment, the 401 program recommends that the applicant meet with the MPCA in advance of requesting a 401 Water Quality Certification. The MPCA is the 401-certifying authority in the State of Minnesota. For further information about the 401 Water Quality Certification process, please contact Bill Wilde at 651-757-2825 or William.wilde@state.mn.us.	

Appendix H

Agency Comments

March 8, 2024

Anthony Nemcek
City of Rosemount
2875 145th Street W
Rosemount, MN 55068

Thank you for the opportunity to review the Rich Valley East Industrial Draft Alternative Urban Areawide Review (AUAR). County Physical Development staff reviewed the document and offer the following comments for consideration.

Transportation

The traffic impact study assumes a short-term (2027) background mitigation of a traffic signal at County State Aid Highway (CSAH) 42 & CSAH 71 (Blaine Avenue). Although a temporary traffic signal is being constructed in 2024 at this intersection, the temporary signal may not be present (removed) by 2027. Similarly, the background mitigations assume geometry improvements on the southbound approach. The southbound approach geometry improvements are anticipated to be driven by area development north and west of the intersection which may not be in place in 2027. The traffic impact study should account for condition where these assumed short-term background mitigations are not in place at CSAH 42 and CSAH 71 (Blaine Avenue) as a worst-case condition.

The Short-Term (2027) Scenario 2 mitigations include recommendation for an additional through lane in each direction (two through lanes per direction total) on CSAH 42 past Driver Avenue without providing anticipated ADT volumes in comparison to capacity thresholds for two- versus four-lane roadways. Please provide the proposed ADT volumes and corresponding capacity threshold comparison following Dakota County Transportation Policy Plan guidelines.

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The Long-Term (2045) Build condition identified installation of dual southbound left-turn lanes at CSAH 42 & CSAH 71 (Blaine Avenue) as a mitigation. Please explain if this mitigation is feasible considering potential right-of-way constraints associated with the adjacent cemetery.

The AUAR and associated TIA did not include signal warrant analysis calculations for any of the study intersections being recommended for signalization. Decisions about traffic control devices are made very carefully by the County in consideration of the safety impact and recognition that crash rates and severity rates typically increase as higher levels of traffic control are added to a given location. Signals require increased

Physical Development Division

P 952-891-7000 **F** 952-891-7031 **W** www.dakotacounty.us
A Dakota County Western Service Center • 14955 Galaxie Ave. • Apple Valley • MN 55124

decision making by drivers and therefore provide the greatest chance for driver error. For these reasons, the County looks carefully at the traffic conditions throughout the day prior to considering a change in intersection control. The County typically considers signal installation when Warrant 1a or 1b are met, however meeting a warrant does not necessarily mean a signal is justified.

MnDOT concurrence will be needed for AUAR mitigation recommendations at the Trunk Highway (TH) 52 ramp intersections.

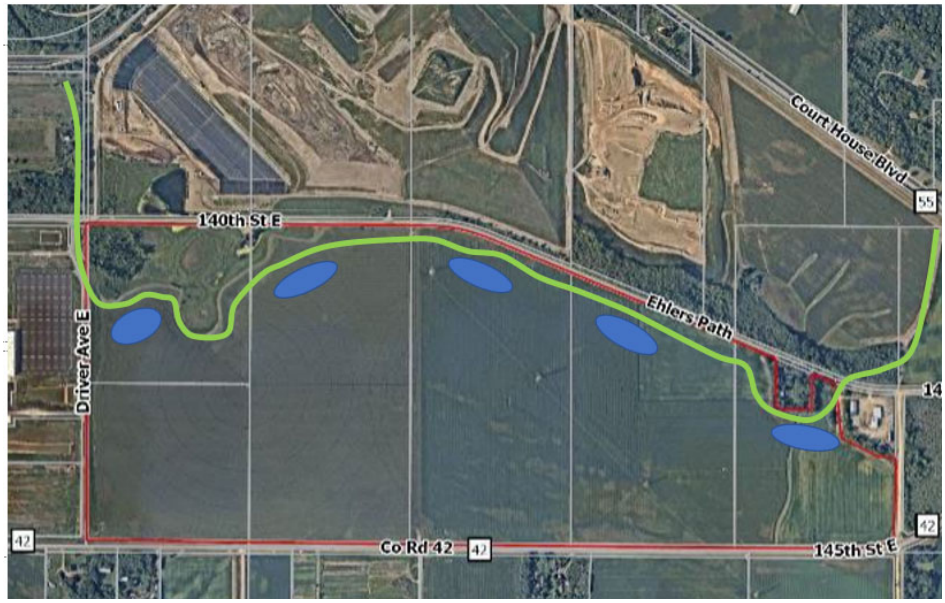
During review of the draft AUAR for Rich Valley East, the County provided the following comments and reiterates these comments to apply to this AUAR review:

> The traffic impact study should include analysis considerations for a roadway network that includes a 140th street connection under TH 52. With the current in-place roadway network, traffic impacts associated with the proposed site development are focused onto CSAH 42. Providing a connection from the proposed site development to CSAH 71 (Blaine Avenue) via 140th Street has the potential for mitigating impacts on CSAH 42, depending upon final development scenario. The AUAR and associated Traffic Impact Analysis does not appear to have included analysis consideration of a 140th Street connection under TH 52.

As we noted, we will examine this in more depth for 2026 renewal.

<u>Greenways</u>

Please consider incorporating the Rosemount Greenway into the proposed development, creating separation from the road and incorporating stormwater management. An illustration of this concept is included below. Please feel free to contact John Mertens in the Dakota County Planning Office at 952-891-7036 if you would like to discuss the County's greenway plans and design standards.



Environmental Resources

Environmental Resources staff completed an environmental review and provided comments on the draft scoping AUAR in November 2023. A Phase I ESA was completed in December 2023, which responded to information identified by our department from November. We do not have any new comments on his draft AUAR. Please Contact Environmental Resources at 952-891-7000 or environ@co.dakota.mn.us for additional information.

If you have any questions relating to our comments, please contact me at 952-891-7007 or Georg.Fischer@co.dakota.mn.us

Sincerely,

Georg T Fischer, Director
Physical Development Division

cc: Commissioner William Droste, District 4
Matt Smith, County Manager

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

March 11, 2024

Anthony Nemcek, Senior Planner
City of Rosemount
2875 145th Street West
Rosemount, MN 55068
Anthony.nemcek@rosemountmn.gov

RE: Rich Valley East Industrial – Alternative Urban Areawide Review

Dear: Anthony Nemcek

Thank you for the opportunity to review and comment on the Alternative Urban Areawide Review (AUAR) for the Rich Valley East Industrial project (Project) located in Rosemount, Dakota County, Minnesota. The Project consists of Scenario 1 including multiple buildings for a total of 2.3 million square feet of proposed data center development. Scenario 2 includes multiple buildings for a total of 1,293,333 square feet of proposed business park, 646,667 square feet of light industrial, and 560,000 square feet of community commercial development. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

Municipal Wastewater

- The estimated gallons per day of wastewater identified for Scenario 1 and Scenario 2 should identify the estimated volume of industrial and domestic wastewater that will be generated under each scenario. In addition, the basis for the estimated flows should be provided.
- The design average wet weather flow for the MCES Empire WWTP is 28.61 MGD, not 24 MGD.
- The average influent wastewater flow at the MCES Empire WWTP for years 2021, 2022, and 2023 is 10.73 MGD.
- The major sewer system features in the area should be shown on a map and the expected flows should be identified.
- Regarding water appropriation, it is indicated that MCES is interested in providing reclaimed water to the region and their effluent pipe is located in the northwest corner of the site. It is also indicated that MCES completed a study in 2018 that explored siting the potential treatment plant at the existing MCES lift station L74 site which is 1000 feet from the site. Some additional information should be provided on the 2018 study and the potential treatment plant and how that relates to water reclamation potential in the area.

401 Certification

For Section 8. Cover Types, of 20.5 acres of existing wetland identified, there are no changes in both Scenario 1 and 2. It does not appear that wetlands will be impacted.

However, Section 9 Permits and Approvals Required includes the USACE Section 404 Permit and the MPCA Section 401 Water Quality Certification. If the USACE 404 permit is required, the 401 Water

Quality Certification must also be included and becomes an enforceable component of the associated federal license or permit.

The scope of a CWA Section 401 certification is limited to assuring that a discharge from a federally licensed or permitted activity will comply with water quality requirements. Along with an Antidegradation Assessment, the 401 program recommends that the applicant meet with the MPCA in advance of requesting a 401 Water Quality Certification. The MPCA is the 401-certifying authority in the State of Minnesota. For further information about the 401 Water Quality Certification process, please contact Bill Wilde at 651-757-2825 or William.wilde@state.mn.us.

We appreciate the opportunity to review this Project. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit actions by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this AUAR, please contact me by email at Chris.Green@state.mn.us or by telephone at 507-476-4258.

Sincerely,

Chris Green

This document has been electronically signed.

Chris Green
Project Manager
Environmental Review Unit
Resource Management and Assistance Division

CG:rs

cc: Dan Card, MPCA
Aaron Hinz, MPCA
Miranda Nichols, MPCA
Joe Braun, MPCA
William Wilde, MPCA
Kirsten Barta, MPCA
Jeffrey Hedman, MPCA
Colin Boysen, MPCA
Deepa deAlwis, MPCA
Julie Henderson, MPCA
Innocent Eyoh, MPCA
Megen Kuhl-Stennes, MPCA

ROSEMOUNT MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM:	Approve Agreement & Authorize Signatures - Harmony Villas Default Remedy	**AGENDA SECTION:** CONSENT AGENDA
PREPARED BY:	Nick Egger, Public Works Director	**AGENDA NO.** 6.d.
ATTACHMENTS:	Harmony Villas Neighborhood Map, Right of Entry & Reimbursement Agreement - Harmony Villas Default Remedy	**APPROVED BY:** LJM
RECOMMENDED ACTION: Approve Right of Entry & Reimbursement Agreement for Remedies to the Default of Developer for Harmony Villas Neighborhood		

BACKGROUND

The Harmony Villas neighborhood, located north of Connemara Trail, west of Brockway Avenue, and south of Bronze Parkway, was constructed between 2017 and 2020. Unfortunately, the developer, Mark Elliot Homes, lagged in completing a few key elements of the required civil infrastructure and grading components as required under their subdivision agreement with the City.

The developer also left several home units unfinished before walking away from the development and ultimately defaulting after the owner of the company passed away. Although two of the home units were purchased by residents, and the other two by another builder, some work owed by the developer has remained unfinished. In the common spaces, a final layer of pavement is left to place on approximately 1/2 of the private streets, several trees need to be planted to meet the spirit of the approved landscaping plan, and some grading and surface restoration and turf need to be completed.

Representatives of the Harmony Villas HOA met with the City several times to work towards understanding what could be done to rectify the matter and to identify how the remaining work could be financed. Ultimately, the HOA agreed to take on procuring the grading and surface/turf restoration component, while the City will take on finishing the pavement, and planting the remaining trees. The value of the work to be delivered by the City is a little over $48,600.

The letter of credit posted by the developer had been reduced through earlier stages of the development as work items were completed. Yet with the time lag between that action and today, the remaining resources are inadequate to cover the full list of work left to complete with the rise in construction contracting expenses in the last few years. Although the City has seized approximately $34,600 from the liquidation of the remaining letter of credit funds, this will fall shy of covering all expenses being performed by the City.

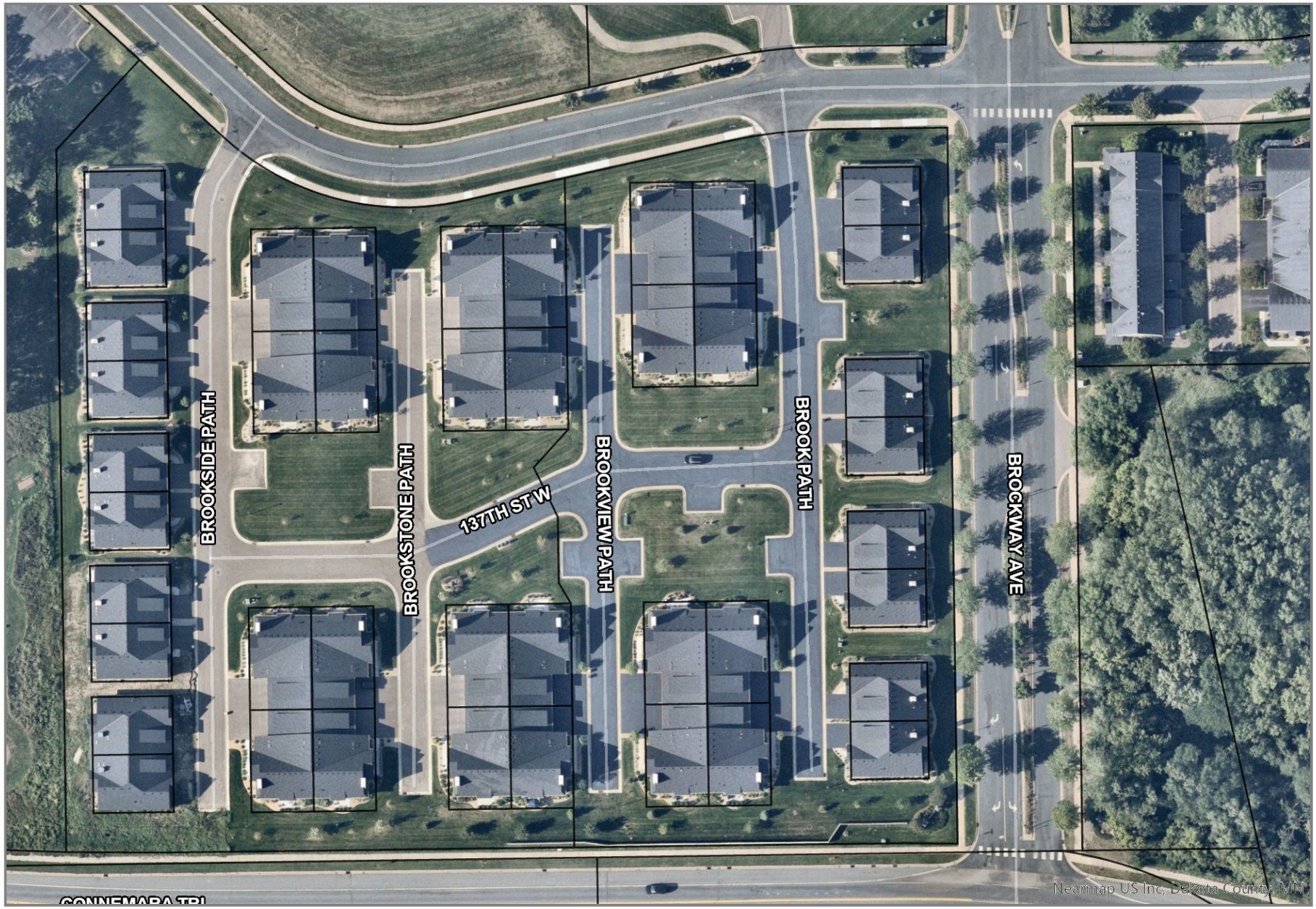
The attached agreement assembled by the City Attorney's office and City staff lays out terms for the City to be able to deliver its portion of the work scope, including a right of entry for the City and its

contractors, as well as repayment terms for the Harmony Villas HOA to pay the City the amount remaining after use of all letter of credit funds, which is $14,036.54.

RECOMMENDATION

The Harmony Villas HOA officers have signed the agreement, and staff is recommending the City formally approve the agreement and authorize the Mayor and City Administrator to affix their signatures.

Harmony Villas Neighborhood



Disclaimer: Map and parcel data are believed to be accurate, but accuracy is not guaranteed. This is not a legal document and should not be substituted for a title search,appraisal, survey, or for zoning verification.

Map Scale
1 inch = 100 feet
5/23/2024

RIGHT OF ENTRY AND REIMBURSEMENT AGREEMENT

THIS RIGHT OF ENTRY AND REIMBURSEMENT AGREEMENT (the "Agreement") is made on this _____ day of _____, 2024, by and between the City of Rosemount, Minnesota, a Minnesota municipal corporation (the "City"), and Harmony Villas Homeowners Association, a Minnesota nonprofit corporation (the "Association").

RECITALS

A. On _____, 20__, the City entered into a Subdivision Agreement for Harmony Villas 1st Addition (the "First Addition Subdivision Agreement") with Mark Elliot Homes LLC, a Minnesota limited liability company (the "Developer"), for the land in the City legally described in **Exhibit A** attached hereto (the "First Addition Property"), pursuant to which the Developer agreed to install certain improvements on the First Addition Property (the "First Addition Subdivision Improvements").

B. On April 2, 2018, the City entered into a Subdivision Agreement for Harmony Villas 2nd Addition (the "Second Addition Subdivision Agreement" and, together with the First Addition Subdivision Agreement, the "Subdivision Agreements") with the Developer, for the land in the City legally described in **Exhibit A** attached hereto (the "Second Addition Property" and, together with the First Addition Property, the "Property"), pursuant to which the Developer agreed to install certain improvements on the Second Addition Property (the "Second Addition Subdivision Improvements" and, together with the First Addition Subdivision Improvements, the "Subdivision Improvements") and deliver a cash deposit to the City in the amount of $621,094 (the "Cash Deposit") to secure the installation of the Second Addition Subdivision Improvements.

C. On November 5, 2018, the Developer executed a Declaration of Common Interest Community (as amended, the "Declaration"), pursuant to Minnesota Statutes, Sections 515B.1-101 to 515B.4-118, whereby the Developer declared their intent to create Common Interest Community Number 644, Harmony Villas, a planned community on the Property, to be administered and maintained by the Association.

D. The Subdivision Improvements were never completed, and the Association has now requested that the City complete certain improvements on the Property (the "Project"), further described in **Exhibit B** attached hereto (the "Plans").

E. The City is willing to construct the Project pursuant to the Plans and this Agreement because it will provide a benefit not only to the Association, but also to the City overall.

F. In order to allow the City to construct the Project, the Association desires to grant the City, its agents, employees and contractors (the "City Parties"), the right to enter onto the Property for said purpose.

G. It is understood that in executing this Agreement, the Association are not granting the City Parties any permanent interest in, or exclusive use or possession of, the Property.

H. A portion of the Project shall be paid for by the remaining funds from the Cash Deposit (the "Remaining Deposit Funds"), the terms of which are contained herein.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and their mutual promises, the parties hereby agree as follows:

1. Incorporation of Recitals and Exhibit. The above recitals and the exhibits attached hereto are incorporated into this Agreement is if fully set forth herein.

2. Right of Entry. As of the effective date of this Agreement, the Association hereby grants to the City Parties the right to enter upon the Property for the purpose of constructing the Project as detailed in the Plans, and in accordance with all terms and conditions contained in this Agreement. The right of entry permitted by this Agreement shall extend only to such portion of the Property as is necessary to perform the tasks described in the Plans, only to such extent as may be reasonably required, and only to such time periods as may reasonably be necessary.

3. Duties of City. In consideration for such right of entry, the City, on behalf of the City Parties, agree to:

(a) Prior to commencing any work that directly affects the Property, provide the Association with a tentative timetable for the Project;

(b) Dispose of all solid waste generated during the course of the Project on the Property in accordance with applicable federal, state and local laws, rules and regulations;

(c) Do no unnecessary damage to the Property and, except for construction of the Project in accordance with the Plans, restore the Property to substantially the same condition in which it was found by the City Parties at the time of their entry upon the Property;

(d) Require any party that enters onto the Property during the Project to carry liability insurance to the extent deemed reasonably necessary by the City; and

(e) Provide the Association a notice of completion when the City Parties complete the Project (the "Completion Date").

4. Access, Repair and Maintenance Duties of the Association. The Association will allow the City Parties to access the Property for the purposes of performing the Project and will not interfere with the Project in any manner. The Association agrees not to disturb the improvements constructed by the City and, because the Project will provide a benefit to the Property, the Association further agrees to be solely responsible for any ongoing repair or maintenance related to the Project. The City shall not be responsible for any future costs associated with said repairs or maintenance and, upon completion of the Project in accordance with the Plans, the City shall have no further responsibilities under this Agreement or otherwise.

5. Remaining Deposit Funds. The City shall pay for a portion of the Project with the Remaining Deposit Funds of $34,606.21 The remainder of the cost of the Project shall be paid for by the Association (the "Association Costs"), in the amount of $14,036.54. Following completion of the Project, the City shall invoice the Association for the Association Costs. The Association shall pay the Association Costs within 30 days of receipt of said invoice.

6. Liability; Indemnification. The City, its officials, employees, contractors and agents shall not be liable or responsible in any manner to the Association, the Association's successors or assigns, or to any other person or persons for any claim, demand, damage, or cause of action of any kind or character arising out of or by reason of the execution of this Agreement or the performance of this Agreement, nor will the Association make any claim against the City for or on account of any injury, loss or damage resulting from the Project or the City's construction thereof.

The Association shall indemnify, hold harmless and defend the City, its officials, employees, contractors and agents from and against any and all liability, loss, costs, damages, expenses, claims, actions or judgments, including reasonable attorneys' fees which the Association, its officers, employees, agents or contractors may hereinafter sustain, incur, or be required to pay, arising out of or by reason of any act or failure to act by the Association, its employees, agents or contractors or arising out of or by reason of this Agreement. Nothing in this Agreement shall constitute a waiver or limitation of any immunity or limitation on liability to which the City is entitled under Minnesota Statutes, Chapter 466, or otherwise.

7. Release of Claims. The Association hereby releases and forever discharges the City, and its attorneys, agents, representatives, employees, former employees, insurers, heirs, executors and assigns of and from any and all past, present or future claims, demands, actions or causes of action, at law or in equity, whether arising by statute, common law or otherwise, and for all claims for damages, of whatever kind or nature, and for all claims for attorneys' fees, and costs and expenses, including but not limited to all claims of any kind arising out of the negotiation, consideration, execution and performance of this Agreement or the Subdivision Agreements. Nothing contained in this paragraph is intended to prevent the exercise of any rights available pursuant to this Agreement.

The City hereby releases and forever discharges the Association, and its attorneys, agents, members, representatives, employees, former employees, insurers, heirs, executors and assigns of and from any and all past, present or future claims, demands, actions or causes of action, at law or in equity, whether arising by statute, common law or otherwise, and for all claims for damages, of whatever kind or nature, and for all claims for attorneys' fees, and costs and expenses, including but not limited to all claims of any kind arising out of the negotiation, consideration, execution and performance of this Agreement. Nothing contained in this paragraph is intended to prevent the exercise of any rights available pursuant to this Agreement.

8. Governing Law. This Agreement shall be interpreted in accordance with the laws of the state of Minnesota.

9. Amendment. This Agreement, including the recitals and attached exhibits which are incorporated in and made part of this Agreement, contains all of the agreements between the parties regarding this matter and may only be modified by a written amendment signed by both parties.

10. No Third-Party Rights. This Agreement is entered into for the benefit of the Association and the City and is not intended to, and does not, confer any rights or remedies upon any other persons.

11. Term. This Agreement shall be in effect as of the date first written above and shall terminate upon the City's notice of completion of the Project pursuant to section 3(e) above.

[remainder of page left intentionally blank]

IN WITNESS WHEREOF, the parties have caused this Agreement to be duly executed in their names and on their behalf, and is effective as of the date first written above.

CITY OF ROSEMOUNT

By: _____
Jeffery D. Weisensel
Its: Mayor

By: _____
Logan Martin
Its: City Administrator

THE ASSOCIATION

By: Debbie Benson 5-22-24

By: John Benz 5-22-24

5-22-24

RS220-446-954088.v1

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

First Addition Property:
That real property located in Dakota County, Minnesota, legally described as: Harmony Villas.

Second Addition Property:
That real property located in Dakota County, Minnesota, legally described as: Harmony Villas 2nd Addition.

EXHIBIT B

PROJECT

The Project includes:

- **Pavement Improvements:** Paving the wearing course on Brookside Path, Brookstone Path, and a portion of 137th Street between Brookside Path and Brookstone Path. Pavement Improvement work includes repair/replacement of a small portion of concrete curb and gutter along Brookside Path, Brookstone Path, and 137th Street in this same area. The cost for this work is $45,921.00 in accordance with the quote received from Pine Bend Paving in April 2024, as shown in Exhibit B-1.
- **Tree Planting:** Tree acquisition and planting trees in accordance with the landscape plan attached as Exhibit B-2. The Cost for this work is $2,721.75 for the cost of purchasing the trees. The City will provide the labor and effort to plant the trees on the site per the revised final adjusted planting plan shown in Exhibit B-2.

EXHIBIT B-1

PAVEMENT COMPLETION COST QUOTE TABULATION

Bid Tabulation

HARMONY VILLAS 2ND ADDITION FINAL PAVING

CITY OF ROSEMOUNT

QUOTES RECEIVED: April 1, 2024 at 12:00 pm

WSB Project No. 011659-000

DENOTES CORRECTED FIGURE

					Engineer's Estimate		McNamara Contracting, Inc.		Bituminous Roadways, Inc.		Pine Bend Paving	
Line #.	Material #	Item	Units	Quantity	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price	Unit Price	Total Price
Base Bid												
1	2021.501	MOBILIZATION	LS	1	$8,000.00	$8,000.00	$6,000.00	$6,000.00	$8,000.00	$8,000.00	$1,600.00	$1,600.00
2	2104.503	REMOVE CURB & GUTTER	LF	30	$15.00	$450.00	$100.00	$3,000.00	$24.00	$720.00	$50.00	$1,500.00
3	2357.506	BITUMINOUS MATERIAL FOR TACK COAT	GAL	135	$6.00	$810.00	$5.00	$675.00	$0.01	$1.35	$5.00	$675.00
4	2360.509	TYPE SP 9.5 WEARING COURSE MIX (2,C)	TON	302	$100.00	$30,200.00	$115.00	$34,730.00	$95.00	$28,690.00	$103.00	$31,106.00
5	2504.602	ADJUST VALVE BOX	EACH	4	$300.00	$1,200.00	$200.00	$800.00	$375.00	$1,500.00	$200.00	$800.00
6	2506.502	ADJUST FRAME & RING CASTING	EACH	6	$300.00	$1,800.00	$300.00	$1,800.00	$1,250.00	$7,500.00	$615.00	$3,690.00
7	2531.503	CONCRETE CURB & GUTTER DESIGN SPECIAL	LF	30	$50.00	$1,500.00	$125.00	$3,750.00	$76.00	$2,280.00	$70.00	$2,100.00
8	2531.604	7" CONCRET VALLEY GUTTER	SF	75	$20.00	$1,500.00	$40.00	$3,000.00	$30.00	$2,250.00	$28.00	$2,100.00
9	2573.502	STORM DRAIN INLET PROTECTION	EACH	5	$200.00	$1,000.00	$200.00	$1,000.00	$0.01	$0.05	$150.00	$750.00
10	2575.604	SITE RESTORATION	SY	8	$20.00	$160.00	$100.00	$800.00	$335.00	$2,680.00	$200.00	$1,600.00
TOTAL BASE BID						$46,620.00		$55,555.00		$53,621.40		$45,921.00

I hereby certify that this is an exact reproduction of bids received.

Certified By: Amanda Sachi License No. 50091

Date: April 1, 2024

RS220-446-954088.v1

EXHIBIT B-2

APPROVED LANDSCAPING PLAN

RS220-446-954088.v1

EXHIBIT B-2

LANDSCAPING COSTS

Wholesale Nursery
6877 235th St W
Farmington, MN 55024-9638
651-463-3288

Bachman's
WHOLESALE NURSERY & HARDSCAPES
www.bachmanswholesale.com

PAGE NO 1
Hardscapes Cedar Acres
23004 Cedar Ave. So.
Farmington, MN 55024
Hardscapes: 952-469-9665
Retail: 952-469-3833

CUST NO:	JOB NO:	PURCHASE ORDER:	REFERENCE:	TERMS:	CLERK:	DATE / TIME:
501106	000	CITY OF ROSEMOUNT		NET 30	DPINGEL	5/6/24 11:35

TERMINAL: 1062

SOLD TO:
CITY OF ROSEMOUNT
2875 145TH ST W
ATTN: PUBLIC WORKS
ROSEMOUNT MN 55068-0000
651-423-4411

SHIP TO:

EXP. DATE: 5/1/25

SALESPERSON: 06 DAN PINGEL
TAX: 50N NURSERYWHSL

QUOTATION:384288/50

LINE	SHIPPED	ORDERED	UM	SKU	DESCRIPTION	LOCATION	UNITS	PRICE/	PER	EXTENSION
1										
2		2	EA	386448	ASPEN SUMMER SHIMMER #15 C		2	161.50	/EA	323.00 CN
3		4	EA	121286	BIRCH PARKLAND PILLAR TR #20 C		4	209.00	/EA	836.00 CN
4		3	EA	207098	MAPLE ARMSTRONG GOLD #20 C		3	261.25	/EA	783.75 CN
5		4	EA	107226	OAK KINDRED SPIRIT #15 C		4	194.75	/EA	779.00 CN
6										

REPRINT

TAXABLE 0.00
NON-TAXABLE 2721.75

SUBTOTAL 2721.75

(WYNNE SUTTON -)

SUBTOTAL 2721.75

TAX AMOUNT 0.00

TOTAL 2721.75

¶.384288/q.
Reference: 0.00

REMIT TO: Bachman's, Inc. Credit Department 6010 Lyndale Ave. So. Minneapolis, MN 55419 612-861-7670
Credit terms are NET 30 days. All amounts not paid within 30 days will incur a finance charge of 1.5% per month. When an account is past due (over 30 days), additional credit extension will cease until the balance is paid in full or satisfactory arrangements are made with our Credit Department. Claims for any cause will receive consideration only when contacting sales representative within 5 days of the invoice

ROSEMOUNT
MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM: Liquor License Renewals	**AGENDA SECTION:** CONSENT AGENDA
PREPARED BY: Erin Fasbender, City Clerk	**AGENDA NO.** 6.e.
ATTACHMENTS:	**APPROVED BY:** LJM
RECOMMENDED ACTION: Motion to approve applications for renewal of Liquor Licenses as listed below for the period of July 1, 2024 through June 30, 2025	

BACKGROUND

The following businesses have submitted applications for the renewal of an Off-Sale Liquor License for the period of July 1, 2024 through June 30, 2025:

Kwik Trip #697, 14810 South Robert Trail	Off-Sale 3.2% Malt
Top Ten Liquors, 15047 Crestone Ave	Off-Sale Intoxicating

Applicants were required to and have submitted proof of liquor liability and workers compensation insurance, renewal fees and the background investigation paperwork for the renewal. The Police Department conducted a background check on the applicants investigating any criminal history, law enforcement contacts and court records all which showed no convictions that would disqualify the applicant from renewing their license. The license fee for off-sale is $200 for off-sale intoxicating and $210 for off-sale 3.2% malt.

RECOMMENDATION

Staff recommends approving the applications for renewal of Liquor Licenses as stated.

ROSEMOUNT
MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM: Medical Leave of Absence - Fire Department	**AGENDA SECTION:** CONSENT AGENDA
PREPARED BY: Richard Schroeder, Fire Chief	**AGENDA NO.** 6.f.
ATTACHMENTS:	**APPROVED BY:** LJM
RECOMMENDED ACTION: Medical Leave of Absence for Captain Brad Miller	

BACKGROUND

This is a request for an additional 39-day medical leave of absence on behalf of Captain Brad Miller starting April 29, 2024. Miller is requesting this additional time off to heal following a surgery. The fire department personnel policy allows for such a leave with city council approval.

Staff recommends approving this leave of absence to begin April 29, 2024 and ending on June 6, 2024 at which time he will be cleared to return to full status. Miller has been made aware that a medical leave above the original 60-day medical leave of absence would require approval of the Rosemount City Council. Miller previously approved a medical leave of absence through April 28, 2024.

RECOMMENDATION

Staff is recommending the City Council approve Captain Miller's request for an additional 39-day medical leave of absence.

ROSEMOUNT MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM:	PD/PW Building Distributed Antenna System	**AGENDA SECTION:** CONSENT AGENDA
PREPARED BY:	Willie Dodds, IT Specialist Nick Egger, Public Works Director Mikael Dahlstrom, Police Chief	**AGENDA NO.** 6.g.
ATTACHMENTS:	Ancom Rosemount PD - PW Cellular DAS Proposal, Ancom Rosemount PD - PW Public Safety DAS Proposal, Konect DAS Quote for Cellular, Konecta DAS Quote for PublicSafety	**APPROVED BY:** LJM
RECOMMENDED ACTION: Motion to approve Distributed Antenna System system and select a vendor to complete requested work		

BACKGROUND

With the size of the new PD/PW building and cellular communication already presenting challenges, staff sought a solution to ensure reliable communication for our Police and Public Works staff. Staff contacted two separate companies that have experience working with other cities in the metro area. Each quote includes two separate components: a system to boost the 800MHz radio signal used by our Police and a system to boost cellular signals for all major networks, benefiting both staff and residents within the building.

In the modern era, effective communication is vital for the smooth operation of emergency services and public works departments. However, traditional communication networks often face challenges in providing comprehensive coverage within large buildings, particularly those with intricate layouts and dense materials. A Distributed Antenna System (DAS) offers a solution by ensuring reliable wireless communication throughout the premises of the new police and public works building.

To address this challenge, we can integrate a Distributed Antenna System (DAS) into the construction plans of the new building. The DAS comprises strategically placed antennas installed throughout the facility, including offices, conference rooms, common areas, parking garages, and even holding cells. These antennas are connected to a centralized hub, which aggregates and amplifies the 800mghz radio and wireless signals from various carriers.

Benefits:

- Reliable Communication: The DAS ensures that police officers, public works staff, and other personnel can communicate effectively via their mobile devices throughout the building, even in areas with poor cellular coverage or high levels of interference.

- Emergency Response: During critical situations, such as natural disasters or security incidents, reliable communication is essential for coordinating emergency response efforts. The DAS provides uninterrupted connectivity, enabling first responders to quickly assess situations, communicate with command centers, and coordinate rescue operations.
- Enhanced Security: In a police building, secure and reliable communication is paramount for ensuring the safety of officers and detainees. The DAS supports encrypted communication channels, protecting sensitive information from interception or tampering.
- Operational Efficiency: Public works departments rely on efficient communication to coordinate maintenance activities, respond to service requests, and manage infrastructure projects. With the DAS in place, staff can communicate seamlessly both indoors and outdoors, improving overall operational efficiency.
- Regulatory Compliance: The DAS ensures compliance with regulations and standards governing wireless communication in public buildings, enhancing the municipality's reputation for adhering to best practices in safety and security.

Staff obtained four separate quotes for the Distributed Antenna System (DAS). Ancom provided a quote of $123,930 for the cellular system and $67,025 for the 800 MHz system. Konecta's quote for the Cellular System amounted to $110,928, and $83,974 for the 800 MHz system. Costs of these systems were anticipated within the overall PW/PD Campus budget, and funds will be sourced from the project fund to cover the expense.

RECOMMENDATION

Staff recommends that the Council authorize the acquisition and implementation of the Distributed Antenna Systems offered by Konecta, as detailed in the attached quotes.

Rosemount Police Department and Public Works Commercial Cellular DAS Proposal

Contained herein is the proposal for installing and commissioning the Commercial Cellular Distributed Antenna Systems at the Rosemount PD/PW Building.

ANCOM DELIVERS SOLUTIONS

1800 Cliff Road East
Burnsville, MN 55337
(952) 808-7699
5/21/2024

ANCOM
COMMUNICATIONS INC
TECHNICAL CENTER INC

1800 EAST CLIFF ROAD, SUITE 17A BURNSVILLE, MINNESOTA 55337
SALES 952-808-0033 SERVICE 952-808-7699 FAX 952-808-0034

Introduction

ANCOM Communications is a Burnsville, MN based, Motorola-authorized two-way radio dealer providing sales, service and rental of Motorola two-way radios and pagers. Since 1991, ANCOM has worked with businesses to identify their communication needs and provide cost-effective, innovative solutions. Our customer base spans the utility, manufacturing, construction, chemical, government, and public safety industries.

ANCOM Technical Center (ATC) is a fully authorized Motorola Service Center. Since 1999, ATC has been serving the communications service needs of commercial and public safety customers throughout Minnesota and western Wisconsin. ATC is recognized as a "Motorola Service Elite Specialist." (Motorola's highest service facility designation) We are also classified as a Certified Service Center by the Electronics Technicians Association International, an independent national organization.

Our technicians are career professionals in the communications industry. We invest heavily on training and certification to ensure that our technical staff is at the fore-front of the quickly evolving field.

Experience with ARMER

ANCOM has worked with the ARMER system since its inception in 2004. We were a crucial part of the initial build out, and continue to be a part of each upgrade that takes place. This includes the minor things such as firmware upgrades for mobile and portable radios, as well as infrastructure upgrades at the site and dispatch PSAP levels.

We currently have service contracts with 72 municipalities/entities to support and maintain their ARMER equipment. Some of these include Goodhue County, Allina Health, and Scott County. Most of these contract customers are set up with automated alerting, and we can often resolve a problem before any end users experience issues.

Additionally, we work closely with MNDOT and are aware of ARMER system changes that could be system impacting for numerous agencies. This can save time, and ultimately money by avoiding unnecessary trips to a customer location.

As in-building coverage enhancement becomes increasingly prevalent, ANCOM has positioned itself at the forefront of technology and innovation. We have installed and commissioned hundreds of in-building systems throughout Minnesota in all types of venues. Providing cost effective, custom designed solutions to ensure that First Responders are never without reliable communications.

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DAS Experience

ANCOM has installed and commissioned many cellular enhancement systems across the Midwest in a variety of different types of venues. We have installed distributed antenna systems in commercial spaces, hospitals, industrial facilities, and stadiums. Each solution was completely custom designed for the customer's unique requirements.

We have good working relationships with all of the major carriers. This helps to ensure that your system, once tuned up, will meet or exceed all expectations.

We are a complete turn-key solution vendor. Our in-building team can deliver any or all aspects of a DAS project. From pre-site survey, to design, to construction, to optimization, every task is handled professionally in-house. This makes us much more responsive to "last minute" changes or modifications that can and do arise during construction.

Proposal Summary

Our Proposed Solution for Commercial Cellular Enhancement at the Rosemount PD/PW building is to install a Consumer Grade Hybrid DAS

Cellular signal will be collected by donor antennas on the roof. Coax will be routed through a customer provided roof penetration. Once inside, we will connect the donor antenna coax to lightning protection, and route coax down to the head-end equipment.

The Cellular Head-End consists of the Main Unit Chassis. This is where we will install modular RF cards that will connect to the donor antennas outside. The RF cards filter and amplify the signal in preparation for distribution. There is also an integrated fiber optic module in the Chassis. This sends the signals out to the DAS Hub units via fiber optic cable. These Hub units convert the light back into RF energy and are connected to Active Remote Units which will be installed throughout the building to distribute signal. One Hub Unit will be installed at the head-end location, and the other will be installed in the public works garage space. Each will have several Active Remote Units connected to them to enhance signal throughout the building.

The system will be tuned and adjusted to provide optimal signal flow in both directions. Upon completion of the install, we will perform signal testing inside the building to ensure proper operation and adequate coverage.

Closeout documentation including test results, as-built diagrams, and equipment cut-sheets will be provided to the customer once this project is completed.

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Quote Breakdown

The price for this system, as designed, is as follows:

Cellular DAS Material:	$ 104,180.00
Cellular DAS Labor:	$ 17,750.00
Cellular DAS Total:	**$ 121,930.00**

Optional Antenna Monitoring (Price Per Year)	**$ 2,000.00**

This quote is valid for 90 days from the date above.

Jake Nesdahl Date:
Project Manager
ANCOM Communications Inc.

Authority Having Jurisdiction Date:

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TECHNICAL CENTER INC

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Assumptions:

- All work can occur during normal business hours, M-F (8:00 AM - 4:30 PM)
- Escorts will not be required
- Acceptable equipment locations are available for the required equipment.
- Access to all areas will be made available throughout the entire process from project start to completion.
- All ANCOM labor is non-union.
- All AC power is to be existing or furnished by others.
- Assumes existing accessible cable pathways in all risers.
- Systems to be installed per the design and any changes may result in additional material and labor costs to be paid for by the customer.
- Delays beyond the control of ANCOM and their installers will result in additional costs to be paid for by the customer.
- Materials are ordered upon receipt of a purchase order for the full project cost, as well as 50% down.
- Project construction will be scheduled only after all materials have been received by ANCOM.
- All vertical cable pathways and exterior penetration will be verified prior to installation
- This Proposal does not include any applicable taxes. Applicable taxes will be added at the time of invoice.

Rosemount Police Department and Public Works ARMER DAS Proposal

Contained herein is the proposal for installing and commissioning the Public Safety Radio Distributed Antenna System at the Rosemount PD/PW Building.

ANCOM DELIVERS SOLUTIONS

1800 Cliff Road East
Burnsville, MN 55337
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5/21/2024

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We have good working relationships with all of the major carriers. This helps to ensure that your system, once tuned up, will meet or exceed all expectations.

We are a complete turn-key solution vendor. Our in-building team can deliver any or all aspects of a DAS project. From pre-site survey, to design, to construction, to optimization, every task is handled professionally in-house. This makes us much more responsive to "last minute" changes or modifications that can and do arise during construction.

Proposal Summary

Our proposed solution for Rosemount Police Department and Public Works is to install an amplified Distributed Antenna System. This will consist of a donor antenna installed on the roof, Head-End equipment, and a network of coaxial cable, antennas, and splitters to distribute signal.

ARMER radio signal and will be collected by the donor antenna installed on the roof of the building. Coax will be routed into the building through the customer provided roof penetration. Once inside, we will install lightning protection bonded to the building grounding system. The Class-A Bi-directional Amplifier will be installed in the main level Server Room. This amplifier will condition, filter, and be programmed to enhance the 800 MHz frequencies used by First Responder personnel.

A Class-A amplifier is also called a channel-selective amplifier. They have the ability to be programmed to enhance only desired frequencies in use by the local emergency responders. The alternative is a Class-B amplifier which is also called band-selective. We are proposing a Class-A amplifier for the following reasons:

- Channel selectivity. We will program the amplifier to enhance the frequencies that are used by Dakota County only. This will prevent other frequencies used by adjacent counties from being brought into the building. If a subscriber radio receives a control channel from more than one ARMER site at a similar power level, it will "bounce" between those sites. This can cause the subscriber radio to miss trunking commands from the Dakota County Control channel. This problem

manifests itself by some radios missing complete conversations, while a radio sitting right next to it receives clearly.

- Interference mitigation. The amplifier we are proposing utilizes uplink muting. This means that when a particular channel is not in use, the amplifier is essentially turned off and not transmitting "dead air" back to the ARMER site. This muting function is performed on a per-channel basis.
- Higher available power. All bi-directional amplifiers have a maximum rated RF power output. In the case of this proposal that power output is 2 Watts or 33 dBm. A Class-B amplifier would take all the RF power in the assigned frequency band and apply gain until it reaches the maximum power out. If an RF source that was in-band, but not an ARMER channel (interfering channel) were present at a relatively high level, maximum power output would be reached using very little gain. That same gain level would be applied to all other RF sources in the band. If the desired ARMER channels were received at a lower power level than the interfering channel, they would be transmitted into the building at a lower level also. A Class-A amplifier solves this problem by a) not amplifying interfering channels in the first place, and b) applying gain on a per channel basis.

The amplifier will be connected to its own local coaxial distribution system for coverage antenna located in the office/admin area of the building. It will also be connected to a Fiber Optic Unit (FOU). The FOU will convert the RF energy into light and send that light to a remote unit located in the Public Works Garage part of the building. The Remote unit will be connected to another coaxial distribution system for coverage antennas in that section of the building.

This system will be tuned and adjusted to provide optimal signal flow in both directions. Upon completion of the install, we will perform signal testing inside the building to ensure proper operation and adequate coverage.

Closeout documentation including test results, as-built diagrams, and equipment cut-sheets will be provided to the customer once this project is completed.

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TECHNICAL CENTER INC

1800 EAST CLIFF ROAD, SUITE 17A BURNSVILLE, MINNESOTA 55337
SALES 952-808-0033 SERVICE 952-808-7699 FAX 952-808-0034

Quote Breakdown

The price for this system, as designed, is as follows:

ARMER DAS Material:	$ 45,975.00
ARMER DAS Labor:	$ 18,050.00
ARMER DAS Total:	**$ 64,025.00**

Optional Annual Maintenance Agreement (Price per Year)	**$ 3,000.00**

This quote is valid for 90 days from the date above.

Jake Nesdahl
Project Manager
ANCOM Communications Inc.

Date:

Authority Having Jurisdiction

Date:

ANCOM
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TECHNICAL CENTER INC

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- This Proposal does not include any applicable taxes. Applicable taxes will ne added at the time of invoice.

KonectaGPS, LLC
905 Coventry Place
Minneapolis, MN 55435
(612)363-1113
david.schlange@konectausa.com
www.konectagps.com

Recommendation

KonectaGPS

ADDRESS	SHIP TO
Rosemount Police and Public Works 14221 Biscayne Ave Rosemount, MN 55068	Rosemount Police and Public Works 14221 Biscayne Ave Rosemount, MN

RECOMMENDATION #	DATE	EXPIRATION DATE
4087	04/04/2024	06/30/2024

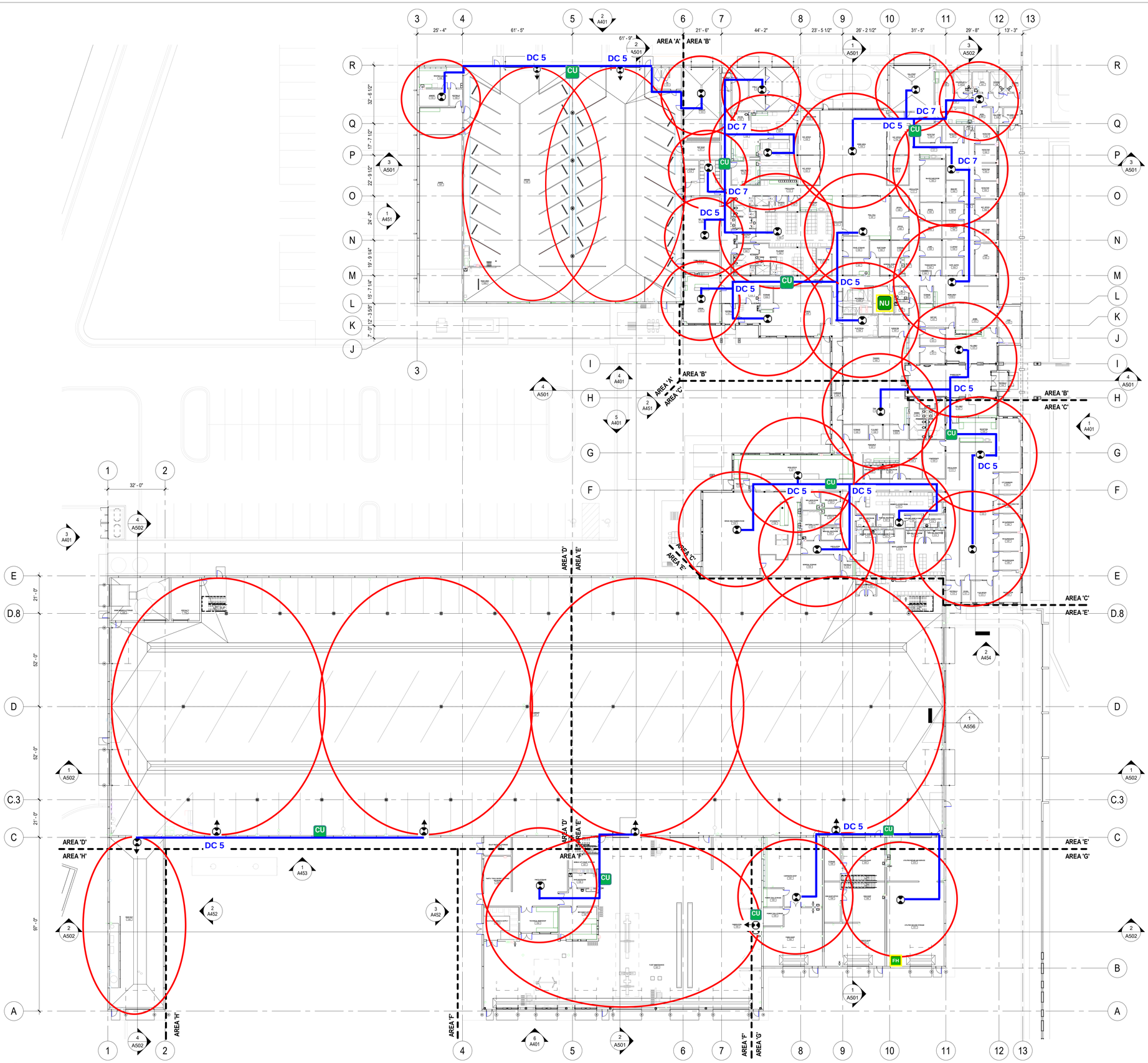
STATE
MN

DESCRIPTION	QTY	RATE	AMOUNT
Cellular Repeater System	1	78,205.12	78,205.12
Turnkey Solution: System Design, Complete Installation, and Certification of Coverage. *Lift rental additional if needed. *Roof penetration and electrical work not included. *50 percent deposit required for turnkey installation.	1	23,323.00	23,323.00
Project Management Services	1	5,705.00	5,705.00
Cellular Annual Monitoring Service	1	1,995.00	1,995.00T
Trip Charge	24	50.00	1,200.00T
Shipping Fees	1	500.00	500.00T
Sales Tax calculated by AvaTax on Fri 26 Apr 15:27:18 UTC 2024	1	0.00	0.00

SUBTOTAL	110,928.12
TAX	0.00
TOTAL	**$110,928.12**

Accepted By

Accepted Date



1 A101 LEVEL 1 - OVERALL FLOOR PLAN
3/64" = 1'-0"

FLOOR PLAN GENERAL NOTES

1. GENERAL NOTES APPLY TO ALL DRAWING SHEETS.
2. DO NOT SCALE THE DRAWINGS. WHERE DIMENSIONS ARE NOT PROVIDED OR ARE UNCLEAR, REQUEST CLARIFICATION FROM THE ARCHITECT.
3. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES UPON DISCOVERY.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL BUILDING CODES. COMPLIANCE WITH ALL APPLICABLE CODES WILL BE REQUIRED TO BE MET OR EXCEEDED.
5. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS AND CEILING FINISHES.
6. REFER TO CODE PLANS FOR LOCATIONS OF RATED WALLS, SMOKE BARRIERS, FIRE EXTINGUISHER CABINETS, ETC.
7. REFER TO INTERIOR FINISH PLANS AND ROOM FINISH SCHEDULE FOR ROOM FINISHES.
8. REFER TO INTERIOR FURNITURE PLANS FOR FURNITURE/FIXTURE LAYOUT.
9. REFER TO SHEET G140 FOR TYPICAL MOUNTING ELEVATIONS.
10. ARCHITECTURAL FINISHED FLOOR ELEVATIONS ARE TO TOP OF CONCRETE SLAB OR TOPPING.
11. UNLESS NOTED OTHERWISE, ALL NON-RATED INTERIOR WALLS SHALL BE TYPE "S4", EXTENDING UP TO UNDERSIDE OF FLOOR OR ROOF ABOVE WITH MINERAL WOOL ACOUSTIC BATT INSULATION. SCRIBE GYPSUM BOARD TO IRREGULARITIES OF DECK ABOVE AND SEAL AROUND ALL PENETRATIONS WITH ACOUSTIC SEALANT.
12. PLAN DIMENSIONS ARE TO FINISHED SURFACE OF MASONRY WALLS, OR CENTERLINE OF STUDS AT METAL STUD INTERIOR WALLS, UNLESS NOTED OTHERWISE. REFER TO SHEET A602 CONSTRUCTION ASSEMBLY TYPES FOR MORE INFORMATION.
13. COORDINATE ALL LOCATIONS FOR IN-WALL BLOCKING AND/OR WALL BACKING FOR ITEMS SUCH AS TOILET ACCESSORIES, GRAB BARS, CASEWORK, WALL-MOUNTED FIXTURES, MARKER BOARDS, VISUAL DISPLAY BOARDS, AUDIO-VISUAL EQUIPMENT, HANDRAILS, ETC. INSTALL FIRE-RESISTIVE TREATED WOOD BLOCKING OR METAL BACKING PLATES IN METAL STUD PARTITIONS.
14. TRANSITIONS BETWEEN FINISH FLOOR ELEVATION(S) SHALL NOT EXCEED 1/2 INCH, UNLESS NOTED OTHERWISE.
15. PROVIDE 4 INCH HIGH CONCRETE HOUSEKEEPING PADS BELOW ALL FLOOR-MOUNTED INTERIOR MECHANICAL AND ELECTRICAL EQUIPMENT. VERIFY EXACT SIZES AND LOCATIONS WITH AFFECTED TRADES.
16. CONTRACTOR SHALL COORDINATE ALL REQUIRED FLOOR/WALL/ROOF PENETRATION SIZES AND LOCATIONS WITH ASSOCIATED TRADES PRIOR TO CUTTING.
17. CONTRACTOR SHALL INSTALL CONTINUOUS PERFORATED DRAIN TILE AROUND THE OUTSIDE PERIMETER OF BUILDING. REFER TO FOUNDATION DETAILS AND SPECIFICATION FOR MORE INFORMATION. SEE PLUMBING DRAWINGS FOR SUMP LOCATION.

BKV GROUP

Architecture
Interior Design
Landscape Architecture
Engineering

222 North Second Street
Long & Kees Bldg
Suite 101
Minneapolis, MN
55401
612.339.3752

www.bkvgroup.com

CONSULTANTS

OERTEL ARCHITECTS

PROJECT TITLE

ROSEMOUNT POLICE & PUBLIC WORKS CAMPUS

ISSUE #	DATE	DESCRIPTION
	02/03/2023	BID PACKAGE 1

CERTIFICATION

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 Architect under the laws of the state of Minnesota

Bruce Schwartzman
27026 — License Number
02/03/2023 — Date

DRAWN BY	Author
CHECKED BY	Checker
COMMISSION NUMBER	2514.01

SHEET TITLE

LEVEL 1 - OVERALL FLOOR PLAN

SHEET NUMBER

A101

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TRUE NORTH

BIM 360://2514-01 Rosemount Police & Public Works Facility/2514-01 Rosemount PD & Public Works_AI_2021.rvt
2/3/2023 10:45:37 AM

KonectaGPS, LLC
905 Coventry Place
Minneapolis, MN 55435
(612)363-1113
david.schlange@konectausa.com
www.konectagps.com

Recommendation

KonectaGPS

ADDRESS	SHIP TO
Rosemount Police and Public Works 14221 Biscayne Ave Rosemount, MN 55068	Rosemount Police and Public Works 14221 Biscayne Ave Rosemount, MN

RECOMMENDATION #	DATE	EXPIRATION DATE
4089	04/04/2024	06/30/2024

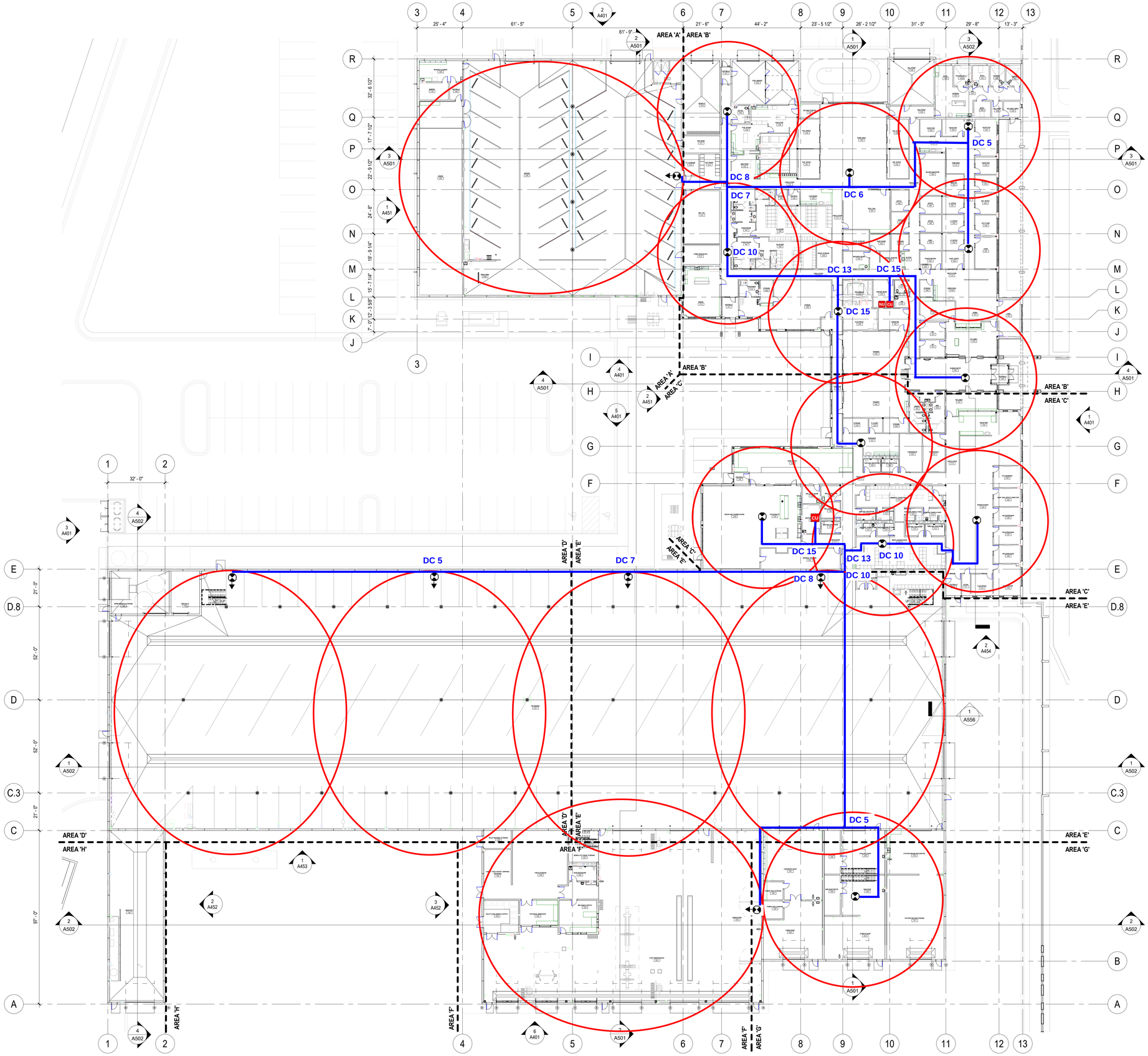
STATE
MN

DESCRIPTION	QTY	RATE	AMOUNT
Public Safety System	1	68,540.02	68,540.02
Turnkey Solution: System Design, Complete Installation, and Certification of Coverage. *Lift rental additional if needed. *Roof penetration and electrical work not included. *50 percent deposit required for turnkey installation.	1	11,608.00	11,608.00
Project Management Services	1	2,776.00	2,776.00
Trip Charge	11	50.00	550.00T
Shipping Fees	1	500.00	500.00T
Sales Tax calculated by AvaTax on Fri 26 Apr 15:28:49 UTC 2024	1	0.00	0.00

SUBTOTAL	83,974.02
TAX	0.00
TOTAL	**$83,974.02**

Accepted By

Accepted Date



1 A101 LEVEL 1 - OVERALL FLOOR PLAN
3/64" = 1'-0"

FLOOR PLAN GENERAL NOTES

1. GENERAL NOTES APPLY TO ALL DRAWING SHEETS.
2. DO NOT SCALE THE DRAWINGS. WHERE DIMENSIONS ARE NOT PROVIDED OR ARE UNCLEAR, REQUEST CLARIFICATION FROM THE ARCHITECT.
3. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, AND ELEVATIONS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES UPON DISCOVERY.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL BUILDING CODES. COMPLIANCE WITH ALL APPLICABLE CODES WILL BE REQUIRED TO BE MET OR EXCEEDED.
5. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS AND CEILING FINISHES.
6. REFER TO CODE PLANS FOR LOCATIONS OF RATED WALLS, SMOKE BARRIERS, FIRE EXTINGUISHER CABINETS, ETC.
7. REFER TO INTERIOR FINISH PLANS AND ROOM FINISH SCHEDULE FOR ROOM FINISHES.
8. REFER TO INTERIOR FURNITURE PLANS FOR FURNITURE/FIXTURE LAYOUT.
9. REFER TO SHEET G140 FOR TYPICAL MOUNTING ELEVATIONS.
10. ARCHITECTURAL FINISHED FLOOR ELEVATIONS ARE TO TOP OF CONCRETE SLAB OR TOPPING.
11. UNLESS NOTED OTHERWISE, ALL NON-RATED INTERIOR WALLS SHALL BE TYPE "S4", EXTENDING UP TO UNDERSIDE OF FLOOR OR ROOF ABOVE WITH MINERAL WOOL ACOUSTIC BATT INSULATION. SCRIBE GYPSUM BOARD TO IRREGULARITIES OF DECK ABOVE AND SEAL AROUND ALL PENETRATIONS WITH ACOUSTIC SEALANT.
12. PLAN DIMENSIONS ARE TO FINISHED SURFACE OF MASONRY WALLS, OR CENTERLINE OF STUDS AT METAL STUD INTERIOR WALLS, UNLESS NOTED OTHERWISE. REFER TO SHEET A602 CONSTRUCTION ASSEMBLY TYPES FOR MORE INFORMATION.
13. COORDINATE ALL LOCATIONS FOR IN-WALL BLOCKING AND/OR WALL BACKING FOR ITEMS SUCH AS TOILET ACCESSORIES, GRAB BARS, CASEWORK, WALL-MOUNTED FIXTURES, MARKER BOARDS, VISUAL DISPLAY BOARDS, AUDIO-VISUAL EQUIPMENT, HANDRAILS, ETC. INSTALL FIRE-RESISTIVE TREATED WOOD BLOCKING OR METAL BACKING PLATES IN METAL STUD PARTITIONS.
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ROSEMOUNT MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM: Approve Bray Hill Subdivsion Agreement	**AGENDA SECTION:** CONSENT AGENDA
PREPARED BY: Brian Erickson, City Engineer	**AGENDA NO.** 6.h.
ATTACHMENTS: Subdivision Agreement	**APPROVED BY:** LJM
RECOMMENDED ACTION: Motion to approve an updated Subdivision Agreement for Bray Hill Addition	

BACKGROUND

On May 3, 2022, City Council approved the Final Plat for Bray Hill Addition and on February 20, 2024, Council approved a time extension for recording of the plat with Dakota County. No additional changes were requested; however, the original applicant is in the process of selling this addition to a new developer. The original Subdivision Agreement was never recorded and has now been updated for the new developer.

The approval of this Subdivision Agreement will be the final step in allowing Distinctive Land Development, LLC to begin the planned improvements. This agreement follows the standard format and includes all the required conditions from the prior Council approval.

RECOMMENDATION

Staff recommends City Council approve the attached Subdivision Agreement and authorize the Mayor and City Clerk to enter into this agreement.

SUBDIVISION AGREEMENT
Bray Hill

AGREEMENT dated this _____ day of _____, 2024 by and between the CITY OF ROSEMOUNT, a Minnesota municipal corporation, (the **"City"**), and Distinctive Land Development, LLC, a Minnesota limited liability company, (the **"Developer"**).

1. **Request for Plat Approval.** The Developer has asked the City to approve the subdivision of land and a plat of land to be known as Bray Hill, which land is legally described on ATTACHMENT ONE, attached hereto and hereby made a part hereof (hereinafter referred to as the "subject property").

2. **Conditions of Plat Approval.** The City has approved the subdivision and the plat on the following conditions:
   a. Approval of a Planned Unit Development Master Development Plan with Rezoning.
   b. Execution of a Subdivision or Development Agreement to secure the public and private improvements.
   c. Incorporation of recommendations of the City Engineer concerning design and installation of public infrastructure and including grading, erosion control, streets and utilities.
   d. Incorporation of any easements necessary to accommodate drainage, ponding, trails, underpasses, conservation areas, streets and utilities.
   e. Compliance with the Dakota County Plat Commission requirements.
   f. Payment of all applicable fees including GIS, Park Dedication and other fees identified in the current fee schedule.
   g. Payment of $166,600 for Fee-In-Lieu of Park Dedication
   h. Provision of $44,220 for landscaping surety.

3. **Phased Development.** The City may refuse to approve final plats of subsequent additions of the plat if the Developer has breached this Agreement and the breach has not been remedied. Development of subsequent phases may not proceed until Subdivision Agreements for such phases are approved by the City.

4. **Effect of Subdivision Approval.** For two (2) years from the date of this Agreement, no amendments to the City's Comprehensive Plan, except an amendment placing the plat in the current urban service area, or official controls shall apply to or affect the use, development density, lot size, lot layout or dedications of the approved plat unless required by state or federal law or agreed to in writing by the City and the Developer. Thereafter, notwithstanding anything in this Agreement to the contrary, to the full extent permitted by state law, the City may require compliance with any amendments to the City's

Comprehensive Guide Plan, official controls, platting or dedication requirements enacted after the date of this Agreement.

5. **Development Plans.** The subject property shall be developed in accordance with the following plans, specifications and contract documents, original copies of which are on file with the City Engineer. The plans and contract documents may be prepared, subject to City approval, after entering this Agreement, but before commencement of any work on the Subject Property. If the plans vary from the written terms of this Agreement, the written terms shall control. The plans are:

Plan A - Plat

Plan B - Soil Erosion Control Plan and Schedule

Plan C - Drainage and Storm Water Runoff Plan

Plan D - Plans and Specifications for Public Improvements

Plan E - Grading Plan and House Pad Elevations

Plan F - Street Lights

Plan G - Landscape Improvements

All Improvements, including Developer Improvements and City-Installed Public Infrastructure Improvements (if any) that lie within the public right-of-way or easements and are improvements listed in Minnesota Statutes, Section 429.021 (hereinafter Public Improvements) will be designed by the Developer and must be approved by the City Engineer. The Developer will prepare plans and specifications for Public Improvements which shall be approved by the City Engineer. Such approvals shall not be unreasonably withheld and the City shall approve or provide Developer with necessary revision comments within 30 calendar days of Developer submittal of Public Improvement plans and specifications. The City will perform all construction inspection for the Public Improvements, at the Developer's expense. Construction inspection includes but is not limited to inspection, documentation, and monitoring.

6. **Installation by Developer.** The Developer shall install or cause to be installed and pay for the following, hereinafter referred to as the "Developer Improvements":

A. Surveying and staking

B. Surface improvements (paved streets, sidewalks, trails, etc.)

C. Water main improvements

D. Sanitary sewer improvements

E. Storm sewer improvements

F. Setting of lot and block monuments

G. Gas, electric, telephone, and cable lines

H. Site grading

I. Landscaping

J. Streetlights

K. Other items as necessary to complete the development as stipulated herein or in other agreements

7. **Time of Performance.** The Developer shall install all required improvements, excepting the wear course of pavement, enumerated in Paragraph 6 that will serve the subject property by December 31, 2024, subject to delays due to inclement weather, casualty, labor strikes, material shortages, or other force majeure not within the Developer's reasonable control. The pavement wear course shall be completed by December 31, 2025. The Developer may, however, request an extension of time from the City. If an extension is granted, it shall be conditioned upon updating the security posted by the Developer to reflect cost increases and the extended completion date.

8. **City-Installed Public Infrastructure**. The following improvements, hereinafter referred to as "City-Installed Public Infrastructure Improvements" (known as City Project 2022-08), shall be designed, inspected, surveyed and administered by the City, and installed in the Subject Property at Developer expense by a Contractor selected by the City through the public bidding process:

   A. None

9. **[This Section Intentionally Left Blank]**

10. **Security for Developer Improvements**. To guarantee compliance with the terms of this Agreement, payment of the costs of all Developer Improvements, and construction of all Developer Improvements (as noted in Paragraph 6), the Developer shall furnish the City with a cash deposit or irrevocable letter of credit from a local bank ("security") in the amount of Two Million, Twenty-Seven Thousand, One Hundred Ten Dollars ($2,027,110). The amount of the security was calculated as follows:

Letter of Credit for Developer Improvements (due with signed agreement)

No.	Item	Cost	110%	Calculation
1	Grading and Erosion Control	$ 61,247	$ 67,371	$3500/ac x 17.499 acres. Minimum $25,000
2	Pond Restoration and Erosion Control Removal	$ 25,000	$ 27,500	Minimum $25,000
3	Survey Monumentation	$ 24,500	$ 26,950	$500/lot x 49 lots
4	Landscaping	$ 40,200	$ 44,220	Per City Planner (134 trees x $300)
5	Street Lights	$ 32,000	$ 35,200	$4000/light x 8 lights
6	Surface Improvements	$ 508,965	$ 636,206	125%
7	Water Main Improvements	$ 284,680	$ 355,850	125%
8	Sanitary Sewer Improvements	$ 340,138	$ 425,172	125%
9	Storm Sewer Improvements	$ 326,913	$ 408,641	125%
	Total	**$ 1,643,642**	**$ 2,027,110**	

Refer to Exhibit A and Exhibit B for an explanation of each item.

The bank and form of the letter of credit or other security shall be subject to the approval of the City Administrator. The letter of credit shall be automatically renewable until the City releases the developer from responsibility. The letter of credit shall secure compliance with all terms of this Agreement and all obligations of the Developer under it. The City may draw down on the letter of credit without notice if the obligations of the Developer have not been completed as required by this Agreement. In the event of a default under this Subdivision Agreement by the Developer, the City shall furnish the Developer with written notice by certified mail of Developers default(s) under the terms of this Subdivision Agreement. If the Developer does not remove said default(s) within two (2) weeks of receiving notice, the City may draw on the letter of credit and take such steps as it deems necessary to remedy the default. With City approval, the letter of credit may be reduced from time to time as financial obligations are paid and Developer Improvements and other Developer obligations are completed to the City's requirements.

11. **Grading Plan/Site Grading**. Site grading shall be completed by the Developer at its cost and approved by the City Engineer. The completion of grading activities will need to be coordinated by the City in

conjunction with the installation of utilities. Developer shall furnish the City Engineer satisfactory proof of payment for the site grading work and shall submit a certificate of survey of the development to the City as the site grading is completed by phase, with street and lot grades. If the installation of utilities by the City is occurring simultaneously with the grading, the utility contractor shall have preference over the grading activities. No substantial grading activities can be completed over installed utilities unless otherwise protected. All improvements to the lots and the final grading shall comply with the grading plan as submitted and shall be the responsibility of the Developer.

12. **License**. The Developer hereby grants the City, its agents, employees, officers and contractors a license to enter the Subject Property to perform all work and inspections deemed appropriate by the City. Such license shall terminate as to all single-family residential lots within the subject property upon acceptance by the City of the public infrastructure improvements.

13. **Erosion Control**. Prior to site grading, and before any utility construction is commenced or building permits are issued, the erosion control plan, Plan B, shall be implemented, inspected and approved by the City. All areas disturbed by the excavation and backfilling operations shall be reseeded within 72 hours after the completion of the work in that area. Except as otherwise provided in the erosion control plan, seed shall be rye grass or other fast-growing seed suitable to the existing soil to provide a temporary ground cover as rapidly as possible. All seeded areas shall be mulched and disc-anchored as necessary for seed retention.

All basement and/or foundation excavation spoil piles shall be kept completely off City right-of-way and shall be completely surrounded with an approved erosion control silt fence. Approved erosion control fencing shall be installed around the perimeter of each lot or at City-approved locations at the time of building permit issuance and remain in place until the lot is seeded or sodded. A 20-foot opening will be allowed on each lot for construction deliveries.

The parties recognize that time is critical in controlling erosion. If development does not comply with the erosion control plan and schedule, or supplementary instructions received from the City, the City may take such action as it deems appropriate to control erosion. This right also applies to the required erosion control for basement and/or foundation excavation spoil piles. The City will attempt to notify the Developer in advance of any proposed action, but failure of the City to do so will not affect the Developer's or City's rights or obligations hereunder. If the Developer does not reimburse the City for any cost the City incurred for such work within thirty (30) days, the City may draw down the letter of credit to pay any costs. No development will be allowed, and no building permits will be issued unless the Subject Property is in full compliance with the erosion control requirements.

14. **Planting and Seeding**. Landscaping shall be in accordance with Landscape Plans approved by the City Planner.

15. **Clean up**. The Developer shall clean streets of dirt and debris that has resulted from construction work by the Developer, its agents or assignees. The City will inspect the site on a weekly basis and determine whether it is necessary to take additional measures to clean dirt and debris from the streets. Costs for City inspection of onsite erosion and sediment control shall be at the Developer's expense. After a 24-hour verbal or written notice to the Developer, the City will complete or contract to complete the clean-up at the Developer's expense in accordance with the procedures specified in Paragraph 13. The Developer shall inspect and, if necessary, clean all catch basins, sumps, and ponding areas of erosion/siltation and restore to the original condition at the end of home construction within this development. All silt fence and other erosion control should be removed following the establishment of turf. These items are to be secured through the letter of credit as is noted in Exhibit A.

16. **Ownership of Improvements.** Upon completion and City acceptance of the work and construction required by this Agreement, the Public Improvements lying within public rights-of-way and easements shall become City property without further notice or action unless the improvements are specifically identified herein as private infrastructure.

17. **Warranty.** The Developer warrants all work required to be performed by it against poor material and faulty workmanship for a period of two (2) years after its completion and acceptance by the City or such longer period as is specified in plans and specifications for Public Improvements.

All trees, grass and sod shall be warranted to be alive, of good quality and disease free for twenty-four (24) months after planting.

Vegetation surrounding ponds and/or wetlands shall be warranted to be alive, of good quality and weed free for three (3) years after planting.

For each pond/wetland in the development, the developer shall provide to the City Engineer an inspection report by July 31 each year which includes the following:

A. Date of inspection

B. Name of person responsible for inspection

C. Photos of the pond/wetland area confirming the vegetation is established as intended

D. Maintenance plan describing the required maintenance activities and tentative schedule.

18. **Responsibility for Costs.**

A. Except as otherwise specified herein, the Developer shall pay all costs incurred by it or the City in conjunction with the development of the Subject Property including, but not limited to, Soil and Water Conservation District charges, legal, planning, engineering and inspection expenses incurred in connection with approval and acceptance of the subdivision and the plat, the preparation of this Agreement and any amendments hereto, and all costs and expenses incurred by the City in monitoring and inspecting the development of the Subject Property.

B. The Developer shall reimburse the City for costs incurred in the preparation and enforcement of this Agreement, including engineering and attorney's fees. Upon request, the City shall provide invoices, in reasonable detail, as to any such fees. The estimated City fees of Two Hundred Forty-Six Thousand, Two Hundred Eighty Three Dollars ($246,283) shall be deposited with the City at the time this Agreement is signed, and represent the following amounts:

City Fees (due with signed agreement)

No.	Item	Cost	Calculation
	Estimated Construction Cost	$ 1,460,695	Developer's Estimate (Lines 6 - 9 above)
1	Engineering Fees	$ 146,070	10% of Estimated Construction Cost
2	Attorney Fees	$ 3,000	Estimate
3	5% City Administrative Fees	$ 73,035	5% of Estimated Construction Cost
4	Street Light Energy Cost	$ 5,760	8 lights x 24 months x $30/month
5	GIS Fees	$ 2,940	$60/unit X 49 units
6	Trail Fog Seal	$ 889	$0.35/SF x 2541 SF
7	Seal Coating	$ 14,589	$1.70/SY x 8582 SY
	Total	**$ 246,283**	

If the actual City fees exceed this estimate, the Developer shall pay the additional costs to the City within thirty (30) business days of the request. If actual City fees are lower than this estimate, any surplus funds will be returned to the developer when the project fund is reconciled and closed.

C. The Developer shall pay in full all bills submitted to it by the City for obligations incurred under this Agreement within thirty (30) business days after receipt. If the bills are not paid on time, the

City may halt development work and construction including, but not limited to, the issuance of building permits for lots that the Developer may or may not have sold, until the bills are paid in full. Bills not paid within thirty (30) days shall accrue interest at the rate of six percent (6%) per year.

D. The Developer shall pay all energy costs for street lights installed within the Subject Property for 24-months at a cost of $30/month/light. After that, the City will assume the energy costs.

E. The Developer will pay the cost of sealcoating the public streets within the development at a cost of $1.70/SY. The sealcoating will be completed within three (3) years following wear course placement.

F. The Developer will pay the cost of fog sealing the public trails within the development at a cost of $0.35/SF. The fog sealing will be completed within three (3) years following trail installation.

19. **Indemnification.** The Developer shall hold the City and its officers, agents and employees harmless from claims made by itself and third parties for damages sustained or costs incurred resulting from plat or subdivision approval and development of the Subject Property, except for any costs or expenses arising from the intentional acts or gross negligence of the City, it's agents, employees or contractors. The Developer shall indemnify the City and its officers, agents and employees for all costs, damages or expenses that the City may pay or incur in consequence of such claims, including attorney's fees.

Notwithstanding any other provision in this Agreement to the contrary, Developer agrees that it will not be able to submit a claim for extra work or for monetary damages (for delay or otherwise), or request an extension of time to complete the work, for any reason arising out of or relating to: (1) the COVID-19 pandemic; or (2) any national, state, or local declaration, resolution, or order relating to the COVID-19 pandemic, unless such declaration, resolution or order prohibits work on the project. The contract completion date shall be extended for the period of the required stoppage in work but without any claim for delay damages.

20. **Insurance**. The Developer agrees to take out and maintain or cause to be taken out and maintained until six months after the City has accepted the Subdivision Improvements, public liability and property damage insurance covering personal injury, including death, and claims for property damage which may arise out of Developer's work or the work of its contractors or subcontractors. Liability limits shall not be less than $500,000 when the claim is one for death by wrongful act or omission or for any other claim and $2,000,000 for any number of claims arising out of a single occurrence, and twice said limits when the claim arises out of the release or threatened release of a hazardous substance. The City shall be named as an additional insured on the policy. The certificate of insurance shall provide that the City must be given the same advance written notice of the cancellation of the insurance as is afforded to the Developer.

21. **Park and Utility Fees.**

The Developer agrees to pay fees, charges and assessments set forth in this Section prior to, or at the time of execution of this agreement by the City:

A. Park dedication fees in the amount of $166,600

B. Storm Sewer Trunk Area Charges in the amount of $108,529

C. Sanitary Sewer Trunk Area Charges in the amount of $18,811

D. Watermain Trunk Area Charges in the amount of $67,478

Or other amounts for such fees as in effect at the time of plat approval.

22. Service Charges.

The Developer understands that builders will be required to pay for the Subject Property fees, charges and assessments in effect at the time of issuance of building permits. The rates for each of these items will be set according to the current rate structure at the time the building permit is received. The fees, charges, and assessments in effect as of the date of this agreement are:

A. Metropolitan Council Environmental Services Availability Charges per SAC unit (current rate is $2,485).

B. Storm Sewer Connection Charges per single family unit and per multiple family unit (single family currently at $770; multi-family currently at $290 per housing unit).

C. Sanitary Sewer Availability Charges per SAC unit (currently at $1,200/SAC unit).

D. Water Availability Charges per SAC unit (currently at $2,425/SAC unit for single family residential and multi-family residential).

23. Building Permits. No occupancy permits shall be issued until:

A. The site grading is completed and approved by the City.

B. All public utilities are tested, approved by the City Engineer, and in service.

C. All curbing is installed and backfilled.

D. The first lift of bituminous is in place and approved by the City.

E. All building permit fees are paid in full.

F. No early building permits will be issued without prior authorization from the City Building Official.

The Developer, in executing this Agreement, assumes all liability and costs for damage or delays incurred by the City in the construction of Public Improvements caused by the Developer, its employees, contractors, subcontractors, material men or agents. No occupancy permits shall be issued until the public streets and utilities referred to in paragraph 6 and 8 are in and approved by the City (excluding the final wear course of bituminous), unless otherwise authorized in writing by the City Engineer.

24. Record Drawings. At project completion, Developer shall submit record drawings of all public and private infrastructure improvements in accordance with the City's Engineering Guidelines. No securities will be fully released until all record drawings have been submitted and accepted by the City Engineer.

25. Developer's Default. In the event of default by the Developer as to any of the work to be performed by it hereunder, the City may, at its option, perform the work and the Developer shall promptly reimburse the City for any expense incurred by the City, provided the Developer is first given notice of the work in default, not less than 48 hours in advance. This Agreement is a license for the City to act, and it shall not be necessary for the City to seek a court order for permission to enter the land. When the City does any such work, the City may, in addition to its other remedies, draw on the letter of credit or other security described in section 10, or levy the cost in whole or in part as a special assessment against the Subject Property. Developer waives its rights to notice of hearing and hearing on such assessments and its right to appeal such assessments pursuant to Minnesota Statutes, Section 429.081.

26. Miscellaneous.

A. The Developer represents to the City that the development of the Subject Property, the subdivision and the plat comply with all city, county, metropolitan, state and federal laws and regulations including, but not limited to: subdivision ordinances, zoning ordinances and environmental regulations. If the City determines that the subdivision, or the plat, or the development of the Subject Property does not comply, the City may, at its option, refuse to allow construction or development work on the Subject Property until the Developer does comply. Upon the City's demand, the Developer shall cease work until there is compliance.

B. Third parties shall have no recourse against the City under this Agreement.

C. Breach of the terms of this Agreement by the Developer shall be grounds for denial of building permits, including lots sold to third parties.

D. If any portion, section, subsection, sentence, clause, paragraph or phase of this Agreement is for any reason held invalid, such decision shall not affect the validity of the remaining portion of this Agreement.

E. If building permits are issued prior to the completion and acceptance of Public Improvements, the Developer assumes all liability and costs resulting in delays in completion of Public Improvements and damage to Public Improvements caused by the City, the Developer, its contractors, subcontractors, material men, employees, agents or third parties.

F. The action or inaction of the City shall not constitute a waiver or amendment to the provisions of this Agreement. To be binding, amendments or waivers shall be in writing, signed by the parties and approved by written resolution of the City Council. The City's failure to promptly take legal action to enforce this Agreement shall not be a waiver or release.

G. This Agreement shall run with the land and may be recorded against the title to the subject property. The Developer shall take such steps, including execution of amendments to this Agreement, as are necessary to effect the recording hereof. After the Developer has completed the work required of it under this Agreement, at the Developer's request, the City will execute and deliver to the Developer a release.

H. Each right, power or remedy herein conferred upon the City is cumulative and in addition to every other right, power or remedy, express or implied, now or hereafter arising, available to the City, at law or in equity, or under any other agreement, and each and every right, power and remedy herein set forth or otherwise so existing may be exercised from time to time as often and in such order as may be deemed expedient by the City and shall not be a waiver of the right to exercise at any time thereafter any other right, power or remedy.

I. The Developer may not assign this Agreement without the written permission of the City Council.

J. The Developer acknowledges that the City may issue additional requirements outside of the 2024 General Specifications and Standard Detail Plates for Street and Utility Construction or the 2008 Engineering Guidelines as the City is in the process of updating these documents. The review process may require additional time and expense due to this process, which shall be the Developer's responsibility. The Developer shall not be billed for the time required for the City to update and approve their revisions to the 2024 General Specifications and Standard Details Plates for Street and Utility Construction or the 2008 Engineering Guidelines.

27. **Notices.** Required notices to the Developer shall be in writing, and shall be either hand delivered to the Developer, its employees or agents, or mailed to the Developer by registered mail at the following address:

Matt Odenthal
Distinctive Land Development, LLC
18466 Kenyon, Ave, Suite 100
Lakeville, Minnesota 55044

Notices to the City shall be in writing and shall be either hand delivered to the City Administrator, or mailed to the City by registered mail in care of the City Administrator at the following address:

City Administrator
Rosemount City Hall
2875 145th Street West
Rosemount, Minnesota 55068

[Remainder of page intentionally left blank.]

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

CITY OF ROSEMOUNT

BY: _____
Jeffery D. Weisensel, Mayor

BY: _____
Erin Fasbender, City Clerk

STATE OF MINNESOTA)
) SS
COUNTY OF DAKOTA)

The foregoing instrument was acknowledged before me this _____ day of _____, 2024, by Jeffery D. Weisensel, Mayor, and Erin Fasbender, City Clerk, of the City of Rosemount, a Minnesota municipal corporation, on behalf of the corporation and pursuant to the authority granted by its City Council.

_____
Notary Public

Distinctive Land Development, LLC

BY: _____
Matt Odenthal, its Chief Manager

STATE OF MINNESOTA)
) SS
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 2024 by Matt Odenthal, its Chief Manager, of Distinctive Land Development, LLC, a Minnesota limited liability company, on behalf of said company.

_____
Notary Public

Drafted By:
City of Rosemount
2875 145th Street West
Rosemount, MN 55068

EXHIBIT A

The following clarifies the various portions of the letter of credit for Developer Improvements that are outlined in the Subdivision Agreement:

Grading & Erosion Control – A restoration and erosion control bond to ensure re-vegetation and erosion control ($3,500/acre). Note: The minimum surety amount is set at $25,000.

Pond Restoration/Erosion Control Removal – A security to allow for cleaning of sedimentation ponds prior to City acceptance, and removal of any installed erosion control measures such as silt fence and wood fiber blanket following development of 75 percent of adjoining lots (estimated lump sum).

Survey Monumentation – An amount equal to 110% of the cost to monument all lots within the development.

Landscaping – An amount equal to 110% of the cost to complete the minimum required landscaping. If additional landscaping is planned, a surety for that cost is not required.

Street Lighting – An amount equal to 110% of the cost to complete the minimum required lighting. If additional lighting is planned, a surety for that cost is not required ($4,000 per light has been used to calculate this cost).

Bray Hill
EXHIBIT B (Page 1 of 2)

Letter of Credit for Developer Improvements (due with signed agreement)

No.	Item	Cost	110%	Calculation
1	Grading and Erosion Control	$ 61,247	$ 67,371	$3500/ac x 17.499 acres. Minimum $25,000
2	Pond Restoration and Erosion Control Removal	$ 25,000	$ 27,500	Minimum $25,000
3	Survey Monumentation	$ 24,500	$ 26,950	$500/lot x 49 lots
4	Landscaping	$ 40,200	$ 44,220	Per City Planner (134 trees x $300)
5	Street Lights	$ 32,000	$ 35,200	$4000/light x 8 lights
6	Surface Improvements	$ 508,965	$ 636,206	125%
7	Water Main Improvements	$ 284,680	$ 355,850	125%
8	Sanitary Sewer Improvements	$ 340,138	$ 425,172	125%
9	Storm Sewer Improvements	$ 326,913	$ 408,641	125%
	Total	**$ 1,643,642**	**$ 2,027,110**	

City Fees (due with signed agreement)

No.	Item	Cost	Calculation
	Estimated Construction Cost	$ 1,460,695	Developer's Estimate (Lines 6 - 9 above)
1	Engineering Fees	$ 146,070	10% of Estimated Construction Cost
2	Attorney Fees	$ 3,000	Estimate
3	5% City Administrative Fees	$ 73,035	5% of Estimated Construction Cost
4	Street Light Energy Cost	$ 5,760	8 lights x 24 months x $30/month
5	GIS Fees	$ 2,940	$60/unit X 49 units
6	Trail Fog Seal	$ 889	$0.35/SF x 2541 SF
7	Seal Coating	$ 14,589	$1.70/SY x 8582 SY
	Total	**$ 246,283**	

Development Fees (due before signed plat is released)

No.	Item	Cost	Calculation
1	Storm Sewer Trunk Charge	$ 108,529	$6865/net developable acre x 15.809 acres
2	Sanitary Sewer Trunk Charge	$ 18,811	$1075/acre x 17.499 acres
3	Water Trunk Charge	$ 67,478	$6500/acre x 17.499 acres = $113,774 minus credit for Outlot D ($46,296) = $67,478
5	Park Dedication	$ 166,600	
	Total	**$ 361,418**	

Totals		
Block	**Lots**	**Units**
1	11	11
2	18	18
3	7	7
4	13	13
Total	**49**	**49**

Total Plat Area =	17.499	acres
Total Park Area =	0.000	acres
Future Plat Area =	0.000	acres
Developable Area * =	17.499	acres
Ponding to HWL =	1.690	acres
Net Developable Area =	15.809	acres

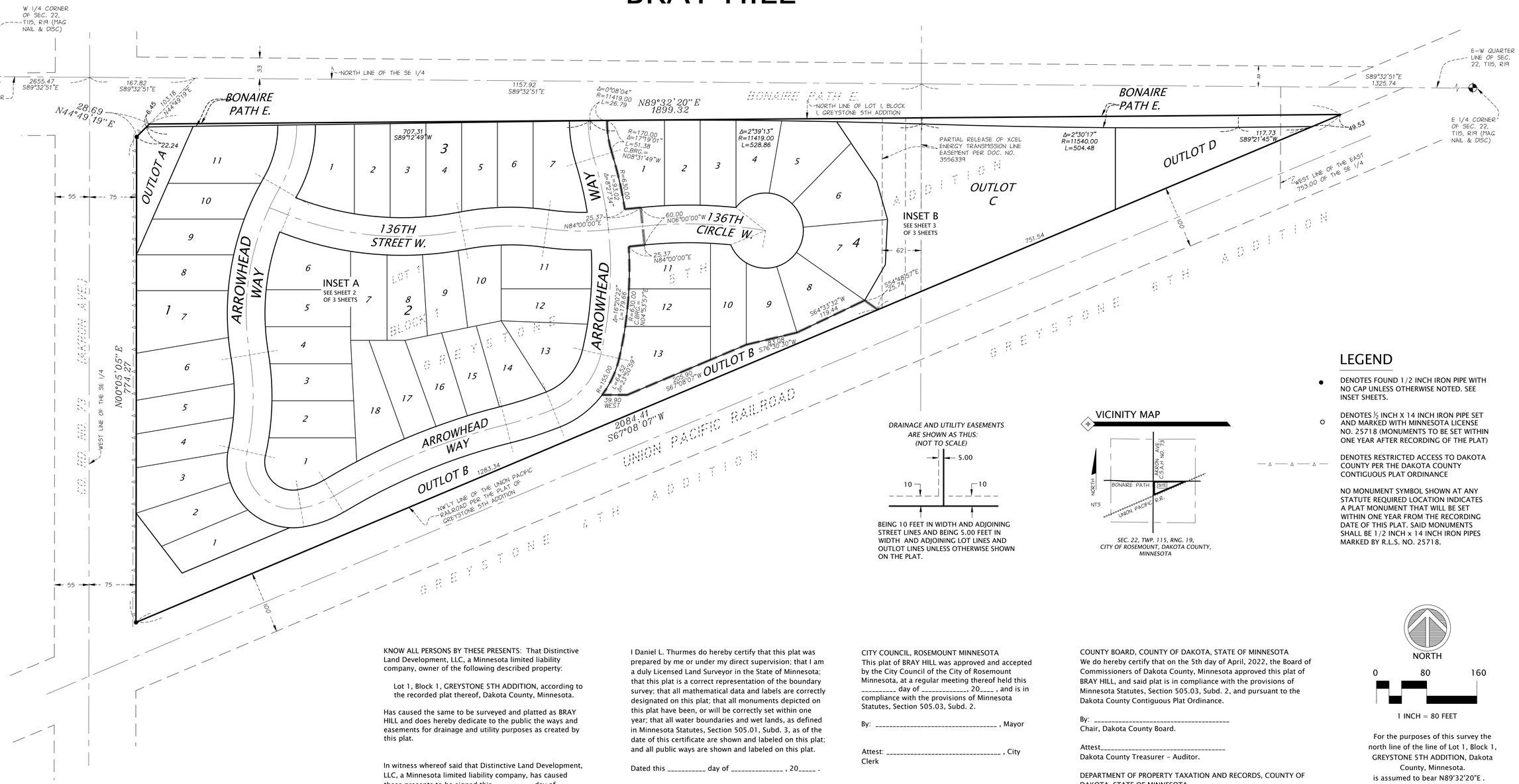
* Excludes future plat and park areas (all outlots)

Block	Lot	Units	SQ FT	Acres
1	1	1	8,408	0.193
1	2	1	8,669	0.199
1	3	1	8,931	0.205
1	4	1	8,127	0.187
1	5	1	8,390	0.193
1	6	1	11,380	0.261
1	7	1	12,729	0.292
1	8	1	8,556	0.196
1	9	1	8,560	0.197
1	10	1	8,343	0.192
1	11	1	13,396	0.308
2	1	1	9,746	0.224
2	2	1	7,875	0.181
2	3	1	7,649	0.176
2	4	1	7,862	0.180
2	5	1	8,026	0.184
2	6	1	9,605	0.221
2	7	1	8,032	0.184
2	8	1	8,105	0.186
2	9	1	7,698	0.177
2	10	1	7,577	0.174
2	11	1	9,496	0.218
2	12	1	7,576	0.174
2	13	1	9,192	0.211
2	14	1	7,883	0.181
2	15	1	7,444	0.171
2	16	1	7,930	0.182
2	17	1	8,431	0.194
2	18	1	9,784	0.225
3	1	1	9,796	0.225
3	2	1	8,377	0.192
3	3	1	8,555	0.196
3	4	1	8,338	0.191
3	5	1	7,894	0.181
3	6	1	7,779	0.179
3	7	1	9,978	0.229
4	1	1	10,908	0.250
4	2	1	7,724	0.177
4	3	1	7,802	0.179
4	4	1	7,598	0.174
4	5	1	10,680	0.245
4	6	1	11,782	0.270
4	7	1	12,028	0.276
4	8	1	8,858	0.203
4	9	1	7,554	0.173
4	10	1	9,378	0.215
4	11	1	9,331	0.214
4	12	1	7,949	0.182
4	13	1	12,539	0.288
Outlot A			9,056	0.208
Outlot B			47,940	1.101
Outlot C			82,998	1.905
Outlot D			20,337	0.467
ROW			161,678	3.712
Total Boundary			762,257	17.499

ATTACHMENT ONE

Bray Hill
Final Plat

BRAY HILL



LEGEND

- ● DENOTES FOUND 1/2 INCH IRON PIPE WITH NO CAP UNLESS OTHERWISE NOTED. SEE INSET SHEETS.
- ○ DENOTES ½ INCH X 14 INCH IRON PIPE SET AND MARKED WITH MINNESOTA LICENSE NO. 25718 (MONUMENTS TO BE SET WITHIN ONE YEAR AFTER RECORDING OF THE PLAT)
- — Δ — Δ — Δ — DENOTES RESTRICTED ACCESS TO DAKOTA COUNTY PER THE DAKOTA COUNTY CONTIGUOUS PLAT ORDINANCE

NO MONUMENT SYMBOL SHOWN AT ANY STATUTE REQUIRED LOCATION INDICATES A PLAT MONUMENT THAT WILL BE SET WITHIN ONE YEAR FROM THE RECORDING DATE OF THIS PLAT. SAID MONUMENTS SHALL BE 1/2 INCH x 14 INCH IRON PIPES MARKED BY R.L.S. NO. 25718.

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN AS THUS: (NOT TO SCALE)

BEING 10 FEET IN WIDTH AND ADJOINING STREET LINES AND BEING 5.00 FEET IN WIDTH AND ADJOINING LOT LINES AND OUTLOT LINES UNLESS OTHERWISE SHOWN ON THE PLAT.

VICINITY MAP

SEC. 22, TWP. 115, RNG. 19, CITY OF ROSEMOUNT, DAKOTA COUNTY, MINNESOTA

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

Lot 1, Block 1, GREYSTONE 5TH ADDITION, according to the recorded plat thereof, Dakota County, Minnesota.

Has caused the same to be surveyed and platted as BRAY HILL and does hereby dedicate to the public the ways and easements for drainage and utility purposes as created by this plat.

In witness whereof said that Distinctive Land Development, LLC, a Minnesota limited liability company, has caused these presents to be signed this _____ day of _____ , 20_____.
SIGNED:

By _____ ,
Matt J. Odenthal, chief manager.

STATE OF _____
COUNTY OF _____

This instrument was acknowledged before me this _____ day of _____ , 20_____ , by Matt J. Odenthal, chief manager, of Distinctive Land Development, LLC, a Minnesota limited liability company on behalf of the limited liability company.

_____

Notary Public_____County.
My Commission Expires_____

I Daniel L. Thurmes do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on this plat have been, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes, Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____ , 20____ .

_____
Daniel L. Thurmes, Licensed Land Surveyor
Minnesota License No. 25718

STATE OF MINNESOTA
COUNTY OF WASHINGTON
This instrument was acknowledged before me this _____ day of _____ , 20_____, by Daniel L. Thurmes, a Licensed Land Surveyor.

_____

Notary Public_____County.
My Commission Expires_____

CITY COUNCIL, ROSEMOUNT MINNESOTA
This plat of BRAY HILL was approved and accepted by the City Council of the City of Rosemount Minnesota, at a regular meeting thereof held this _____ day of _____, 20____ , and is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

By: _____ , Mayor

Attest: _____ , City Clerk

COUNTY SURVEYOR, COUNTY OF DAKOTA, STATE OF MINNESOTA
I hereby certify that in accordance with Minnesota Statutes, Section 505.021, Subd 11, this plat has been reviewed and approved this _____ day of _____ , 20_____.

By: _____
Todd B. Tollefson, Dakota County Surveyor

COUNTY BOARD, COUNTY OF DAKOTA, STATE OF MINNESOTA
We do hereby certify that on the 5th day of April, 2022, the Board of Commissioners of Dakota County, Minnesota approved this plat of BRAY HILL, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2, and pursuant to the Dakota County Contiguous Plat Ordinance.

By: _____
Chair, Dakota County Board.

Attest_____
Dakota County Treasurer – Auditor.

DEPARTMENT OF PROPERTY TAXATION AND RECORDS, COUNTY OF DAKOTA, STATE OF MINNESOTA
Pursuant to Minnesota Statutes, Section 505.021, Subd. 9, taxes payable in the year 20____ on the land hereinbefore described have been paid. Also pursuant to Minnesota Statutes, Section 272.12, there are no delinquent taxes and transfer entered this _____ day of _____ , 20_____

By: _____
Amy A. Koethe, Director
Department of Property Taxation and Records

COUNTY RECORDER, COUNTY OF DAKOTA, STATE OF MINNESOTA
I hereby certify that this plat BRAY HILL was filed in the office of the County Recorder for public record on this _____ day of _____ , 20_____ , at _____ o'clock _____ .M. and was duly filed in Book _____ of Plats, Page _____ as Document No. _____ .
By: _____
Amy A. Koethe, County Recorder

NORTH

0 80 160

1 INCH = 80 FEET

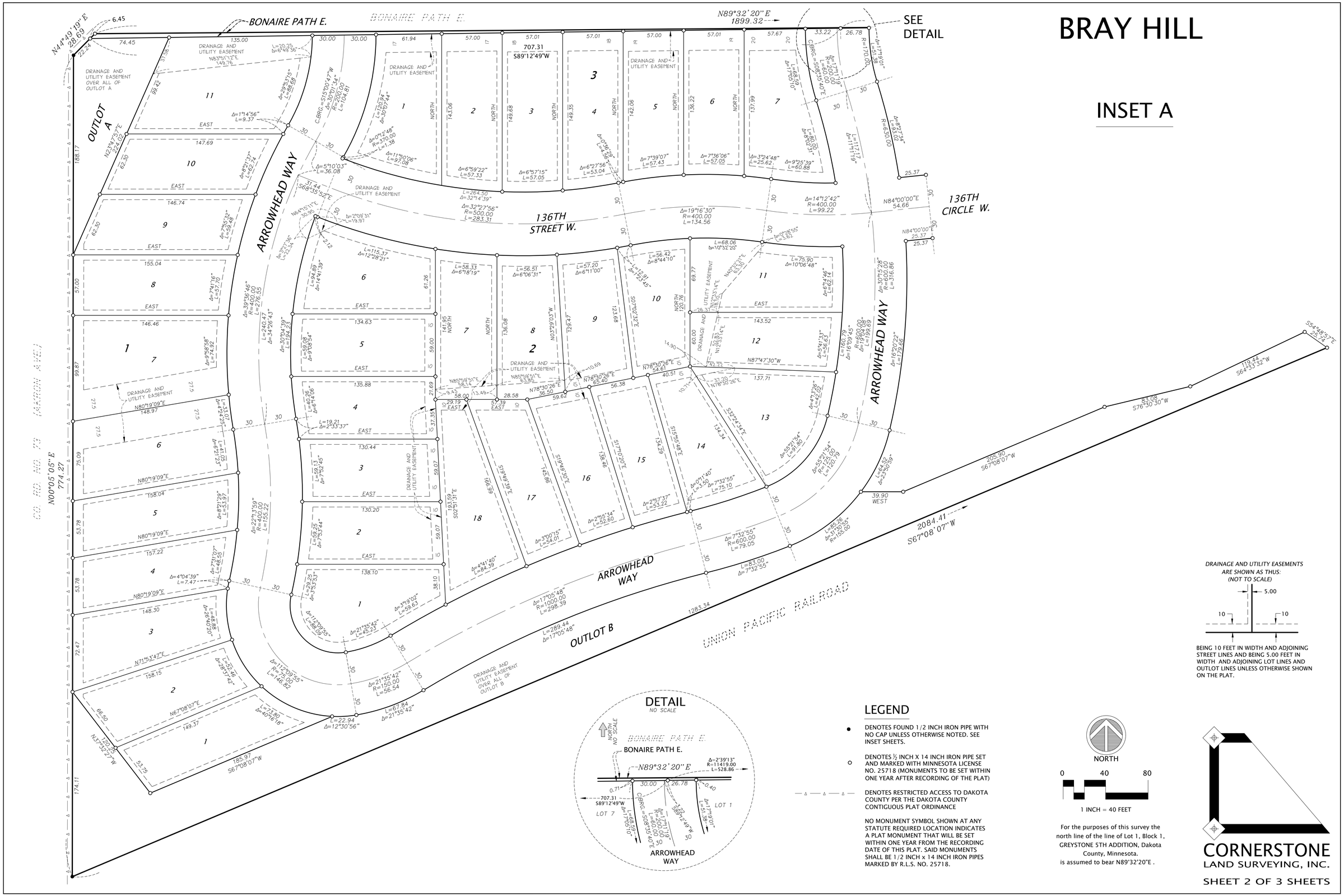
For the purposes of this survey the north line of the line of Lot 1, Block 1, GREYSTONE 5TH ADDITION, Dakota County, Minnesota. is assumed to bear N89°32'20"E .

CORNERSTONE
LAND SURVEYING, INC.

SHEET 1 OF 3 SHEETS

BRAY HILL

INSET A



DRAINAGE AND UTILITY EASEMENTS ARE SHOWN AS THUS: (NOT TO SCALE)

5.00

10 10

BEING 10 FEET IN WIDTH AND ADJOINING STREET LINES AND BEING 5.00 FEET IN WIDTH AND ADJOINING LOT LINES AND OUTLOT LINES UNLESS OTHERWISE SHOWN ON THE PLAT.

LEGEND

- ● DENOTES FOUND 1/2 INCH IRON PIPE WITH NO CAP UNLESS OTHERWISE NOTED. SEE INSET SHEETS.
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- — Δ — Δ — Δ — DENOTES RESTRICTED ACCESS TO DAKOTA COUNTY PER THE DAKOTA COUNTY CONTIGUOUS PLAT ORDINANCE

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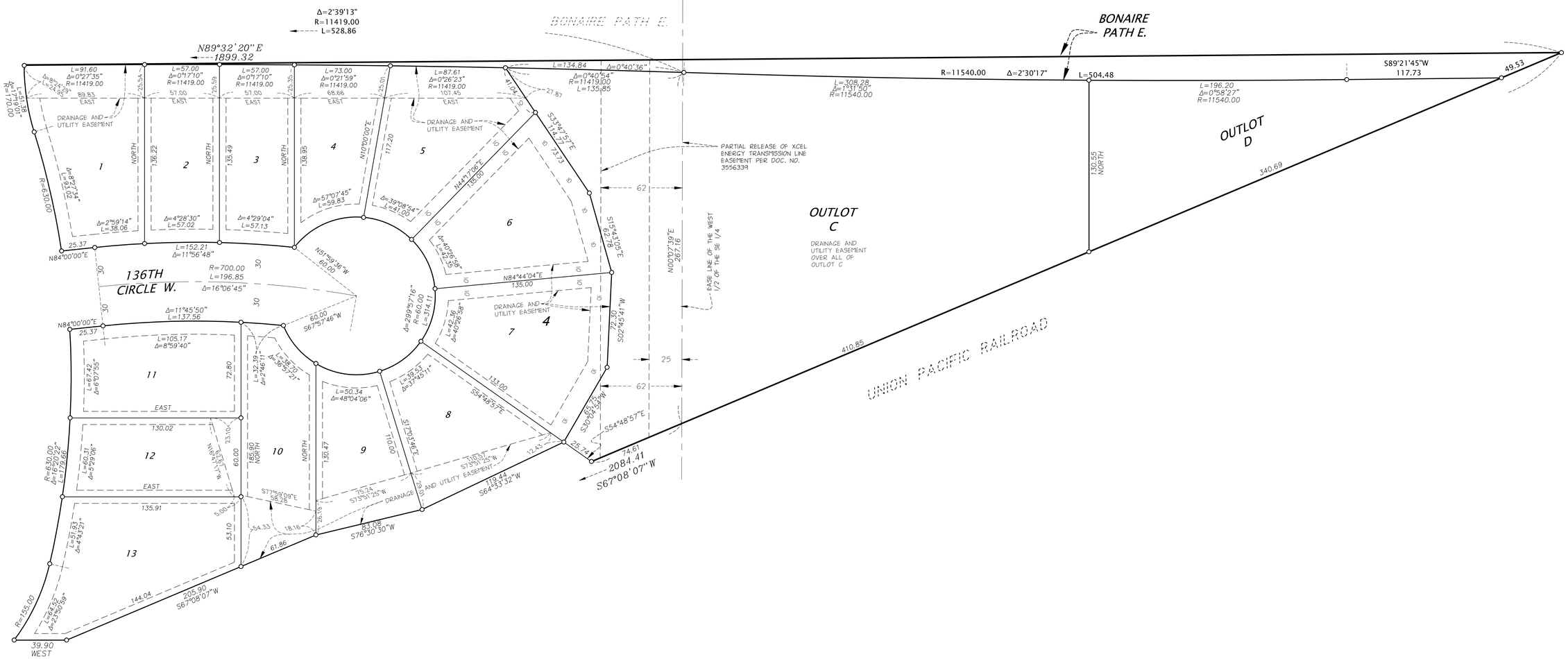
For the purposes of this survey the north line of the line of Lot 1, Block 1, GREYSTONE 5TH ADDITION, Dakota County, Minnesota. is assumed to bear N89°32'20"E .

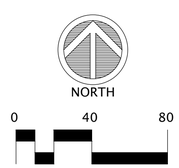
CORNERSTONE
LAND SURVEYING, INC.

SHEET 2 OF 3 SHEETS

BRAY HILL

INSET B

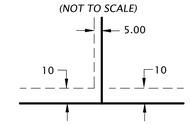




1 INCH = 40 FEET

For the purposes of this survey the north line of the line of Lot 1, Block 1, GREYSTONE 5TH ADDITION, Dakota County, Minnesota. is assumed to bear N89°32'20"E .

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN AS THUS: (NOT TO SCALE)



BEING 10 FEET IN WIDTH AND ADJOINING STREET LINES AND BEING 5.00 FEET IN WIDTH AND ADJOINING LOT LINES AND OUTLOT LINES UNLESS OTHERWISE SHOWN ON THE PLAT.

LEGEND

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CORNERSTONE
LAND SURVEYING, INC.

SHEET 3 OF 3 SHEETS

ROSEMOUNT MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM:	Request for a Minor Amendment to the Joint Public Works and Police Campus Planned Unit Development Agreement for a deviation from City Code Section 11-8-6 F.2.a	**AGENDA SECTION:** CONSENT AGENDA
PREPARED BY:	Julia Hogan, Planner	**AGENDA NO.** 6.i.
ATTACHMENTS:	Resolution, Minor Amendment, Site Location, Freestanding Sign Site Plan, Monument Sign Location Map	**APPROVED BY:** LJM

RECOMMENDED ACTION:

1. **Motion** to adopt a resolution approving a Minor Amendment to the City of Rosemount's Joint Public Works and Police Campus Planned Unit Development Agreement granting a deviation from the maximum height standard for freestanding signs in City Code Section 11-8-6 F.2.a.

2. **Motion** to authorize the Mayor and City Clerk execute a Minor Amendment to the City of Rosemount's Joint Public Works and Police Campus Planned Unit Development Agreement.

BACKGROUND

The City Council is being asked to consider a request for approval of a minor amendment to the City of Rosemount's Joint Public Works and Police Campus Planned Unit Development (PUD) Agreement to revise the maximum height requirement for freestanding signage. The City of Rosemount's Joint Public Works and Police Campus was approved by the City Council in February 2023, which included approvals for a planned unit development master development plan, site plan and building design review. Four deviations from the city code were also included in the approvals, which included a deviation to the permitted exterior materials, fence height, parking minimums, and number of freestanding signage at the same right-of-way frontage. A minor amendment was also requested after the initial approval to allow for a further reduction in parking on the site, which was approved by City Council in July 2023.

The applicant is now requesting a minor amendment to the City of Rosemount's Joint Public Works and Police Campus PUD Agreement for a deviation from City Code Section 11-8-6 F.2.a to allow for the maximum allowed height for freestanding signage on site to be 8-feet. The city codes sign chapter has regulations for each zoning district. The PI - Public Institutional zoning district states that each freestanding monument sign is limited to fifty (50) square feet and six feet (6') in height. The freestanding monument sign submitted by the applicant shows the sign being 88-inches or 7.3 feet in height, which is over the maximum allowed 6-foot height requirement. Districts such as the C4 – General Commercial and C3 – Highway Commercial allow for freestanding signs to be up to 100 square

feet in size and up to 20-feet in height, while districts like BP – Business Park and the industrial districts allow for freestanding signage to be 100 square feet in size and up to 10-feet in height. The sign area square footage meets the 50 square feet requirement for the PI zoning district and meets the minimum setback requirement of 10-feet. Staff finds the request to be in line with the scale of the development and appropriate for the site.

RECOMMENDATION

Staff is recommending that the City Council approve the request for a minor amendment to the City of Rosemount's Joint Public Works and Police Campus Planned Unit Development Agreement granting a deviation from the maximum height requirement for freestanding signs in the City Code Section 11-8-6 F.2.a.

CITY OF ROSEMOUNT
DAKOTA COUNTY, MINNESOTA

RESOLUTION 2024-XX

A RESOLUTION APPROVING A MINOR AMENDMENT TO THE CITY OF ROSEMOUNT'S JOINT PUBLIC WORKS AND POLICE CAMPUS PLANNED UNIT DEVELOPMENT AGREEMENT GRANTING A DEVIATION FROM THE MAXIMUM HEIGHT REQUIREMENT FOR FREESTANDING SIGNS

WHEREAS, the Community Development Department of the City of Rosemount received a request to amend the City of Rosemount's Joint Public Works and Police Campus Planned Unit Development Agreement to grant a deviation to City Code Section 11-8-6 F.2.a; and

WHEREAS, staff has prepared and recommends a Minor PUD Amendment to revise the maximum height standard for freestanding signage on site; and

WHEREAS, on June 4th, 2024, the City Council of the City of Rosemount reviewed the application and staff recommendation.

NOW, THEREFORE, BE IT RESOLVED, the City Council of the City of Rosemount hereby approves the Minor Amendment to the City of Rosemount's Joint Public Works and Police Campus Planned Unit Development Agreement to revise the maximum height standard for freestanding signage, subject to the following conditions:

1. The following deviation from the City Code:
    a. A deviation from Section 11-8-6 F.2.a: to increase the maximum height standard for freestanding signage from six (6) feet to eight (8) feet.
2. Execution of the Minor Amendment to the City of Rosemount's Joint Public Works and Police Campus Planned Unit Development Agreement.

ADOPTED this 4th day of June, 2024, by the City Council of the City of Rosemount.

_____
Jeffery D. Weisensel, Mayor

ATTEST:

_____
Erin Fasbender, City Clerk

A MINOR AMENDMENT TO THE CITY OF ROSEMOUNT'S JOINT PUBLIC WORKS AND POLICE CAMPUS PLANNED UNIT DEVELOPMENT (PUD) AGREEMENT GRANTING A DEVIATION FROM THE MAXIMUM HEIGHT STANDARD FOR FREESTANDING SIGNAGE

THIS DECLARATION made this ____ day of _____, 20___ by and between the **City of Rosemount** (hereinafter referred to as the "Declarant"), and the **CITY OF ROSEMOUNT**, **a Minnesota municipal corporation** (hereinafter referred to as the "City");

WHEREAS, Declarant is the owner of the real property described on Attachment One attached hereto and hereby made a part hereof (hereinafter referred to as the "Subject Property"); and

WHEREAS, the Subject Property is subject to a Planned Unit Development Agreement, "City of Rosemount's Joint Public Works and Police Campus Master Development Plan" dated February 21, 2023 (hereinafter referred to as the "Planned Unit Development Agreement"); and

WHEREAS, Declarant wishes to further amend the Planned Unit Development Agreement as hereinafter provided, which amendment has been approved and consented to by the City of Rosemount, acting through its City Council, as evidenced by the duly authorized signatures of its officers affixed hereto.

NOW, THEREFORE, the Declarant declares that the Subject Property is, and shall be, held, transferred, sold, conveyed and occupied subject to the covenants, conditions, and restrictions, hereinafter set forth.

1. The use and development of the Subject Property shall conform to the Planned Unit Development Agreement except as modified herein.

    a. The Planned Unit Development Agreement shall be amended to allow the following deviation from Section 11-8-6 F.2.a: to increase the maximum height standard for freestanding signage from six (6) feet to eight (8) feet.

2. Except as modified by paragraph 1 of this Amendment, the Planned Unit Development Agreement shall remain in full force and effect.

3. The obligations and restrictions of this Amendment shall run with the land of the Subject Property and shall be enforceable against the Declarant, its successors and assigns, by the City of Rosemount acting through its City Council. This Amendment may be amended from time to time by a written amendment executed by the City and the owner or owners of the lot or lots to be affected by said amendment.

IN WITNESS WHEREOF, the undersigned as duly authorized agents, officers or representatives of Declarant have hereunto set their hands and seals as of the day and year first above written.

DECLARANT

City of Rosemount

By_____
Its_____

By_____
Its_____

STATE OF MINNESOTA)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ___ day of _____, 2024 by _____ and _____, the _____ and _____, for and on behalf of the City of Rosemount, a _____, by and on behalf of said _____.

_____
Notary Public

This Amendment is approved and consented to by the City Council of the City of Rosemount.

CITY OF ROSEMOUNT

By:_____
Jeffery D. Weisensel, Mayor

And by:_____
Erin Fasbender, City Clerk

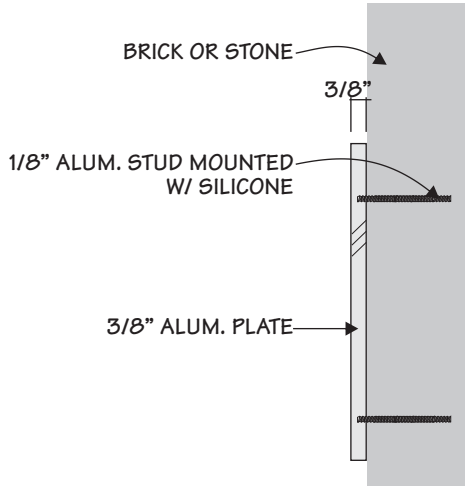
STATE OF MINNESOTA)
) ss.
COUNTY OF DAKOTA)

The foregoing instrument was acknowledged before me this ___ day of _____, 2024 by Jeffery D. Weisensel and Erin Fasbender, the Mayor and City Clerk, respectively, for and on behalf of the City of Rosemount, a Minnesota corporation, by and on behalf of said corporation.

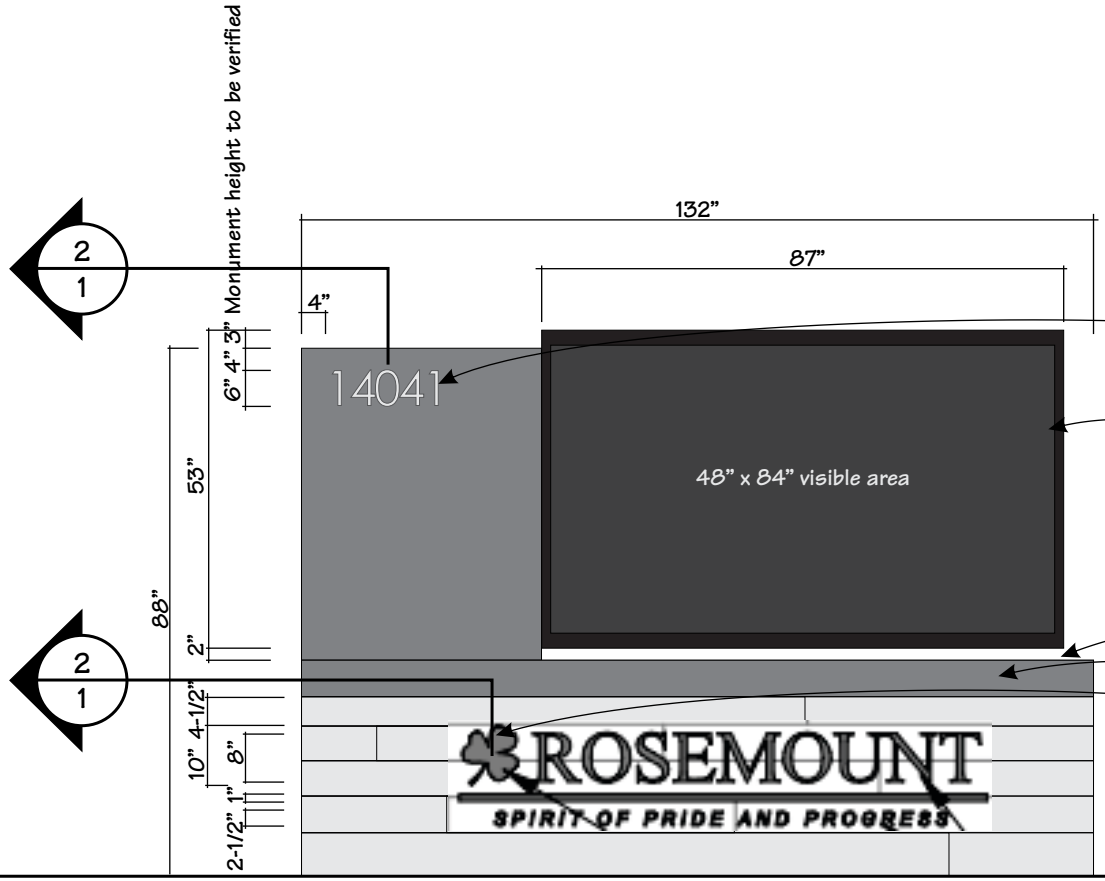
_____
Notary Public

THIS INSTRUMENT WAS DRAFTED BY:
City of Rosemount
2875 145th Street West
Rosemount, MN 55068
651-423-4411

CONNEMARA TRL
CONNEMARA TRL
CONNEMAR
140TH ST W
BIRCH ST W
BELMONT TRL
BELFAST ST W
AVA
Erickson Pond
BRAZIL AVE
BISCAYNE AVE
BANYAN LN
BLOOMFIELD PATH
BAYBERRY TRL
145TH ST W
145TH ST W



2/1 SECTION: FLAT CUT LETTER
SCALE: 3" = 1'-0"



3/8" THICK FLAT CUT NUMBERS W/
VERTICAL BRUSH & SATIN CLEAR COAT FINISH.
FLUSH MOUNTED W/ STUDS & SILICONE ADHESIVE.

16mm RGB TWO ONE SIDED EMCS, MOUNTED TO TWO
EXISTING 4" X 4" X 1/4" STEEL SQ. TUBES.
120 VOLT 16.0 amps (8.00 per face) Single Phase Service.
FINAL CONNECTIONS BY OTHERS
ALUM. FLASHING ON ENDS, PTD. BLACK
SEE DETAILS 1-1A

GAP FOR FLASHING (VERIFY) BY OTHERS

MONUMENT BASE & FOOTINGS BY OTHERS

3/8" THICK FLAT CUT LOGO W/ RGB DIGITAL PRINT (VERIFY)
FLUSH MOUNTED W/ STUDS & SILICONE ADHESIVE.

3/8" THICK FLAT CUT LETTERS W/ MATTE BLACK FINISH.
FLUSH MOUNTED W/ STUDS & SILICONE ADHESIVE.

1/1 LAYOUT: TWO SIDED MONUMENT, QTY: 1
ARCHITECTURAL SHEET: A016 - 2, 3, 4 & 5

ADDRESS FONT: CENTURY GOTHIC (SHOWN) ARTWORK: TO BE PROVIDED
SCALE: 3/8" = 1'-0"

nicheVisual
1561 Susanne Drive NE
Longville, MN 56655
nichevisualsign@gmail.com

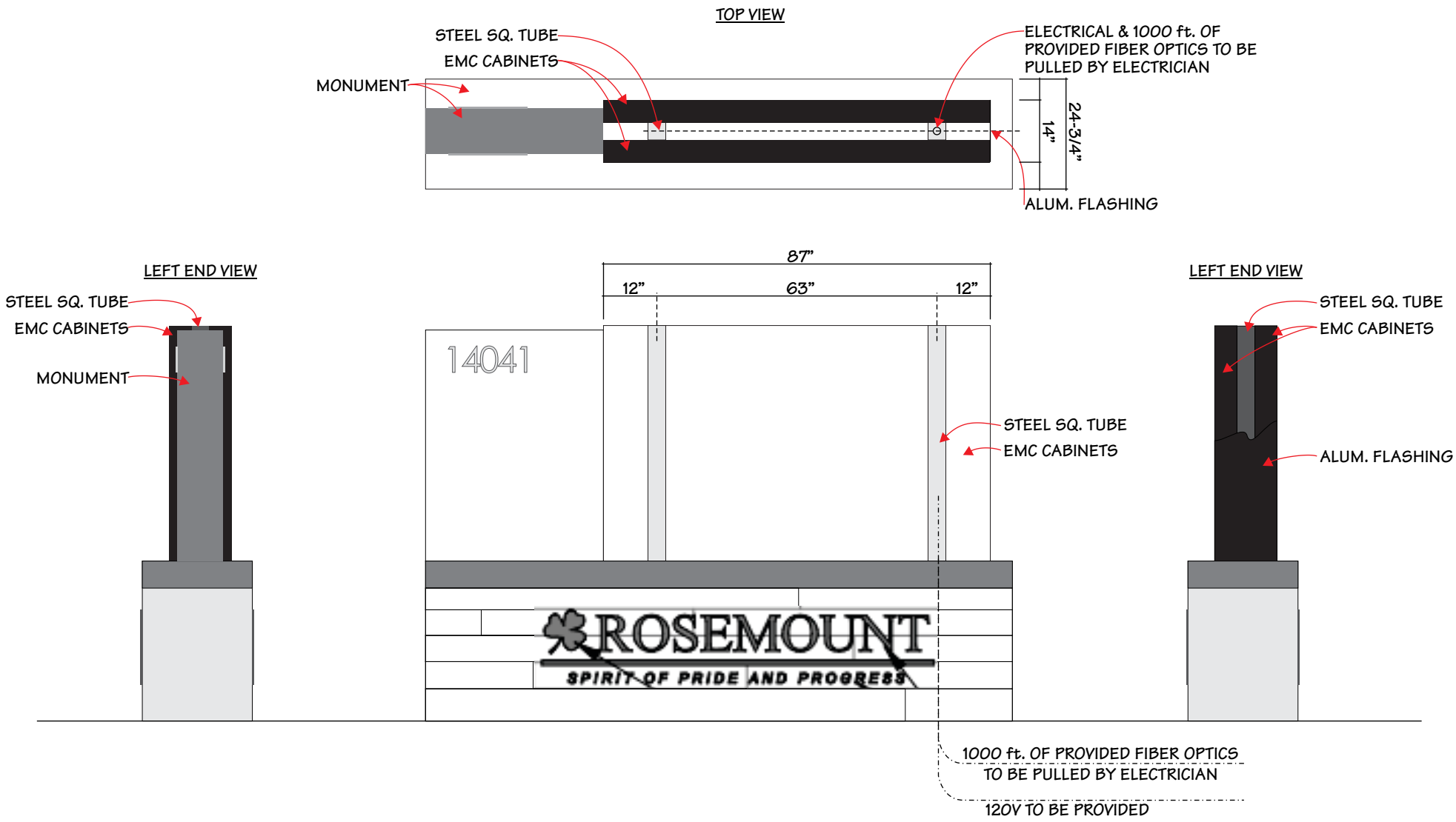
DATE: 07/06/23
TIME 18

CLIENT
Rosemount Police & PW
ADDRESS
14041 Biscayne Ave
Rosemount, MN 55068

REVISIONS/NOTES
3-25-24
4-16-24

SIGN & DATE HERE TO PROCEED INTO PRODUCTION

DATE:



1
1A

DETAIL: TWO SIDED MONUMENT

ADDRESS FONT: CENTURY GOTHIC (SHOWN) ARTWORK: TO BE PROVIDED

SCALE: 3/8" = 1'-0"

niche**Visual**
1561 Susanne Drive NE
Longville, MN 56655
nichevisualsign@gmail.com

DATE:
07/06/23

TIME
18

CLIENT
Rosemount Police & PW

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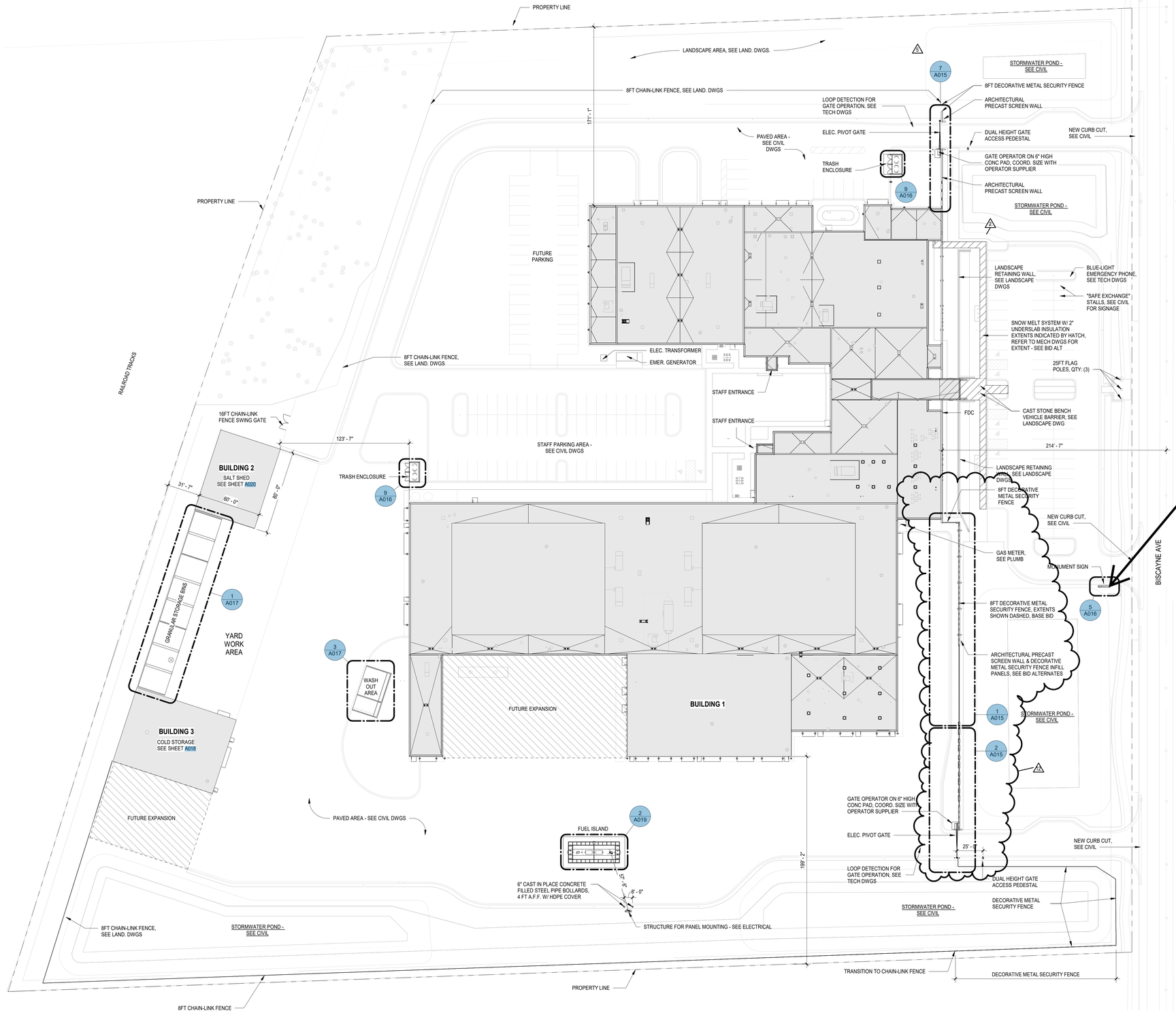

MONUMENT SIGN LOCATION

1 A010 ARCHITECTURAL SITE PLAN
1" = 40'-0"

SITE PLAN GENERAL NOTES

1. REFER TO SITE SURVEY FOR EXISTING TOPOGRAPHY, UTILITIES, AND OTHER PERTINENT INFORMATION.
2. DO NOT SCALE THE DRAWINGS. WHERE DIMENSIONS ARE NOT PROVIDED OR ARE UNCLEAR, REQUEST CLARIFICATION FROM THE ARCHITECT.
3. CONTRACTORS SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND FIELD CONDITIONS SHALL BE REPORTED TO THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
4. REFER TO 'C' SERIES (CIVIL) DRAWINGS FOR SITE DEMOLITION, EROSION CONTROL, SITE GRADING, UTILITIES, STORMWATER, AND SITE PAVING.
5. REFER TO 'L' SERIES (LANDSCAPE) DRAWINGS FOR LANDSCAPE PLANTINGS, SPECIALITY PAVING, FLAG POLES, AND SITE FURNISHINGS.
6. REFER TO 'E' SERIES (ELECTRICAL) DRAWINGS FOR SITE LIGHTING AND SITE POWER.
7. REFER TO 'T' SERIES (TECHNOLOGY) DRAWINGS FOR SITE SECURITY AND ACCESS CONTROL.
8. REFER TO 'M' SERIES (MECHANICAL) DRAWINGS FOR BUILDING STORM WATER, SEWER, AND OTHER CONNECTION LOCATIONS.
9. REFER TO GEOTECHNICAL REPORT PROVIDED IN PROJECT MANUAL FOR MORE INFORMATION.
10. CONCRETE APRONS/STOOPS AT EXTERIOR SIDE OF DOOR THRESHOLDS AND SILLS SHALL BE 1/2 INCH LOWER THAN INTERIOR FLOOR, AND SLOPE AWAY FROM BUILDING AT 1/4 INCH PER FOOT MINIMUM.
11. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE NOT LESS THAN 5% FOR A MINIMUM DISTANCE OF TEN FEET MEASURED FROM THE PERPENDICULAR FACE OF THE BUILDING WALL. REFER TO CIVIL FOR ADDITIONAL GRADING REQUIREMENTS.
12. FINISHED FLOOR ELEVATION 100' - 0" = 980.25; REFER TO CIVIL.

BKV GROUP

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Interior Design
Landscape Architecture
Engineering

222 North Second Street
Long & Kees Bldg
Suite 101
Minneapolis, MN
55401
612.339.3752

www.bkvgroup.com

CONSULTANTS

OERTEL ARCHITECTS

PROJECT TITLE

ROSEMOUNT POLICE & PUBLIC WORKS CAMPUS

ISSUE #	DATE	DESCRIPTION
	02/03/2023	BID PACKAGE 1
2	03/02/2023	BP1_ADD-02
	04/04/2023	BID PACKAGE 2
5	05/15/2023	ASI-01
9	05/19/2023	CONFORMED SET
12	07/14/2023	PR-04

CERTIFICATION

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 Architect under the laws of the state of Minnesota

Bruce Schwartzman
27026 — 04.04.2023
License Number — Date

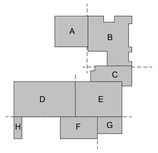
DRAWN BY	CTH
CHECKED BY	MJH
COMMISSION NUMBER	2514.01

SHEET TITLE

ARCHITECTURAL SITE PLAN

SHEET NUMBER

A010



TRUE NORTH

© 2022 BKV Group

BIM 360://2514-01 Rosemount Police & Public Works Facility/2514-01 Rosemount PD & Public Works_AI_2021.rvt
7/14/2023 12:52:26 PM

ROSEMOUNT MINNESOTA

EXECUTIVE SUMMARY

City Council Regular Meeting: June 4, 2024

AGENDA ITEM:	Rosemount Zoning Code Update	**AGENDA SECTION:** PUBLIC HEARINGS
PREPARED BY:	Anthony Nemcek , Senior Planner	**AGENDA NO.** 7.a.
ATTACHMENTS:	Ordinance , Resolution, Consultant's Memo, Current Zoning Map, Proposed Zoning Map, Zoning Districts Conversion	**APPROVED BY:** LJM
RECOMMENDED ACTION: Motion to adopt an ordinance to repeal and replace Title 11: Zoning Regulations and Title 12: Subdivision Regulations, including the zoning map. **Motion** to adopt a resolution approving summary publication of the adopted ordinance.		

BACKGROUND

Community Development staff, along with the consultant team from HKGi, will present a summary of recommended changes to the zoning code and map in alignment with the work completed over the past year and a half. Please see the attached memo from HKGi outlining the scope.

The updated code is intended to bring the Zoning Ordinance into alignment with the 2040 Comprehensive Plan updates and make the code more modern, consistent, and user-friendly. Staff has created a web page for this code update and encourages the Council to view the documents, maps, and Planning Commission meeting videos there. In addition to the web page, staff has published an article in the City newsletter, distributed information via social media, and held public hearings before the Planning Commission.

A public hearing was held during the March 18 and May 28 Planning Commission meetings to review the proposed changes to the text of the Zoning Ordinance as well as the zoning map changes that are a part of the update. The Planning Commission voted unanimously to recommend the Council approve the ordinance text as well as the zoning map.

RECOMMENDATION

Hold a public hearing, discuss the proposed changes to the City's zoning and subdivision regulations and zoning map, and adopt the code and map update. Additionally, staff is recommending the publication of an ordinance summary following adoption.

CITY OF ROSEMOUNT
COUNTY OF DAKOTA
STATE OF MINNESOTA

ORDINANCE NO. 2024 - XX

AN ORDINANCE REPEALING AND REPLACING TITLE 11: ZONING REGULATIONS AND TITLE 12: SUBDIVISION REGULATIONS

SECTION 1. The City Council of the City of Rosemount hereby repeals Title 11: Zoning Regulations and Title 12: Subdivision Regulations, and replaces them with the following:

TITLE 11 ZONING REGULATIONS

CHAPTER 1 INTRODUCTORY PROVISIONS

11-1-1 :Title

A. This title shall be known as the CITY OF ROSEMOUNT ZONING ORDINANCE except as referred to herein as "this title."

11-1-2 :Purpose

A. It is the purpose of this title to protect and promote public health, safety and general welfare, which may be met through the following objectives:

1. To assist in the implementation of the city of Rosemount comprehensive plan upon which this title is based.
2. To promote the orderly development and compatibility of residential, commercial, industrial, agricultural, recreational and public uses.
3. To promote the orderly transition of rural to urban uses.
4. To prevent the premature extension of city utilities and services.
5. To prevent overcrowding of the land and structures.
6. To prevent congestion in public rights of way.
7. To protect natural resources in the city and promote reforestation and the replacement of other replenishable resources.
8. To promote agricultural preservation.
9. To promote a safe, effective pedestrian and vehicular circulation system.

11-1-3 :Effective Date and Authority to Adopt

A. The effective date of this title is June 5, 2024. This title hereby supersedes and replaces in its entirety, Title 11 of the Rosemount, Minnesota Code on the effective date hereof. The provisions of this title shall apply to all development plans and permits filed on or after the effective date. Plans on file before the effective date shall be reviewed for compliance with the Zoning Regulations title effective at the time of filing.

B. The authority to adopt this title within the City of Rosemount is derived from M.S. Chapter 462,

including but not limited to M.S. §§ 462.357 and 462.358, as well as other applicable state statutes and rules. Whenever other applicable city, state, or federal laws or rules referenced in this title have been amended or superseded, this title shall also be considered amended accordingly.

11-1-4 :Severability

A. If any section, clause, provision, or portion of this title is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this title shall not be affected thereby.

B. If any application of this title to a particular structure, land, or water is adjudged unconstitutional or invalid by a court of competent jurisdiction, such judgment shall not be applicable to any other structure, land, or water not specifically included in said judgment.

11-1-5 :Administration

A. Zoning Administrator

1. This title shall be administered and enforced by the Zoning Administrator who shall be appointed by the Council. The Zoning Administrator may delegate specific responsibility to any individual city employee, but shall remain responsible for all decisions made by those employees. The Zoning Administrator shall also maintain current and permanent records of this title, including, but not limited to, conditional uses, variances, amendments, and appeals.

11-1-6 :Interpretation

A. In their interpretation and application, the provisions of this title shall be held to be the minimum requirements for the promotion of the public health, safety, morals and general welfare.

B. Relationship to Comprehensive Plan

1. The Comprehensive Plan for the City of Rosemount or “comprehensive plan,” including amendments adopted by the City Council, is the guiding policy document for the city. A primary intent of this title is to implement the policies, goals and actions of the comprehensive plan while remaining consistent with all applicable requirements of federal and state laws.

C. Conflicting Regulations or Provisions

1. In their interpretation and application, the provisions of this title shall be held to be minimum requirements. Wherever this title imposes a greater restriction than is imposed or required by other provisions of law or by other rules or regulations or ordinances, the provisions of this title shall govern except as otherwise provided in state statutes or rules.

D. Abrogation and Greater Restrictions

1. It is not intended by this title to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this title imposes greater restrictions, the provisions of this title shall prevail. All other ordinances inconsistent with this title are hereby repealed to the extent of the inconsistency only.

E. Use of Graphics, Illustrations, Figures, Photos, and Cross-References

1. Graphics, illustrations, figures, and photos are provided for illustrative purposes only and shall not be construed as regulations. Where a conflict may occur between the text and any

graphic, illustration, figure, or photo, the text shall control.

2. In some instances, cross-references between titles, chapters, sections, and subsections are provided that include the title, chapter, section, or subsection number along with the name of the reference. Where a conflict may occur between the given cross-reference number and name, the name shall control.

F. Rules of Construction

1. Clarification on the provisions of this title or questions on the procedures or applicability of this title should be directed to the community development department or other city departments as may be appropriate. Further clarification or interpretation of this title shall be accomplished according to the procedures of the board of appeals and adjustments as set forth in section 11-9-7 “Appeals” of this title.

2. For additional clarity and consistency in the understanding and application of this title the following shall apply:

    1. Use of the masculine gender includes the feminine and neuter genders unless otherwise specifically noted.

    2. Grammatical use or references made in the singular shall include the plural and the plural shall include the singular, unless such use or reference is otherwise specifically stated.

    3. Sentence construction or phraseology in the present tense, and similarly, references in the future tense may include the present.

    4. The word "shall" is used to mean mandatory; whereas, the word "may" is permissive and does not imply obligation.

11-1-7 :Applicability

A. No structure, or part thereof, shall be erected, converted, enlarged, reconstructed, altered or moved and no structure or land shall be used for any purpose or in any manner which is not in conformity with the provisions of this title.

11-1-8 :Nonconforming Uses, Structures, and Lots

A. Purpose

1. This section is established in recognition of the existence of uses, structures, site improvements, and lots which were lawfully established but which do not currently comply with the provisions of this title or subsequent amendments. It is further established to specify the requirements, circumstances, and conditions under which nonconforming uses, structures, site improvements, and lots will be operated and maintained and to encourage actions that bring nonconformities into conformity with this title.

B. Continuance of Nonconforming Uses and Structures

1. Any nonconformity, including the lawful use or occupation of land or structures existing at the time of the adoption hereof, may be continued through repair, replacement, restoration, maintenance, or improvement but not through expansion, unless:

    a. The nonconformity or occupancy is discontinued for a period of more than one year; or

    b. Any nonconforming use or structure is destroyed by fire or other peril to the extent of greater than 50% of its market value and no building permit has been applied for within

180 days of when the property is damaged. In this case, the city may impose reasonable conditions upon a building permit to mitigate any newly created impact on adjacent property.

2. Any subsequent use or occupancy of the land or structures shall be a conforming use or occupancy.

C. Expansion of Nonconforming Uses and Structures

1. No nonconformity may be added to or enlarged in any manner unless such additions or enlargements are made so as to bring said use or structure into conformity with the regulations of the zoning ordinance.

D. Conditions

1. The city may, by ordinance, impose upon nonconformities reasonable regulations to prevent and abate nuisances and to protect the public health, welfare, or safety.

E. Nonconforming Lots of Record

1. Multiple lots or parcels of record shall be considered a single undivided parcel if such lots or parcels:

   a. Are under common ownership;

   b. Are contiguous; and

   c. Do not meet the area or dimensional standards for the applicable zoning district.

2. No portion of such single parcels may be used, sold, or subdivided in a manner that lessens compliance with applicable area or dimensional standards.

11-1-9 :Official Maps

A. Purpose

Land that is needed for future street purposes and as sites for other necessary public facilities and services is frequently diverted to nonpublic uses which could have been located on other lands without hardship or inconvenience to the owners. When this happens, public uses of land may be denied or may be obtained only at prohibitive cost or at the expense of dislocating the owners and occupants of the land. Identification of an official map of land needed for future public uses permits both the public and private property owners to adjust their building plans equitably and conveniently before investments are made which will make such adjustments difficult to accomplish. It is the purpose of this chapter to provide a uniform procedure for the proper use of official maps as authorized by the Minnesota municipal planning act, Minnesota statutes chapter 462.

B. Official Map Defined

"Official map" as used in this chapter means a map adopted in accordance with this chapter showing existing streets, proposed future streets, and the area needed for widening of existing streets of the city. An official map may also show the location of existing and future land and facilities within the city. An official map may cover the entire city or any portion of the city.

C. Initiation of Proceedings

Proceedings for adoption, amendment, or repeal of an official map or any part thereof may be initiated by:

1. The city's planning department;
2. A recommendation of the planning commission; or
3. Action by the city council.

D. Sketch Maps and Reports

Every proposal or request for an official map or its amendment or repeal, however initiated, shall be accompanied by a sketch map or plat showing the lands proposed to be included and the public purpose to be served.

E. Reference to Planning Commission

Except when proceedings have been initiated by recommendation of the planning commission, every proposed official map or change in a map shall be referred to the planning commission for advice and recommendation thereon, and such recommendation shall be submitted to the city council within 45 days after reference to the planning commission along with the report of the commission on the effect of the proposal on the comprehensive plan of the city. If no recommendation is received by the council from the planning commission within 45 days after reference of the proposal to the commission by the council, the council may take such action as it may deem proper upon the proposal without further action by the planning commission.

F. Notice and Hearing

1. Notice: Upon receiving the recommendation of the planning commission or after 45 days from the submission of the proposal to the planning commission without a recommendation from the commission, the council may call a public hearing on the proposal. A notice of the time, place, and purpose of the hearing and a description of property to be included in the mapped streets and public grounds shall be published in the official newspaper at least 10 days prior to the date of the hearing. At least 10 days prior to the hearing, the clerk shall also mail a copy of the notice to each owner of land situated within or abutting any street or other public ground shown on the official map. For purposes of this notice, the owners shall be determined by the records of the county auditor and the notice shall be addressed to the last known address as shown by the auditor's records. Failure to serve any such notice shall not invalidate the proceedings.
2. Hearing: At the time and place specified in the notice, the council shall hear evidence and arguments concerning the proposal. The hearing may be continued from time to time without further notice. The council may direct the planning commission to conduct a hearing and following the hearing to report its recommendation to the council.

G. Preparation and Filing of Maps

The official map or maps shall be prepared in sufficient detail to permit the establishment of future acquisition lines on the ground. In unplatted areas, a minimum of a centerline survey shall be made prior to the preparation of the final draft of the official map. The accuracy of the future acquisition lines shown on the official map shall be attested to by a licensed land surveyor. After enactment of any ordinance adopting an official map or amending or repealing a previous official map ordinance, a certified copy of the official map or section to which the ordinance relates, together with an attached copy of the ordinance, shall be filed with the county recorder.

H. Effect

After an official map has been adopted and filed, the issuance of building permits by the city

shall be subject to the provisions of this chapter. The city shall deny every application for a permit to construct a new building or structure or expand an existing building or structure within any area designated on the official map for street or public purposes, or outside of any building line that may have been established upon the existing street. Whenever any street or highway is widened or improved or any new street is opened, or any interest in lands for other public purposes is acquired by the city, the city is not required in such proceedings to pay for any building or structure placed without a permit or in violation of conditions of a permit within the limits of the mapped street or outside of any building line that may have been established upon the existing street or within any area thus identified for public purposes. The adoption of an official map does not give the city any right, title, or interest in areas identified for public purposes thereon, but the adoption of the map does authorize the city to acquire such interest without paying compensation for buildings or structures erected in such areas without a permit or in violation of the conditions of a permit.

I. Appeals

Whenever a building permit is denied pursuant to this chapter, the board of appeals and adjustments shall, upon appeal filed with it by the owner of the land, grant a permit for building in an area designated on the official map for a street or other public purpose in any case in which the board finds, upon the evidence and the arguments presented to it: a) that the entire property of the appellant of which the area designated for public purposes forms a part cannot yield a reasonable return to the owner unless such a permit is granted, or b) that balancing the interest of the city in preserving the integrity of the official map and of the comprehensive city plan and the interest of the property owner in the use of his property and in the benefits of ownership, the grant of such permit is required by considerations of justice and equity. The board of appeals and adjustments shall hold a public hearing upon the appeal after notice of the hearing has been published in the official newspaper once at least 10 days before the hearing. If the board authorizes the issuance of a permit, it shall specify the exact location, ground area, height, and other details as to the extent and character of the building for which the permit is granted. If the board authorizes issuance of a permit, the council or other authority, board or commission having jurisdiction shall have six months from the date of the decision of the board to institute proceedings to acquire such land or interest therein, and if no such proceedings are started within that time, the city shall issue the permit if the application otherwise conforms to local ordinances.

J. Adoption of Maps

Language for adoption of official maps shall be as follows:

1. ADOPTION OF MAP [fill in description]: The map entitled "Official Map of _____", a copy of which is attached to Ordinance No. ____ and incorporated herein by reference, is hereby adopted and designated as the Official Map of _____.

TITLE 11 ZONING REGULATIONS

CHAPTER 2 ZONING DISTRICTS AND GENERAL PROVISIONS

11-2-1 :Establishment of Zoning Districts

A. For the purpose of this title, the city of Rosemount, Minnesota, is hereby divided into the following base zoning districts:

1. A-1, Agricultural Preserve District
2. A-2, Agricultural District
3. RR, Rural Residential District
4. R-1, Low Density Traditional Residential District
5. R-2, Low to Medium Density Residential District
6. R-3, Medium Density Residential District
7. R-4, High Density Residential District
8. MX-1, Downtown Mixed Use District
9. MX-2, Highway Mixed Use District
10. B-1, General Business District
11. B-2, Employment District
12. I-1, General Industrial District
13. I-2, Heavy Industrial District
14. PI, Public and Institutional District

B. For the purpose of this title, the city of Rosemount, Minnesota, is hereby divided into the following special zoning districts:

1. Floodplain Overlay District
2. Shoreland Overlay District
3. Wetland Overlay District
4. Mississippi River Corridor Critical Area Overlay District
5. PUD, Planned Unit Development District

11-2-2 :Zoning Districts Map

A. The boundaries of these districts are hereby defined and established on a map entitled "zoning map city of Rosemount, Minnesota", dated June 4, 2024, which map and all explanatory matter thereon is hereby made a part of this title.

11-2-3 :Interpretation of Zoning Districts Map

A. The district boundaries shall be determined by measurement from and as shown on the zoning map, and in case of any questions as to the interpretation of such boundary lines, the Planning Commission shall interpret the map according to the reasonable intent of this title.

B. Where uncertainty exists with respect to the boundaries of any districts indicated on the zoning map, the following rules shall apply:

   1. Boundaries indicated as approximately following the centerline of streets or highways shall be construed as following the centerlines of said streets or highways.

   2. Boundaries indicated as approximately following lot lines shall be construed as following such lot lines.

   3. Boundaries indicated as approximately following city boundary lines shall be construed as following such boundaries.

   4. Boundaries indicated as approximately following railroad lines shall be construed to be midway between the main tracks.

   5. Boundaries indicated as approximately parallel to the centerlines of streets or highways shall be construed as being parallel thereto and at such distance therefrom as indicated on the official zoning map. If no distance is given, such dimension shall be determined by the use of the scale shown on the official zoning map.

   6. Boundaries following the shoreline of a stream, lake, or other body of water shall be construed to follow the ordinary high water level (OHWL) and in the event of change in the shoreline shall be construed as moving with the OHWL.

   7. Boundaries indicated as approximately following the centerline of streams, rivers, canals or other bodies of water shall be construed to follow such centerlines.

   8. Where the application of the aforesaid rules leaves a reasonable doubt as to the boundaries between two districts, the regulations of the more restrictive district shall govern the entire parcel in question, unless otherwise determined by the board of appeals and adjustments.

C. Where a district boundary line divides a lot which was in single ownership at the time of passage of this chapter, the extension of the regulations for either portion of the lot beyond the district line into the remaining portion of the lot may be interpreted by the Zoning Administrator upon request of the owner.

11-2-4 :Zoning of Annexed Land

A. Land annexed to the city subsequent to the effective date of this ordinance shall be temporarily zoned into the R-1 District. Within a period of one year from the date of annexation, the Planning Commission shall recommend to the City Council a final zoning map for the annexed territory. The Commission may recommend such final zoning map at the time of annexation.

11-2-5 :General Lot, Building, and Yard Provisions

A. Lot Provisions

   1. Lots of Record:

      a. No lot of record shall be reduced in size below the district requirements of this title.

b. A lot of record shall be deemed a buildable lot even though the lot area and/or dimensions are less than those required for the district provided as follows:

i. It fronts on a public street.

ii. Minimum requirements for private or public utility service are met.

iii. Evidence is presented that the lot in question met minimum requirements for the division of property under ordinance regulations in effect at the time of the division of property.

2. One Building per Lot: Except for PUD, or a multiple-unit residential project, not more than one principal building shall be located on a lot.

3. Street Access Required. Every building hereafter erected shall be located on a lot having frontage on a public street as defined herein.

4. Sewer and Water, Single-Unit Dwellings. Single-unit dwellings which are not connected to the municipal sewer system shall be permitted only when the requirements for private on site sewer systems have been satisfied.

B. Yard Provisions

1. Required Yards or Other Open Space:

a. Reduction: If the existing yard or other open space is less than the minimum required by this title, it shall not be further reduced in area or dimension.

b. Relative to Other Buildings: No required yard or other open space allocated to a building or dwelling group shall be used to satisfy yard or other open space minimum requirements for any other building.

2. Permitted Yard Encroachments: The following encroachments into required yards shall be permitted:

a. Special Structural Elements: Special structural elements attached to the principal building such as chimneys, solar collectors, flues, belt courses, sills, pilasters, lintels, ornamental features, cornices, eaves and gutters provided they do not extend more than two and one-half feet (2 1/2') into a yard.

b. Yard Lights: Yard lights in R districts not closer than five feet to the front lot line and lights in all districts for illuminating parking areas, loading areas, or yards for safety and security purposes provided the direct source of light is not visible from the public right of way or adjacent residential property.

c. Decorative Landscaping: Decorative landscaping, trees, shrubs and other aesthetic or sculptural elements including arbors and trellises within the front, side, street side and rear yards except within sight triangles adjacent to intersections on corner lots.

d. Accessory Appendages:

i. Terraces, steps and stoops to the front (main) entrance of a structure may encroach into the required front, street side, or side yards by not more than 15 feet. However, in no case shall they be closer than five feet to a lot line or encroach into a utility easement, whichever is more restrictive.

ii. Balconies, decks, and uncovered porches may encroach into a required yard area as follows:

(a) Street Yards:

(1) If the balcony, deck, or uncovered porch is less than two feet in height above finished grade (not including railings) measured vertically at the face of the principal structure, it may encroach into the required street front yard area 15 feet.

(2) Balconies, decks and uncovered porches higher than two feet may only encroach into required street front yards by five feet.

(3) In no case shall any balcony, deck or uncovered porch be closer than five feet to a lot line or encroach into a utility easement, whichever is more restrictive.

(b) Rear Yards: 15 feet into a required rear yard area but no closer than 15 feet to a rear lot line or encroach into a utility easement, whichever is more restrictive.

(c) Side Yards: Five feet into a required side yard area but no closer than five feet to a lot line or encroach into a utility easement, whichever is more restrictive.

iii. Single-unit homes built prior to January 1, 1980, may have an open single-story porch that encroaches into the required front yard a distance not exceeding 10 feet, provided they maintain a minimum front yard setback of 20 feet.

(a) The 10 feet shall include the roofline, support columns, and steps.

(b) The porch area may have a railing, but not a solid wall, that conforms to the Minnesota state building code standards but shall not exceed 3.5 feet in height.

(c) The porch area shall not be enclosed nor screened with mesh, glass, or other similar material but may have dividers, spindles, or lattice no higher than 3.5 feet from the base of the porch with no more than 50% opacity.

e. Picnic Shelters, Gazebos, Recreation Equipment, etc.:

i. Picnic shelters, gazebos, pool houses, stairs, fire escapes, and recreation equipment may be placed only in side or rear yard areas and shall conform to the requirements of subsection 11-6-7C “Accessory Structure”.

ii. Recreational equipment such as basketball backstops, hockey nets, skateboard ramps (less than 36 inches in overall height), bicycle ramps (less than 36 inches in overall height), and other small recreational play equipment associated with residential use may be used and stored in the driveway area of a residence.

(a) No recreational play equipment may be stored or installed in the right-of-way, any easement, public or private street, cul-de-sac, alley, path, or sidewalk.

(b) Larger recreational equipment such as swimming pools, trampolines, or sport courts are not exempted.

3. Required Side and Rear Yard Enlargement:

a. Corner Lots: Where a side yard abuts a street which is adjacent to the front yard of one or more residential lots on the same block, such side yards shall meet the front yard

setback requirement of the district. The same yard dimension determined for such a side yard shall apply to structures in the rear yard.

b. Through Lots: Through lots shall provide the required front yard on both streets.

c. Commercial, Industrial, and Public Buildings: For commercial, industrial, and public buildings exceeding 35 feet in height and located on a lot adjoining an R district, any such building shall be set back from the interior side or rear lot line abutting said R district a minimum of one additional foot for each foot of building height in excess of 35 feet. Where there is an intervening alley, one-half (1/2) the alley right of way may be subtracted from this computation.

d. Yards Abutting Dissimilar Districts: Rear or side yards for dissimilar abutting districts shall meet the requirements of the more restrictive of the two districts.

4. Side Yards; Permitted Reduction: No side yard shall be required between attached housing units.

5. Front Yards; Permitted Reduction and Required Expansion:

a. Established Front Yards: Where 40% or more of the lots on any block are developed with buildings, the average front yard for the block shall be computed.

i. Established R District Front Yards: Where the average is less than the required front yard, the average or 20 feet, whichever is greater, shall be the required front yard. Where the average is greater than the required front yard, the average shall be the required front yard.

ii. Established C District Front Yards: The average front yard shall be the required front yard.

6. Residential principal structures shall be set back a minimum of 30 feet from any easement boundary intended for or containing high voltage transmission lines.

7. No accessory or principal structure shall be constructed within any easement.

8. Visibility At Intersections:

a. A minimum sight triangle shall be established on each corner lot at every street intersection through which motorists shall have reasonable unobstructed view.

b. The minimum sight triangle shall be defined as a triangle located at the corner of intersecting streets. The adjacent sides shall be located along the street right of way line (and adjacent property lines) of the intersecting streets and shall be 25 feet in length. The third side shall be a straight line joining the end points of the adjacent sides.

c. The city shall have the authority to order the removal of vision obstructions located within the minimum sight triangle.

C. Outdoor Storage. Except as specifically authorized by this title, all equipment, merchandise, materials, supplies, unlicensed vehicles, junk vehicles, trash and junk, and finished and unfinished products shall be stored within structures as defined herein. This provision does not apply to clothesline poles, lawn furniture, picnic tables and playground equipment as associated with residential use. Construction materials may be stored outdoors only during construction, and such materials must be for use in construction on the property on which they are stored.

D. Building Provisions

1. Height Regulations:
    a. Permitted Exceptions: Except as specifically provided in the B-2, I-1, or I-2 districts, the following structural appurtenances shall be permitted to a height not to exceed 25 feet in addition to the maximum height permitted for the district, provided they do not impair the solar access of buildings on adjoining properties and are not used for human occupancy or commercial enterprise:
        i. Ornamentation such as church spires, belfries, bell towers, cupolas, domes, monuments and flagpoles.
        ii. Mechanical appurtenances such as chimneys, smokestacks, elevator and stairwell penthouses, antennas, transmission towers and other necessary structures.
2. Earth Sheltered Structures: Earth sheltered structures will be permitted on the basis of site conditions, which are conducive to such construction, or in areas where changes to existing site conditions are complementary to the site and adjacent properties and the existing character of property and structures in the area.
3. Temporary Dwellings:
    a. The use and occupancy of a tent, RV, or other temporary dwelling for the purpose of living quarters is not permitted in any district.
    b. Temporary Family Healthcare Dwellings: Pursuant to authority granted by Minnesota statutes, section 462.3593, subdivision 9, the city of Rosemount opts out of the requirements of Minnesota statutes, section 462.3593, which defines and regulates temporary family healthcare dwellings.
4. Underground Electrical Services:
    a. Electric, phone, and cable distribution facilities serving any new building or structure served by municipal facilities shall be located underground.
    b. Poles, wires, or other aboveground distribution facilities may only be temporarily installed during site construction or repair of the underground system.
    c. No changes in the grade or contours of land above or adjacent to these facilities, once installed, shall be made without the approved written consent of the City Engineer and the utility company providing such services.

TITLE 11 ZONING REGULATIONS

CHAPTER 3 AGRICULTURAL & RESIDENTIAL DISTRICTS

11-3-1 :Purpose Statements

The following statements specify the purposes of the zoning districts established to regulate the areas of the City considered appropriate for agricultural and residential uses:

A. A-1 Agricultural Preserve District. This district is expressly established to allow landowners to comply with the requirements of the Metropolitan Area Agricultural Preserves Act, Minnesota Statutes, chapter 473H.

B. A-2 Agricultural District. The purpose of the Agricultural District is to encourage the long-term continuation of agricultural and related uses in the city in areas which are both suitable for agriculture and are not planned for urban development.

C. RR Rural Residential District. The purpose of the Rural Residential District is to provide for a large lot rural residential lifestyle which is separate from and not in conflict with commercial agricultural activities. Within this district, public sewer and water systems are not available.

D. R-1 Low Density Traditional Residential District. The purpose of the Low Density Traditional Residential District is to provide for the preservation of existing neighborhoods within the metropolitan urban service area which are primarily made up of detached single-unit residential dwellings. This district is intended to apply predominantly to areas of existing single-unit development.

E. R-2 Low to Medium Density Residential District. The purpose of the Low to Medium Density Residential District is to accommodate a mixture of attached and detached single-unit dwellings and smaller multiple-unit dwellings within the metropolitan urban service area. Developments within this district are intended to provide full urban infrastructure with a focus on pedestrian and vehicular connectivity, access, and open spaces.

F. R-3 Medium Density Residential District. The purpose of the Medium Density Residential District is to accommodate a variety of medium density attached housing types including townhouses, apartments, and senior housing within the metropolitan urban service area. This district is intended to be located within close walking or driving distance of areas of greater concentrations of commercial, recreational, employment, and public activity. It is intended that this district provide a blend of housing, recreation, and open space opportunities.

G. R-4 High Density Residential District. The purpose of the High Density Residential District is to support high density attached housing types such as apartments and senior housing within the metropolitan urban service area. This district is intended to be located near or within areas of greater concentrations of commercial, recreational, employment, and public activity. Developments within this district should be walkable and should provide convenient access to goods, services, and amenities.

11-3-2 :Uses

A. Tables 3.1 and 3.2 list land uses and indicates whether they are permitted, permitted with standards, conditional, interim, or prohibited. The tables also include references to whether additional use-specific standards are applicable to each use.

B. The following definitions shall be referenced when using Tables 3.1 and 3.2:

1. Permitted Use: A "P" indicates that a use is allowed by right, subject to compliance with all other applicable provisions of this code.

2. Permitted with Standards Use: A "PS" indicates that a use is allowed when standards identified in chapter 6 "Use-Specific Standards" are met. Uses permitted with standards are also subject to all other applicable requirements of this chapter. Any request to vary from the standards set forth for a permitted with standards use shall be processed as a variance.

3. Conditional Use: A "C" indicates that a use is allowed only if a conditional use permit is issued by the city after compliance with the procedure and requirements set forth in section 11-9-3 "Conditional Use Permit."

4. Interim Use: An "I" indicates that a use may be allowed for a limited period of time if an interim use permit is issued by the city after compliance with the procedure and requirements set forth in section 11-9-4 "Interim Use Permit."

5. Prohibited Use: A blank cell in the use table indicates that the land use is prohibited in that zoning district.

C. In the event a proposed use is not listed in the use table, the Zoning Administrator is authorized to classify the proposed use into an existing use type as set forth in Tables 3.1 and 3.2 that the Zoning Administrator determines most closely fits the proposed use.

1. If found to be consistent with a listed use, the proposed use shall be treated the same as the listed use.

2. If no similar use determination is made by the Zoning Administrator, the proposed use is prohibited. In such case, the City Council on its own initiative may amend this chapter to allow the proposed use or an interested party may request an amendment to this chapter in accordance with the procedure and requirement set forth in section 11-9-2 "Zoning Code Amendment."

Table 3.1 Principal Use Table

Use Type	**Agricultural Districts**		**Residential Districts**					**Use Standards Reference**
	A-1	**A-2**	**RR**	**R-1**	**R-2**	**R-3**	**R-4**	
Residential								
Household Living								
Dwelling, single-unit detached	PS	PS	PS	PS	PS			See 11-6-1
Dwelling, manufactured home	PS	PS	PS	PS	PS			See 11-6-1
Dwelling, twinhome					PS	PS		

Use Type	Agricultural Districts		Residential Districts					Use Standards Reference
	A-1	A-2	RR	R-1	R-2	R-3	R-4	
Dwelling, two- to four-unit					PS	PS		
Dwelling, attached townhouse or rowhouse					PS	PS	PS	See 11-6-1
Dwelling, apartment						PS	PS	See 11-6-1
Dwelling, apartment mixed use							PS	See 11-6-1
Dwelling, courtyard cottage				PS	PS	PS	PS	See 11-6-1
Manufactured home park					C	C	C	See 11-6-1
Group Living								
Assisted living facility						PS	PS	See 11-6-1
Continuing care senior facility						PS	PS	See 11-6-1
Long-term or transitional care facility						PS	PS	See 11-6-1
Residential care facility, licensed in-home (6 or fewer persons)	P	P	P	P	P			
Residential care facility, licensed in-home (7-16 persons)					P	P	P	
Public, Social, & Institutional								
Day care center, 12 or fewer persons	P	P	P	P	P			See 11-6-2
Day care center, 13-16 persons					P	P	P	See 11-6-2
Place of worship			C	C	C	C	C	See 11-6-2
Sacred community			PS	PS	PS	PS	PS	See 11-6-2
School, elementary			C	C	C	C	C	
Commercial								
Food, Beverage, & Entertainment								
Commercial event center		C						See 11-6-3
Commercial recreation facility, indoor		C						
Commercial recreation facility, outdoor		C						See 11-6-3
Retail Sales & Services								

Use Type	Agricultural Districts		Residential Districts					Use Standards Reference
	A-1	A-2	RR	R-1	R-2	R-3	R-4	
Animal boarding, kennel, or daycare center		C	C					See 11-6-3
Commercial animal breeding		C	C					See 11-6-3
Industrial								
Brewery, farm winery, or distillery		C						See 11-6-4
Microbrewery or microdistillery		C						See 11-6-4
Small brewery		C						See 11-6-4
Large-scale mineral extraction		I						See 11-6-4
Small-scale mineral extraction		I						See 11-6-4
Agriculture, Open Space, & Natural Resources								
Agriculture	P	P						
Agriculture research and testing facility	P	P						
Commercial greenhouse or nursery		P	C					
Commercial horse stable		P	PS					See 11-6-5
Community solar garden or solar farm	I	I						See 11-6-5
Nature preserve/conservation area	P	P						
Park or playground		P	P	P	P	P	P	
Public recreation facility		P	P	P	P	P	P	
Wildlife recreation area	P	P						
Utilities & Transportation								
Essential service facility	PS	PS	PS	PS	PS	PS	PS	See 11-6-6
Small wireless facility within the ROW		C	C	C	C	C	C	See 11-6-6

Table 3.2 Accessory Use Table

Use Type	Agricultural Districts		Residential Districts					Use Standards Reference
	A-1	A-2	RR	R-1	R-2	R-3	R-4	
Accessory agricultural building	P	P						
Accessory agriculture	P	P	P					
Accessory dwelling unit, internal or attached		PS	PS	PS	PS			See 11-6-7
Accessory structure	PS	PS	PS	PS	PS	PS	PS	See 11-6-7
Agricultural product stand	P	P						
Agriculture associated with breweries, microdistilleries, and wineries	P	P						
AM radio antenna, supporting tower, and related accessory structures		C						See 11-6-7
Cemetery			PS	PS	PS	PS	PS	See 11-6-2
Construction-related temporary use		PS	PS	PS	PS	PS	PS	See 11-6-7
Day care, group family	PS	PS	PS	PS	PS			See 11-6-7
Garage sale	PS	PS	PS	PS	PS	PS	PS	See 11-6-7
Greenhouse	P	P	P	P	P			
Home occupation	PS	PS	PS	PS	PS	PS		See 11-6-7
Keeping of animals, domestic	PS	PS	PS	PS	PS	PS	PS	See 11-6-7
Keeping of animals, non-domestic	PS	PS	PS					See 11-6-7
Keeping of bees	PS	PS	PS	PS				See 11-6-7
Keeping of chickens	PS	PS	PS	PS				See 11-6-7
Mobile food unit	PS	PS	PS	PS	PS	PS	PS	See 11-6-7
Off-street parking or loading facility					P	P	P	

Use Type	Agricultural Districts		Residential Districts					Use Standards Reference
	A-1	A-2	RR	R-1	R-2	R-3	R-4	
Recreational amenity, private	PS	PS	PS	PS	PS	PS	PS	See 11-6-8
Recreation vehicle parking storage		PS	PS	PS	PS			See 8-2-5
Residential swimming pool			PS	PS	PS	PS	PS	See 5-3-1
Sacred community			PS	PS	PS	PS	PS	See 11-6-8
Sales office, temporary			PS	PS	PS	PS	PS	See 11-6-8
Satellite dish	PS	PS	PS	PS	PS	PS	PS	See 11-6-8
Short-term vacation rental		PS	PS	PS	PS	PS		See 11-6-8
Small-scale solar energy system, ground-mounted		PS	PS	PS	PS	PS	PS	See 11-6-8
Small scale solar energy system, roof-mounted	PS	PS	PS	PS	PS	PS	PS	See 11-6-8
Uses accessory to large-scale mineral extraction		I						See 11-6-8
Uses accessory to small-scale mineral extraction		I						See 11-6-8

11-3-3 :Lot Dimensions

A. All lot dimension standards listed in this Section are subject to the exemptions listed in section 11-2-5 "General Lot, Building, and Yard Provisions."

B. Table 3.3 establishes the minimum lot area and lot width requirements for the A-1, A-2, RR, R-1, R-2, R-3, and R-4 zoning districts.

Table 3.3. Agricultural and Residential Lot Dimensions

District	Use Types	Minimum Lot Area (sq. ft.)	Minimum Lot Width (ft.)
A-1	All uses	40 acres	300
A-2	All uses	2.5 acres	300
RR	All uses	2.5 acres platted 5 acres unplatted	200 platted 300 unplatted

District	Use Types	Minimum Lot Area (sq. ft.)	Minimum Lot Width (ft.)
R-1	Dwelling, single-unit detached	8,500	65
	Dwelling, courtyard cottage	17,500 per development	140 per development
	All other uses	20,000	120
R-2	Dwelling, single-unit detached	7,500	60
	Dwelling, twinhome	6,250 [12,500 total]	50 [100 total]
	Dwelling, 2-unit (duplex)	12,500	100
	Dwelling, 3-4 unit	15,000	120
	Dwelling, attached townhouse or rowhouse	2,500 per unit	20 per unit
	Dwelling, courtyard cottage	15,000 per development	120 per development
	All other uses	20,000	120
R-3	Dwelling, twinhome	6,250 [12,500 total]	50 [100 total]
	Dwelling, 2-unit (duplex)	12,500	100
	Dwelling, 3-4 unit	15,000	120
	Dwelling, attached townhouse or rowhouse	2,500 per unit	20 per unit
	Dwelling, courtyard cottage	15,000 per development	120 per development
	Dwelling, apartment	22,500	150
	All other uses	20,000	120
R-4	Dwelling, courtyard cottage	15,000	120
	Dwelling, attached townhouse or rowhouse	2,500 per unit	20 per unit
	Dwelling, apartment	22,500	150
	All other uses	20,000	120

11-3-4 :Site Dimensions

A. All site dimension standards listed in this Section are also subject to the supplementary yard and height regulations listed in Chapter 2, General Zoning Requirements.

B. Table 3.4 establishes the minimum site dimension standards for principal structures in the A-1, A-2, RR, R-1, R-2, R-3, and R-4 zoning districts. Setbacks for any use not listed shall be the most restrictive of the district.

Table 3.4. Agricultural and Residential Site Dimensions – Principal Structures

District	Minimum Yard Setbacks (feet)			Maximum Building Height (feet)	Maximum Lot Coverage
	Front	Side	Rear		
A-1	50'	30'	30'	50'	None
A-2	50'	30'	30'	50'	None
RR	40'	30'	30'	35'	30%
R-1	25'	7.5'[1]	30'	35'	35%
R-2	25'	7.5' single- and two-unit 30' multi-unit	30'	35'	40% single unit detached 70% single unit attached 30% 2-unit
R-3	25'	30'	30'	35'	75%
R-4	25'	30'	30'	4 stories not to exceed 48'	75%
[1] Parcels in the R-1 district platted prior to 1979 shall meet the following minimum setbacks: 5' for a single-story structure and 10' for a 2-story structure.					

C. Table 3.5 establishes the minimum site dimension standards for accessory structures in the A-1, A-2, RR, R-1, R-2, R-3, and R-4 zoning districts. Setbacks for any use not listed shall be the most restrictive of the district.

Table 3.5. Agricultural and Residential Site Dimensions – Accessory Structures

District	Minimum Yard Setbacks (feet)			Maximum Building Height (feet)
	Front	Side	Rear	
A-1	50	30	30	75
A-2	50	30	30	75
RR	40	30	30	35
R-1	30	10	Structures 120 SF or less: 5' Structures greater than 120 SF: 30'	18
R-2	30	10	Structures 120 SF or less: 5' Structures greater than 120 SF: 30'	18

District	Minimum Yard Setbacks (feet)			Maximum Building Height (feet)
	Front	Side	Rear	
R-3	30	10	10	18
R-4	40	10	10	18

D. Principal structure setbacks for residential lots shall be increased on the side adjacent to freeways, arterial and collector streets, and railroad rights of way or easements in order to provide space for earthen berms, buffer yards, or planting strips as shown in Table 3.6 below.

Table 3.6. Increased Setbacks

Side Adjacent To	Increased Setbacks for Principal Structures
Collector street[1]	10 ft.
Minor arterial highway[1]	20 ft.
Principal arterial (freeways)[1]	30 ft.
[1] As designated by the transportation element of the comprehensive plan.	

TITLE 11 ZONING REGULATIONS

CHAPTER 4 NON-RESIDENTIAL DISTRICTS

11-4-1 :Purpose Statements

The following statements specify the purposes of the zoning districts established to regulate the areas of the City considered appropriate for non-residential uses:

A. MX-1 Downtown Mixed Use District. The purpose of the Downtown Mixed Use District is to provide for the establishment of a diversified commercial, civic, and lifestyle center. This district should contain a mix of cultural, civic, entertainment, residential, retail, service, office, and public uses. Consideration for pedestrian and bicycle users related to access, landscaping, amenities, and architectural design shall be integrated.

B. MX-2 Highway Mixed Use District. The purpose of the Highway Mixed Use District is to allow for a horizontal or vertical mix of residential and commercial uses at specific nodes along County Road 42 in conformance with the Highway 42 Commercial Site Concepts developed in 2021. High volumes of traffic and access to CR 42 are important for the uses in this district.

C. B-1 General Business District. The purpose of the General Business District is to accommodate a broad range of commercial and retail uses and services which serve the local community. This district is intended to be located at important neighborhood intersections or along major community roadways.

D. B-2 Employment District. The purpose of the Employment District is to provide a suitable environment for employment centers, business headquarters, offices and professional uses, warehousing, light industrial uses, and associated complementary uses with a focus on quality site design. Uses are primarily confined within buildings with limited outdoor usage or storage.

E. I-1 General Industrial District. The purpose of the General Industrial District is to provide for the establishment of both light and medium industrial uses, including manufacturing, warehousing, and repair uses. General industrial uses are conducted primarily within buildings, but may include limited exterior operation and storage.

F. I-2 Heavy Industrial District. The purpose of the Heavy Industrial District is to provide for the establishment of heavy industrial uses which may include significant exterior operation or storage of equipment and materials. As a result of operation, heavy industrial uses may generate byproducts such as noise, odors, smoke, and vibration, which may have nuisance impacts on surrounding properties. As a result, these uses require larger land areas and are not compatible with residential uses or high concentrations of people.

G. PI Public and Institutional District. The purpose of the Public and Institutional District is to accommodate major public and institutional uses of a governmental, educational, assembly, and recreational nature that serve the entire community.

11-4-2 :Uses

A. Tables 4.1 and 4.2 list land uses and indicates whether they are permitted, permitted with standards, conditional, interim, or prohibited. The tables also include references to whether additional use-specific standards are applicable to each use.

B. The following definitions shall be referenced when using Tables 4.1 and 4.2:

1. Permitted Use: A "P" indicates that a use is allowed by right, subject to compliance with all other applicable provisions of this code.
2. Permitted with Standards Use: A "PS" indicates that a use is allowed when standards identified in chapter 6 "Use-Specific Standards" are met. Uses permitted with standards are also subject to all other applicable requirements of this chapter. Any request to vary from the standards set forth for a permitted with standards use shall be processed as a variance.
3. Conditional Use: A "C" indicates that a use is allowed only if a conditional use permit is issued by the city after compliance with the procedure and requirements set forth in section 11-9-3 "Conditional Use Permit."
4. Interim Use: An "I" indicates that a use may be allowed for a limited period of time if an interim use permit is issued by the city after compliance with the procedure and requirements set forth in section 11-9-4 "Interim Use Permit."
5. Prohibited Use: A blank cell in the use table indicates that the land use is prohibited in that zoning district.

C. In the event a proposed use is not listed in the use table, the Zoning Administrator is authorized to classify the proposed use into an existing use type as set forth in Tables 4.1 and 4.2 that the Zoning Administrator determines most closely fits the proposed use.

1. If found to be consistent with a listed use, the proposed use shall be treated the same as the listed use.
2. If no similar use determination is made by the Zoning Administrator, the proposed use is prohibited. In such case, the City Council on its own initiative may amend this chapter to allow the proposed use or an interested party may request an amendment to this chapter in accordance with the procedure and requirement set forth in section 11-9-2 "Zoning Code Amendment."

Table 4.1 Principal Use Table

Use Type	**Mixed Use**		**Commercial**		**Industrial**		**Public**	**Use Standards Reference**
	MX-1	**MX-2**	**B-1**	**B-2**	**I-1**	**I-2**	**PI**	
Residential								
Household Living								
Dwelling, attached townhouse or rowhouse	PS	PS						See 11-6-1
Dwelling, apartment	PS	PS						See 11-6-1
Dwelling, apartment mixed use	PS	PS						See 11-6-1
Dwelling, live/work	C	C						

Use Type	Mixed Use		Commercial		Industrial		Public	Use Standards Reference
	MX-1	MX-2	B-1	B-2	I-1	I-2	PI	
Dwelling, courtyard cottage		PS						See 11-6-1
Manufactured home park	C	C						See 11-6-1
Group Living								
Assisted living facility	C	PS						See 11-6-1
Long-term or transitional care facility	C	PS						See 11-6-1
Continuing care senior facility	C	PS						See 11-6-1
Residential care facility, licensed in-home (7-16 persons)	P	P						
Lodging								
Hotel	P	P	P	C				
Motel		P	P	C				
Public, Social, & Institutional								
Cemetery							C	See 11-6-2
Day care center, 13-16 persons	P	P						See 11-6-2
Day care center, more than 16 persons	C	PS	P	C				See 11-6-2
Educational services	P	P	P				P	
Funeral home			C					See 11-6-2
Hospital				P			P	
Medical or dental clinic or office	P	P	P	P				
Municipal social, cultural, or recreational facility	P	P					P	
Place of worship	P	P		C			P	See 11-6-2
Public assembly	P	P					P	
Public or governmental services							P	

Use Type	Mixed Use		Commercial		Industrial		Public	Use Standards Reference
	MX-1	MX-2	B-1	B-2	I-1	I-2	PI	
Sacred community	PS	PS		PS			PS	See 11-6-2
School, elementary							P	
School, secondary							P	
School, post-secondary				P			P	
Commercial								
Food, Beverage, & Entertainment								
Adult establishment					PS			See 11-6-3
Bar	P	P	P					
Brewpub	P	P	P					
Restaurant	P	P	P					
Specialty food or beverage shop	P	P	P					
Commercial recreation facility, indoor	P	P	P	P				
Commercial recreation facility, outdoor		PS	PS	PS			P	See 11-6-3
Health and athletic club facility	P	P	P					
Retail Sales & Services								
Animal boarding, kennel, or daycare center				C	C			See 11-6-3
Animal/veterinary clinic or hospital	PS	PS	PS	PS	PS			See 11-6-3
Automobile fuel station		C	C		C			See 11-6-3
Automotive repair and service, major			C	C	P	P		See 11-6-3
Automotive repair and service, minor		C	P	P	P			See 11-6-3
Car wash		PS	P		C			See 11-6-3
Commercial center		P	P					

Use Type	Mixed Use		Commercial		Industrial		Public	Use Standards Reference
	MX-1	MX-2	B-1	B-2	I-1	I-2	PI	
General repair, excluding automotive repair			P	P	P			
Landscape and horticultural service					PS			See 11-6-3
Off-site service business			P	P				
Retail or service with residential above	P	P						
Standalone retail business, large	P	P	P					
Standalone retail business, small	P	P	P					
Standalone service business	P	P	P	P				
Tobacco store or smoke shop			C					
Vehicle sales or rental			C	C				See 11-6-3
Business & Technical Services								
Art studio	P	P	P	P				
Business or professional office	P	P	P	P				
Production studio, including motion picture, recording, television, and radio				P	P			
Showroom			P	P				
Testing or research laboratory use				P	P			
Industrial								
Brewery, farm winery, or distillery				PS	PS			
Data center				P	P	P		
Microbrewery or microdistillery	PS	PS	PS	PS	PS			

Use Type	Mixed Use		Commercial		Industrial		Public	Use Standards Reference
	MX-1	MX-2	B-1	B-2	I-1	I-2	PI	
Small brewery		C	C	P	P			See 11-6-4
Combined heat and power plant						C		See 11-6-4
Commercial bakery			C	C				
Composting						I		
Construction contractor yard					P	P		
Construction demolition waste facility						I		See 11-6-4
Large-scale mineral extraction						I		See 11-6-4
Large-scale mineral extraction, ancillary uses						I		See 11-6-4
Manufacturing, custom	C	C	C	P	P			See 11-6-4
Manufacturing, heavy						PS		See 11-6-4
Manufacturing, light				P	P	P		
Manufacturing or storage of combustible or explosive materials						P		
Manufacturing, storage, or distribution of chemicals or fertilizer						P		
Nonhazardous industrial waste containment facility						I		See 11-6-4
Recycling operation						C		See 11-6-4
Scrap or salvage yard						C		
Self-service storage facility				C	C			See 11-6-4
Small-scale mineral extraction						I		See 11-6-4

Use Type	Mixed Use		Commercial		Industrial		Public	Use Standards Reference
	MX-1	MX-2	B-1	B-2	I-1	I-2	PI	
Storage and sale of machinery and equipment				C	P	P		
Warehouse and distribution facility				P	P			
Waste processing facility						I		
Waste transfer station						I		
Wholesale trade establishment				P	P			
Agriculture, Open Space, & Natural Resources								
Community solar garden or solar farm					I	I	I	See 11-6-5
Nature preserve/conservation area							P	
Park or playground	P	P	P				P	
Public recreation facility	P	P	P				P	
Wildlife recreation area							P	
Utilities & Transportation								
Commercial use antenna and/or tower					PS	PS		See 11-6-6
Essential service facility	PS	PS	PS	PS	PS	PS	PS	See 11-6-6
Public parking or loading facility	P						P	
Small wireless facility within the ROW	PS		PS	PS	PS	PS	PS	See 11-6-6
Transit station	P	P	P	P			P	
Transmission facility greater than 1/4 mile in length			C					
Truck stop					C	C		See 11-6-6
Truck terminal					PS	PS		See 11-6-6

Table 4.2 Accessory Use Table

Use Type	Mixed Use		Commercial		Industrial		Public	Use Standards Reference
	MX-1	MX-2	B-1	B-2	I-1	I-2	PI	
Accessory agricultural building	P							
Accessory agriculture				P				
Accessory retail				PS	PS			See 11-6-7
Accessory structure				PS	PS	PS	PS	See 11-6-7
Agriculture associated with breweries, microdistilleries, and wineries				P	P	P		
Barge terminal						P		
Car wash, full service		PS	PS		PS			See 11-6-3
Car wash, self service		PS	PS		PS			See 11-6-3
Cemetery	PS	PS					P	See 11-6-2
Community garden							C	
Construction-related temporary use	PS	PS	PS	PS	PS	PS	PS	See 11-6-7
Day care center				P				
Drive-through facility	PS	PS	PS					See 11-6-7
Greenhouse							P	
Indoor bulk material storage accessory to a permitted or conditional use						P		
Keeping of animals, domestic	PS	PS						See 11-6-7
Mobile food unit	PS	PS	PS	PS	PS	PS	PS	See 11-6-7
Office uses accessory to a permitted or conditional use				P	P	P	P	

Use Type	Mixed Use		Commercial		Industrial		Public	Use Standards Reference
	MX-1	MX-2	B-1	B-2	I-1	I-2	PI	
Off-street parking or loading facility	P	P	P	P	P	P	P	
Outdoor dining	PS	PS	PS					See 11-6-8
Outdoor display or sales	PS	PS	PS	PS	PS	PS		See 11-6-8
Outdoor industrial equipment					PS	PS		See 11-6-8
Outdoor storage				C	PS	PS		See 11-6-8
Overnight sleeping facilities for security personnel				P	P	P		
Recreational amenity, private	PS	PS		PS	PS	PS		See 11-6-8
Residential swimming pool	PS	PS						See 5-3-1
Sacred community	PS	PS		PS			PS	See 11-6-8
Sales office, temporary	PS	PS						See 11-6-8
Satellite dish	PS	PS	PS	PS	PS	PS	PS	See 11-6-8
Small-scale solar energy system, ground-mounted					PS	PS	PS	See 11-6-8
Small scale solar energy system, roof-mounted	PS	PS	PS	PS	PS	PS	PS	See 11-6-8
Spent bauxite disposal facility						I		See 11-6-8
Transient merchant sales lot	PS	PS	PS				PS	See 11-6-8
Uses accessory to large-scale mineral extraction						I		See 11-6-8
Uses accessory to small-scale mineral extraction						I		See 11-6-8

11-4-3 :Lot Dimensions

A. All lot dimension standards listed in this Section are subject to the exemptions listed in section 11-2-5 "General Lot, Building, and Yard Provisions."

B. Table 4.3 establishes the minimum lot area and lot width requirements for the MX-1, MX-2, B-1, B-2, I-1, I-2, and PI zoning districts.

Table 4.3. Non-Residential Lot Dimensions

District	Use Types	Minimum Lot Area (sq. ft.)	Minimum Lot Width (ft.)
MX-1	Dwelling, attached townhouse or rowhouse	2,500 per unit	20 per unit
	Dwelling, apartment	22,500	150
	All other uses	None	None
MX-2	Dwelling, attached townhouse or rowhouse	2,500 per unit	20 per unit
	Dwelling, apartment	22,500	150
	All other uses	20,000	150
B-1	All uses	20,000	120
B-2	All uses	1 acre	120
I-1	All uses	5 acres	None
I-2	All uses	25 acres	None
PI	All uses	None	None

11-4-4 :Site Dimensions

A. All site dimension standards listed in this Section are also subject to the supplementary yard and height regulations listed in Chapter 2, General Zoning Requirements.

B. Table 4.4 establishes the minimum site dimension standards for principal structures for the MX-1, MX-2, B-1, B-2, I-1, I-2, and PI zoning districts. Setbacks for any use not listed shall be the most restrictive of the district.

Table 4.4. Non-Residential Site Dimensions

District	Minimum Setbacks (ft.)			Maximum Building Height (ft.)	Maximum Lot Coverage
	Front	Side	Rear		
MX-1	None[1]	None[1]	None[1]	4 stories not to exceed 48'	90%
MX-2	30'	10'	10'	35'	75%
B-1	30'	10'	10'	35'	75%

District	Minimum Setbacks (ft.)			Maximum Building Height (ft.)	Maximum Lot Coverage
	Front	Side	Rear		
B-2	30'	10'	10'	50'	75%
I-1	75'	50'	50'	50'	70%
I-2[2]	150'	150'	150'	75'	70%
PI	30'	30'	30'	50'	70%
[1] A 10 foot buffer yard is required adjacent to any residential district. [2] Minimum building size of 10% of property will be a standard in the I-2 district.					

C. Table 4.5 establishes the minimum site dimension standards for accessory structures for the MX-1, MX-2, B-1, B-2, I-1, I-2, and PI zoning districts. Setbacks for any use not listed shall be the most restrictive of the district.

Table 4.5. Non-Residential Site Dimensions

District	Minimum Setbacks (ft.)			Maximum Building Height (ft.)
	Front	Side	Rear	
MX-1	0	0	0	18
MX-2	30	10	10	25
B-1	30	10	10	18
B-2	30	10	10	40
I-1	75	50	50	75
I-2	Structures less than or equal to 35 ft. in height: 75 Structures up to 50 ft. in height: 150 Structures over 50 ft. in height: 300			75
PI	30	10	10	25

11-4-5 :District Standards

A. MX-1 Downtown Mixed Use District

1. The outdoor overnight parking of trailers within city-approved customer parking is prohibited. The term "trailer" shall include any vehicle that is not self-propelled that requires another motorized vehicle to propel it and requires its own license from the state department of motor vehicles.

B. MX-2 Highway Mixed Use District

1. Residential uses shall be prohibited along street frontages within 500 feet of the intersection of Highway 42 and any collector or arterial road as designated in the Comprehensive Plan.

2. For each development site within the MX-2 District, no more than 25% of the net buildable area shall be used solely for residential uses. Net buildable area excludes wetlands, drainage and utility easements, rights-of-way, and steep slopes.

   a. Within each contiguous MX-2 District area, the total area allowed for residential-only uses may be transferred between development sites with a signed agreement between all involved property owners. No more than 25% of each contiguous MX-2 District area is allowed to be residential-only uses.

C. B-2 Employment and I-1 General Industrial Districts

1. When a permitted, accessory, interim, or conditional use abuts any of the items listed in the table below, the applicable increased minimum yard setback shall apply:

   Table 4.5. Increased Setbacks

Item	**Increased Minimum Setback**	
	Parking and Circulation	**Structure**
Principal arterial ROW	40 ft.	75 ft.
Minor arterial ROW	35 ft.	60 ft.
Collector ROW	30 ft.	40 ft.
Railroad	10 ft.	30 ft.
Residential or institutional uses/districts	30 ft. or 2x building height	30 ft. or 2x building height

2. Minimum building size: 10% of the subject property, excluding protective wetlands and bluff impact zones.

E. I-2 Heavy Industrial District

1. The minimum district size for the I-2 District is 25 acres.
2. Minimum building size: 10% of the subject property, excluding protective wetlands and bluff impact zones.
3. All principal and accessory uses allowed within the I-2 District, except those with specific exemptions, shall comply with the development standards outlined in this chapter for the I-1 General Industrial District. The City Council may choose to waive some or all of these development standards for nonexempt uses after review.

TITLE 11 ZONING REGULATIONS

CHAPTER 5 SPECIAL/OVERLAY DISTRICTS

11-5-1 :Floodplain Overlay District

A. Statutory Authorization and Purpose

1. Statutory Authorization. This floodplain ordinance is adopted pursuant to the authorization and policies contained in Minnesota Statutes, Chapter 103F; Minnesota Rules, parts 6120.5000 – 6120.6200; the rules and regulations of the National Flood Insurance Program (NFIP) in 44 CFR § 59 to 80; and the planning and zoning enabling legislation in Minnesota Statutes, Chapter 462.

2. Purpose

   a. This ordinance regulates development in the flood hazard areas of the City of Rosemount. These flood hazard areas are subject to periodic inundation, which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base. It is the purpose of this ordinance to promote the public health, safety, and general welfare by minimizing these losses and disruptions.

   b. This ordinance is adopted in the public interest to promote sound land use practices, and floodplains are a land resource to be developed in a manner which will result in minimum loss of life and threat to health, and reduction of private and public economic loss caused by flooding.

   c. This ordinance is adopted to maintain eligibility in the National Flood Insurance Program.

   d. This ordinance is also intended to preserve the natural characteristics and functions of watercourses and floodplains in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits and enhance community and economic development.

3. Abrogation and Greater Restrictions. It is not intended by this ordinance to repeal, abrogate, or impair any existing easements, covenants, or private agreements. The standards in this ordinance take precedence over any less restrictive, conflicting local laws, ordinances, or codes. All other ordinances inconsistent with this ordinance are hereby repealed to the extent of the inconsistency only.

4. Warning and Disclaimer of Liability. This ordinance does not imply that areas outside the floodplain districts or land uses permitted within such districts will be free from flooding or flood damages. Not all flood risk is mapped. Larger floods do occur and the flood height may be increased by man-made or natural causes, such as ice jams or bridge openings restricted by debris. This ordinance does not create liability on the part of the City of Rosemount or its officers or employees for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

5. Severability. If any section, clause, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court of law, the remainder of this ordinance shall not be affected and shall remain in full force.

6. Definitions. Unless specifically defined in section 11-10-6 Floodplain Definitions, words or phrases used in this ordinance must be interpreted according to common usage and so as to give this ordinance its most reasonable application.

B. Jurisdictions and Districts

1. Lands to Which Ordinance Applies. This ordinance applies to all lands under the jurisdiction of the City of Rosemount within the Floodplain, shown as Zone AE on the Flood Insurance Rate Map panels referenced in subsection B.2 below.

   a. The standards imposed in this overlay district are in addition to any other requirements. In case of a conflict, the more restrictive standards will apply.

   b. Where a conflict exists between the floodplain limits illustrated on the official floodplain maps and actual field conditions (as illustrated in Figure 5.1), the Base Flood Elevation (BFE) shall be the governing factor in locating the outer boundaries of the one-percent annual chance floodplain.

Figure 5.1: The mapped floodplain may not always align with on-the-ground contour elevations

   c. Persons contesting the location of the district boundaries will be given a reasonable opportunity to present their case to the city and to submit technical evidence.

2. Incorporation of Maps by Reference. The following maps together with all attached material are hereby adopted by reference and declared to be a part of the official zoning map and this ordinance. The attached material includes the Flood Insurance Study(s) for Dakota County, Minnesota, and Incorporated Areas, dated March 16, 2016, and the Flood Insurance Rate map panels enumerated below, dated December 2, 2011, all prepared by the Federal Emergency Management Agency. These materials are on file at City Hall.

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3. Annexations: The Flood Insurance Rate Map panels referenced in subsection B.2 above may include floodplain areas that lie outside of the corporate boundaries of the City of Rosemount at the time of adoption of this ordinance. If any of these floodplain land areas are annexed into the City of Rosemount after the date of adoption of this ordinance, the newly annexed floodplain lands will be subject to the provisions of this ordinance immediately upon the date of annexation. Annexations into panels not referenced in subsection B.2 require ordinance amendment in accordance with subsection G below.

4. Municipal Boundary Adjustments & Townships. The Flood Insurance Rate Map panels referenced in subsection B.2 apply countywide. If at any point any lands come under the jurisdiction of another local government, the following shall apply:

   a. City adjustments of corporate boundaries, including but not limited to annexations and detachments, shall shift floodplain administrative authority of all affected lands immediately upon the date of the boundary adjustment occurring. Cities retain jurisdiction for all incorporated lands, and the County retains jurisdiction under this ordinance on all unincorporated lands, except as provided under subsection B.4.b below or through some form of administrative agreement.

   b. Townships wishing to adopt official controls under Minnesota Statutes, Section 394.33 may only obtain zoning authority for floodplain controls when they have adopted an ordinance that is approved by the Department of Natural Resources and has formally enrolled in the NFIP. Until this occurs, the county shall retain jurisdiction under this ordinance on all unincorporated lands. In the event that a township returns zoning authority, the county shall resume that authority.

C. Permitted Activities and Standards in the Floodplain District

1. Permitted Activities. A permit must be obtained from the Zoning Administrator to verify compliance with all applicable standards outlined in this ordinance prior to the following uses or activities:

   a. Any addition, modification, rehabilitation, repair, or alteration to a nonconforming structure as specified in subsection D below. Normal maintenance and repair also requires a permit if such work, separately or in conjunction with other planned work, constitutes a substantial improvement as defined in section 11-10-6 of this ordinance.

   b. Any use that requires fill, excavation, storage of materials, or placement of anything that may cause a potential obstruction, as well as any other form of development as defined in section 11-10-6 of this ordinance.

2. Activities Not Requiring a Permit. Certain uses or activities may be exempt from obtaining a permit, such as planting a garden, farming, or other obviously insignificant activities such as putting up a mailbox or flagpole. Farm fences, as defined in section 11-10-6 of this

ordinance, are not considered to be an obstruction, and as such, do not require a permit. A local permit is not required if a public waters work permit has been obtained from the Department of Natural Resources, unless a significant area above the ordinary high water level is also to be disturbed. The continuation of existing uses, when the associated activities do not encroach further on the regulatory floodplain or trigger associated standards in this ordinance, do not require a permit.

3. Minimum Development Standards.

   a. All development must:

      i. Be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

      ii. Be constructed with materials and equipment resistant to flood damage;

      iii. Be constructed by methods and practices that minimize flood damage;

      iv. Be reasonably safe from flooding and consistent with the need to minimize flood damage;

      v. Be assured to provide adequate drainage to reduce exposure to flood hazards;

      vi. Not be detrimental to uses in adjoining areas; and

      vii. Not adversely affect the efficiency or restrict the flood carrying capacity of the channel and adjoining floodplain of any tributary watercourse or drainage system.

   b. Buildings and Structures. No new structures, such as buildings or accessory structures may be permitted in the regulatory floodplain. Modifications and alterations of nonconforming structures is subject to the standards in subsection D below.

   c. Subdivisions. All new lots must be able to accommodate for a building site with a natural grade outside of the floodplain. All subdivisions must have vehicular access both to the subdivision and to the individual building sites no lower than two feet below the Regulatory Flood Protection Elevation (RFPE).

   d. Encroachment Analysis. Development in the following areas requires hydrologic and hydraulic analysis performed by a professional engineer, or using other standard engineering practices (e.g. projects that restore the site to the previous cross-sectional area).

      i. In a floodway, development may not result in any of the following during the one-percent annual chance flood: cause a stage increase of 0.00 feet or greater, obstruct flood flows, or increase velocities.

      ii. In areas where a floodway has not been delineated, development may not allow stage increases more than one-half (0.5) foot at any point during the one-percent chance flood. This evaluation must include the cumulative effects of previous encroachments. A lesser water surface elevation increase than one-half (0.5) foot is required if, due to the water surface level increase, increased flood damages would potentially result.

   e. Fences not meeting the definition of farm fences are not permitted.

f. Transportation Facilities. Railroad tracks, roads, and bridges must be elevated to the Regulatory Flood Protection Elevation (RFPE) where such facilities are essential to the orderly functioning of the area, or where failure or interruption would result in danger to public health or safety. Minor or auxiliary roads or railroads may be constructed at a lower elevation where failure or interruption of transportation services would not endanger the public health or safety. All public transportation facilities should be designed to minimize increases in flood elevations.

g. Public Utilities. All utilities such as gas, electrical, sewer, and water supply systems to be located in the floodplain must be elevated and/or floodproofed to the Regulatory Flood Protection Elevation (RFPE), be located and constructed to minimize or eliminate flood damage, and be designed to eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters. All public utilities should be designed to minimize increases in flood elevations. New solid waste management facilities, as defined in Minnesota Rules, part 7035.0300, are prohibited. Water supply systems are subject to the provisions in Minnesota Rules, part 4725.4350.

h. Potential Pollutants. Materials that, in time of flooding, are buoyant, flammable, explosive, or could be injurious to human, animal, or plant life, as well as those likely to cause pollution of the waters, such as sewage; sand; rock; wrecked and discarded equipment; dredged spoil; municipal, agricultural or industrial waste; and other wastes as further defined in Minnesota Statutes, Section 115.01, are prohibited.

i. Land Alterations. In areas within 25 feet of the ordinary high water level, land alterations shall be restricted to:

   i. the minimum required to accommodate beach and access areas, not to exceed a volume greater than 10 cubic yards; and

   ii. the minimum required to accommodate for public utilities, roads, railroad tracks, bridges, and shoreline stabilization projects to correct an identified erosion problem, as verified by a qualified resource agency or the zoning administrator.

j. Recreational vehicles must be travel ready, meeting the following criteria:

   i. The vehicle must be fully licensed.

   ii. The vehicle must be ready for highway use, meaning on wheels or the internal jacking system, attached to the site only by quick disconnect type utilities.

   iii. No permanent structural type additions may be attached to the vehicle.

k. Private On-site Water Supply, Individual Sewage Treatment Systems, and other Service Facilities shall be subject to applicable provisions detailed in subsection C.3.g above. Replacement of on-site sewage treatment systems are to be constructed to avoid impairment to them or contamination from them during times of flooding, shall not be located in a designated floodway, and are subject to the provisions in Minnesota Rules, parts 7080.2270. No new private service facilities may be permitted in the regulatory floodplain

D. Nonconformities

1. Continuance of Nonconformities: A use, structure, or occupancy of land which was lawful before the passage or amendment of this ordinance, but which is not in conformity with the provisions of this ordinance, may be continued subject to the following conditions:

    a. Within the floodway, or where the floodway has not been delineated, any expansion or enlargement of uses or structures is prohibited.

    b. Any addition, modification, rehabilitation, repair, or alteration shall be in conformance with the provisions of this ordinance, shall not increase the flood damage potential or increase the degree of obstruction to flood flows, and where applicable, must be protected to the Regulatory Flood Protection Elevation (RFPE).

    c. If any nonconforming structure is determined to be substantially damaged or substantially improved based on the procedures in subsection D.3 below, it may not be reconstructed except in conformity with the provisions of this ordinance.

    d. If any nonconforming use, or any use of a nonconforming structure, is discontinued for more than one year, any future use of the premises must conform to this ordinance.

2. Standards for Modifications and Alterations of Nonconforming Structures. In addition to the standards identified in C.3, the following standards and procedures apply to additions, modifications, rehabilitations, repairs, alterations, or maintenance of nonconforming structures:

    a. All structures, including manufactured homes, must be elevated on fill so that the lowest floor of the lowest enclosed area (including basement) is at or above the Regulatory Flood Protection Elevation (RFPE). The finished fill elevation shall be at or above the elevation associated with the base flood plus any stage increases that result from designation of a floodway. Fill must extend at the same elevation at least 15 feet beyond the outside limits of the structure. Elevations must be certified by a registered professional engineer, land surveyor or other qualified person designated by the Zoning Administrator.

    b. Electrical, heating, ventilation, ductwork, plumbing, and air conditioning equipment and other service facilities are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

3. Substantial Improvement and Substantial Damage Determinations. Prior to issuing any permits for additions, modifications, rehabilitations, repairs, alterations, or maintenance to nonconforming structures, the Zoning Administrator is required to determine if such work constitutes substantial improvement or repair of a substantially damaged structure. A determination must be made in accordance with the following procedures:

    a. Estimate the market value of the structure. In the case of repairs, the market value of the structure shall be the market value before the damage occurred and before any restoration or repairs are made.

    b. Estimate the cost of the project. The property owner shall accommodate for inspection, and furnish other documentation needed by the zoning administrator to evaluate costs.

        i. Improvement costs shall be comprised of the market rate of all materials and labor, as well as the costs of all ordinary maintenance and upkeep carried out over the past one year.

ii. Costs to repair damages shall be comprised of the market rate of all materials and labor required to restore a building to its pre-damaged condition regardless of the work proposed, as well as associated improvement costs if structure is being restored beyond its pre-damaged condition.

c. Compare the cost of the improvement, repairs, or combination thereof to the estimated market value of the structure, and determine whether the proposed work constitutes substantial improvement or repair of a substantially damaged structure, as defined in section 11-10-6 of this ordinance.

d. Based on this determination, the zoning administrator shall prepare a determination letter and notify the property owner accordingly. Structures determined to be substantially damaged or substantially improved may not be reconstructed except in conformity with the provisions of this ordinance

E. Administration

1. Duties. A Zoning Administrator or other official must administer and enforce this ordinance.

a. Permit Application Requirements. Permit applications must be submitted to the Zoning Administrator. The permit application must include the following, as applicable:

i. A site plan showing all existing or proposed buildings, structures, service facilities, potential obstructions, and pertinent design features having an influence on the permit.

ii. Location and detail of grading, fill, or storage of materials.

iii. Copies of any required local, state or federal permits or approvals.

iv. Other relevant information requested by the Zoning Administrator as necessary to properly evaluate the permit application.

b. Recordkeeping. The Zoning Administrator must maintain applicable records in perpetuity documenting:

i. Encroachment analysis, as detailed in section C.3.d above.

ii. Final elevations, as applicable, detailing the elevation to which structures and improvements to structures are constructed or floodproofed. Elevations shall be determined by an engineer, architect, surveyor or other qualified individual, as approved by the Zoning Administrator.

iii. Substantial damage and substantial improvement determinations, as detailed in section D.3, including the cost of improvements, repairs, and market value.

iv. All variance actions, including justification for their issuance, and must report such variances as requested by the Federal Emergency Management Agency.

2. Variances

a. An application for a variance to the provisions of this ordinance will be processed and reviewed in accordance with Minnesota Statutes, section 462.357, Subd. 6(2) and this ordinance.

b. Variances must not be issued within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.

c. Variances from the provisions in this ordinance may only be issued by a community upon:

   i. A showing of good and sufficient cause,

   ii. A determination that failure to grant the variance would result in exceptional hardship to the applicant, and

   iii. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

d. Variances from the provisions in this ordinance may only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

e. Variances must be consistent with the general purpose of these standards and the intent of applicable provisions in state and federal law.

f. Though variances may be used to modify permissible methods of flood protection, no variance shall permit a lesser degree of flood protection than the Regulatory Flood Protection Elevation (RFPE).

g. The Zoning Administrator must notify the applicant for a variance that:

   i. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage and

   ii. Such construction below the base or regional flood level increases risks to life and property. Such notification must be maintained with a record of all variance actions.

3. Notifications for Watercourse Alterations: Before authorizing any alteration or relocation of a river or stream, the Zoning Administrator must notify adjacent communities. If the applicant has applied for a permit to work in public waters pursuant to Minnesota Statute, Section 103G.245, this will suffice as adequate notice. A copy of the notification must also be submitted to FEMA.

4. Notification to FEMA When Physical Changes Increase or Decrease Base Flood Elevations: Where physical changes affecting flooding conditions may increase or decrease the water surface elevation of the base flood, the City of Rosemount must notify FEMA of the changes in order to obtain a Letter of Map Revision (LOMR), by submitting a copy of the relevant technical or scientific data as soon as practicable, but no later than six months after the date such supporting information becomes available. Within areas where the floodway has not been delineated, a map revision is only required if development results in stage increases greater than 0.5 feet.

5. Notifications to the Department of Natural Resources.

   a. All notices of public hearings to consider variances or conditional uses under this ordinance must be sent via electronic mail to the Department of Natural Resources respective area hydrologist at least 10 days before the hearings. Notices of hearings to consider subdivisions/plats must include copies of the subdivision/plat.

b. A copy of all decisions granting variances and conditional uses under this ordinance must be sent via electronic mail to the Department of Natural Resources respective area hydrologist within 10 days of final action.

F. Penalties and Enforcement

1. Uses in Violation of the Ordinance. Every structure, fill, deposit, or other use placed or maintained in the floodplain in violation of this ordinance shall be considered a public nuisance.

2. Civil Remedies. The creation of a public nuisance may be enjoined and the maintenance of a public nuisance under this ordinance may be abated by an action brought by the City of Rosemount or the Department of Natural Resources.

3. Enforcement. Violations of the provisions of this ordinance constitutes a misdemeanor and is punishable as defined by law. The Zoning Administrator may utilize the full array of enforcement actions available to it including but not limited to prosecution and fines, injunctions, after-the-fact permits, orders for corrective measures or a request to the National Flood Insurance Program for denial of flood insurance. The City of Rosemount must act in good faith to enforce these official controls and to correct ordinance violations to the extent possible so as not to jeopardize its eligibility in the National Flood Insurance Program.

G. Amendments

1. Ordinance Amendments. Any revisions to the floodplain maps by the Federal Emergency Management Agency or annexations of new map panels require an ordinance amendment to update the map references in subsection B.2 above.

2. Required Approval: All amendments to this ordinance must be submitted to the Department of Natural Resources (DNR) for review and approval prior to adoption, for compliance with state and federal rules and requirements. The floodplain ordinance shall not be considered valid until approved.

11-5-2 :Shoreland Overlay District

A. Statutory Authorization and Policy

1. Statutory Authorization. This shoreland ordinance is adopted pursuant to the authorization and policies contained in Minnesota Statutes, Chapter 103F, Minnesota Rules, Parts 6120.2500 - 6120.3900, and the planning and zoning enabling legislation in Minnesota Statutes, Chapter 462.

2. Policy. The Legislature of Minnesota has delegated responsibility to local governments of the state to regulate the subdivision, use and development of the shorelands of public waters and thus preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of shorelands, and provide for the wise use of waters and related land resources. This responsibility is hereby recognized by the City of Rosemount.

B. General Provisions and Definitions

1. Jurisdiction. The provisions of this ordinance apply to the shorelands of the public water bodies as classified in subsection D.1 below, and to the shorelands of public water bodies greater than 10 acres in unincorporated areas in which the city has, by ordinance, extended the application of its zoning regulations as provided by Minnesota Statute, Chapter 462.357 Subd 1. Pursuant to Minnesota Rules, Parts 6120.2500 - 6120.3900, no lake, pond, or

flowage less than 10 acres in size in municipalities or 25 acres in size in unincorporated areas need be regulated in a local government's shoreland regulations. A body of water created by a private user where there was no previous shoreland may, at the discretion of the governing body, be exempt from this ordinance.

2. Enforcement. The Zoning Administrator is responsible for the administration and enforcement of this ordinance. Any violation of the provisions of this ordinance or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variances or conditional uses constitutes a misdemeanor and is punishable as defined by law. Violations of this ordinance can occur regardless of whether or not a permit is required for a regulated activity listed in subsection C.2 below.

3. Severability. If any section, clause, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this ordinance shall not be affected thereby.

4. Abrogation and Greater Restrictions. It is not intended by this ordinance to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance imposes greater restrictions, the provisions of this ordinance shall prevail. All other ordinances inconsistent with this ordinance are hereby repealed to the extent of the inconsistency only.

5. Definitions. Unless specifically defined in section 11-10-5 Shoreland Definitions, words or phrases used in this ordinance shall be interpreted to give them the same meaning they have in common usage and to give this ordinance its most reasonable application. For the purpose of this ordinance, the words "must" and "shall" are mandatory and not permissive. All distances, unless otherwise specified, are measured horizontally.

C. Administration

1. Purpose. The purpose of this Section is to identify administrative provisions to ensure the ordinance is administered consistent with its purpose.

2. Permits.

   a. A permit is required for the construction of buildings or building additions (including construction of decks and signs), the installation and/or alteration of sewage treatment systems, and those grading and filling activities not exempted by subsection H.3 below.

   b. A certificate of compliance, consistent with Minnesota Rules Chapter 7082.0700 Subp. 3, is required whenever a permit or variance of any type is required for any improvement on or use of the property. A sewage treatment system shall be considered compliant if the only deficiency is the system's improper setback from the ordinary high water level.

3. Application materials. Application for permits and other zoning applications such as variances shall be made to the Zoning Administrator on the forms provided. The application shall include the necessary information so that the Zoning Administrator can evaluate how the application complies with the provisions of this ordinance.

4. Certificate of Zoning Compliance. The Zoning Administrator shall issue a certificate of zoning compliance for each activity requiring a permit as specified in subsection C.2 above. This certificate will specify that the use of land conforms to the requirements of this

ordinance. Any use, arrangement, or construction at variance with that authorized by permit shall be deemed a violation of this ordinance and shall be punishable as provided in subsection B.2.

5. Variances. Variances may only be granted in accordance with Section 462.357 and are subject to the following:
    a. A variance may not circumvent the general purposes and intent of this ordinance; and
    b. For properties with existing sewage treatment systems, a certificate of compliance, consistent with Minnesota Rules Chapter 7082.0700 Subp. 3, is required for variance approval. A sewage treatment system shall be considered compliant if the only deficiency is the system's improper setback from the ordinary high water level.
6. Conditional Uses. All conditional uses in the shoreland area are subject to a thorough evaluation of the waterbody and the topographic, vegetation, and soil conditions to ensure:
    a. The prevention of soil erosion or other possible pollution of public waters, both during and after construction;
    b. The visibility of structures and other facilities as viewed from public waters is limited;
    c. There is adequate water supply and on-site sewage treatment; and
    d. The types, uses, and numbers of watercraft that the project will generate are compatible in relation to the suitability of public waters to safely accommodate these watercrafts.
7. Mitigation.
    a. In evaluating all variances, conditional uses, zoning and building permit applications, the zoning authority shall require the property owner to address the following conditions, when related to and proportional to the impact, to meet the purpose of this ordinance, to protect adjacent properties, and the public interest:
        i. Advanced storm water runoff management treatment;
        ii. Reducing impervious surfaces;
        iii. Increasing setbacks from the ordinary high water level;
        iv. Restoration of wetlands;
        v. Limiting vegetation removal and/or riparian vegetation restoration;
        vi. Provisions for the location, design, and use of structures, sewage treatment systems, water supply systems, watercraft launching and docking areas, and parking areas; and
        vii. Other conditions the zoning authority deems necessary.
    b. In evaluating plans to construct sewage treatment systems, roads, driveways, structures, or other improvements on steep slopes, conditions to prevent erosion and to preserve existing vegetation screening of structures, vehicles, and other facilities as viewed from the surface of public waters assuming summer, leaf-on vegetation shall be attached to permits.
8. Nonconformities.

a. All legally established nonconformities as of the date of this ordinance may continue, but will be managed according to 462.357 Subd. 1e and other regulations of this community for alterations and additions; repair after damage; discontinuance of use; and intensification of use.

b. All additions or expansions to the outside dimensions of an existing nonconforming structure must meet the setback, height, lowest floor elevations, and other requirements of subsections E to H. Any deviation from these requirements must be authorized by a variance.

9. Notifications to the Department of Natural Resources.

a. All amendments to this shoreland ordinance must be submitted to the Department of Natural Resources for review and approval for compliance with the statewide shoreland management rules

b. All notices of public hearings to consider variances, ordinance amendments, or conditional uses under shoreland management controls must be sent to the commissioner or the commissioner's designated representative at least ten (10) days before the hearings. Notices of hearings to consider proposed subdivisions/plats must include copies of the subdivision/plat.

c. All approved ordinance amendments and subdivisions/plats, and final decisions approving variances or conditional uses under local shoreland management controls must be sent to the commissioner or the commissioner's designated representative and postmarked within ten days of final action. When a variance is approved after the Department of Natural Resources has formally recommended denial in the hearing record, the notification of the approved variance shall also include the summary of the public record/testimony and the findings of facts and conclusions which supported the issuance of the variance.

d. Any request to change the shoreland management classification of public waters within the City of Rosemount must be sent to the commissioner or the commissioner's designated representative for approval, and must include a resolution and supporting data as required by Minnesota Rules, part 6120.3000, subp.4.

e. Any request to reduce the boundaries of shorelands of public waters within the City of Rosemount must be sent to the commissioner or the commissioner's designated representative for approval and must include a resolution and supporting data The boundaries of shorelands may be reduced when the shoreland of water bodies with different classifications overlap. In these cases, the topographic divide between the water bodies shall be used for adjusting the boundaries.

10. Mandatory EAW. An Environmental Assessment Worksheet consistent with Minnesota Rules, Chapter 4410 must be prepared for projects meeting the thresholds of Minnesota Rules, part 4410.4300, Subparts 19a, 20a, 25, 27, 28, 29, and 36a.

D. Shoreland Classification System and Land Uses

1. Shoreland Classification System.

a. Purpose. To ensure that shoreland development on the public waters of (insert local government name) is regulated consistent with the classifications assigned by the commissioner under Minnesota Rules, part 6120.3300.

b. Lakes are classified as follows:

i. General development (GD);

General Development Lake Name	DNR Public Waters I.D. #
No lakes currently classified as GD within the City	

ii. Recreational development (GD);

Recreational Development Lake Name	DNR Public Waters I.D. #
Keegan Lake	19001100

iii. Natural environment (NE).

Natural Environment Lake Name	DNR Public Waters I.D. #
Unnamed	19000800
Unnamed	19001200
Unnamed	19018200
Unnamed	19018500
Unnamed	19031100
Unnamed	19032000

c. Rivers and Streams are classified as follows:

i. Transition

Transition River Name	Legal Description
Mississippi River	

d. All public rivers and streams shown on the Public Waters Inventory Map for Dakota County, a copy of which is adopted by reference, not given a classification in subsection D.1.c above shall be considered "Tributary."

2. Land Uses

a. Purpose. To identify land uses that are compatible with the protection and preservation of shoreline resources in order to conserve the economic and environmental values of shoreland and sustain water quality.

b. Shoreland district land uses listed in subsections D.2.c and D.2d are regulated as:

i. Permitted uses (P). These uses are allowed, provided all standards in this ordinance are followed;

ii. Conditional uses (C). These uses are allowed through a conditional use permit. The use must be evaluated according to the criteria in subsection C.6 above and any additional conditions listed in this ordinance; and

iii. Not permitted uses (N). These uses are prohibited.

c. Land uses for lake classifications:

Land Uses	General Development	Recreational Development	Natural Environment
Single residential	P	P	P
Duplex, triplex, quad residential	P	P	C
Residential PUD	C	C	C
Water-dependent (Resorts are also Commercial PUDs)	C	C	C
Commercial	P	P	C
Commercial PUD (Expansion of PUD involving up to six additional units or sites allowed as a permitted use provided the provisions of subsection J are satisfied.)	C	C	C
Solar power facilities (principal land use)	C	C	C
Parks & historic sites	C	C	C
Public, semipublic	P	P	C
Industrial	C	C	N
Agricultural: cropland and pasture	P	P	P
Agricultural feedlots: New	N	N	N
Agricultural feedlots: Expansion or resumption of existing	C	C	C
Forest management	P	P	P
Forest land conversion	C	C	C
Extractive use	C	C	C
Mining of metallic minerals and peat	P	P	P

d. Land uses for river and stream classifications:

Land Uses	Remote	Forested	Transition	Agriculture	Urban	Tributary
Single residential	P	P	P	P	P	P
Duplex, triplex, quad residential	C	P	P	P	P	P
Residential PUD	C	C	C	C	C	C
Water-dependent commercial - Accessory to residential PUD	C	C	C	C	C	C
Commercial	C	C	C	C	P	P
Commercial PUD - Expansion of PUD involving up to six additional units or sites allowed as a permitted use provided the provisions of subsection J are satisfied.	C	C	C	C	C	C

Land Uses	Remote	Forested	Transition	Agriculture	Urban	Tributary
Solar power facilities (principal land use)	C	C	C	C	C	C
Parks & historic sites	C	C	C	C	C	C
Public, semipublic	C	C	C	C	P	P
Industrial	N	C	N	N	C	C
Agricultural: cropland and pasture	P	P	P	P	P	P
Agricultural feedlots: New	N	N	N	N	N	N
Agricultural feedlots: Expansion or resumption of existing	C	C	C	C	C	C
Forest management	P	P	P	P	P	P
Forest land conversion	C	C	C	C	C	C
Extractive use	C	C	C	C	C	C
Mining of metallic minerals and peat	P	P	P	P	P	P

E. Special Land Use Provisions

1. Commercial, Industrial, Public, and Semipublic Use Standards.

a. Water-dependent uses may be located on parcels or lots with frontage on public waters provided that:

i. The use complies with provisions of subsection G;

ii. The use is designed to incorporate topographic and vegetative screening of parking areas and structures;

iii. Uses that require short-term watercraft mooring for patrons must centralize these facilities and design them to avoid obstructions of navigation and to be the minimum size necessary to meet the need; and

iv. Uses that depend on patrons arriving by watercraft may use signs and lighting, provided that:

(a) Signs placed in or on public waters must only convey directional information or safety messages and may only be placed by a public authority or under a permit issued by the county sheriff; and

(b) Signs placed within the shore impact zone are:

(1) No higher than ten feet above the ground, and no greater than 32 square feet in size; and

(2) If illuminated by artificial lights, the lights must be shielded or directed to prevent illumination across public waters; and

(c) Other lighting may be located within the shore impact zone or over public waters if it is used to illuminate potential safety hazards and is shielded or otherwise directed to prevent direct illumination across public waters. This does not preclude use of navigational lights.

b. Commercial, industrial, public, and semi-public uses that are not water-dependent must be located on lots or parcels without public waters frontage, or, if located on lots or parcels with public waters frontage, must either be set back double the ordinary high water level setback or be substantially screened from view from the water by vegetation or topography, assuming summer, leaf-on conditions.

2. Agriculture Use Standards.

   a. Buffers.

      i. The shore impact zone for parcels with permitted agricultural land uses is equal to a line parallel to and 50 feet from the ordinary high water level.

      ii. General cultivation farming, grazing, nurseries, horticulture, truck farming, sod farming, and wild crop harvesting are permitted uses if steep slopes and shore and bluff impact zones are maintained in perennial vegetation or operated under an approved conservation plan with the field office technical guides of the local soil and water conservation district or the Natural Resource Conservation Service, and as approved by the local soil and water conservation district.

   b. New animal feedlots are not allowed in shoreland. Modifications or expansions to existing feedlots or resumption of old feedlots are conditional uses and must meet the following standards:

      i. Feedlots must be designed consistent with Minnesota Rules, Chapter 7020;

      ii. Feedlots must not further encroach into the existing ordinary high water level setback or the bluff impact zone and must not expand to a capacity of 1,000 animal units or more; and,

      iii. Old feedlots not currently in operation may resume operation consistent with Minnesota Statutes, Section 116.0711.

3. Forest Management Standards.

   a. The harvesting of timber and associated reforestation must be conducted consistent with the applicable provisions of the Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers.

   b. Intensive vegetation clearing for forest land conversion to another use is a conditional use subject to an erosion control and sedimentation plan developed and approved by the soil and water conservation district.

4. Extractive Use Standards. Extractive uses are conditional uses and must meet the following standards:

   a. Site Development and Restoration Plan. A site development and restoration plan must be developed, approved, and followed over the course of operation. The plan must:

      i. Address dust, noise, possible pollutant discharges, hours and duration of operation, and anticipated vegetation and topographic alterations;

      ii. Identify actions to be taken during operation to mitigate adverse environmental impacts, particularly erosion; and

      iii. Clearly explain how the site will be rehabilitated after extractive activities end.

b. Setbacks for Processing Machinery. Processing machinery must meet structure setback standards from ordinary high water levels and from bluffs.

5. Metallic and Peat Mining Standards. Mining of metallic minerals and peat is a permitted use provided the provisions of Minnesota Statutes, Sections 93.44 to 93.51, are satisfied.

F. Dimensional and General Performance Standards

1. Purpose. To establish dimensional and performance standards that protect shoreland resources from impacts of development.

2. Lot Area and Width Standards. After the effective date of this ordinance, all new lots must meet the minimum lot area and lot width requirements in subsections F.2.e and F.2.f, subject to the following standards:

a. Only lands above the ordinary high water level can be used to meet lot area and width standards;

b. Lot width standards must be met at both the ordinary high water level and at the building line;

c. The sewer lot area dimensions can only be used if publicly owned sewer system service is available to the property;

d. Residential subdivisions with dwelling unit densities exceeding those subsections F.2.e and F.2.f are allowed only if designed and approved as residential PUDs under subsection J of this ordinance; and

e. Lake Minimum Lot Area and Width Standards:

i. General development lake – No sewer

Lot Type	Riparian Lot Area (sf)	Riparian Lot Width (ft)	Nonriparian Lot Area (sf)	Nonriparian Lot Width (ft)
Single	20,000	100	40,000	150
Duplex	40,000	180	80,000	265
Triplex	60,000	260	120,000	375
Quad	80,000	340	160,000	490

ii. General development lake – Sewer

Lot Type	Riparian Lot Area (sf)	Riparian Lot Width (ft)	Nonriparian Lot Area (sf)	Nonriparian Lot Width (ft)
Single	15,000	75	10,000	75
Duplex	26,000	135	17,500	135
Triplex	38,000	195	25,000	190
Quad	49,000	255	32,500	245

iii. Recreational development lake – No sewer

Lot Type	Riparian Lot Area (sf)	Riparian Lot Width (ft)	Nonriparian Lot Area (sf)	Nonriparian Lot Width (ft)
Single	40,000	150	40,000	150
Duplex	80,000	225	80,000	265
Triplex	120,000	300	120,000	375
Quad	160,000	375	160,000	490

iv. Recreational development lake – Sewer

Lot Type	Riparian Lot Area (sf)	Riparian Lot Width (ft)	Nonriparian Lot Area (sf)	Nonriparian Lot Width (ft)
Single	20,000	75	15,000	75
Duplex	35,000	135	26,000	135
Triplex	50,000	195	38,000	190
Quad	65,000	255	49,000	245

v. Natural environment lake – No sewer

Lot Type	Riparian Lot Area (sf)	Riparian Lot Width (ft)	Nonriparian Lot Area (sf)	Nonriparian Lot Width (ft)
Single	80,000	200	80,000	200
Duplex	120,000	300	160,000	400
Triplex	160,000	400	240,000	600
Quad	200,000	500	320,000	800

iv. Natural environment lake – Sewer

Lot Type	Riparian Lot Area (sf)	Riparian Lot Width (ft)	Nonriparian Lot Area (sf)	Nonriparian Lot Width (ft)
Single	40,000	125	20,000	125
Duplex	70,000	225	35,000	220
Triplex	100,000	325	52,000	315
Quad	130,000	425	65,000	410

f. River/Stream Minimum Lot Width Standards. There are no minimum lot area requirements for rivers and streams. The lot width standards in feet are:

Lot Type	Remote	Forested	Transition	Agriculture	Urban & Tributary No Sewer	Urban & Tributary Sewer
Single	300	200	250	150	100	75
Duplex	450	300	375	225	150	115
Triplex	600	400	500	300	200	150
Quad	750	500	625	375	250	190

3. Special Residential Lot Provisions.

a. Subdivisions of duplexes, triplexes, and quads are conditional uses on Natural Environment Lakes and must also meet the following standards:

   i. Each building must be set back at least 200 feet from the ordinary high water level;

   ii. Each building must have common sewage treatment and water systems in one location and serve all dwelling units in the building;

   iii. Watercraft docking facilities for each lot must be centralized in one location and serve all dwelling units in the building; and

   iv. No more than 25 percent of a lake's shoreline can be in duplex, triplex, or quad developments.

b. One guest cottage may be allowed on lots meeting or exceeding the duplex lot area and width dimensions presented in. Subsections F.2.e and F.2.f, provided the following standards are met:

   i. For lots exceeding the minimum lot dimensions of duplex lots, the guest cottage must be located within an area equal to the smallest duplex-sized lot that could be created including the principal dwelling unit;

   ii. A guest cottage must not cover more than 700 square feet of land surface and must not exceed 15 feet in height; and

   iii. A guest cottage must be located or designed to reduce its visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks or color, assuming summer leaf-on conditions.

c. Controlled access lots are permissible if created as part of a subdivision and in compliance with the following standards:

   i. The lot must meet the area and width requirements for residential lots, and be suitable for the intended uses of controlled access lots as provided in item D;

   ii. If docking, mooring, or over-water storage of more than six watercraft is to be allowed at a controlled access lot, then the width of the lot (keeping the same lot depth) must be increased by a percentage of the requirements for riparian residential lots for each watercraft beyond six, consistent with the following table:

Ratio of lake size to shore length (acres/mile)	Required percent increase in frontage
Less than 100	25%
100 – 200	20%
201 – 300	15%
301 – 400	10%
Greater than 400	5%

   iii. The lot must be jointly owned by all purchasers of lots in the subdivision or by all purchasers of nonriparian lots in the subdivision who are provided riparian access rights on the access lot; and

   iv. Covenants or other equally effective legal instruments must be developed that:

(a) Specify which lot owners have authority to use the access lot;

(b) Identify what activities are allowed. The activities may include watercraft launching, loading, storage, beaching, mooring, docking, swimming, sunbathing, or picnicking;

(c) Limit the total number of vehicles allowed to be parked and the total number of watercraft allowed to be continuously moored, docked, or stored over water;

(d) Require centralization of all common facilities and activities in the most suitable locations on the lot to minimize topographic and vegetation alterations; and

(e) Require all parking areas, storage buildings, and other facilities to be screened by vegetation or topography as much as practical from view from the public water, assuming summer, leaf-on conditions.

4. Placement, Height, and Design of Structures.

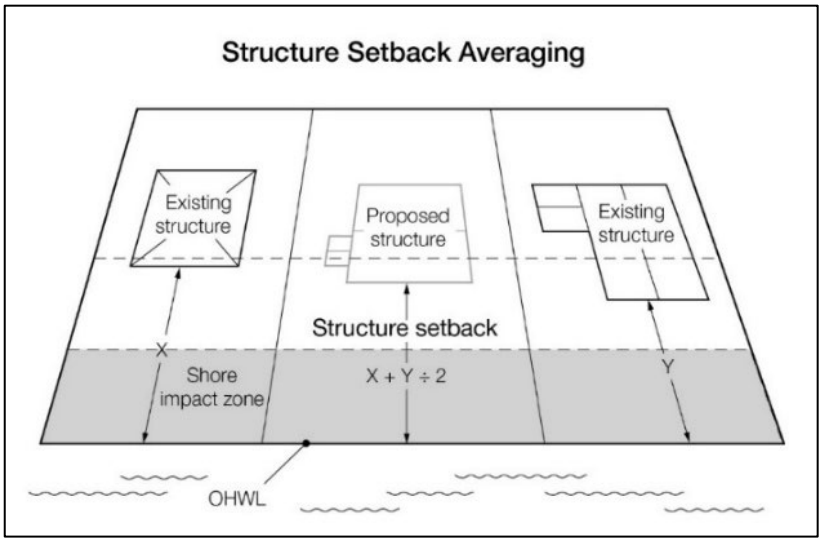
a. OHWL Setback for Structures and Sewage Treatment Systems. When more than one setback applies to a site, structures and facilities must be located to meet all setbacks, and comply with the following OHWL setback provisions:

Waterbody Classification	**Structures with No Sewer**	**Structures with Sewer**	**Sewage Treatment Systems**
Natural Environment Lakes	150	150	150
Recreational Development Lakes	100	75	75
General Development Lakes	75	50	50
Remote Rivers	200	200	150
Forested and Transition Rivers	150	150	100
Agriculture, Urban, & Tributary Rivers	100	50	75

i. OHWL Setbacks. Structures and sewage treatment systems must meet setbacks from the Ordinary High Water Level (OHWL), except that one water-oriented accessory structure or facility, designed in accordance with subsection G.3 below, may be set back a minimum distance of 10 feet from the OHWL:

ii. Setback averaging. Where structures exist on the adjoining lots on both sides of a proposed building site, structure setbacks may be altered without a variance to conform to the adjoining setbacks from the OHWL, provided the proposed structure is not located in a shore impact zone or in a bluff impact zone (see Figure 7);

Figure 5.2. Structure Setback Averaging



iii. Setbacks of decks. Deck additions may be allowed without a variance to a structure not meeting the required setback from the ordinary high water level if all of the following criteria are met:

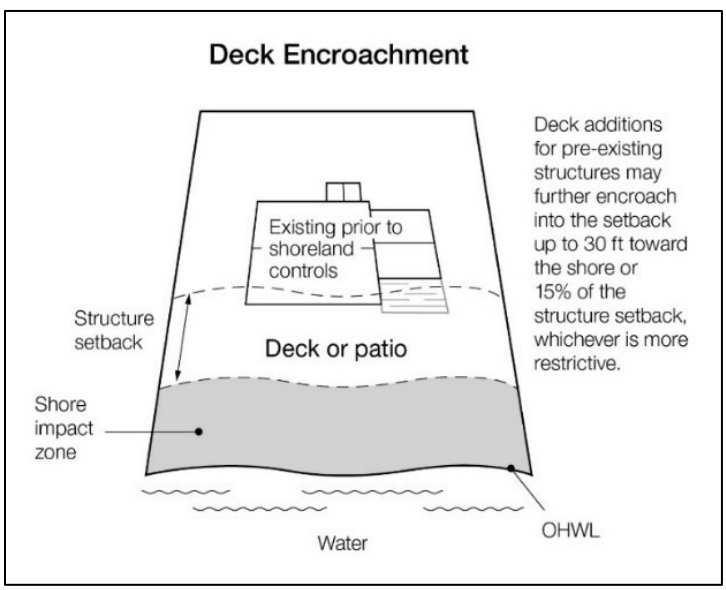
(a) The structure existed on the date the structure setbacks were established;

(b) A thorough evaluation of the property and structure reveals no reasonable location for a deck meeting or exceeding the existing ordinary high water level setback of the structure;

(c) The deck encroachment toward the ordinary high water level does not exceed 15% of the existing setback of the structure from the ordinary high water level or is no closer than 30 feet from the OHWL, whichever is more restrictive; and

(d) The deck is constructed primarily of wood, and is not roofed or screened (see Figure 8).

Figure 5.3. Deck Encroachment



iv. Additional structure setbacks. Structures must also meet the following setbacks, regardless of the waterbody classification:

Setback from:	Setback (ft)
Top of bluff	30
Unplatted cemetery	50
Right-of-way line of federal, state, or county highway	50
Right-of-way line of town road, public street, or other roads not classified	20

v. Bluff Impact Zones. Structures and accessory facilities, except stairways and landings, must not be placed within bluff impact zones.

b. Height of Structures. All structures in residential districts in cities, except churches and nonresidential agricultural structures, must not exceed 25 feet in height.

c. Lowest Floor Elevation.

i. Determining elevations. Structures must be placed at an elevation consistent with the applicable floodplain regulatory elevations. Where these elevations are not known, the lowest floor, including basement, must be placed or flood-proofed at an elevation determined using the following methodology:

(a) For lakes, by placing the lowest floor at a level at least three feet above the highest known water level, or three feet above the ordinary high water level, whichever is higher (see Figure 9);

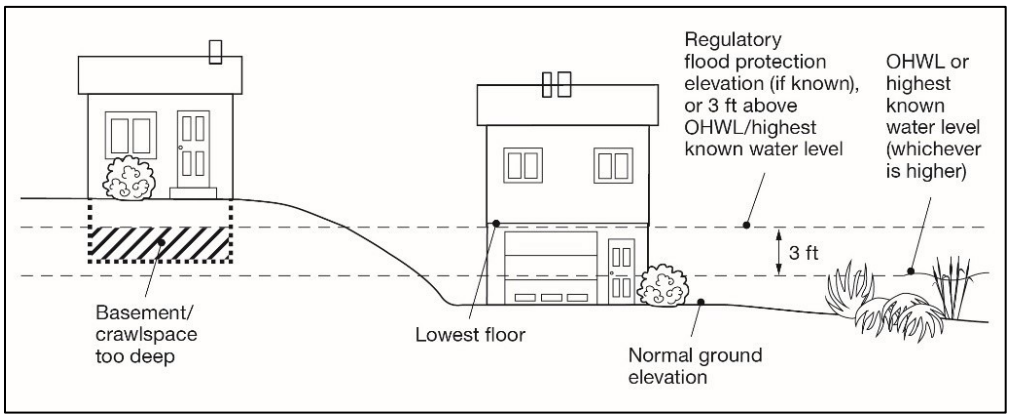
(b) For rivers and streams, by placing the lowest floor at least three feet above the highest known flood elevation. If highest known flood elevation is not available, by placing the lowest floor at least three feet above the ordinary high water level (see Figure 9), or by conducting a technical evaluation to establish a flood protection elevation. Technical evaluations must be done by a qualified engineer or hydrologist consistent with Minnesota Rules, parts 6120.5000 to 6120.6200.

ii. Methods for placement.

(a) In addition to the lowest floor, all service utilities must be elevated or water-tight to the elevation determined in part A.

(b) If the structure is floodproofed, then it must be built to resist hydrostatic pressure through elevation methods such as blocks, pilings, filled stem walls, elevated concrete pad, internally flooded enclosed areas, or through other accepted engineering practices consistent with FEMA technical bulletins 1, 2 and 3.

Figure 5.4. Lowest Floor Elevation



d. Significant Historic Sites. No structure may be placed on a significant historic site in a manner that affects the values of the site unless adequate information about the site has been removed and documented in a public repository.

5. Water Supply and Sewage Treatment.

a. Water supply. Any public or private supply of water for domestic purposes must meet or exceed standards for water quality of the Minnesota Department of Health and the Minnesota Pollution Control Agency.

b. Sewage treatment. Any premises used for human occupancy must be connected to a publicly-owned sewer system, where available or comply with Minnesota Rules, Chapters 7080 – 7081.

G. Performance Standards for Public and Private Facilities

1. Placement and Design of Roads, Driveways, and Parking Areas. These facilities must be designed to take advantage of natural vegetation and topography to achieve maximum screening as viewed from public waters. They must be constructed to minimize and control erosion to public waters consistent with the field office technical guides of the local SWCD and comply with the following standards:

a. Roads, driveways, and parking areas must meet structure setbacks and must not be placed within bluff and shore impact zones, when other reasonable and feasible placement alternatives exist. If no alternatives exist, they may be placed within these areas, and must be designed to minimize adverse impacts;

b. Watercraft access ramps, approach roads, and access-related parking areas may be placed within shore impact zones provided the vegetative screening and erosion control conditions of this subpart are met;

c. For public roads, driveways and parking areas, documentation must be provided by a qualified individual that they are designed and constructed to minimize and control erosion to public waters consistent with the field office technical guides of the local soil and water conservation district, or other applicable technical materials.

2. Stairways, Lifts, and Landings. Stairways and lifts are the preferred alternative to major topographic alterations for achieving access up and down bluffs and steep slopes to shore areas. Stairways, lifts, and landings must meet the following design requirements:

a. Stairways and lifts must not exceed four feet in width on residential lots. Wider stairways may be used for commercial properties, public recreational uses, and planned unit developments;

b. Landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet may be used for commercial properties, public-space recreational uses, and planned unit developments;

c. Canopies or roofs are not allowed on stairways, lifts, or landings;

d. Stairways, lifts, and landings may be either constructed above the ground on posts or pilings, or placed into the ground, provided they are designed and built in a manner that ensures control of soil erosion;

e. Stairways, lifts, and landings must be located in the most visually inconspicuous portions of lots, as viewed from the surface of the public water assuming summer, leaf-on conditions, whenever practical; and

f. Facilities such as ramps, lifts, or mobility paths for physically handicapped persons are also allowed for achieving access to shore areas, if they are consistent with the dimensional and performance standards of sub items G.2.a to G.2.e and the requirements of Minnesota Rules, Chapter 1341.

3. Water-oriented Accessory Structures or Facilities. Each residential lot may have one water-oriented accessory structure or facility if it complies with the following provisions:

a. The structure or facility must not exceed ten feet in height, exclusive of safety rails, and cannot occupy an area greater than 250 square feet. The structure or facility may include detached decks not exceeding eight feet above grade at any point;

b. The structure or facility is not in the Bluff Impact Zone;

c. The setback of the structure or facility from the ordinary high water level must be at least ten feet;

d. The structure is not a boathouse or boat storage structure as defined under Minnesota Statutes, Section 103G.245;

e. The structure or facility must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks or color, assuming summer, leaf-on conditions;

f. The roof may be used as an open-air deck with safety rails, but must not be enclosed or used as a storage area;

g. The structure or facility must not be designed or used for human habitation and must not contain water supply or sewage treatment facilities;

h. As an alternative for general development and recreational development waterbodies, water-oriented accessory structures used solely for storage of watercraft and boating-related equipment may occupy an area up to 400 square feet provided the maximum width of the structure is 20 feet as measured parallel to the shoreline; and

i. Water-oriented accessory structures may have the lowest floor placed lower than the elevation specified in subsection F.4.c if the structure is designed to accommodate internal flooding, constructed of flood-resistant materials to the elevation, electrical and

mechanical equipment is placed above the elevation and, if long duration flooding is anticipated, the structure is built to withstand ice action and wind-driven waves and debris.

4. Fences. Fences between principal structures and the waterbody are allowed if fences are:
   a. Not higher than six feet.
   b. Not located within the SIZ and BIZ, except for farm fences.
   c. Not located in the regulatory floodplain, except for farm fences.
5. Lighting. Within the OHWL setback:
   a. Lighting shall be fully shielded and directed away from the water.
   b. Uplighting viewable from the water is prohibited.

H. Vegetation and Land Alterations

1. Purpose. Alterations of vegetation and topography are regulated to prevent erosion into public waters, fix nutrients, preserve shoreland aesthetics, preserve historic values, prevent bank slumping, sustain water quality, and protect fish and wildlife habitat.
2. Vegetation Management.
   a. Removal or alteration of vegetation must comply with the provisions of this subsection except for:
      i. Vegetation alteration necessary for the construction of structures and sewage treatment systems under validly issued permits for these facilities;
      ii. The construction of public roads and parking areas if consistent with subsection G.1 above;
      iii. Forest management uses consistent with subsection E.3 above; and
   b. Agricultural uses consistent with subsection E.2 above.
   c. Intensive vegetation clearing in the shore and bluff impact zones and on steep slopes is prohibited. Intensive clearing outside of these areas is allowed if consistent with the forest management standards in subsection E.3 above.
   d. Limited clearing and trimming of trees and shrubs in the shore and bluff impact zones and on steep slopes, is allowed to provide a view to the water from the principal dwelling and to accommodate the placement of stairways and landings, picnic areas, access paths, livestock watering areas, beach and watercraft access areas, and permitted water-oriented accessory structures or facilities, provided that:
      i. Vegetation be maintained to screen structures, vehicles, or other facilities as viewed from the water, assuming summer, leaf-on conditions;
      ii. Existing shading of water surfaces along rivers is preserved;
   e. Removal of trees, limbs, or branches that are dead, diseased, dying, or pose safety hazards is allowed without a permit.
   f. Fertilizer and pesticide runoff into surface waters must be minimized through use of vegetation, topography or both.

3. Grading and Filling.

   a. Grading and filling activities must comply with the provisions of this subsection except for the construction of public roads and parking areas if consistent with subsection G.1 above.

   b. Permit Requirements.

      i. Grading, filling and excavations necessary for the construction of structures and sewage treatment systems if part of an approved permit, do not require a separate grading and filling permit. However, the standards in subsection H.3.c below must be incorporated into the permit.

      ii. For all other work, a grading and filling permit is required for:

      iii. the movement of more than 10 cubic yards of material on steep slopes or within shore or bluff impact zones; and

      iv. the movement of more than 50 cubic yards of material outside of steep slopes and shore and bluff impact zones.

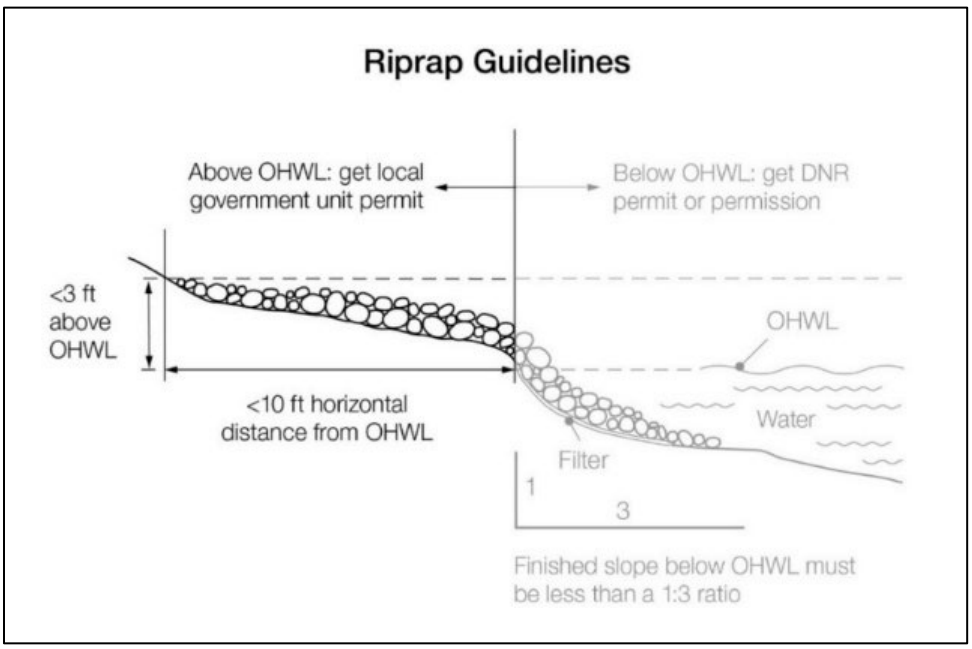
      v. Placement of natural rock rip rap, including associated grading of the shoreline and placement of a filter blanket is permitted if:

      vi. the finished slope does not exceed three feet horizontal to one-foot vertical;

      vii. the landward extent of the riprap is within ten feet of the ordinary high water level; and

      viii. the height of the riprap above the ordinary high water level does not exceed three feet (see Figure 10).

      Figure 5.5. Riprap Guidelines



   c. Grading, filling and excavation activities must meet the following standards:

i. Grading or filling of any wetland must meet or exceed the wetland protection standards under Minnesota Rules, Chapter 8420 and any other permits, reviews, or approvals by other local state, or federal agencies such as watershed districts, the DNR or US Army Corps of Engineers;

ii. Land alterations must be designed and implemented to minimize the amount of erosion and sediment from entering surface waters during and after construction consistently by:

(a) Limiting the amount and time of bare ground exposure;

(b) Using temporary ground covers such as mulches or similar materials;

(c) Establishing permanent vegetation cover as soon as possible;

(d) Using sediment traps, vegetated buffer strips or other appropriate techniques;

(e) Stabilizing altered areas to acceptable erosion control standards consistent with the field office technical guides of the soil and water conservation district;

(f) Not placing fill or excavated material in a manner that creates unstable slopes. Plans to place fill or excavated material on steep slopes must be reviewed by qualified professionals for continued slope stability and must not create finished slopes of 30 percent or greater;

(g) Fill or excavated material must not be placed in bluff impact zones;

(h) Any alterations below the ordinary high water level of public waters must first be authorized by the commissioner under Minnesota Statutes, Section 103G; and

(i) Alterations of topography are only allowed if they are accessory to permitted or conditional uses and do not adversely affect adjacent or nearby properties

d. Connections to public waters. Excavations to connect boat slips, canals, lagoons, and harbors to public waters require a public waters permit and must comply with Minnesota Rules, Chapter 6115.

4. Stormwater Management.

a. General Standards:

i. When possible, existing natural drainageways, and vegetated soil surfaces must be used to convey, store, filter, and retain stormwater runoff before discharge to public waters.

ii. Development must be planned and conducted in a manner that will minimize the extent of disturbed areas, runoff velocities, erosion potential, and reduce and delay runoff volumes. Disturbed areas must be stabilized as soon as possible and appropriate facilities or methods used to retain sediment on the site.

iii. When development density, topography, soils, and vegetation are not sufficient to adequately handle stormwater runoff, constructed facilities such as settling basins, skimming devices, dikes, waterways, ponds and infiltration may be used. Preference must be given to surface drainage, vegetation, and infiltration rather than buried pipes and man-made materials and facilities.

b. Specific Standards:

i. Impervious surfaces of lots must not exceed 25 percent of the lot area.

ii. When constructed facilities are used for stormwater management, documentation must be provided by a qualified individual that they are designed and installed consistent with the field office technical guide of the local soil and water conservation district or the Minnesota Stormwater Manual, as applicable.

iii. New constructed stormwater outfalls to public waters must be consistent with Minnesota Rules, part 6115.0231.

I. Subdivision/Platting Provisions

1. Purpose. To ensure that new development minimizes impacts to shoreland resources and is safe and functional.

2. Land suitability. Each lot created through subdivision, including planned unit developments authorized under subsection J below, must be suitable in its natural state for the proposed use with minimal alteration A suitability analysis must be conducted for each proposed subdivision, including planned unit developments, to determine if the subdivision is suitable in its natural state for the proposed use with minimal alteration and whether any feature of the land is likely to be harmful to the health, safety, or welfare of future residents of the proposed subdivision or of the community.

3. Consistency with other controls. Subdivisions and each lot in a subdivision shall meet all official controls so that a variance is not needed later to use the lots for their intended purpose.

4. Water and Sewer Design Standards.

a. A potable water supply and a sewage treatment system consistent with Minnesota Rules, Chapters 7080 – 7081 must be provided for every lot.

b. Each lot must include at least two soil treatment and dispersal areas that support systems described in Minnesota Rules, parts 7080.2200 to 7080.223 or site conditions described in part 7081.0270, subparts 3 to 7, as applicable.

c. Lots that would require use of holding tanks are prohibited.

5. Information requirements.

a. Topographic contours at ten-foot intervals or less from United States Geological Survey maps or more current sources, showing limiting site characteristics;

b. The surface water features required in Minnesota Statutes, section 505.021, Subd. 1, to be shown on plats, obtained from United States Geological Survey quadrangle topographic maps or more current sources;

c. Adequate soils information to determine suitability for building and sewage treatment capabilities for every lot from the most current existing sources or from field investigations such as soil borings, percolation tests, or other methods;

d. Information regarding adequacy of domestic water supply; extent of anticipated vegetation and topographic alterations; near-shore aquatic conditions, including depths, types of bottom sediments, and aquatic vegetation; and proposed methods for controlling stormwater runoff and erosion, both during and after construction activities;

e. Location of 100-year flood plain areas and floodway districts from existing adopted maps or data; and

f. A line or contour representing the ordinary high water level, the “toe” and the “top” of bluffs, and the minimum building setback distances from the top of the bluff and the lake or stream.

6. Dedications. When a land or easement dedication is a condition of subdivision approval, the approval must provide easements over natural drainage or ponding areas for management of stormwater and significant wetlands.

7. Platting. All subdivisions that create five or more lots or parcels that are 2-1/2 acres or less in size shall be processed as a plat in accordance with Minnesota Statutes, Chapters 462.358 Subd. 3a (cities) and 505. No permit for construction of buildings or sewage treatment systems shall be issued for lots created after the adoption of this ordinance unless the lot was previously approved as part of a formal subdivision.

8. Controlled Access Lots. Controlled access lots within a subdivision must meet or exceed the lot size criteria in subsection F.3.c above.

J. Planned Unit Developments (PUDs)

1. Purpose. To protect and enhance the natural and scenic qualities of shoreland areas during and after development and redevelopment of high density residential and commercial uses.

2. Types of PUDs Permissible. Planned unit developments (PUDs) are allowed for new projects on undeveloped land, redevelopment of previously built sites, or conversions of existing buildings and land. Deviation from the minimum lot size standards of subsection F.2 above is allowed if the standards in this Section are met.

3. Processing of PUDs. Planned unit developments must be processed as a conditional use. An expansion to an existing commercial PUD involving 6 or less new dwelling units or sites since the date this ordinance was adopted is permissible as a permitted use provided the total project density does not exceed the allowable densities calculated in the project density evaluation procedures in subsection J.5 below. Approval cannot occur until all applicable environmental reviews are complete.

4. Application for a PUD. The applicant for a PUD must submit the following documents prior to final action on the application request:

a. Site plan and/or plat showing:

i. Locations of property boundaries;

ii. Surface water features;

iii. Existing and proposed structures and other facilities;

iv. Land alterations;

v. Sewage treatment and water supply systems (where public systems will not be provided);

vi. Topographic contours at ten-foot intervals or less; and

vii. Identification of buildings and portions of the project that are residential, commercial, or a combination of the two (if project combines commercial and residential elements).

b. A property owner's association agreement (for residential PUD's) with mandatory membership, and consistent with Section J.6 below.

c. Deed restrictions, covenants, permanent easements or other instruments that:

i. Address future vegetative and topographic alterations, construction of additional buildings, beaching of watercraft, and construction of commercial buildings in residential PUDs; and

ii. Ensure the long-term preservation and maintenance of open space in accordance with the criteria and analysis specified in subsection J.6 below.

d. A master plan/site plan describing the project and showing floor plans for all commercial structures.

e. Additional documents necessary to explain how the PUD will be designed and will function.

5. Density Determination. Proposed new or expansions to existing planned unit developments must be evaluated using the following procedures.

a. Step 1. Identify Density Analysis Tiers. Divide the project parcel into tiers by drawing one or more lines parallel to the ordinary high water level at the following intervals, proceeding landward:

Waterbody Classification	No Sewer (ft)		Sewer (ft)
General Development Lakes – 1st tier	200		200
General Development Lakes – all other tiers	267		200
Recreational Development Lakes	267		267
Natural Environment Lakes	400		320
All Rivers	300		300

b. Step 2. Calculate Suitable Area for Development. Calculate the suitable area within each tier by excluding all wetlands, bluffs, or land below the ordinary high water level of public waters.

c. Step 3. Determine Base Density:

i. For residential PUDs, divide the suitable area within each tier by the minimum single residential lot area for lakes to determine the allowable number of dwelling units, or base density, for each tier. For rivers, if a minimum lot area is not specified, divide the tier width or river frontage by the minimum single residential lot width.

ii. For commercial PUDs:

(a) Determine the average area for each dwelling unit or dwelling site within each tier. Include both existing and proposed dwelling units and sites in the calculation.

(1) For dwelling units, determine the average inside living floor area of dwelling units in each tier. Do not include decks, patios, garages, or porches and basements, unless they are habitable space.

(2) For dwelling sites (campgrounds), determine the area of each dwelling site as follows:

For manufactured homes, use the area of the manufactured home, if known, otherwise use 1,000 sf.

For recreational vehicles, campers or tents, use 400 sf.

(b) Select the appropriate floor area/dwelling site area ratio from the following table for the floor area or dwelling site area determined in subsection J.5.c.ii.1 below.

Inside Living Floor Area or Dwelling Site Area (sf)	**General Development Lakes w/Sewer – all tiers** **General Development Lakes w/no sewer – 1st tier** **Agricultural, Urban and Tributary Rivers**	**General Development Lakes w/no sewer – all other tiers** **Recreational Development Lakes** **Forested and Transition Rivers**	**Natural Environment Lakes** **Remote Rivers**
≤ 200	.040	.020	.010
300	.048	.024	.012
400	.056	.028	.014
500	.065	.032	.016
600	.072	.038	.019
700	.082	.042	.021
800	.091	.046	.023
900	.099	.050	.025
1,000	.108	.054	.027
1,100	.116	.058	.029
1,200	.125	.064	.032
1,300	.133	.068	.034
1,400	.142	.072	.036
≥ 1,500	.150	.075	.038

(c) Multiply the suitable area within each tier determined in subsection J.5.b by the floor area or dwelling site area ratio to yield the total floor area or dwelling site area for each tier to be used for dwelling units or dwelling sites.

(d) Divide the total floor area or dwelling site area for each tier calculated in subsection J.5.c.ii.3 by the average inside living floor area for dwelling units or dwelling site area determined in J.5.c.ii.1. This yields the allowable number of dwelling units or dwelling sites, or base density, for each tier.

iii. Allowable densities may be transferred from any tier to any other tier further from the waterbody, but must not be transferred to any tier closer to the waterbody.

iv. All PUDs with densities at or below the base density must meet the design standards in subsection J.6

d. Step 4. Determine if the Site can Accommodate Increased Density:

i. The following increases to the dwelling unit or dwelling site base densities determined in subsection J.5.c are allowed if the design criteria in subsection J.6 below are satisfied as well as the standards in subsection J.5.d, item ii:

Shoreland Tier	Maximum density increase within each tier (percent)
1st	50
2nd	100
3rd	200
4th	200
5th	200

ii. Structure setbacks from the ordinary high water level:

(a) Are increased to at least 50 percent greater than the minimum setback; or

(b) The impact on the waterbody is reduced an equivalent amount through vegetative management, topography, or additional acceptable means and the setback is at least 25 percent greater than the minimum setback.

6. Design Criteria. All PUDs must meet the following design criteria.

a. General Design Standards.

i. All residential planned unit developments must contain at least five dwelling units or sites.

ii. On-site water supply and sewage treatment systems must be centralized and meet the standards in subsection F.5 above. Sewage treatment systems must meet the setback standards of subsection F.4.a.i above.

iii. Dwelling units or dwelling sites must be clustered into one or more groups and located on suitable areas of the development.

iv. Dwelling units or dwelling sites must be designed and located to meet the dimensional standards in subsections F.4.a, F.4.b, and F.4.c:

v. Shore recreation facilities:

(a) Must be centralized and located in areas suitable for them based on a suitability analysis.

(b) The number of spaces provided for continuous beaching, mooring, or docking of watercraft must not exceed one for each allowable dwelling unit or site in the first tier (notwithstanding existing mooring sites in an existing commercially used harbor).

(c) Launching ramp facilities, including a small dock for loading and unloading equipment, may be provided for use by occupants of dwelling units or sites located in other tiers.

vi. Structures, parking areas, and other facilities must be treated to reduce visibility as viewed from public waters and adjacent shorelands by vegetation, topography, increased setbacks, color, or other means acceptable to the local unit of government, assuming summer, leaf-on conditions. Vegetative and topographic screening must be preserved, if existing, or may be required to be provided.

vii. Accessory structures and facilities, except water oriented accessory structures, must meet the required structure setback and must be centralized.

viii. Water-oriented accessory structures and facilities may be allowed if they meet or exceed design standards contained in subsection G.3 above and are centralized.

b. Open Space Requirements.

i. Open space must constitute at least 50 percent of the total project area and must include:

(a) Areas with physical characteristics unsuitable for development in their natural state;

(b) Areas containing significant historic sites or unplatted cemeteries;

(c) Portions of the shore impact zone preserved in its natural or existing state as follows:

(1) For existing residential PUD's, at least 50 percent of the shore impact zone.

(2) For new residential PUDs, at least 70 percent of the shore impact zone.

(3) For all commercial PUD's, at least 50 percent of the shore impact zone.

ii. Open space may include:

(a) Outdoor recreational facilities for use by owners of dwelling units or sites, by guests staying in commercial dwelling units or sites, and by the general public;

(b) Subsurface sewage treatment systems if the use of the space is restricted to avoid adverse impacts on the systems; and

(c) Non-public water wetlands.

iii. Open space shall not include:

(a) Dwelling sites;

(b) Dwelling units or structures, except water-oriented accessory structures or facilities;

(c) Road rights-of-way or land covered by road surfaces and parking areas;

(d) Land below the OHWL of public waters; and

(e) Commercial facilities or uses.

c. Open Space Maintenance and Administration Requirements.

i. Open space preservation. The appearance of open space areas, including topography, vegetation, and allowable uses, must be preserved and maintained by use of deed restrictions, covenants, permanent easements, public dedication, or other equally effective and permanent means. The instruments must prohibit:

(a) Commercial uses (for residential PUD's);

(b) Vegetation and topographic alterations other than routine maintenance;

(c) Construction of additional buildings or storage of vehicles and other materials; and

(d) Uncontrolled beaching of watercraft.

ii. Development organization and functioning. Unless an equally effective alternative community framework is established, all residential planned unit developments must use an owners association with the following features:

(a) Membership must be mandatory for each dwelling unit or dwelling site owner and any successive owner;

(b) Each member must pay a pro rata share of the association's expenses, and unpaid assessments can become liens on units or dwelling sites;

(c) Assessments must be adjustable to accommodate changing conditions; and

(d) The association must be responsible for insurance, taxes, and maintenance of all commonly owned property and facilities.

d. Erosion Control and Stormwater Management.

i. Erosion control plans must be developed and must be consistent with the provisions of subsection H.3 above. Erosion control plans approved by a soil and water conservation district may be required if project size and site physical characteristics warrant.

ii. Stormwater management facilities must be designed and constructed to manage expected quantities and qualities of stormwater runoff.

(a) For commercial PUDs, impervious surfaces within any tier must not exceed 25 percent of the tier area.

7. Conversions. Local governments may allow existing resorts or other land uses and facilities to be converted to residential PUDs if all of the following standards are met:

a. Proposed conversions must be evaluated using the same procedures for residential PUDs involving new construction. Inconsistencies between existing features of the development and these standards must be identified;

b. Deficiencies involving water supply and sewage treatment, structure color, impervious coverage, open space, and shore recreation facilities must be corrected as part of the conversion or as specified in the conditional use permit;

c. Shore and bluff impact zone deficiencies must be evaluated and reasonable improvements made as part of the conversion. These improvements must include, where applicable, the following:

i. Removal of extraneous buildings, docks, or other facilities that no longer need to be located in shore or bluff impact zones;

ii. Remedial measures to correct erosion, improve vegetative cover and improve screening of buildings and other facilities as viewed from the water; and

iii. Conditions attached to existing dwelling units located in shore or bluff impact zones that preclude exterior expansions in any dimension or substantial alterations. The conditions must also provide for future relocation of dwelling units, where feasible, to other locations, meeting all setback and elevation requirements when they are rebuilt or replaced.

d. Existing dwelling unit or dwelling site densities that exceed standards in subsection J.5 above may be allowed to continue but must not be allowed to be increased, either at the time of conversion or in the future. Efforts must be made during the conversion to limit impacts of high densities by requiring seasonal use, improving vegetative screening, centralizing shore recreation facilities, installing new sewage treatment systems, or other means.

11-5-3 :Wetland Overlay District

A. Purpose and Intent: It is the intent of these wetland overlay regulations to impose restrictions in addition to the those required by the underlying zoning for the protection of wetlands as defined by the United States Army Corps of Engineers' Wetland Delineation Manual 1987 or Minnesota Rule 8420 with the following implementation purposes:

1. To implement the Rosemount Comprehensive Wetland Management Plan.
2. To achieve no net loss in the quantity, quality, and biological diversity of existing wetlands.
3. To increase the quantity, quality, and biological diversity of wetlands by restoring or enhancing diminished or drained wetlands.
4. To avoid direct or indirect impacts from activities that destroy or diminish the quantity, quality, and biological diversity of wetlands.
5. To replace wetland values where avoidance of activity is not feasible and prudent.

B. Application Required: Any property proposing an activity that is regulated as described within Section IV. Wetland Regulations of the Comprehensive Wetland Management Plan shall submit an application to the City through the Joint Application Form for Activities Affecting Water Resources in Minnesota available through the Board of Soil and Water Resources. This application shall be subject to the requirements of this section, the Comprehensive Wetland Management Plan, and Minnesota Rule 8420.

C. Wetland Applications: Wetland related applications shall be submitted to the City of Rosemount as per the Comprehensive Wetland Management Plan and Minnesota Rule 8420.

1. Wetland Boundary or Type Application: When an application subject to chapter 7 “Development Standards” of this title or title 12 “Subdivision Regulations” is submitted to the City, the applicant shall submit a wetland delineation to determine the wetland boundary and type. The delineation will include the following information:

a. Level 1 delineation completed in compliance with the most recent US Army Corps of Engineers (USACE) Guidance for Offsite Hydrology/Wetland Determinations.

b. If a Level 1 delineation indicts the likelihood of a wetland, the applicant shall prepare and submit a Level 2 delineation in compliance with the most recent USACE Manual for Delineating Wetlands in Conjunction with the Midwest Supplement.

c. Delineations shall be subject to field verification by City staff, the Technical Evaluation Panel (TEP), and/or USACE.

2. No Loss and Exemption Applications: The Wetland Conservation Act (WCA) No Loss and Exemption standards are covered in Minnesota Rules 8420.0410-.0420. Applications for No Loss or Exemption determinations shall follow the procedures and requirements of Minnesota Rules 8420. Wet areas created by human activity ("incidental wetlands") as specified in Minnesota Rules 8420.0105 not intended to produce wetland shall not be regulated by this section. Wetlands that are exempt per the WCA shall not be regulated by the policies within this section. However, buffer zones and restoration of disturbed areas in conformance with this section may be required if the project is part of an overall land development plan.

3. Sequencing Application: An applicant proposing to impact wetlands must submit an application that demonstrates adherence to the Sequencing Standards outlined in Minnesota Rules 8420.0520. The applicant may submit a sequencing evaluation with the wetland replacement plan application or apply for a preliminary sequencing decision from the city, as per Minnesota Rules 8420.0325, as amended.

4. Replacement Plan Application:

a. Concurrently with a sequencing application requesting a determination that wetland impacts are unavoidable, a replacement plan application shall be submitted for the activities requiring compensatory mitigation, including:

i. Filling or draining of any wetland;

ii. Excavating in the permanently or semi-permanently flooded areas of a type 3, 4, or 5 wetland;

iii. Excavation that results in conversion to non-wetland.

b. Wetland impacts that occur due to road improvement projects that address safety issues and are not undertaken solely to accommodate additional traffic capacity by the city or county as the local road authority may be eligible to be replaced by BWSR through the Local Government Wetland Replacement Program (LGRWRP).

c. The lost functions and values of the wetland impacted must be replaced in conformance with the Comprehensive Wetland Management Plan Section IX: Wetland Replacement.

D. Local Government Unit Decision Authority: Wetland applications decisions shall be determined as follows:

1. City staff has the administrative authority to approve wetland boundary, wetland type, no loss, and exemption applications.

2. City staff has the administrative authority to approve sequencing and replacement plans that impact less than 10,000 square feet of wetlands.

3. City staff may request the City Council review and approve any applications listed in provisions 1 and 2 of this subsection.

4. The City Council shall approve all sequencing and replacement plans that impact 10,000 square feet or greater of wetlands.

E. Appeals of Wetland Application Decisions: Appeals of decisions of applications submitted under subsection C above made by the city will follow the appeal process in accordance with Minnesota Rules 8420.

F. Wetland Buffers

1. Buffer Establishment:

   a. Application: Any property in which an application has been required under subsection B above and has been determined to have a wetland shall submit a Buffer Zone Establishment and Management Plan for review and approval by the city engineer. The Plan shall be reviewed and approved subject to the standards described in the Comprehensive Wetland Management Plan Subsections VIII.B.2. and X.B.

   b. Continued Maintenance: The maintenance and vegetation performance of the buffer shall be subject to the standards of subsection IX.A of the Comprehensive Wetland Management Plan: Wetland Monitoring. Once established, activities in buffer zones that are not associated with the approved Plan that disturb the roots or influence the growth of the vegetation, such as grading, mowing, landscaping and planting, fertilizing, spraying (herbicides), and seeding or sodding are prohibited. Herbicides and controlled burns or other management practices used to control noxious weeds or invasive species will be allowed only with permission from the city engineer. Enhancement of the buffer zone through installation of additional native plantings is allowed and encouraged.

2. Buffer Zone Widths by Wetland Classification:

   a. Preserve: 75 Feet.

   b. Manage 1: 50 Feet.

   c. Manage 2: 30 Feet.

   d. Manage 3:

      i. Non-Agricultural Area: 15 Feet

      ii. Agricultural Area: None.

3. Buffer Averaging: Comprehensive Wetland Management Plan subsection VIII.B.1. describes functions of buffer zones. A property owner may request an adjustment to the buffer zone widths regulation in subsection F above through buffer averaging to determine an alternate buffer width approved by the city engineer subject to the following standards:

   a. The buffer averaging improves the buffer zone function.

   b. The buffer zone prioritization review described with the Comprehensive Wetland Management Plan subsection VIII.B.1.

4. Structural Setback from Buffer Zone: 30 Feet.

5. Conservation Easements: Buffer zones will be contained within a conservation easement that includes both the wetland and the buffer zone.

6. Buffer Zone Monuments: The installation of monuments which mark the outer edge of the wetland buffer zones. All markers and their placement shall be per city specification or approved by the city engineer.

G. Stormwater Pre-Treatment: To alleviate the sediment and nutrient loading of wetlands, storm water pretreatment shall be required based on wetland classification as follows:

1. Preserve: Sediment and nutrient pretreatment required, consider diversion if possible.
2. Manage 1: Sediment and nutrient pretreatment required.
3. Manage 2: Sediment pretreatment required.
4. Manage 3: Pretreatment to NPDES standards (per Minnesota Pollution Control Agency rules) is required if these standards apply to the project.

H. Enforcement: WCA enforcement shall be in conformance with Minnesota Rules 8240.

I. Lots In Existence Before July 21, 1998: The city first adopted the Comprehensive Wetland Management Plan on July 21, 1998. A lot which is part of a subdivision or plat, an auditor's subdivision or a registered land survey; or a parcel of land not so platted, for which a deed has been recorded in the Dakota County recorder's office prior to July 21, 1998 shall not be required to meet the standards of subsections 11-5-3, C, D, and F. For the lots that existed before the July 21, 1998, the following standards shall be required:

1. Buffer Zone: 15 Feet.
2. Structural Setback from Buffer Zone: 15 Feet.
3. Buffer Maintenance: Activities that disturb the roots or influence the growth of the vegetation, such as grading, mowing, landscaping and planting, fertilizing, spraying (herbicides), and seeding or sodding are prohibited. Herbicides and controlled burns or other management practices used to control noxious weeds or invasive species will be allowed only with permission from the city engineer. Enhancement of the buffer zone through installation of additional native plantings is allowed and encouraged.

11-5-4 :Mississippi River Corridor Critical Area Overlay District

A. Authority, Intent, and Purpose

1. Statutory Authorization. This Mississippi River Corridor Critical Area (MRCCA), section 11-5-4 is adopted pursuant to the authorization and policies contained in Minnesota Statutes, Chapter 116G, Minnesota Rules, parts 6106.0010 – 6106.0180, and the planning and zoning enabling legislation in Minnesota Statutes, Chapter 462 and 473.
2. Policy. The Legislature of Minnesota has delegated responsibility to local governments of the state to regulate the subdivision, use and development of designated critical areas and thus preserve and enhance the quality of important historic, cultural, aesthetic values, and natural systems and provide for the wise use of these areas.

B. General Provisions

1. Jurisdiction. The provisions of this section apply to land within the river corridor boundary as described in the State Register, volume 43, pages 508 to 519 and shown on the zoning map.
2. Enforcement. The Zoning Administrator is responsible for the administration and enforcement of this section. Any violation of its provisions or failure to comply with any of

its requirements including violations of conditions and safeguards established in connection with grants of variances or conditional uses constitutes a misdemeanor and is punishable as defined by law. Violations of this section can occur regardless of whether or not a permit is required for a regulated activity listed in subsection D.2.

3. Severability. If any section, clause, provision, or portion of this section is judged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this section shall not be affected thereby.

4. Abrogation and Greater Restrictions. It is not intended by this section to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this section imposes greater restrictions, the provisions of this section shall prevail. All other provisions inconsistent with this section are hereby repealed to the extent of the inconsistency only.

5. Underlying Zoning. Uses and standards of underlying zoning districts apply except where standards of this overlay district are more restrictive.

6. Definitions. Unless specifically defined in section 11-10-6 Mississippi River Corridor Critical Area (MRCCA) Definitions, words or phrases used in this section shall be interpreted to give them the same meaning they have in common usage and to give this section its most reasonable application. For the purpose of this section, the words “must” and “shall” are mandatory and not permissive. All distances, unless otherwise specified, are measured horizontally.

C. Administration

1. Purpose. The purpose of this subsection is to identify administrative provisions to ensure this section is administered consistent with its purpose.

2. Permits. A permit is required for the construction of buildings or building additions (including construction of decks and signs), the installation and/or alteration of sewage treatment systems, vegetation removal consistent with subsection J and land alterations consistent with subsection K.

3. Variances. Variances to the requirements under this section may only be granted in accordance with Minnesota Statutes, Section 462.357 and must consider the potential impacts of variances on primary conservation areas, public river corridor views, and other resources identified in the MRCCA plan. In reviewing the variance application, the Zoning Administrator shall:

   a. Evaluate the impacts to these resources. If negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts, consistent with subsection D.5 below; and

   b. Make written findings that the variance is consistent with the purpose of this section as follows:

      i. The extent, location and intensity of the variance will be in substantial compliance with the MRCCA Plan;

      ii. The variance is consistent with the character and management purpose of the MRCCA district in which it is located;

iii. The variance will not be detrimental to PCAs and PRCVs nor will it contribute to negative incremental impacts to PCAs and PRCVs when considered in the context of past, present and reasonable future actions; and

iv. The variance will not negatively impact the scenic and environmentally sensitive areas of the Mississippi River Corridor, including: floodplains, wetlands, bluffs, steep slopes, natural drainage ways, significant vegetation and wildlife habitat.

4. Conditional and interim use permits. All conditional and interim uses, required under this section, must comply with Minnesota Statutes, section 462.3595 and must consider the potential impacts on primary conservation areas, public river corridor views, and other resources identified in the MRCCA plan. In reviewing the application, the City Council shall:

   a. Evaluate the impacts to these resources and if negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts, consistent with subsection D.5 below; and

   b. Make written findings that the conditional use is consistent with the purpose of this section as follows:

      i. The extent, location and intensity of the conditional use will be in substantial compliance with the MRCCA Plan;

      ii. The conditional use is consistent with the character and management purpose of the MRCCA district in which it is located;

      iii. The conditional use will not be detrimental to PCAs and PRCVs nor will it contribute to negative incremental impacts to PCAs and PRCVs when considered in the context of past, present and reasonable future actions; and

      iv. The conditional use will not negatively impact the scenic and environmentally sensitive areas of the Mississippi River Corridor, including: floodplains, wetlands, bluffs, steep slopes, natural drainage ways, significant vegetation and wildlife habitat.

5. Conditions of Approval. The City Council shall evaluate the impacts to PCAs, PRCVs, and other resources identified in the MRCCA Plan, and if negative impacts are found, require conditions to mitigate the impacts that are related to and proportional to the impacts. Mitigation may include:

   a. Restoration of vegetation identified as “vegetation restoration priorities” identified in the MRCCA plan.

   b. Preservation of existing vegetation;

   c. Stormwater runoff management;

   d. Reducing impervious surface;

   e. Increasing structure setbacks;

   f. Wetland and drainage route restoration and/or preservation;

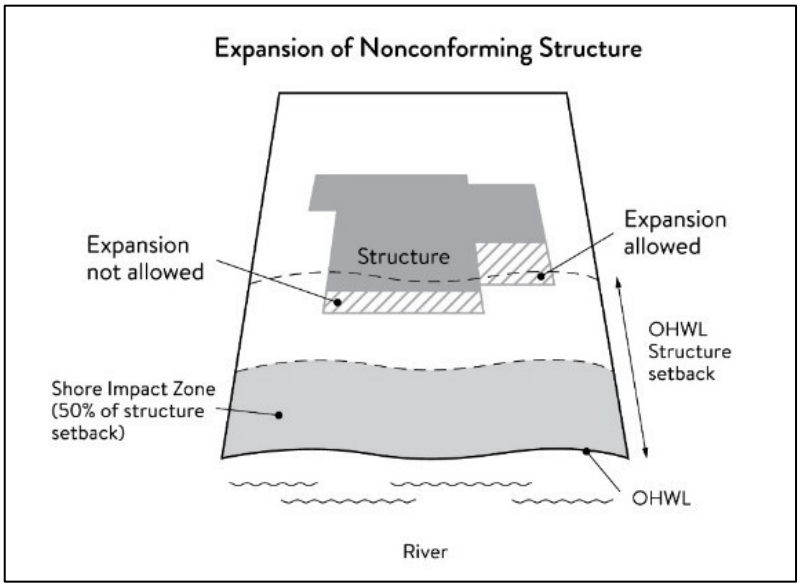
   g. Limiting the height of structures

   h. Modifying structure design to limit visual impacts on PRCVs; and

   i. Other conservation measures.

6. Application materials. Applications for permits and discretionary actions required under this section must submit the following information unless the Zoning Administrator determines that the information is not needed.
    a. A detailed project description; and
    b. Scaled maps and plans, dimensional renderings, maintenance agreements, and other materials that identify and describe:
        i. Primary conservation areas;
        ii. Public river corridor views;
        iii. Buildable area;
        iv. Existing and proposed topography and drainage patterns;
        v. Proposed storm water and erosion and sediment control practices;
        vi. Existing and proposed vegetation to be removed and established;
        vii. Ordinary high water level, blufflines, and all required setbacks;
        viii. Existing and proposed structures;
        ix. Existing and proposed impervious surfaces; and
        x. Existing and proposed subsurface sewage treatment systems.
7. Nonconformities.
    a. All legally established nonconformities as of the date of this ordinance may continue consistent with Minnesota Statutes, section 462.357, Subd. 1e.
    b. New structures erected in conformance with the setback averaging provisions of subsection G.3.d below are conforming structures.
    c. Site alterations and expansion of site alterations that were legally made prior to the effective date of this ordinance are conforming. Site alterations include vegetation, erosion control, storm water control measures, and other nonstructural site improvements.
    d. Legally nonconforming principal structures that do not meet the setback requirements of subsection G.3 below may be expanded laterally provided that:
        i. The expansion does not extend into the shore or bluff impact zone or further into the required setback than the building line of the existing principal structure (See Figure 5.6); and
        ii. The expanded structure's scale and bulk is consistent with that of the original structure and existing surrounding development.

    Figure 5.6. Expansion of Nonconforming Structure



8. Notifications.

   a. Amendments to this section and to the MRCCA plan must be submitted to the Commissioner as provided in Minnesota Rules, part 6106.0070, Subp. 3, Items B – I.

   b. Notice of public hearings for discretionary actions, including conditional and interim use permits, variances, appeals, rezonings, preliminary plats, final subdivision plats, master plans, and PUDs, must be sent to the following entities at least 30 days prior to the hearing:

      i. The Commissioner in a format prescribed by the DNR;

      ii. National Park Service; and

      iii. Where building heights exceed the height limits specified in subsection G.2 below as part of the conditional use or variance process, adjoining local governments within the MRCCA, including those with overlapping jurisdiction and those across the river.

   c. Notice of final decisions for actions in subsection D.8.b above, including findings of fact, must be sent to the Commissioner, the National Park Service, and adjoining local governments within the MRCCA within 10 days of the final decision.

   d. Requests to amend district boundaries must follow the provisions in Minnesota Rules, part 6106.0100, Subp. 9, Item C.

9. Accommodating disabilities. Reasonable accommodations for ramps or other facilities to provide persons with disabilities access to the persons' property, as required by the federal Americans with Disabilities Act and the federal Fair Housing Act and as provided by Minnesota Rules, chapter 1341, must:

   a. Comply with subsections G to M; or

   b. If subsections G to M cannot be complied with, ramps or other facilities are allowed with an administrative permit provided:

      i. The permit terminates on either a specific date or upon occurrence of a particular event related to the person requiring accommodation; and

ii. Upon expiration of the permit, the ramp or other facilities must be removed.

D. MRCCA Districts

1. Purpose. The purpose of this subsection is to establish districts under which building height and structure placement are regulated to protect and enhance the Mississippi River's resources and features consistent with the natural and built character of each district.

2. District description and management purpose. The MRCCA within the City is divided into the following MRCCA Districts:

   a. Rural and Open Space (ROS).

      i. Description. The ROS District is characterized by rural and low-density development patterns and land uses, and includes land that is riparian or visible from the river, as well as large, undeveloped tracts of high ecological and scenic value, floodplain, and undeveloped islands. Many primary conservation areas exist in the district.

      ii. Management purpose. The ROS District must be managed to sustain and restore the rural and natural character of the corridor and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas.

   b. Separated from River (SR).

      i. Description. The SR District is characterized by its physical and visual distance from the Mississippi River. The district includes land separated from the river by distance, topography, development, or a transportation corridor. The land in this district is not readily visible from the Mississippi River.

      ii. Management purpose. The SR district provides flexibility in managing development without negatively affecting the key resources and features of the river corridor. Minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the Mississippi River are priorities in the district.

   c. Urban Mixed (UM).

      i. Description. The UM District includes large areas of highly urbanized mixed use that are a part of the urban fabric of the river corridor, including institutional, commercial, industrial, and residential areas and parks and open space.

      ii. Management purpose. The UM District must be managed in a manner that allows for future growth and potential transition of intensely developed areas that does not negatively affect public river corridor views and that protects bluffs and floodplains. Restoring and enhancing bluff and shoreline habitat, minimizing erosion and flow of untreated storm water into the river, and providing public access to and public views of the river are priorities in the district.

3. MRCCA district map. The locations and boundaries of the MRCCA districts established by this section are shown on the official zoning map which is incorporated herein by reference. The district boundary lines are intended to follow the centerlines of rivers and streams, highways, streets, lot lines, and municipal boundaries, unless a boundary line is otherwise indicated on the map. Where district boundaries cross unsubdivided property, the district boundary line is determined by use of dimensions or the scale appearing on the map.

E. Special Land Use Provisions

1. Purpose. To identify development standards and considerations for land uses that have potential to negatively impact primary conservation areas and public river corridor views.

2. Underlying zoning. Uses within the MRCCA are generally determined by underlying zoning, with additional provisions for the following land uses:

   a. Agricultural use. Perennial ground cover is required within 50 feet of the ordinary high water level and within the bluff impact zone.

   b. Feedlots. New animal feedlots and manure storage areas are prohibited. Existing animal feedlots and manure storage areas must conform with Minnesota Rules, chapter 7020.

   c. Forestry. Tree harvesting and biomass harvesting within woodlands, and associated reforestation, must be consistent with recommended practices in Conserving Wooded Areas in Developing Communities: Best Management Practices in Minnesota.

   d. Nonmetallic mining. Nonmetallic mining requires a conditional use permit or interim use permit issued by the local government, subject to the following:

      i. New nonmetallic mining is prohibited within the shore impact zone and bluff impact zone and within the required structure setback from the bluffline and OHWL;

      ii. Processing machinery must be located consistent with setback standards for structures as provided in subsection G3 below;

      iii. Only one barge loading area, which must be limited to the minimum size practicable, is permitted for each mining operation;

      iv. New and, where practicable, existing nonmetallic mining operations must not be readily visible and must be screened by establishing and maintaining natural vegetation. The unscreened boundaries of nonmetallic mining areas are limited to only the barge loading area;

      v. A site management plan must be developed by the operator and approved by the local government before new nonmetallic mining commences. Operations must be consistent with the site plan throughout the duration of operations at the site. The site management plan must:

         (a) Describe how the site will be developed over time with an emphasis on minimizing environmental risk to public waters;

         (b) Explain where staged reclamation may occur at certain points during the life of the site;

         (c) Address dust, noise, storm water management, possible pollutant discharges, days and hours of operation, and duration of operations; and

         (d) Describe any anticipated vegetation and topographic alterations outside the pit, and reclamation plans consistent with the stated end use for the land; and;

      vi. Existing and new nonmetallic mining operations must submit land reclamation plans to the local government compatible with the purposes of this ordinance.

   e. River-dependent uses. River-dependent uses must comply with the following design standards:

i. Structures and parking areas, except shoreline facilities and private roads and conveyances serving river-dependent uses as provided in subsection M below, must meet the dimensional and performance standards in this section, must be designed so that they are not readily visible, and must be screened by establishing and maintaining natural vegetation;

ii. Shoreline facilities must comply with Minnesota Rules, chapter 6115 and must:

(a) Be designed in a compact fashion so as to minimize the shoreline area affected; and

(b) Minimize the surface area of land occupied in relation to the number of watercraft or barges to be served; and

iii. Dredging and placement of dredged material are subject to existing federal and state permit requirements and agreements.

f. Wireless communication towers. Wireless communication towers require a conditional or interim use permit and are subject to the following design standards:

i. The applicant must demonstrate that functional coverage cannot be provided through co-location, a tower at a lower height, or a tower at a location outside of the MRCCA;

ii. The tower must not be located in a bluff or shore impact zone; and

iii. Placement of the tower must minimize impacts on public river corridor views.

iv. Comply with the general design standards in subsection I.2 below.

F. Structure Height and Placement and Lot Size

1. Purpose. To establish standards that protect primary conservation areas and public river corridor views from development impacts and ensure that new development is sited consistent with the purpose of the MRCCA.

2. Structure height. Structures and facilities must comply with the following standards unless identified as exempt in subsection M below.

a. Structures and facilities must comply with the following standards unless identified as exempt in subsection M below.

i. ROS District: 35 feet.

ii. SR District: Height is determined by underlying zoning, provided the allowed height is consistent with that of the mature treeline, where present, and existing surrounding development, as viewed from the OWHL of the opposite shore.

iii. UM District: 65 feet, provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimize interference with public river corridor views. Structures over 65 feet are allowed as a conditional use according to Section 6.23.

b. Height is measured on the side of the structure facing the Mississippi River.

c. In addition to the conditional use permit requirements of subsection D.4 above, criteria for considering whether to grant a conditional use permit for structures exceeding the height limits must include:

i. Assessment of the visual impact of the proposed structure on public river corridor views, including views from other communities;

ii. Determination that the proposed structure meets the required bluff and OHWL setbacks;

iii. Identification and application of techniques to minimize the perceived bulk of the proposed structure, such as:

(a) Placing the long axis of the building perpendicular to the river;

(b) Stepping back of portions of the façade;

(c) Lowering the roof pitch or use of a flat roof;

(d) Using building materials or mitigation techniques that will blend in with the natural surroundings such as green roofs, green walls, or other green and brown building materials;

(e) Narrowing the profile of upper floors of the building; or

(f) Increasing the setbacks of the building from the Mississippi River or blufflines;

iv. Identification of techniques for preservation of those view corridors identified in the MRCCA Plan; and

v. Opportunities for creation or enhancement of public river corridor views.

3. Structure and impervious surface placement.

a. Structures and impervious surface must not be placed in the shore or bluff impact zones unless identified as an exemption in subsection M below.

b. Structures, impervious surfaces, and facilities must comply with the following OHWL setback provisions unless identified as exempt in subsection M below.

i. ROS District: 200 feet from the Mississippi River and 150 feet from the Minnesota and Vermillion Rivers.

ii. SR District: 75 feet from the Vermillion River.

iii. UM District: 50 feet from the Mississippi River.

c. Structures, impervious surfaces, and facilities must comply with the following bluffline setback provisions unless identified as exempt in Section 12.0:

i. ROS District: 100 feet.

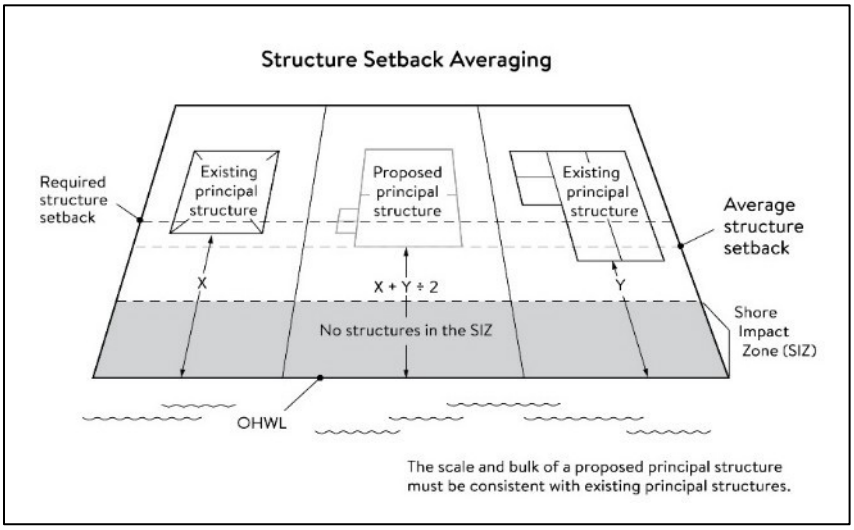
ii. SR District: 40 feet.

iii. UM District: 40 feet.

d. Where principal structures exist on the adjoining lots on both sides of a proposed building site, the minimum setback may be altered to conform to the average of the adjoining setbacks, if the new structure's scale and bulk riverward or bluffward of the

setbacks required under subsections G.3.b and G.3.c above are consistent with adjoining development. See Figure 5.7.

Figure 5.7. Structure Setback Averaging



e. Subsurface sewage treatment systems, including the septic tank and absorption area, must be located at least 75 feet from the ordinary high water level of the Mississippi River and all other public waters.

4. Lot size and buildable area.

   a. The width of lots abutting the Mississippi River in the ROS District must be at least 200 feet, unless alternative design methods are used that provide greater protection of the riparian area.

   b. All new lots must have adequate buildable area to comply with the setback requirements of subsections G.3.b and G.3.c above so as to not require variances to use the lots for their intended purpose.

G. Performance Standards for Private Facilities

1. Purpose. To establish design standards for private facilities that are consistent with best management practices and that minimize impacts to primary conservation areas, public river corridor views and other resources identified in the MRCCA plan.

2. General design standards. All private facilities must be developed in accordance with the vegetation management and land alteration requirements in subsections J and K below.

3. Private roads, driveways, and parking areas. Except as provided in subsection M below, private roads, driveways and parking areas must:

   a. Be designed to take advantage of natural vegetation and topography so that they are not readily visible;

   b. Comply with structure setback requirements according to subsection G above; and

   c. Not be placed within the bluff impact zone or shore impact zone, unless exempt under subsection M below and designed consistent with subsection I.2 below.

4. Private water access and viewing facilities.

a. Private access paths must be no more than:

   i. Eight feet wide, if placed within the shore impact zone; and

   ii. Four feet wide, if placed within the bluff impact zone.

b. Private water access ramps must:

   i. Comply with Minnesota Rules, parts 6115.0210 and 6280.0250; and

   ii. Be designed and constructed consistent with the applicable standards in Design Handbook for Recreational Boating and Fishing Facilities.

c. Design and construction of private stairways, lifts, and landings are subject to the following standards:

   i. Stairways and lifts must not exceed four feet in width on residential lots. Wider stairways may be used for commercial properties and residential facilities held in common, if approved by the City;

   ii. Landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet area allowed for commercial properties and residential facilities held in common, if approved by the City;

   iii. Canopies or roofs are prohibited on stairways, lifts, or landings;

   iv. Stairways, lifts, and landings must be located in the least visible portion of the lot whenever practical; and

   v. Ramps, lifts, mobility paths, or other facilities for persons with physical disabilities are allowed for achieving access to shore areas according to subsection H.4.c i-iv above, and as provided under subsection D.9 above.

d. One water-oriented accessory structure is allowed for each riparian lot or parcel less than 300 feet in width at the ordinary high water level, with one additional water-oriented accessory structure allowed for each additional 300 feet of shoreline on the same lot or parcel. Water-oriented accessory structures are prohibited in the bluff impact zone and must:

   i. Not exceed 12 feet in height;

   ii. Not exceed 120 square feet in area; and

   iii. Be placed a minimum of 10 feet from the ordinary high water level.

5. Decks and patios in setback areas. Decks and at-grade patios may encroach into the required setbacks from the ordinary high water level and blufflines without a variance, when consistent with subsections J and K below, provided that:

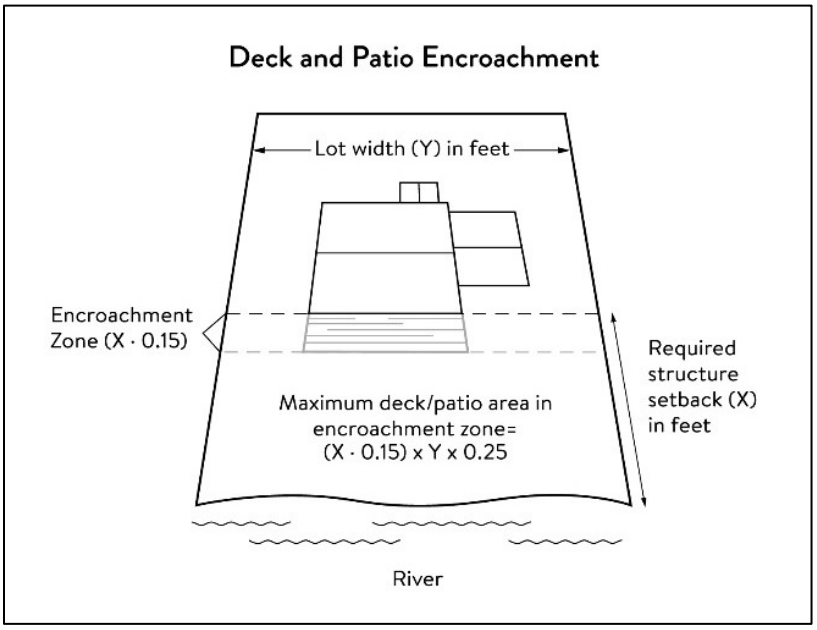
   a. The encroachment of the deck or patio into the required setback area does not exceed 15 percent of the required structure setback;

   b. The area of the deck or patio that extends into the required setback area occupies no more than 25 percent of the total area between the required setback and the 15 percent using the formula:

      [Required setback depth (feet) x 0.15 x lot width at setback (feet) x 0.25 = maximum total area]

c. The deck or patio does not extend into the bluff impact zone. See Figure 5.8.

Figure 5.8. Deck and Patio Encroachment



6. Off-premise and directional signs.
   a. Off-premise signs shall:
      i. Meet required structure placement and height standards in subsections G.2 and G.3 above .
      ii. Not be readily visible
   b. Water-facing signs must comply with the following standards:
      i. They must be consistent with Minnesota Statutes, section 86B.115.
      ii. Only convey the location and name of the establishment and the general types of goods and services available, if located in a shore impact zone.
      iii. Be no greater than ten feet in height and 32 square feet in surface area; and
      iv. If illuminated, the lighting must be fully shielded and directed downward to prevent illumination out across the river or to the sky.

H. Performance Standards for Public Facilities

1. Purpose. To establish design standards for public facilities that are consistent with best management practices and that minimize impacts to primary conservation areas, public river corridor views and other resources identified in the MRCCA plan. Public facilities serve the public interest by providing public access to the Mississippi River corridor or require locations in or adjacent to the river corridor and therefore require some degree of flexibility.
2. General design standards. All public facilities must be designed and constructed to:
   a. Minimize visibility of the facility from the river to the extent consistent with the purpose of the facility;

b. Comply with the structure placement and height standards in subsection G above, except as provided in subsection M below;

c. Be consistent with the vegetation management standards in subsection J below and the land alteration and storm water management standards in subsection K below, including use of practices identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001, where applicable;

d. Avoid primary conservation areas, unless no alternative exists. If no alternative exists, then disturbance to primary conservation areas must be avoided to the greatest extent practicable, and design and construction must minimize impacts; and

e. Minimize disturbance of spawning and nesting times by scheduling construction at times when local fish and wildlife are not spawning or nesting.

3. Right-of-way maintenance standards. Right-of-way maintenance must comply with the following standards:

   a. Vegetation currently in a natural state must be maintained to the extent feasible;

   b. Where vegetation in a natural state has been removed, native plants must be planted and maintained on the right-of-way; and

   c. Chemical control of vegetation must be avoided when practicable, but when chemical control is necessary, chemicals used must be in accordance with the regulations and other requirements of all state and federal agencies with authority over the chemical's use.

4. Crossings of public water or public land. Crossings of public waters or land controlled by the commissioner are subject to approval by the commissioner according to Minnesota Statutes, sections 84.415 and 103G.245.

5. Public utilities. Public utilities must comply with the following standards:

   a. High-voltage transmission lines, wind energy conversion systems greater than five megawatts, and pipelines are regulated according to Minnesota Statutes, chapter 216E, 216F, and 216G respectively; and

   b. If overhead placement is necessary, utility facility crossings must minimize visibility of the facility from the river as much as practicable.

   c. The appearance of structures must be as compatible as practicable with the surrounding area in a natural state with regard to height and width, materials used, and color.

   d. Wireless communication facilities, according to subsection F.2.f above.

6. Public transportation facilities. Public transportation facilities shall comply with structure placement and height standards in subsection G above. Where such facilities intersect or about two or more MRCCA districts, the least restrictive standards apply. Public transportation facilities must be designed and constructed to give priority to:

   a. Providing scenic overlooks for motorists, bicyclists, and pedestrians;

   b. Providing safe pedestrian crossings and facilities along the river corridor;

   c. Providing access to the riverfront in public ownership; and

   d. Allowing for use of the land between the river and the transportation facility.

7. Public recreational facilities. Public recreational facilities must comply with the following standards:

    a. Buildings and parking associated with pubic recreational facilities must comply with the structure placement and height standards in subsection G above except as provided in subsection M below;

    b. Roads and driveways associated with public recreational facilities must not be placed in the bluff or shore impact zones unless no other placement alternative exists. If no alternative exists, then design and construction must minimize impacts to shoreline vegetation, erodible soils and slopes, and other sensitive resources.

    c. Trails, access paths, and viewing areas associated with public recreational facilities and providing access to or views of the Mississippi River are allowed within the bluff and shore impact zones if design, construction, and maintenance methods are consistent with the best management practice guidelines in Trail Planning, Design, and Development Guidelines.

        i. Hard-surface trails are not allowed on the face of bluffs with a slope exceeding 30 percent. Natural surface trails are allowed, provided they do not exceed eight feet in width.

        ii. Trails, paths, and viewing areas must be designed and constructed to minimize:

            (a) Visibility from the river;

            (b) Visual impacts on public river corridor views; and

            (c) Disturbance to and fragmentation of primary conservation areas.

    d. Public water access facilities must comply with the following requirements:

        i. Watercraft access ramps must comply with Minnesota Rules parts 6115.0210 and 6280.0250; and

        ii. Facilities must be designed and constructed consistent with the standards in Design Handbook for Recreational Boating and Fishing Facilities.

    e. Public signs and kiosks for interpretive or directional purposes are allowed in the bluff or shore impact zones, provided they are placed and constructed to minimize disturbance to these areas and avoid visual impacts on public river corridor views. If illuminated, the lighting must be fully shielded and be directed downward.

    f. Public stairways, lifts, and landings must be designed as provided in subsection H.4.c above.

I. Vegetation Management

1. Purpose. To establish standards that sustain and enhance the biological and ecological functions of vegetation; preserve the natural character and topography of the MRCCA; and maintain stability of bluffs and steep slopes and ensure stability of other erosion-prone areas.

2. Applicability. This section applies to:

    a. Shore impact zones;

    b. Areas within 50 feet of a wetland or natural drainage route;

c. Bluff impact zones;

d. Areas of native plant communities; and

e. Significant existing vegetative stands identified in the MRCCA plan.

3. Activities allowed without a vegetation permit.

a. Maintenance of existing lawns, landscaping and gardens;

b. Removal of vegetation in emergency situations as determined by (insert name of LGU);

c. Right-of-way maintenance for public facilities meeting the standards of subsection I.3 above;

d. Agricultural and forestry activities meeting the standards of subsections F.2.a and F.2.c above;

e. Selective vegetation removal, provided that vegetative cover remains consistent with the management purpose of the MRCCA District, including removal of:

i. Vegetation that is dead, diseased, dying, or hazardous;

ii. Vegetation to prevent the spread of diseases or insect pests;

iii. Individual trees and shrubs; and

iv. Invasive non-native species.

4. Activities allowed with a vegetation permit.

a. Only the following intensive vegetation clearing activities are allowed with a vegetation permit:

i. Clearing of vegetation that is dead, diseased, dying, or hazardous;

ii. Clearing to prevent the spread of diseases or insect pests;

iii. Clearing to remove invasive non-native species.

iv. Clearing to prepare for restoration and erosion control management activities consistent with a plan approved by the City.

v. The minimum necessary for development that is allowed with a building permit or as an exemption under subsection M below.

b. General Performance Standards. The following standards must be met, in addition to a restoration plan under subsection J.6 below, in order to approve a vegetation permit:

i. Development is sited to minimize removal of or disturbance to natural vegetation;

ii. Soil, slope stability, and hydrologic conditions are suitable for the proposed work as determined by a professional engineer and approved by the City;

iii. Clearing is the minimum necessary and designed to blend with the natural terrain and minimize visual impacts to public river corridor views;

iv. Vegetation removal activities are conducted so as to expose the smallest practical area of soil to erosion for the least possible time; and

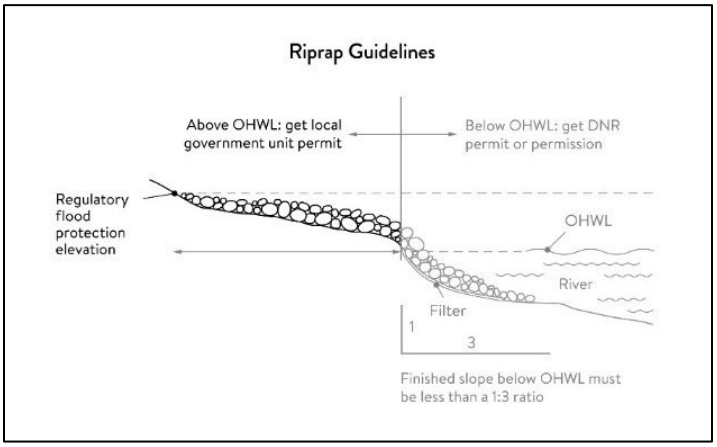
v. Any other condition determined necessary to achieve the purpose of this section.

5. Prohibited activities. All other intensive vegetation clearing is prohibited.
6. Vegetation restoration plan.
    a. Development of a vegetation restoration plan and reestablishment of natural vegetation is required:
        i. For any vegetation removed with a permit under subsection J.4.a above;
        ii. Upon failure to comply with any provisions in this section; or
        iii. As part of the planning process for subdivisions as provided in subsection L below.
    b. Restoration Plan Performance Standards. The vegetation restoration plan must satisfy the application submittal requirements in subsection D.6 above, and:
        i. Vegetation must be restored in one or more of the following restoration priority areas:
            (a) Areas with soils showing signs of erosion, especially on or near the top and bottom of steep slopes and bluffs;
            (b) Shoreline areas within 25 feet of the water with no natural vegetation, degraded vegetation, or planted with turf grass;
            (c) Areas on steep slopes and bluffs that are visible from the river with no natural vegetation, degraded vegetation, or planted with turf grass; or
            (d) Other approved priority opportunity area, including priorities identified in the MRCCA plan, if none of the above exist.
        ii. Include vegetation that provides suitable habitat and effective soil stability, runoff retention, and infiltration capability. Vegetation species, composition, density, and diversity must be guided by nearby patches of native plant communities and by Native Vegetation Establishment and Enhancement Guidelines;
        iii. Any highly erodible soils disturbed during removal and/or restoration must be stabilized with deep-rooted vegetation with a high stem density;
        iv. Vegetation removed must be restored with native vegetation to the greatest extent practicable. The area (square feet) of the restored vegetation should be similar to that removed to the greatest extent practicable.
        v. For restoration of removed native plant communities, restored vegetation must also provide biological and ecological function equivalent to the removed native plant communities. The area (square feet) of the restored vegetation should be equivalent to that removed;
        vi. Be prepared by a qualified individual; and
        vii. Include a maintenance plan that includes management provisions for controlling invasive species and replacement of plant loss for three years.
    c. A certificate of compliance will be issued after the vegetation restoration plan requirements have been satisfied.

J. Land Alteration Standards and Stormwater Management

1. Purpose. To establish standards that protect water quality from pollutant loadings of sediment, nutrients, bacteria, and other contaminants; and maintain stability of bluffs, shorelines, and other areas prone to erosion.
2. Land alteration.
   a. Within the bluff impact zone, land alteration is prohibited, except for the following, which are allowed by permit.
      i. Erosion control consistent with a plan approved by the local government or resource agency and consistent with subsection K.6 below;
      ii. The minimum necessary for development that is allowed as an exception under subsection M below; and
      iii. Repair and maintenance of existing buildings and facilities.
   b. Within the water quality impact zone, land alteration that involves more than ten cubic yards of material or affects an area greater than 1,000 square feet requires a permit.
3. Rock riprap, retaining walls, and other erosion control structures.
   a. Construction, repair, or replacement of rock riprap, retaining walls, and other erosion control structures located at or below the OHWL must comply with Minnesota Rules, part 6115.0215, Subp. 4, item E, and 6115.0216, Subp. 2. Work must not proceed until approved by the commissioner, permitted by the US Army Corps of Engineers, and any other permits are obtained. See Figure 5.9.

   Figure 5.9. Riprap Guidelines



   b. Construction or replacement of rock riprap, retaining walls, and other erosion control structures within the bluff impact zone and the water quality impact zone are allowed with a permit consistent with provisions of subsection K.6 below provided that:
      i. If the project includes work at or below the OHWL, the commissioner has already approved or permitted the project.
      ii. The structures are used only to correct an established erosion problem as determined by the City.
      iii. The size and extent of the structures are the minimum necessary to correct the erosion problem and are not larger than the following, unless a professional

engineer determines that a larger structure is needed to correct the erosion problem:

(a) Retaining walls must not exceed five feet in height and must be placed a minimum horizontal distance of 10 feet apart; and

(b) Riprap must not exceed the height of the regulatory flood protection elevation.

c. Repair of existing rock riprap, retaining walls, and other erosion control structures above the OHWL does not require a permit provided it does not involve any land alteration.

4. Stormwater management.

a. In the bluff impact zone, storm water management facilities are prohibited, except by permit if:

i. There are no alternatives for storm water treatment outside the bluff impact zone on the subject site;

ii. The site generating runoff is designed so that the amount of runoff reaching the bluff impact zone is reduced to the greatest extent practicable;

iii. The construction and operation of the facility does not affect slope stability on the subject property or adjacent properties; and

iv. Mitigation based on the best available engineering and geological practices is required and applied to eliminate or minimize the risk of slope failure.

b. In the water quality impact zone, development that creates new impervious surface, as allowed by exemption in subsection M below, or fully reconstructs existing impervious surface of more than 10,000 square feet requires a storm water permit. Multipurpose trails and sidewalks are exempt if there is down gradient vegetation or a filter strip that is at least five feet wide.

c. In all other areas, storm water runoff must be directed away from the bluff impact zones or unstable areas.

5. Development on steep slopes. Construction of structures, impervious surfaces, land alteration, vegetation removal, or other construction activities are allowed on steep slopes if:

a. The development can be accomplished without increasing erosion or storm water runoff;

b. The soil types and geology are suitable for the proposed development; and

c. Vegetation is managed according to the requirements of subsection J above.

6. Conditions of land alteration permit approval.

a. Temporary and permanent erosion and sediment control measures retain sediment onsite consistent with best management practices in the Minnesota Stormwater Manual;

b. Natural site topography, soil, and vegetation conditions are used to control runoff and reduce erosion and sedimentation;

c. Construction activity is phased when possible;

d. All erosion and sediment controls are installed before starting any land disturbance activity;

e. Erosion and sediment controls are maintained to ensure effective operation;

f. The proposed work is consistent with the vegetation standards in subsection J above; and

g. Best management practices for protecting and enhancing ecological and water resources identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001.

7. Compliance with other plans and programs. All development must:

a. Be consistent with Minnesota Statutes, chapter 103B, and local water management plans completed under Minnesota Statutes, chapter 8410;

b. Meet or exceed the wetland protection standards under Minnesota Rules, chapter 8420; and

c. Meet or exceed the floodplain management standards under Minnesota Rules, parts 6120. 5000 – 6120.6200.

K. Subdivision and Land Development Standards

1. Purpose.

a. To protect and enhance the natural and scenic values of the MRCCA during development or redevelopment of the remaining large sites

b. To establish standards for protecting and restoring biological and ecological functions of primary conservation areas on large sites; and

c. To encourage restoration of natural vegetation during development or redevelopment of large sites where restoration opportunities have been identified in MRCCA Plans.

2. Applicability.

a. The design standards in this section apply to subdivisions, planned unit developments and master- planned development and redevelopment of land involving ten or more acres for contiguous parcels that abut the Mississippi River and 20 or more acres for all other parcels, including smaller individual sites within the following developments that are part of a common plan of development that may be constructed at different times:

i. Subdivisions;

ii. Planned unit developments; and

iii. Master-planned development and redevelopment of land.

b. The following activities are exempt from the requirements of this section:

i. Minor subdivisions consisting of three or fewer lots;

ii. Minor boundary line corrections;

iii. Resolutions of encroachments;

iv. Additions to existing lots of record;

v. Placement of essential services; and

vi. Activities involving river-dependent commercial and industrial uses.

3. Application materials. Project information listed in subsection D.6 above must be submitted for all proposed developments.

4. Design standards.

a. Primary conservation areas, where they exist, must be set aside and designated as protected open space in quantities meeting the following as a percentage of total parcel area:

i. CA-ROS District: 50%;

ii. CA-UM District: 10%; and

iii. CA-SR District: 10% if the parcel includes native plant communities or provides feasible connections to a regional park or trail system, otherwise no requirement.

b. If the primary conservation areas exceed the amounts specified in subsection L.4.a above, then protection of native plant communities and natural vegetation in riparian areas shall be prioritized.

c. If primary conservation areas exist but do not have natural vegetation (identified as restoration priorities in the MRCCA Plan), then a vegetation assessment must be completed to evaluate the unvegetated primary conservation areas and determine whether vegetation restoration is needed. If restoration is needed, vegetation must be restored according to subsection J.6.b above.

d. If primary conservation areas do not exist on the parcel and portions of the parcel have been identified in the MRCCA plan as a restoration area, vegetation must be restored in the identified areas according to subsection J.6.b above and the area must be set aside and designated as protected open space.

e. Storm water treatment areas or other green infrastructure may be used to meet the protected open space requirements if the vegetation provides biological and ecological functions.

f. Land dedicated under section 12-2-6, Park Dedication, for public river access, parks, or other open space or public facilities may be counted toward the protected open space requirement.

g. Protected open space areas must connect open space, natural areas, and recreational areas, where present on adjacent parcels, as much as possible to form an interconnected network.

5. Alternative design standards.

a. The City will consider alternative design standards through a Planned Unit Development (PUD). With using a PUD, the City will consider deviation from minimum lot sizes and lot dimension standards. Use of a PUD within the MRCCA boundary shall include the following:

i. A demonstrated protection and restoration of continuous vegetation – preventing the fragmentation of vegetation and habitat by individual lots, especially along the river and natural drainage areas and protecting it as common open space.

ii. Protection of open space, particularly primary conservation areas, beyond the minimum identified in 4a.

6. Permanent protection of designated open space.

a. Designated open space areas must be protected through one or more of the following methods:

i. Public acquisition by a government entity for conservation purposes;

ii. A permanent conservation easement, as provided in Minnesota Statutes, chapter 84C;

iii. A deed restriction; and

iv. Other arrangements that achieve an equivalent degree of protection.

b. Permanent protection methods must ensure the long-term management of vegetation to meet its biological and ecological functions, prohibit structures, and prohibit land alteration, except as needed to provide public recreational facilities and access to the river.

L. Exemptions

1. Purpose. To provide exemptions to structure placement, height and other standards for specific river or water access dependent facilities as provided in Minnesota Statutes, section 116G.15 Subd. 4.

2. Applicability.

a. Uses and activities not specifically exempted must comply with this section. Uses and activities exempted under shore impact zone and bluff impact zone must comply with the vegetation management and land alteration standards in subsections J and K above.

b. Uses and activities in subsection M.3 below are categorized as:

i. Exempt – E. This means that the use or activity is allowed;

ii. Exempt if no alternative – (E). This means that the use or activity is allowed only if no alternatives exist; and

iii. Not exempt - N. This means that a use or activity is not exempt and must meet the standards of this ordinance.

3. Use and activity exemptions classification.

a. General uses and activities.

Table 5.2. General Uses and Activities

Use or Activity	Setbacks	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Industrial and utility structures requiring greater height for operational reasons (such as elevators, refineries and railroad signaling towers)	N	E	N	N	Structure design and placement must minimize interference with public river corridor views.
Barns, silos, and farm structures	N	E	N	N	
Bridges and bridge approach roadways	E	EN(E)	Section 8		
Wireless communication towers	E	E	N	N	Section 5.26
Chimneys, church spires, flag poles, public monuments, and mechanical stacks and equipment	N	E	N	N	
Historic properties and contributing properties in historic districts	E	E	E	E	Exemptions do not apply to additions or site alterations

b. Public utilities.

Table 5.3. Public Utilities

Use or Activity	Setbacks	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Electrical power facilities	N(E)	E	(E)	Section 8	
Essential services (other than storm water facilitiesE	E	E	(E)	Section 8	
Storm water facilities	E	N	E	(E)	Section 10
Wastewater treatment	E	N	E	N	Section 8

Use or Activity	Setbacks	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Public transportation facilities	E	N	(E)	(E)	Section 8

c. Public recreational facilities.

Table 5.4. Public Recreational Facilities

Use or Activity	Setbacks	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Accessory structures, such as monuments, flagpoles, light standards, and similar features	E	E	(E)	(E)	Section 8; within BIZ, only on slopes averaging less than 30%. Exemptions do not apply to principal structures.
Picnic shelters and other one-sided structures	E	N	(E(E)Section 8		
Parking lots	(E)	N	(E)	(E)	Section 8; within BIZ, only within 20 feet of toe of bluff; not on face of bluff; and must not affect stability of bluff
Roads and driveways	(E)	N	(E)	(E)	Section 8
Natural-surfaced trails, access paths, and viewing areas	E	N	E	E	Section 8
Hard-surfaced trails and viewing platforms	E	N	E	(E)	Section 8; within BIZ, only on slopes averaging less than 30%
Water access ramps	E	N	E	(E)	Section 8
Public signs and kiosks for interpretive or directional purposes	E	N	E	(E)	Section 8

d. River-dependent uses.

Table 5.5. River Dependent Uses

Use or Activity	Setbacks	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Shoreline facilities	E	N[1]	E	(E)	Section 5.25. Exemptions do not apply to buildings, structures, and parking areas that are not part of a shoreline facility
Private roads and conveyance structures serving river-dependent usesEN[1]	E	(E)	Section 5.25		
[1] River-dependent commercial, industrial, and utility structures are exempt from height limits only if greater height is required for operational reasons.					

e. Private residential and commercial water access and use facilities.

Table 5.6. Private Residential and Commercial Water Access and Use Facilities

Use or Activity	Setbacks	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Private roads serving 3 or more lots	(E)	N	N	(E)	Section 7; in BIZ, only on slopes averaging less than 30%. Exemption does not apply to private roads serving fewer 3 lots or to private driveways and parking areas
Access paths	E	N	E	E	Section 7
Water access ramps	E	N	E	N	Section 7
Stairways, lifts, and landings	E	N	E	E	Section 7

A. _____

Use or Activity	Setbacks	Height Limits	SIZ	BIZ	Applicable standards with which the use or activity must comply
Water-oriented accessory structures	E	N	E	N	Section 7
Patios and decks	E	N	N	N	Section 7.5
Directional signs for watercraft (private)	E	N	E	N	Section 7.6; exemption does not apply to off-premise signs
Temporary storage of docks, boats, and other equipment during the winter months	E	N	E	N	
Erosion control structures, such as rock riprap and retaining walls	E	N(E)	Sections 10.3, 10.5 and 10.6		
Flood control structures	E	N	E	(E)	Section 10

11-5-5 :Planned Unit Development (PUD) District

A. Purpose: The purpose of the planned unit development (PUD) district is to provide a district that will encourage the following:

1. Flexibility in land development and redevelopment in order to utilize new techniques of building design and construction, and site design including clustering of buildings and land uses.
2. Provision of life cycle housing to all income and age groups.
3. Energy conservation through the use of more efficient building design and siting and the clustering of buildings and land uses.
4. Preservation of desirable site characteristics and open space and protection of sensitive environmental features, including, but not limited to, steep slopes, trees and poor soils.
5. More efficient and effective use of land, open space and public facilities through mixing of land uses and assembly and development of land into larger parcels.
6. High quality of design and design compatible with surrounding land uses, including both existing and planned.
7. Sensitive development in transitional areas located between different land uses and along significant transportation or scenic corridors within the city.
8. Development that is consistent with the comprehensive plan.

B. Development Standards: Within the PUD district, all development shall be in compliance with the following:

1. Area: Each PUD shall have a minimum area of two acres, excluding wetlands, land lying below the ordinary high water level of any lake, land within a floodway, and existing rights-of-way, unless the applicant can demonstrate the existence of one of the following:

    a. Unusual physical features of the property itself or of the surrounding neighborhood such that development as a PUD will conserve a physical or topographic feature of importance to the neighborhood or community.

    b. The property is directly adjacent to or across the right of way from property which has been developed previously as a PUD and will appear as and will function as an extension of that previously approved development.

    c. The property is located in a transitional area between different land use categories or on a collector or arterial (minor or principal) street, as defined in the comprehensive plan.

2. Uses: For a given PUD, all uses shall be consistent with the comprehensive plan and the master development plan as approved.

    a. Area Used for Land Uses: The city may permit up to 10% of the gross floor area of all buildings in a PUD to be used for land uses for which the site is not designated in the comprehensive plan if the city council finds that such use is in the best interests of the city and is consistent with the requirements of this chapter. If nondesignated uses are to be incorporated into a PUD, the city may forward a copy of the request to the metropolitan council for review.

    b. Designated for Multiple Land Uses: Where the site of a proposed PUD is designated for more than one land use in the comprehensive plan, the city may require that the PUD include all the proposed land uses.

    c. Single Land Use or Housing Type: Any PUD which involves a single land use type or housing type may be permitted; provided, that it is otherwise consistent with the objectives of this title and the comprehensive plan.

3. Density:

    a. Each residential PUD or the residential portion of each mixed-use PUD shall have a density within the range specified in the comprehensive plan for the PUD site.

    b. The density of individual buildings or lots within a PUD may exceed these standards, provided the density for the entire PUD does not exceed the permitted standards.

    c. If the site is not designated in the comprehensive plan for residential use, the appropriate density shall be determined by the city based upon the city council's finding that such density is consistent with the intent of the PUD and of the comprehensive plan.

4. Application of Title Provisions: The requirements contained in this title shall apply to a PUD as deemed appropriate by the city. The regulations of the most closely related base zoning district shall be considered presumptively appropriate, but may be departed from in order to accomplish the purposes of this section.

    a. Buildings per Lot: The city may permit more than one building to be placed on one platted or recorded lot in a PUD as long as the buildings are separated by at least 12 feet.

b. Setbacks, Buffers, and Greenspace: Setback, buffers, and greenspace within a PUD shall be consistent with applicable sections of this title and title 12 “Subdivision Regulations” of this code unless the developer can demonstrate to the city's satisfaction that a lesser standard should be permitted with the addition of a screening treatment or other mitigative measures.

c. Private Recreational Uses: Each residential PUD comprised of units other than single-unit detached housing or within a mixed-use PUD shall provide an area dedicated for private recreational uses for project residents. Such areas will be for active or passive recreational uses suited for the needs of the residents of the project, including, but not limited to, swimming pools, trails, nature areas, picnic areas, tot lots and saunas.

d. Streets, Utilities, Public Facilities and Subdivisions: The city ordinances governing the specifications and standards for streets, utilities, public facilities and subdivisions may be modified based upon the unique characteristics of the PUD. The city council may therefore approve streets, utilities, public facilities, and land subdivisions that are not in compliance with usual specifications or ordinance requirements if it finds that strict adherence to such standards or requirements is not required to meet the intent of this chapter or to protect the health, safety, or welfare of the residents of the PUD, the surrounding area, or the city as a whole.

e. Parking: Parking provided for uses within a PUD shall be consistent with the parking requirements contained in section 11-7-3 “Off-street Parking and Loading Standards” of this title, unless the developer can demonstrate to the city's satisfaction that a lesser standard should be permitted on the grounds of complementary peak parking demands by the uses within the PUD. The city may require execution of a restrictive covenant limiting future use of the property to those uses that will continue the complementary peak parking demands or a proof of parking agreement.

f. Architectural and Landscape Design: The applicant shall demonstrate that the architectural and landscape design proposed for all residential PUDs or the residential portion of a mixed-use PUD will provide privacy for both internal and exterior living areas. This provision shall include, but not be limited to, landscape and fence screens, location of HVAC equipment, and location of structures relative to adjacent homes. Deviations from approved plans must be approved by both the City Council.

g. Signs: Signs shall be restricted to those permitted under chapter 8, "Signage", of this title or in a sign plan approved by the city regulated by permanent covenants.

5. Covenants: All applicants for a PUD shall establish an association or similar framework approved by the city to oversee the maintenance of commonly held properties and review of architectural modifications to the approved plans.

6. Unified Ownership or Control: All property to be included within a PUD shall be under unified ownership or control or subject to such legal restrictions or covenants as may be necessary to ensure compliance with the approved master development plan and final site and building plan.

TITLE 11 ZONING REGULATIONS

CHAPTER 6 USE-SPECIFIC STANDARDS

11-6-1 :Principal Uses, Residential

A. Assisted living facility

1. A permanent common open space area for passive group outdoor recreation activities shall be provided with a size of not less than 10% of the lot area:

   a. The area shall be landscaped with shade trees and shrubbery for the purpose of protection from the sun, screening and visual interest.

   b. Such an outdoor living area shall be properly drained, located for convenience and optimum use, and shall be walled, fenced, or planted to provide reasonable privacy.

   c. This area may be surfaced to provide an area for garden furniture. It may also be roofed in whole or in part, provided that it is open on all sides and meets the requirements for location of accessory buildings in its designated zoning district.

2. All buildings shall have a common room open for use by all of the residents of the building. The common area shall meet the occupancy and space requirements for common rooms as outlined in the Uniform Building Code.

B. Continuing care senior facility

1. A continuing care senior facility may include several uses within a single development, including townhouse or rowhouse dwellings, apartments, or assisted living facilities. Each use within the development shall be required to meet the standards specific to that use listed in this Section.

C. Dwelling, apartment

1. No apartment dwelling shall be allowed 150 feet of Trunk Highway 3.

D. Dwelling, apartment mixed use

1. No dwelling units shall be allowed on the first floor of any part of the building within 150 feet of Trunk Highway 3.

E. Dwelling, attached townhouse or rowhouse

1. No dwelling units shall be allowed within 150 feet of Trunk Highway 3.

2. No frontage requirement on a public street or road is necessary for attached townhouse or rowhouse dwellings; however, access to a public street is required via common open space fronting the right of way.

3. A maximum of 10 dwelling units may be attached per building, except where buildings are adjacent to the RR and R-1 zoning districts; such buildings shall be limited to a maximum of four dwelling units per building.

4. In addition to the site dimension requirements found in tables 3.3 and 4.3, the following setbacks shall be required for any townhome development:

a. Principal structures shall be set back at least 60 feet from the right-of-way of any principal arterial highway, 50 feet from the right-of-way of any minor arterial highway, and 40 feet from the right-of-way of any collector street.

b. Principal structures shall be set back at least 20 feet from the back of curb of any private roadway.

c. Principal structures shall be set back at least 20 feet from any perimeter interior side or rear lot line.

5. Minimum Distance Between Townhome Structures: In addition to the setback requirements above, the following minimum distances shall be maintained between structures:

   a. A minimum 10 feet shall be maintained between side walls of end unit townhomes between adjacent rows of townhome units.

   b. Where the rear of a row of townhome dwelling units faces the rear of an adjoining row of townhome dwelling units, the minimum distance between structures shall 60 feet.

   c. Where the rear of a row of townhomes faces the side wall or front of an adjoining row of townhomes, the minimum distance between the structures shall be 40 feet.

   d. Off street parking areas provided within the common area for the use of all of the homeowners shall maintain a minimum setback of 15 feet from adjacent townhome dwelling units.

6. Design of Garage and Accessory Structures:

   a. Garages and other accessory structures shall be architecturally compatible in construction and appearance with the main building. Garage spaces required to satisfy off street parking requirements shall be attached to the townhome dwelling unit.

   b. A minimum of 150 cubic feet of storage space, exclusive of parking spaces provided, shall be provided within the garage.

7. Design of Streets and Parking Areas:

   a. All parking and driving surfaces shall be surfaced with concrete or asphalt, and shall be defined by continuous concrete perimeter curbing.

   b. All internal private roadways shall be a minimum 28 feet wide face to face.

8. Vertical Wall Surface Alignments: No more than two adjacent unit exterior walls may occupy the same vertical plane. All townhouse or rowhouse buildings containing three or more dwelling units shall have minimum offsets of four feet between one of the units and the adjacent unit.

9. Open Space Requirements:

   a. Recreational Space: All areas not occupied by structures, parking or driving surfaces shall be landscaped and maintained with vegetation. At least 20% of the open/green space, excluding required setback areas, shall be reserved for playgrounds and/or passive recreational space. Park lands shall be graded and seeded by the developer.

   b. Streets and Lanes: The developer of each townhome development shall be responsible for building and developing of the open space into finished, graded and fully developed areas consisting of paved streets having a minimum of five ton axle load bituminous

surfacing and common paved parking areas, in accordance with section 11-7-3, “Off Street Parking and Loading Standards”, of this title.

10. See section 12-2-9 “Homeowners Association” for Homeowners’ Association requirements.

F. Dwelling, courtyard cottage

1. All dwelling units within the development shall have a permanent frost-free foundation or equal, in accordance with the applicable building code.
2. Each dwelling shall have a maximum gross floor area of 1,200 square feet.
3. Dwelling units shall have a maximum height of 25 feet.
4. The minimum distance between dwellings shall be 10 feet.
5. Each cottage courtyard development shall provide a shared courtyard which is centrally located, allowing each dwelling unit to be located adjacent to the shared courtyard. The minimum width and depth of the shared courtyard shall be 20 ft.
6. Each dwelling with street frontage shall have a principal entrance facing the front property line and street. Each dwelling that does not have street frontage shall have a principal entrance facing the shared courtyard.
7. Pedestrian paths shall be provided to ensure pedestrian access from each individual dwelling to the front property line and street.
8. Any parking, trash, or driveways which are located along the perimeter of the site shall be screened with fencing and landscaping from adjacent development.
9. No dwelling shall be allowed to have an accessory dwelling unit.
10. Each dwelling may be subdivided into an individual lot for rental and ownership opportunities.

G. Dwelling, single-unit detached (includes manufactured home)

1. All single-unit detached dwellings shall have a permanent frost-free foundation or equal, in accordance with the applicable building code.
2. Minimum area for enclosed parking spaces:
   a. All single-unit detached dwellings shall provide no less than 440 square feet in area and no less than 20 feet wide in either direction to accommodate two enclosed parking spaces. The maximum footprint of a garage shall not exceed 50 percent of the gross floor area of the principal building (garage and living area combined).
   b. Any single-unit detached dwelling permit for properties receiving preliminary plat, lot division, or registered land survey approvals after the effective date hereof, shall include certificates of survey providing for the location of an attached third garage stall, whether or not construction is intended. The area allotted for the third stall shall be a minimum of 10 feet wide and 20 feet long. The combined area for the required two stall attached garage and the proposed third stall shall not exceed 50% of the gross floor area of the principal building (garage and living area combined).

H. Dwelling, twin-home

1. All single-unit detached dwellings shall have a permanent frost-free foundation or equal, in accordance with the applicable building code.
2. Attached dwellings without common open space or shared facilities shall have FHA party wall, maintenance or comparable agreements consistent with state statutes.
3. Attached dwellings which share the ownership of common open spaces or other facilities (i.e., driveways or utility services) shall be required to have condominium association documentation consistent with state statutes.

I. Dwelling, two- to four-unit

1. All single-unit detached dwellings shall have a permanent frost-free foundation or equal, in accordance with the applicable building code.
2. Attached dwellings without common open space or shared facilities shall have FHA party wall, maintenance or comparable agreements consistent with state statutes.
3. Attached dwellings which share the ownership of common open spaces or other facilities (i.e., driveways or utility services) shall be required to have condominium association documentation consistent with state statutes.

J. Long-term or transitional care facility

1. A permanent common open space area for passive group outdoor recreation activities shall be provided with a size of not less than five percent of the lot area:
    a. The area shall be landscaped with shade trees and shrubbery for the purpose of protection from the sun, screening and visual interest.
    b. Such an outdoor living area shall be properly drained, located for convenience and optimum use, and shall be walled, fenced, or planted to provide reasonable privacy.
    c. This area may be surfaced to provide an area for garden furniture. It may also be roofed in whole or in part, provided that it is open on all sides and meets the requirements for location of accessory buildings in its designated zoning district.
2. All buildings shall have a common room open for use by all of the residents of the building. The common area shall meet the occupancy and space requirements for common rooms as outlined in the Uniform Building Code.

K. Manufactured home park

1. Manufactured homes not meeting single-unit dwelling requirements are permitted only in planned manufactured home parks. The PUD procedure is required for all park proposals.
2. Manufactured home parks must be serviced by public sewer and water systems.
3. Manufactured homes must have a full basement or must be affixed to a permanent frost-free foundation with a completely enclosed crawl space.
4. Only manufactured homes certified as meeting current HUD "manufactured home construction and safety standards" shall be permitted, unless evidence is furnished that manufactured homes meeting prior HUD codes have been updated to meet current construction and safety standards and upon inspection have been found safe and fit for residential occupancy.

5. Every person operating a manufactured home park within the city shall provide and keep a suitable guest register for the registration of all persons provided with accommodations, and each person shall register therein, as provided by state law. This register shall contain the following:
    a. Name and lot address of each occupant;
    b. Name and address of the owner of the manufactured home;
    c. Make, model, year and license of each manufactured home; and
    d. Date of arrival and departure of each manufactured home.
    e. This information shall be kept for at least three years after the date the occupant leaves the manufactured home park.
6. Minimum Site Area: Minimum site area for manufactured home parks is 40 acres.
7. Property Line Abutting Street: Manufactured home parks shall have at least one property line abutting a collector or arterial street, as defined by the comprehensive guide plan.
8. Setbacks: All structures within manufactured home parks shall be set back a minimum of 50 feet from all adjacent property lines. Said setback area shall be provided with a dense combination of earthen berms and plant materials, specific plans for which must be approved by the planning commission.
9. Parks And Recreational Uses: Dedication for parks and recreational uses shall be determined according to the requirements of title 12 of this code. The city council shall determine whether land or cash in lieu of land shall be required, and, in the case of land dedication, whether the land shall be publicly or privately owned and maintained.
10. Streets And Utilities Under Single Ownership: Streets and utilities in manufactured home parks under single ownership shall be privately constructed, owned and maintained.
11. Privately Owned Utilities: Privately owned utilities shall be designed and constructed to meet the minimum specifications of the Minnesota department of health and the Minnesota pollution control agency. The use of propane or butane gas for any purpose in lieu of public or private utilities within the confines of the manufactured home park is prohibited.
12. Private Streets: Private streets shall be constructed to meet minimum city specifications and shall be paved to a minimum width of 32 feet where on street parking is permitted. Where parking is permitted on one side only and signs are posted, the minimum street width shall be 28 feet. All streets and roadways located within the manufactured home park shall have a concrete curb and gutter and paved in accordance with city standards.
13. Condominium Style Parks: The city council shall determine whether streets and utilities in condominium style manufactured home parks may be publicly owned and maintained.
14. Access Points: All manufactured home parks shall be designed with a minimum of two access points on public thoroughfares, providing full ingress and egress at each location.
15. Storm Shelters: Each manufactured home park shall provide a storm shelter or shelters of sufficient capacity to safely protect all of the residents of the park in case of a storm emergency. In lieu thereof, the planning commission may approve basement shelters within each unit provided the minimum standards for safety are assured.

16. Outdoor Storage of Recreation Vehicles: The outdoor storage of recreation vehicles shall not be permitted except as provided for in section 11-6-8 “Accessory Uses, N-Z” of this title.
17. Sidewalks: A concrete sidewalk, not less than five feet wide shall be constructed along one side of streets entering the manufactured housing park and provide safe pedestrian links to recreational amenities and the required shelter within the park and to public recreational facilities as recommended by the parks and recreation commission.
18. Landscaping: All surfaces not occupied by the manufactured home, patios, sidewalks or hard surfaced off street parking shall be sodded and maintained with grass or native ground cover. One boulevard or shade tree shall be provided per manufactured home with a minimum size of two inches (B&B). In addition, landscape screening is required in the perimeter setback areas to mitigate the effects of dissimilar uses and traffic.
19. Carports and Garages: A freestanding carport or garage not attached to a manufactured home may be permitted provided that it conforms to all applicable uniform building codes and is consistent with accessory structure setbacks provided herein. Prior to issuance of any building permit, permission must be provided by the park owner and certified to the city.
20. Accessory Structures: One freestanding accessory structure or storage shed per manufactured home may be permitted in addition to above mentioned carports or garages. All accessory structures shall conform to applicable building codes. Said structures shall be limited to 120 square feet in size.
21. Manufactured home park closings:
    a. Purpose and Intent: In view of the peculiar nature and problems associated with the closure or conversion of manufactured home parks, the city council finds that the public health, safety and general welfare will be promoted by requiring compensation to displaced homeowners and tenants of such parks. The purpose of this section is to define by whom and in what amount compensation for the park relocation or displacement of a manufactured home is paid. This section is adopted pursuant to the authority granted under Minnesota Statutes 327C.095. The relocation costs stated in this section are intended to be considered along with all other compensation eligible to the displaced residents. If the park closing falls under the federal uniform relocation act, the park owner will not be required to reimburse residents' expenses reimbursed under that act.
    b. Notice of Closing: If the manufactured home park is to be sold with the intent to convert in whole or in part to another use or the owner of the park requests and receives rezoning of the property from the city, the park owner shall, at least nine months prior to conversion to another use or sale to someone with the intent to convert to another use, provide a copy of a closure statement to a resident or each manufactured home and to the city community development department.
    c. Notice of Public Hearing: The community development department shall schedule a public hearing with the city council. The community development department shall mail a notice at least ten days prior to the public hearing to a resident of each manufactured home in the park stating the time, place and purpose of the hearing. The park owner shall provide the city with a list of the names and addresses of at least one resident of each manufactured home in the park at the time the closure statement is submitted to the community development department.

d. Public Hearing: A public hearing shall be held before the city council for the purpose of reviewing the closure statement and evaluating what impact the park closing may have on displaced residents and the park owner. At the public hearing, the city council will take testimony regarding the reasonableness of the maximum relocation costs to be paid by the park owner and the actual costs to relocate park residents. Based on the testimony, the city council, at its discretion, may adopt an ordinance increasing or decreasing the maximum total relocation costs as described in provision i within this subsection.

e. Conditions of Closing:

   i. As a condition of the closing of the manufactured home park, the park owner shall pay the relocation costs to the contractors providing the relocation services and/or to displaced residents. If the park owner determines within four months prior to the date of closure of the park that the park will not be closed, the park owner may rescind the notice of closure and shall pay any actual relocation costs incurred by any of the park's manufactured home owners. If the park owner determines at least four months prior to the date of closure of the park that the park will not be closed, the park owner may rescind the notice of closure, and not be liable for any relocation costs.

   ii. Each displaced resident is eligible for an equal share of the maximum total compensation as described in provision i within this subsection. If a displaced resident's relocation cost is less than their equal share, then the difference between the equal share and the actual relocation costs of that household is equally distributed to the displaced residents who have relocation costs in excess of their equal share.

   iii. The city shall not issue a building permit in conjunction with the reuse of the manufactured home park property unless the park owner has paid the relocation costs and/or the park purchaser has compensated displaced residents in accordance with the requirements of this section. Approval of any application for rezoning, platting, conditional use permit, planned unit development or variance in conjunction with a park closing or conversion shall be conditional on compliance with the requirements of this section.

f. Displaced Resident Statement: Within 90 days of receipt of a closure notice, the displaced resident shall provide the park owner with a written statement of relocation costs, or in the alternative, a written statement that the resident cannot relocate his or her manufactured home to another manufactured home park within a 25-mile radius. If a resident determines not to relocate as defined within this section, the resident must state whether he or she elects to receive relocation costs under provisions g and j of this subsection.

g. Election to Relocate:

   i. If a manufactured home can be relocated to another manufactured home park within a 25-mile radius, the park owner shall pay displaced residents' "relocation costs" as defined herein.

   ii. The park owner shall make relocation payments directly to contractors providing the relocation service, or the displaced resident may choose to be reimbursed by

the park owner after the resident submits to the park owner proof of payment of relocation costs. The park owner shall be entitled to receive adequate documentation of relocation costs, including costs of proposals, invoices, estimates and contacts for relocation services.

iii. If a displaced resident cannot relocate the manufactured home within a 25-mile radius of the park which is being closed or some other agreed upon distance, and the resident elects not to tender title to the manufactured home, the resident is entitled to relocation costs based upon an average of relocation costs awarded to other residents in the park.

iv. A displaced resident compensated under this section shall retain title to the manufactured home and shall be responsible for its prompt removal from the manufactured home park. All rent due and owing to the park owner, and all property taxes for the current and prior years shall be paid by the displaced resident prior to removing the manufactured home from the park.

h. Election to Receive Compensation: If a resident cannot relocate his or her manufactured home to another manufactured home park within a 25-mile radius or some other agreed upon distance and tenders title to the manufactured home, the resident is entitled to compensation to be paid by the purchaser of the park in order to mitigate the adverse financial impact of the park closing. In such instance, the compensation shall be an amount equal to the estimated market value of the manufactured home as determined by an independent appraiser experienced in manufactured home appraisal, or the tax assessed value of the manufactured home for the year in which the park is scheduled to close, whichever is greater. The appraisal shall be conducted only after it is determined that the manufactured home cannot be relocated to another park within 25 miles. The purchaser shall pay the cost of the appraisal. The resident shall transfer title of the manufactured home to the park purchaser free and clear of all liens and encumbrances. All rent due the property owner and all property taxes for the current and prior years shall be paid by displaced residents prior to the removal of the manufactured home from the park by the park purchaser.

i. Limitation of Relocation Costs and Compensation: Subject to provision d of this subsection, the total amount of compensation paid to displaced owners of manufactured homes shall not exceed the greater of 25% of the county assessor's estimated market value of the manufactured home park, as determined by the county assessor for the year in which the park is scheduled to close, or 25% of the purchase price of the park. At the public hearing of the park closure, the city council will take testimony regarding the reasonableness of the maximum relocation costs to be paid by the park owner and the actual costs to relocate park residents. Based on the testimony, the city council, at its discretion, may adopt an ordinance increasing or decreasing the maximum total relocation costs.

j. Penalty: Violation of any provision of this chapter shall be a misdemeanor.

11-6-2 :Principal Uses, Public and Institutional

A. Cemetery

1. Application, Public Hearing, Notice, And Procedure: The application, public hearing, public notice, and procedure requirements for cemeteries shall be the same as for planned unit

development (PUD) as provided in section 11-9-6 “Planned Unit Development” of this title. At the time of plat approval, a security in the form of a performance bond, letter of credit or other such form as deemed necessary to secure the landscape improvements and perpetual maintenance for the platted portion of the cemetery will be required.

a. All cemeteries must be platted so that each gravesite will have a lot and block number.

b. Cemeteries must have a minimum acreage size of five acres.

c. All gravesites must be set back a minimum of 50 feet from any cemetery property boundary.

d. All gravesites must be set back a minimum of 15 feet from any potable water well.

e. No gravesite shall be located in a flood hazard area within a 500-year flood event boundary.

f. Any cemetery not completely enclosed by a secured fence after closing, nor staffed by on site personnel during daylight hours shall be developed as a memorial park with no aboveground gravesite markers.

g. All cemeteries must have planting strips or buffer yards adjacent to residential districts or uses, public uses and public rights of way. In the absence of a planting strip along a property line, boulevard trees are required to be planted at 50-foot intervals. The interior of the cemetery must have a minimum of one tree per 5,000 square feet to break up the large expanse of turf area.

h. All gravesites must be within 200 feet of interior access drives, if the cemetery is to be open to public access. All interior driveways must be paved in accordance with standards specified in section 11-7-3 “Off-Street Parking and Loading Standards” of this title.

i. All gravesites must have minimum direct frontage to a six foot wide land containing no gravesites to provide access to gravesites for equipment.

j. All burials must utilize a concrete vault to avoid risk of cave ins, buried to a minimum depth of six feet so that no portion of the grave is above the frost line during winter months.

k. Cemeteries must have direct access to a collector or arterial street.

l. All cemetery development will require site plan review approval and will be subject to the conditions for grading permits as specified in section 11-9-1 “Site Plan and Building Design Review” of this title. In addition, soil borings will be required to determine the depth of the water table and the soil structure appropriateness for burials.

m. All gravesites shall be set back a minimum of 100 feet from any wetland.

B. Day care center

1. Child daycare services, more than 12 persons

a. Pick up and drop off areas shall be located on the site, and shall be designed to avoid interfering with traffic and pedestrian movements.

b. Outdoor recreational area shall be located and designed in a manner which mitigates visual and noise impacts on any abutting residential parcels.

c. Provide proof of all applicable state, federal, and other governmental licensing agency approvals.

2. Adult daycare services

a. When a center is located in a multifunctional organization, the center may share a common space with the multifunctional organization if the required space available for use by participants is maintained while the center is operating.

b. Outdoor recreational area shall be located and designed in a manner which mitigates visual and noise impacts on any abutting residential parcels.

c. Provide proof of all applicable state, federal, and other governmental licensing agency approvals.

C. Funeral home or mortuary

1. The use shall provide adequate off-street parking as regulated in this title. In the case of shared parking between abutting uses, a reduction of up to 40% in the number of required parking spaces may be approved.

D. Place of worship

1. In any residential district, the property must have direct access onto an arterial street, as designated in the Comprehensive Plan, or access to a local street within 500 feet of the local street's intersection with an arterial street.

2. In the RR District, the following additional standards shall apply:

a. The property is designated "TR Transitional Residential" within the City's adopted Comprehensive Plan.

b. No ancillary uses, including, but not limited to, daycares and nurseries occurring separately from the religious services, are allowed at the place of worship.

c. Parking lot landscaping requirements for a place of worship shall be the standards for the PI district in Section 11-7-6 A of this title.

d. Permitted materials requirements for a place of worship shall be the standards for the PI district in Section 11-7-2 B of this title.

e. The maximum lot coverage for places of worship shall be 30%.

3. In the B-2 district, the property must have direct access to or be within 300 feet of a collector or arterial roadway as defined in the Comprehensive Plan.

E. Sacred community

1. Any sacred community use shall meet all requirements listed in Minnesota Statute 327.30.

11-6-3 :Principal Uses, Commercial

A. Adult establishment

1. Incorporation of Findings and Definitions: The findings, purpose and definitions in sections 3-8-1 and 3-8-2 of this code are incorporated and relied upon in this section.

2. Permitted Locations:

a. Adult establishments as defined and regulated in title 3, chapter 8 of this code are permitted in an overlay district which is established in the I-1 District east of COUNTY ROAD 73 and north of CSAH 42 in the city of Rosemount. Adult uses will conform to the I-1 District standards.

b. Adult establishments may be located within the overlay district provided they are not located within:

i. 500 feet of a residential structure,

ii. 1,000 feet from the property line of a park, school, church, library, commercial daycare center, cemetery, or

iii. 1,000 feet of another adult establishment.

B. Animal boarding, kennel, or daycare center

a. Any site used for overnight animal boarding or kennel shall not be less than five acres in size. Animal daycare centers may be located on properties smaller than five acres.

b. All structures used in conjunction with overnight animal boarding, including outdoor dog runs, shall be located a minimum of 500 feet from adjacent residential structures and 75 feet from residential property lines. Animal daycare centers shall be exempt from this requirement.

c. All commercial kennels shall be licensed by the State of Minnesota Board of Animal Health.

d. The maximum number of animals shall not exceed the space provided in accordance with the requirements of the State of Minnesota Board of Animal Health.

e. Subject to the regulations regarding the care and keeping of animals within the city contained in title 7, chapter 4 of this code.

f. In the RR District, no outdoor keeping of animals or dog runs shall be permitted.

C. Animal/veterinary clinic or hospital

a. Outdoor runs or kennels shall not be permitted.

b. Subject to the regulations regarding the care and keeping of animals within the City contained in title 7, chapter 4 of this Code.

D. Automobile fuel station

1. The site and building(s) shall be designed to limit the effects of this use on adjacent properties and public rights of way. No gasoline pumps shall be located on a site abutting any residential use or district.

2. The principal building shall be the primary source for screening the gasoline pumps from adjacent properties and/or rights of way. Landscaping and berming shall be a secondary source for screening gasoline pumps. Should landscaping and berming be found ineffective by the city, the city may approve screening walls and/or decorative fencing as an alternative. Screening walls shall be constructed of the same materials as the principal building and shall not extend more than 25 feet without a change in architecture to reduce their mass and appearance. The secondary source of screening (landscaping and berming or

walls and/or decorative fencing) shall provide a minimum 90% opacity screen to a height of four feet.

3. Stacking for gas pumps shall be provided for at least one car beyond the pump island in each direction in which access can be gained to the pump. Each space shall be a minimum of nine feet wide by 18 feet long.
4. Stacking areas shall be designed and located to minimize noises, emissions, and headlight glare upon adjacent properties and shall not interfere with circulation through any required parking, loading, maneuvering or pedestrian area.
5. Fuel pumps shall be installed on pump islands. Pump islands shall be elevated six inches above the traveled surface of the site and shall conform to the applicable principal building setback. Additionally, there shall be sufficient area around the pump island(s) to allow for safe and efficient movement of vehicles through the site, with a minimum 24 feet between pump rows, measured curb face to curb.
6. Underground fuel storage tanks are to be positioned to allow adequate access by motor fuel transports and unloading operations that do not conflict with circulation, access and other activities on the site.
7. A protective canopy structure may be located over the pump islands, subject to the following standards:
    a. The edge of the canopy shall maintain setbacks as required for the principal building.
    b. The architectural design, colors, and character of the canopy shall be consistent with the principal building on the site. The canopy posts/signposts shall not obstruct traffic or the safe operation of the gas pumps.
    c. The canopy shall not exceed 18 feet in height and must provide at least 14 feet of clearance to accommodate a semitrailer passing underneath. The height of the canopy may be increased should the city council determine the architectural design enhances the site and/or is more consistent with the principal building.
    d. The canopy fascia shall not exceed three feet in vertical height.
    e. Canopy lighting shall consist of canister spotlights recessed into the canopy. No portion of the light source or fixture may extend below the bottom face of the canopy. Total canopy illumination shall not exceed 115 foot-candles below the canopy at ground level. The fascia of the canopy shall not be illuminated.
    f. Signage may be allowed on a canopy; however, such signage will apply toward the allowable sign area for the principal building and/or ground sign.
8. No public address system shall be audible from a noncommercial or nonindustrial use or district.
9. The sale, storage, or display of vehicles is prohibited.
10. No outside storage, display, or services shall be allowed except as follows:
    a. Propane sales limited to 20-pound capacity tanks may be located outside provided the tanks are secured in a locker and the use meets all state building and fire codes.
    b. Sale or display of goods shall be allowed on the private sidewalk immediately in front of the principal building, provided that a minimum four foot clearance is maintained for

pedestrian access and that the display does not exceed four feet in height and is maintained in an orderly fashion. Display shall not block the handicap accessible route.

c. Sale or display of goods shall be allowed in an area underneath the canopy adjacent to the pump island provided that the display does not exceed three feet in height or extend beyond the concrete base of the pump island. This area shall be maintained in an orderly and safe fashion and in accordance with applicable state fire code regulations.

11. Any repair, assembly, disassembly or maintenance of vehicles shall require an additional conditional use permit subject to the performance standards outlined in this subsection for automotive repair.

12. A car wash facility not accessory to automobile repair or a nonservice motor fuel station shall require an additional conditional use permit subject to the performance standards outlined in this subsection for car wash, full- or self-service.

E. Automotive repair and service, major

1. The site and building(s) shall be designed to limit the effects of this use on adjacent properties and public rights-of-way. No automotive repair use shall be located on a site abutting any residential use or district.

2. All repair, assembly, disassembly or maintenance of vehicles shall occur within a closed building, except minor maintenance, including tire inflation, adding oil, wiper replacement and the like. All overhead vehicle doors on the building shall remain closed except when a vehicle is entering or exiting the building.

3. Gasoline pumps/sales shall require an additional conditional use permit subject to the performance standards outlined in this subsection for nonservice motor fuel stations.

4. Outdoor storage of parts, materials, and equipment may be allowed in the B-2 District subject to the performance standards outlined in those districts for outdoor storage and outdoor display or sales.

5. Automotive repair uses shall designate on a site plan separate areas for customer parking and storage of inoperable vehicles awaiting repair or repaired vehicles awaiting pick up. These areas shall meet the design standards outlined in section 11-7-3, "Off Street Parking and Loading Requirements" of this title and be screened as follows:

6. Customer parking areas shall meet the applicable screening standards outlined in this title including, but not limited to, section 11-7-3, "Off Street Parking and Loading Requirements" of this title and this subsection.

7. Inoperable vehicles awaiting repair or repaired vehicles awaiting pick up shall be stored behind the principal building. Landscaping and berming shall be a secondary source for screening said vehicles. Should landscaping and berming be found ineffective by the city, the city may approve screening walls and/or decorative fencing as an alternative. Screening walls shall be constructed of the same materials as the principal building and shall not extend more than 25 feet without a change in architecture to reduce their mass and appearance. Stacking areas shall have a minimum 90% opacity screen to a height of six feet.

8. In the B-1 and B-2 districts, junk or unlicensed vehicles awaiting repair or pick up shall be stored completely inside a closed building in accordance with the performance standards for outdoor storage outlined in section 11-6-8 of this chapter.

9. Parking of vehicles on public right of way shall be prohibited.

10. All painting must be conducted in an approved paint booth. All paint booths and all other activities of the operation shall thoroughly control the emission of fumes, dust, or other particulate matter in compliance with Minnesota pollution control standards and applicable fire and building codes.

11. All flammable materials, including liquids and rags, shall conform to the applicable provisions of the Minnesota fire code.

12. No public address system shall be audible from a noncommercial or nonindustrial use or district.

F. Automotive repair and service, minor

1. The site and building(s) shall be designed to limit the effects of this use on adjacent properties and public rights-of-way. No automotive repair use shall be located on a site abutting any residential use or district.

2. All repair, assembly, disassembly or maintenance of vehicles shall occur within a closed building, except minor maintenance, including tire inflation, adding oil, wiper replacement and the like. All overhead vehicle doors on the building shall remain closed except when a vehicle is entering or exiting the building.

3. Gasoline pumps/sales shall require an additional conditional use permit subject to the performance standards outlined in this subsection for nonservice motor fuel stations.

4. Automotive repair uses shall designate on a site plan separate areas for customer parking and storage of inoperable vehicles awaiting repair or repaired vehicles awaiting pick up. These areas shall meet the design standards outlined in section 11-7-3 "Off Street Parking and Loading Requirements" of this title and be screened as follows:

   a. Customer parking areas shall meet the applicable screening standards outlined in this title including, but not limited to, section 11-7-3 "Off Street Parking and Loading Requirements" of this title and this subsection.

   b. Inoperable vehicles awaiting repair or repaired vehicles awaiting pick up shall be stored behind the principal building. Landscaping and berming shall be a secondary source for screening said vehicles. Should landscaping and berming be found ineffective by the city, the city may approve screening walls and/or decorative fencing as an alternative. Screening walls shall be constructed of the same materials as the principal building and shall not extend more than 25 feet without a change in architecture to reduce their mass and appearance. Stacking areas shall have a minimum 90% opacity screen to a height of six feet.

   c. In the MX-2 District, junk or unlicensed vehicles awaiting repair or pick up shall be stored completely inside a closed building in accordance with the performance standards for outdoor storage outlined in section 11-6-8 of this chapter.

5. Parking of vehicles on public right of way shall be prohibited.

6. All painting must be conducted in an approved paint booth. All paint booths and all other activities of the operation shall thoroughly control the emission of fumes, dust, or other particulate matter in compliance with Minnesota pollution control standards and applicable fire and building codes.

7. All flammable materials, including liquids and rags, shall conform to the applicable provisions of the Minnesota fire code.
8. No public address system shall be audible from a noncommercial or nonindustrial use or district.

G. Car wash

1. The site and structure(s) shall be designed to limit the effects of the washing operation on adjacent properties and public rights of way. No car wash use shall be located abutting any residential use or district.
2. Stacking lanes shall not interfere with circulation in any required parking, loading, maneuvering, or pedestrian area.
3. Stacking and exiting areas shall be screened from adjacent properties and/or rights-of-way. Stacking areas shall have a minimum 90% opacity screen to a height of six feet while exiting areas shall have a minimum 50% opacity screen to a height of at least four feet.
    a. The principal structure shall be the primary source for screening the stacking and exiting areas from adjacent properties and/or rights of way.
    b. Landscaping and berming shall be a secondary source for screening the stacking and exiting areas. Should landscaping and berming be found ineffective by the city, the city may approve screening walls and/or decorative fencing as an alternative.
    c. Screening walls shall be constructed of the same materials as the principal structure and shall not extend more than 25 feet without a change in architecture to reduce their mass and appearance.
4. All overhead vehicle doors on the building shall remain closed except when a vehicle is entering or exiting the building.
5. Untreated water from the car wash shall not be discharged into the storm sewer. If the water is to be pretreated and discharged into the storm sewer, the pretreatment plans shall be subject to review and approval of the city engineer and building official, and subject to applicable requirements of metropolitan council environmental services and MPCA.

H. Commercial animal breeding

1. Any site used for commercial animal breeding shall not be less than five acres in size.

I. Commercial event center

1. The parcel must be a minimum of five acres in size.
2. Site must be located east of County Road 71.
3. The property owner and venue operator must be the same individual(s) and the site shall be its primary residence. The operator, or its designee, must be on the premises for the duration of each event.
4. The maximum number of guests is 200. A larger number of guests may be approved by the city based on the size of site, structures, parking availability, and other relevant factors.
5. Outdoor seating areas, where liquor is available shall be located in a controlled or cordoned area acceptable to the City with at least one opening.

6. Outdoor seating areas where food and/or liquor is available shall be set back 20 feet from property lines and have appropriate screening to adjacent properties.
7. The hours of operation shall be no later than 10:00 P.M. on Sunday through Thursday and 12:00 midnight on Friday and Saturday.
8. Class 5 gravel surfacing shall be allowed for off-street parking as long as the property is without access to public sanitary sewer to the site. When public sanitary sewer service becomes available to the property, the property owner shall surface the parking lot with a blacktop or concrete surface within one year. No vehicle parking is permitted within or along any public right-of-way.
9. Parking lot setbacks for gravel or surface lots shall be 20 feet from the side and rear property lines and 50 feet from the front property line.
10. Parking lot shall be screened from neighboring parcels.
11. Lighting shall be provided as necessary for security, safety, and traffic circulation. The level of lighting shall not exceed 0.5 lumen at any residential property line or 1.0 lumen at any nonresidential property line.
12. A traffic circulation and safety plan, including but not limited to access and signage, shall be reviewed and approved by the City Fire Marshal and Police Chief.
13. Compliance with all applicable regulations including State Health Code, State building codes, and local liquor licensing requirements. The operator shall coordinate events and activities with adjoining property owners to ensure appropriate Health and Safety Codes are met.
14. The serving of food and beverages is permitted only in conjunction with an event.
15. Overnight accommodations for guests, including campers, tents, or other recreation vehicles, are prohibited.
16. Sanitary facilities adequate for the number of attendees shall be provided as determined by the City. Portable toilets may be approved for temporary use and must be screened from view from roads and neighboring properties by landscaping or a wooden enclosure. No portable toilets shall be located closer than 400 feet from a neighboring residential structure.
17. Sound amplification systems cannot be used outdoors after 10:00 P.M.
18. Noise from an event shall not be plainly audible at a distance of 50 feet or more from the property line.
19. Trash enclosures must be provided and meet the standards for the B-1 District.

J. Commercial recreation facility, outdoor

1. Outdoor commercial recreation facilities shall adhere to the following standards:
    a. No outdoor amusement and recreation service shall be located on a site abutting any residential use or district.
    b. The site and building(s) shall be designed to limit the effects of this use on adjacent properties and public rights of way.
    c. All improvements except landscaping shall conform to the setback requirements for principal buildings in the district.

d. No public address system shall be audible from a noncommercial or nonindustrial use or district.

K. Landscape and horticultural service

1. A principal structure must be built on the site.
2. Landscape and horticultural services are subject to the requirements for outdoor display, sales, and storage in the I-1 District.

L. Vehicle sales or rental

1. The site and building(s) shall be designed to limit the effects of the sales or rental use on adjacent properties. No sales or display area shall be located on a site abutting any residential use or district.
2. A minimum building floor area of 20% of the lot area shall be required. All overhead vehicle doors on the building shall remain closed except when a vehicle is entering or exiting the building.
3. The outdoor sales or display area shall not interfere with circulation in any required parking, loading, maneuvering or pedestrian area.
4. The maximum area permitted for outdoor sales or display shall not exceed three and one-half square feet of outdoor storage area to each one square foot of enclosed ground floor principal building area.
5. The outdoor sales or display area shall conform to the principal building setback requirements of this district and meet the off-street parking and loading performance standards outlined in section 11-7-3 “Off-Street Parking and Loading Standards” of this title.
6. Junk vehicles are prohibited.
7. Any repair, assembly, disassembly or maintenance of vehicles shall require an additional conditional use permit subject to the performance standards outlined in this subsection for automotive repair.
8. Landscaping and berming shall be a primary source for screening outdoor sales and display area from adjacent rights of way. Should landscaping and berming be found ineffective by the city, the city may approve screening walls and/or decorative fencing as an alternative. Screening walls shall be constructed of the same materials as the principal building and shall not extend more than 25 feet without a change in architecture to reduce their mass and appearance. The screening source (landscaping and berming or walls and/or decorative fencing) shall provide a minimum 50% opacity screen to a height of at least four feet.
9. All necessary city or state licenses/permits shall be obtained and remain in good standing.
10. All exterior lighting shall conform to section 11-7-8 “Lighting Standards” of this title.
11. No public address system shall be audible from a noncommercial or nonindustrial use or district. Playing of music or advertisements from the public address system is prohibited.
12. Tents, rooftop parking, ramps or similar vertical devices for elevated displays are prohibited.
13. Signs shall conform to the performance standards outlined in this title as well as the standards listed below:

a. Pennants, balloons, streamers, pinwheels or other attention attracting devices are prohibited.

b. No freestanding light poles shall be uses as temporary sign supports, as flagpoles or to connect flags, streamers, or pennants.

c. No graphics shall be painted on the building or windows.

d. Open hoods of vehicles, windshields, car windows, trunks, roofs or the like shall not be used for individual letters or other signage.

e. No vehicle or trailer shall be parked in such a manner as to advertise the site location, or to promote or advertise a sale or event.

11-6-4 :Principal Uses, Industrial

A. Brewery, farm winery, or distillery

1. The use shall comply with all applicable provisions of state and local law and obtain all required licenses.
2. The site and building(s) shall be designed to limit the effects of this use on adjacent properties and public rights-of-way. No loading docks or overhead vehicle doors shall be on a side abutting any public rights-of-way or any residential use or district.
3. The principal building shall be the primary source for screening of the loading area or any required outdoor equipment.
4. All drives, loading and parking areas for the brewery, farm winery, or distillery and associated uses shall be paved with a concrete or bituminous surface including concrete curbing.
5. Pedestrian circulation between the parking area and the brewery, farm winery, or distillery and associated uses shall be provided through sidewalks at least five feet in width and paved with concrete, bituminous, pavers or similar hardscape.
6. Outdoor dining is subject to the performance standards outlined for outdoor dining in section 3-1-14 of this Code and section 11-6-8 "Accessory Uses, N-Z" of this chapter.

B. Microbrewery or microdistillery

1. Compliance with all applicable provisions of state and local law and obtain all required licenses.
2. The site and building(s) shall be designed to limit the effects of this use on adjacent properties and public rights-of-way. No loading docks or overhead vehicle doors shall be on a side abutting any public rights-of-way or any residential use or district.
3. The principal building shall be the primary source for screening of the loading area or any required outdoor equipment.
4. All drives, loading and parking areas for the microbrewery or microdistillery and associated uses shall be paved with a concrete or bituminous surface including concrete curbing.
5. Pedestrian circulation between the parking area and the microbrewery or microdistillery and associated uses shall be provided through sidewalks at least five feet in width and paved with concrete, bituminous, pavers or similar hardscape.
6. Outdoor seating is subject to the performance standards outlined for outdoor seating in section 3-1-14 of this Code and section 11-6-8 "Accessory Uses, N-Z" of this chapter.

C. Small brewery

1. Compliance with all applicable provisions of state and local law and obtain all required licenses.
2. The site and building(s) shall be designed to limit the effects of this use on adjacent properties and public rights of way. No loading docks or overhead vehicle doors shall be on a side abutting any public rights of way or any residential use or district.
3. The principal building shall be the primary source for screening of the loading area or any required outdoor equipment.
4. Outdoor seating is subject to the performance standards outlined for outdoor seating in section 3-1-14 of this Code and section 11-6-8 "Accessory Uses, N-Z" of this chapter.

D. Combined heat and power plant

1. The combined heat and power plant is customarily incidental and subordinate to the primary use of the site and must support existing processes within the facility. A minimum of 80% of power generated by the CHP plant must be utilized by the facility.
2. For the sale of power from the combined heat and power plant to remain incidental and subordinate to the primary use (i.e., the refinery), the sale of excess power cannot exceed 30% of the total amount of power needed to operate the principal use. This 30% limit, however, cannot be calculated based upon the total amount of power that can theoretically be generated by the CHP plant. Rather, the 30% sale limitation must be based upon:
    a. The critical load and ancillary load demand of the refinery itself; and
    b. Necessary redundancy power.
3. The owner/operator of the combined heat and power plant may not sell any power in excess of the maximum power sale amounts set forth herein without the advance consent of the city; the city shall only consider such a request by the owner/operator of the facility in the event of a crisis or casualty (i.e., a tornado, or other similar disaster).
4. The facility must have a single owner at all times.
5. The owner/operator of the combined heat and power plant is prohibited from selling, transferring or otherwise providing power to any third party user directly, and shall only sell, transfer, or otherwise provide power, if at all, to the city, Xcel Energy, Dakota Electric, and shall only export power through an interconnection with the regional electric grid.
6. Maximum height of any structure cannot exceed that allowed by the zoning ordinance or that of any existing structures within the facility, whichever is lower.
7. The project must comply with all other applicable zoning code provisions for the I-2 District with regard to site and building requirements as well as performance standards.
8. The project must comply with all requirements of state and federal agencies.
9. Landscaping plans must take into account sightlines from neighboring rights of way and land uses that differ from the project.
10. The CHP plant cannot exceed the principal structure in square footage, height, or massing as determined by the city.
11. The parcel where the CHP plant is located must be greater than 100 acres.

E. Construction demolition waste facility

1. Recycling operations subject to the requirements of subsection J below.
2. The facility is developed, operated and maintained in accordance with an approved interim use permit by the City of Rosemount and all other applicable local, State and Federal laws.
3. Permits for the facility by the State of Minnesota and Dakota County are pending or have received approval.

F. Large-scale mineral extraction

1. Large-scale mineral extraction uses shall only be established within the following boundary: CSAH 42 to the north, County Road 73 to the east, CSAH 46 to the south and Biscayne Avenue to the west.
2. Permit Required: It shall be unlawful for any person, firm or corporation to remove, store or excavate rock, sand, gravel, clay, silt or other like material in the city, or to fill or raise the existing surface grades, without receiving a permit for large-scale mineral extraction. Such permits may only be issued in a zoning district where large-scale mineral extraction is listed as an interim use and within the boundary identified above.
3. Initial large scale mineral extraction permit applications for a permit under this section shall be submitted with and considered simultaneously with an application for an interim use permit under section 11-9-4 “Interim Use Permit” of this title. No permit will be required for any of the following:
    a. Excavation for a foundation, cellar or basement of a building if a building permit has been issued.
    b. Excavation by state, county or city authorities in connection with construction or maintenance of roads, highways or utilities.
    c. Curb cuts, utility hookups or street opening for which another permit has been issued by the city.
    d. Excavation less than 100 square feet in area or one foot in depth.
    e. Excavation or grading for agricultural purposes.
4. Review Process
    a. Public Hearing: A public hearing will be conducted for consideration of permit applications. The public hearing, public notice and procedure requirements for the permits shall be the same as those for amendments as provided in section 11-9-2 “Zoning Code Amendment” of this title.
    b. Criteria for Permit Approval: The following factors will be evaluated when determining whether to approve a large-scale mineral extraction operation. The approval or denial of a permit shall include, but not be limited to, findings on the following factors:
        i. Consistency with City Plans and Policies: The proposed large scale mineral extraction permit is consistent with the comprehensive guide plan and the location is suitable in that the excavation, mining, processing, stockpiling or hauling of sand and gravel deposits will not tend to create a nuisance or unreasonably adverse land use impacts or exceed local, state or federal safety and environmental standards on the adjacent properties. The applicant for a permit, at the applicant's sole cost, shall provide information to help determine the suitability, including, but not limited to, a

completed zoning amendment application; exhibits illustrating adjacent and on-site buildings and land uses; existing elevations and percent of slope within and 300 feet beyond the perimeter of the EIS boundary; and an environmental impact statement.

ii. Environmental Impacts: An environmental impact statement (as defined by Minnesota environmental quality board rules) shall be completed for each large-scale gravel mining project proposed. The proposed project shall be so designed and operated as to minimize adverse impacts identified in the environmental impact statement. The environmental impact statement shall be considered by the city council prior to any final action on a large-scale mineral extraction permit request. The application for a large-scale mineral extraction permit shall not be considered complete until the time as final comment has been received on the adequacy of the environmental impact statement.

5. Application Requirements: The application for a large-scale mineral extraction permit shall include the following:

a. The correct legal description of the land upon which excavation is proposed.

b. The name and address of the applicant, the owner of the land and the person or corporation conducting the actual removal operation.

c. The names and addresses of all adjacent landowners within one-fourth (0.25) mile.

d. The purpose of the proposed excavation.

e. The estimated time required to complete the proposed excavation and rehabilitation.

f. The names of the highways, streets or other public roadways within the city upon which the material shall be transported.

g. A map of the proposed pit or excavation area to a scale of one inch equals two hundred feet (1" = 200') showing the presently excavated area, the area proposed to be excavated during the permit period, and the minimum and maximum elevations of the area, and showing a minimum of 300 feet of the adjacent land on all sides of the proposed excavation area.

h. A rehabilitation, reclamation, and restoration plan providing for the orderly and continuing rehabilitation of all excavated land. Such plan shall illustrate, using appropriate photographs, maps, and surveys drawn to a scale of one inch equals two hundred feet (1" = 200') and with a five foot contour interval satisfactory to the engineer, the following:

i. Removal of Planned Contours: The removal of planned contours of the land when the mineral removal operations are completed.

ii. Timetable: The estimated period of time that the pit will be operated and a schedule setting forth the timetable for excavation and rehabilitation of land lying within the active, inactive and restoration areas.

iii. Storage: Those areas of the site used for storage of topsoil and overburden.

iv. Depth; Slope; Revegetation: The depth of all water bodies, the slopes of all slopes after rehabilitation and a description of the type and quantity of plantings where revegetation is to be established.

v. Contour Extension: The five-foot contours shall extend at least 200 feet beyond the boundary of the operation or beyond the adjoining right of way, whichever is more inclusive.

vi. Ancillary and Accessory Uses: Ancillary and accessory use rehabilitation, reclamation, and restoration plan.

vii. Maximum Slope: The maximum slope of the reclamation area that is developable shall be at no steeper than five feet horizontal to one foot vertical. The maximum slope of the reclamation area that is undevelopable, such as the area between a water body and a right of way line shall be no steeper than two feet horizontal to one foot vertical. Any slope greater than three feet horizontal to one foot vertical shall be designed by a licensed engineer and approved by the city engineer.

viii. Adjacent to Water Bodies: For manmade groundwater lakes, the bottom contour shall be gradually sloping from the shoreline to the deepest portion of the water body at a maximum slope of 10 feet horizontal to one foot vertical from at least 50 feet upland from the proposed shoreline to at least 10 feet from the proposed shoreline toward the center of the water body. Beyond 10 feet in horizontal distance, the slope of the bottom contours may be no steeper than two to one (2:1).

i. When mining is proposed within the groundwater or within 20 vertical feet of a historic groundwater measurement elevation, then a hydrogeological study shall be submitted. The study will include tests of soils and groundwater to determine the presence of contaminants on the site that will, or could be, released to the groundwater or the environment by mining or related activities. All contaminants of concern identified in the EIS and any other contaminants identified by the city council will be studied unless the applicant demonstrates to the satisfaction of the city council that such study is not warranted. The hydrogeological study shall include the following:

i. Description of each groundwater excavation (size, shape and location).

ii. Description of the location and construction information of all wells within 300 feet of the EIS boundary.

iii. Description of the proposed fill activity (grain size distribution, quantity, and placement procedures).

iv. Description of the aquifer characteristics in the area of each groundwater excavation to be affected by proposed fill activity (aquifer thickness and general geological setting).

v. Description of the impacts of the proposed fill activity on groundwater flow regimes.

vi. Description of a groundwater monitoring plan including evidence, to the city council's satisfaction, that the proposed monitoring will provide timely and effective notice of changes to the hydrology, the presence of contaminants of concern that were not previously identified, or the release, movement, or the threatened release of contaminants.

vii. Identify and describe all measures that will be taken to avoid potential impacts on the groundwater from mining or related activities including, but not limited to, testing, monitoring, containment, and mitigation.

viii. Identify the depth to Prairie Du Chien aquifer and determine the appropriate separation between the mining activity and the aquifer.

ix. Such other information as the city may from time to time require.

j. Location of any and all existing wells and the size and depth thereof.

k. Surface water protection plan including a contingency response plan and employee training to facilitate immediate and remedial response should any accident, release of contaminant, or other spill occur.

l. Such other information as the city may from time to time require, including, but not limited to, the location or anticipated location of all stockpiles of aggregate based construction debris material on the land for which the permit is desired.

6. Performance Standards

a. Boundary: Extraction operations shall be conducted within the confines of the excavation site described in the permit.

b. Access: Extraction operations shall only be allowed on sites that have direct access to a principal arterial, minor arterial, or collector street as designated in the city of Rosemount comprehensive guide plan. A local street may be used if approved by the city council.

c. Setbacks: Setback boundaries shall be as follows. Where setbacks are measured from zoning district boundaries that occur along a public street right of way, the zoning district boundary is assumed to be the centerline of that public right of way.

i. Residential zoning district: 350 feet.

ii. Industrial, commercial or institutional zoning district: 150 feet.

iii. Agricultural zoning district: 30 feet.

iv. Inhabited residence not in a residential zoning district: 200 feet.

v. Rights of way or streets: 75 feet.

vi. Preexisting water bodies: 150 feet.

d. Height:

i. The height of all equipment, stockpiles, and all other operations, except those described in provisions ii and iii below, within the permitted mineral extraction operation shall not exceed 60 feet. This standard does not apply to the ancillary facilities covered by a separate interim use permit.

ii. The city council may approve a limited number of stationary conveyors to a height no taller than 65 feet provided that all practical means of screening and setbacks are employed into the conveyor's construction and installation.

iii. The floating dredge shall not exceed 75 feet in height.

e. Appearance, Screening, and Berming: The mining shall be screened from any public right of way or urban development through a combination of existing stands of trees, berming and installed landscaping.

i. Existing Tree Stands: The preferred method of screening the mining operation is the maintaining existing stands of trees that would provide a level of at least 90% opacity. If the stand of trees does not provide 90% opacity, then additional landscaping or berming shall be installed to provide ninety percent (90%) opacity. An annual opacity audit of the tree stands shall be conducted and dead vegetation shall be removed and additional landscaping or berming shall be installed to maintain 90% opacity. The methodology for the opacity measure shall be taken during full leaf growth from the shoulder of any public road or neighboring property to determine opacity in a band five to seven feet off the ground.

ii. Berms: Berms shall be constructed in areas where the existing tree stands do not exist. The berms shall be at least 10 feet in height measured from the toe of the berm or from the fog line of the existing public road, whichever results in the greatest height of the berm.

f. Hours of Operation:

i. Mining: The hours of operation shall be limited to seven o'clock (7:00) A.M. to seven o'clock (7:00) P.M. Monday through Saturday. The community development director may authorize Sunday operation from eight o'clock (8:00) A.M. to five o'clock (5:00) P.M. on no more than five Sundays annually provided the operator notifies the community development director no less than 72 hours before a Sunday operation. The city council may grant special permission for extra hours of operation within the annual extraction permit. The extra hours of operation may be conditioned on more restrictive performance standards to address the additional adverse impacts caused by the extra hours of operation.

ii. Crushing And Washing: The hours of operation shall be limited to seven o'clock (7:00) A.M. to seven o'clock (7:00) P.M. Monday through Saturday. The city council may grant special permission for extra hours of operation within the annual extraction permit. The extra hours of operation may be conditioned on more restrictive performance standards to address the adverse impacts caused by the extra hours of operation.

iii. Truck Hauling: The hours of operation shall be limited to seven o'clock (7:00) A.M. to seven o'clock (7:00) P.M. Monday through Saturday. The community development director may authorize Sunday operation from eight o'clock (8:00) A.M. to five o'clock (5:00) P.M. on no more than five Sundays annually provided the operator notifies the community development director no less than 72 hours before a Sunday operation. The city council may grant special permission for extra hours of operation within the annual extraction permit. The extra hours of operation may be conditioned on more restrictive performance standards, including, but not limited to, the truck haul routes, to address the adverse impacts caused by the extra hours of operation.

iv. Staging Activities: Staging activities will be permitted one- half ($^1/_2$) hour before normal hours and one-half ($^1/_2$) hour after normal hours. Staging activities include lining up and loading of trucks, equipment inspections, fueling, and other similar related actions. Trucks may enter the site within one-half ($^1/_2$) hour before the normal hours; however, no gravel trucks may leave the site until normal hours of operation. After the P.M. normal hours of operation and within one-half ($^1/_2$) hour

past the P.M. normal hours of operation, site cleanup and equipment maintenance is permitted as well.

g. Slopes:

   i. Mining: During the entire period of operations, all excavations other than the working face shall be sloped on all sides no steeper than one foot horizontal to one foot vertical, unless a steeper slope is approved by the city engineer.

   ii. Berming: The public view or right of way face of the perimeter berms shall be sloped no steeper than four feet horizontal to one foot vertical. The extraction side of the perimeter berm shall be sloped no steeper than three feet horizontal to one foot vertical.

h. Noise: Maximum noise level at the perimeter of the EIS boundary shall comply with the limits or standards established by the Minnesota pollution control agency and the United States environmental protection agency.

i. Paved Access Road: All access roads from a large-scale mineral extraction operation to any public roadway shall be paved with asphalt or concrete for a distance of at least 150 feet, measured from the mining side of the public right of way, to minimize dust conditions. During the annual operating permit review, the city council may require additional paving length if dust and mud tracking are identified as a problem by the city. All unpaved roads within the mining operation shall be treated with a dust retardant on a regular basis as stipulated in the annual operating permit.

j. Dust Control: Operators shall use all practical means to reduce the amount of fugitive dust generated by excavation operations. In any event, the amount of dust or other particulate matter generated by the excavation shall not exceed air pollution standards established by the Minnesota pollution control agency. On days with wind advisory, as defined by the national oceanic and atmospheric administration's national weather service, the community development director may require during the time of wind advisory that the dry mining operation cease operations to eliminate additional dust generation.

k. Explosives: The use of explosives in the large-scale mineral extraction operation is prohibited.

l. Surface Water Pollution: The permittee shall prepare a surface water protection plan to ensure that surface water quality is not impacted by the mining operation, accidents or spills within the EIS boundary. The mining plans shall comply with the city's surface water management plan. Excavation operators shall comply with all applicable Minnesota pollution control agency and department of natural resources regulations and all applicable United States environmental protection agency regulations for the protection of water quality. No waste products or processed residue, including untreated wash water, shall be deposited in any public waters of the state of Minnesota.

m. Groundwater: The excavation operators shall prepare a groundwater monitoring plan to ensure that groundwater flow, level, or quality is not impacted. The groundwater monitoring plan shall comply with city and Minnesota department of health regulations. The groundwater monitoring plan may include the surface water monitoring of any

created water body that is fed by groundwater including the monitoring of any water bodies or channelized waterways tributary to the created water body.

n. Wastewater: On site sewage treatment systems shall conform with title 9, chapter 6 of this code, Dakota County ordinance 113, and all applicable state and federal regulations.

o. Topsoil: All topsoil located within the EIS boundary before the mineral extraction operation begins, except the topsoil located over areas that are planned to be reclaimed as open water, shall remain within boundaries of the operation. Additional topsoil may be retained to ensure that a minimum of six inches of topsoil is placed on all areas reclaimed and restored as dry ground.

p. Landscaping:

    i. Existing tree and ground cover shall be preserved to the maximum extent feasible, maintained or supplemented by selective cutting, transplanting and replanting of trees, shrubs and other ground cover along all setback areas.

    ii. The public view and right of way side of berms that are planned to exist longer than 15 years shall be landscaped with a density of one tree per 625 square feet. A minimum of 66% of the trees shall be conifers.

    iii. The city council may consider staggering the timing of the installation of the landscaping if more berming is constructed than is required to screen the phase of mining permitted with the annual operating permit.

    iv. Berms that are planned to exist less than 15 years shall be landscaped with a standard MNDOT ROW mix.

    v. All areas reclaimed shall be seeded with a city approved seed mix within 14 days of final grade being established. Additional seeding shall be applied as needed until the vegetation has been established.

    vi. The city may require cover over areas that have remained undisturbed for more than 12 months if it is determined that these areas generate airborne dust particles.

q. Maintenance of Mining Vehicles:

    i. All machinery shall be kept operational.

    ii. Abandoned machinery and rubbish shall be promptly removed from the excavation site.

    iii. All machinery shall be periodically inspected, repaired, and painted as needed to prevent rusting or other deterioration of the machinery.

r. Lighting: Any lighting shall be shielded to prevent lights from being directed at traffic on a public road in such brilliance that it impairs the vision of the driver and may not interfere with or obscure traffic signs or signals. The level of lighting shall not exceed 1.0 lumen at the EIS boundary line.

s. Compliance with Other Governmental Regulations: The large-scale mineral extraction operation shall comply with all applicable federal, state, and county laws and regulations, including Dakota County ordinances 110 and 111.

t. Compliance with the EIS: The city shall determine permit conditions and requirements that address issues and potential impacts that include, but are not limited to, those

described in the EIS. The city council may require additional studies or information on any issues that the council determines were not adequately addressed in the EIS because the EIS does not contain sufficient detail for permitting purposes, because the proposed means of mitigation have changed, because new mitigation techniques are available, because new information has been discovered, or for any other reason.

u. Council Waiver: The city council, at the time of issuance of the annual extraction permit, may waive or modify any of the provisions in this section or impose additional requirements if it finds that the plan of operation or other materials submitted with the application or other factors make appropriate more suitable measures for standards consistent with the public health, safety and welfare.

7. Special Requirements

a. Reimbursement of City Costs: The permittee shall reimburse the city for the cost of periodic inspections for the purpose of determining that the provisions of the extraction permit and this section are being followed. The city may retain consultants at the applicant's expense to evaluate the application requirements, monitoring and testing results.

b. Haul Routes: The applicant shall submit to the city a detailed map of the streets on which the material removed shall be transported (haul routes). The city shall inspect the haul routes proposed to be used by the applicant or owner and shall recommend to the city council necessary upgrading or repairing of the haul routes prior to their use by the applicant or owner. The city council shall designate the haul routes and may consider the recommendations of the responsible city officials in the extraction permit issued to the applicant. It shall be the responsibility of the applicant or owner to maintain the haul routes in accordance with the provisions set forth in the permit. The city shall periodically inspect haul routes to ensure compliance with the permit. During the period of, or upon completion of, the excavation operations, the applicant or owner shall make any necessary repairs to the haul routes as recommended by the city. All costs of inspection provided for in this subsection shall be borne by the applicant or owner. The use of the haul routes shall be subject to any road and weight restrictions imposed by the city. The operator shall be responsible for reimbursing the city for any additional maintenance costs incurred for public roads as a result of the mining operation.

c. Gravel Production and Phasing:

i. A phasing plan shall be prepared.

ii. No mineral extraction permit shall authorize extraction operations to be conducted in more than two noncontiguous 80-acre areas of an extraction operation concurrently.

iii. No mineral extraction permit shall authorize extraction to be conducted on more than 160 acres at one time.

d. Other Requirements as Determined by the Council: The permittee shall comply with such other requirements as the city council shall from time to time deem proper and necessary for the protection of its citizens and the general welfare.

8. Reclamation, Restoration, and Rehabilitation

a. Phased Operation: To ensure that the mine is reclaimed in a timely and orderly manner, the mining operation shall be divided into phases of no more than 80 acres per phase.

b. Significant Transportation Corridors: The reclamation plan shall show all future collector and arterial roadways. To provide for the roadway and utility construction of these future roadways, a reasonable reclamation grade as determined by the city shall be established within the entire designated right of way width for the appropriate roadway classification. Within 24 months of receipt of written notice from the city that the collector or arterial right of way is needed for either roadway and/or utility construction, the permittee will complete mining within that right of way and reclaim the right of way to the grades approved within the interim reclamation plan.

c. Trunk Utility Services: Within 24 months of receipt of written notice from the city that public trunk utility services are needed to be constructed within the mining operation, the permittee shall provide an easement for the utility construction, complete the mining within the easement, and reclaim the easement to the grades approved within the interim reclamation plan.

d. Water Bodies and Drainage Plan: The city has an adopted surface water management plan which plans for the conveyance of surface water across the city. The mining operation shall allow for the conveyance of surface water within the approved mining areas as called for within the surface water management plan.

e. Interim Reclamation Plan: The permittee shall provide an interim reclamation plan which provides reclamation grades for all 80-acre phases that would allow for agricultural use immediately following reclamation.

f. End Use Grading Plan: The comprehensive plan anticipates that the ultimate use for the entirety of the city is urban development. To accommodate this ultimate use and allow for orderly development, the permittee shall provide an end use grading plan that can reasonably accommodate urban development. For mining operations that are expected to require more than 20 years to complete, the city council may approve an end use grading plan for the area that is expected to be completed within 20 years. The city council shall not approve an annual operating permit for an area without an approved end use grading plan.

g. Removal of Buildings, Structures, and Vehicles: Within 18 months of the reclamation of each phase, all buildings, structures and plants incidental to that phase of operation shall be dismantled and removed by and at the expense of the sand and gravel producer last operating the building, structure or plant, or the owner of the property, unless the structure or use is compatible with the anticipated ultimate use of the property. All buildings, structures or plants not removed as required by this section may be removed by the city with the costs for the removal charged to the permittee or the owner of the property.

h. Haul Back Materials and Operations: The city council may permit the depositing of clean and compactable inorganic fill that is able to support urban development to achieve the reclamation grades. The permittee shall submit a haul back management plan that includes the types of fill that shall be deposited, where the fill comes from, and what testing of the fill shall occur. The testing result for the material proposed to be used as fill shall be submitted to and approved by city staff before the fill material is transferred

within the EIS boundary. All fill deposited within the mining operation must be able to support urban residential development.

i. Duration of Mining and/or Ancillary Uses: To provide for the orderly development of the city, the city council shall determine the duration of the mining or ancillary use within the interim use permit.

9. Operating Permit:

a. Purpose of the Operating Permit: A large scale mineral extraction operation may extend for years or decades to complete. The purpose of the operating permit is to provide an opportunity for the city council to review the operation of the mine, gather public comment on the operation, modify any permit conditions as necessary to address adverse impacts that arise from the operation, and revise the phases and/or subphases of the mine. The large-scale mineral extraction interim use permit provides a zoning basis for the mine provided the city issues an operating permit.

b. Application, Public Hearing, Notice and Procedure: The application, public hearing, public notice and procedure requirements for operating permit shall be the same as those for amendments as provided in section 11-9-2 Zoning Code Amendment of this title, except that the permit may be issued only on the affirmative vote of a majority of the entire city council.

c. Area Without an End Use Grading Plan: The city council shall not issue an operating permit for an area without an approved end use grading plan that accommodates urban development.

d. Duration of Operating Permit: The large-scale mineral extraction permit shall run for two years from January 1 through December 31 of the next year or for a lesser period of time as the city council may specify at the time of issuance of the extraction permit. If the extraction permit is to run for less than two full years, the fee shall be prorated as determined by the city council. An administrative review of the permit will be completed mid-way through the two-year period.

e. Operating Permit Fee: The fee for large scale mineral extraction permit shall be as established from time to time by resolution of the city council.

f. Inspections: The city may inspect all mineral extraction sites where a large-scale mineral extraction permit has been issued. The operator or owner of any large-scale mineral extraction operation found in violation of the requirements of this title or its extraction permit shall remedy such violations within the time specified by written notice from the city.

g. Financial Surety: The city council shall require the applicant or owner of the premises on which the excavation operation is located to post a surety with a surety acceptable to the city, cash escrow, performance bond or letter of credit ("security") in an amount and source determined by the city council, in favor of the city, conditioned to pay the city the costs and expense of repairing any streets where such repair work is made necessary by the special burden resulting from hauling and travel, and removing material from any pit or excavation, and conducting required rehabilitation and conditioned further to comply with all the requirements of this section and the particular extraction permit, and to pay any expense the city may incur by reason of doing anything required to be done by any applicant to whom a permit is issued. The

security shall remain in full force and effect for a minimum period of one year after expiration of the extraction permit to guarantee the required rehabilitation as well as the other requirements herein provided. The surety bond will be based on the number of acres requested within the annual renewal extraction permit, the amount of acres that have not been reclaimed to the end use grading plan elevations, and an amount that can be immediately withdrawn for the special burden of street repair or to replace insufficient landscaping. Surety for unfulfilled rehabilitation measures will be determined and a security will be required as long as the rehabilitation measures are not completed.

h. Insurance: The permittee shall maintain general liability insurance and provide the city annually a certificate of general liability insurance issued by insurers duly licensed within the state of Minnesota. The city council shall determine the appropriate amount of liability insurance every two years during its review of the permit renewal.

10. Enforcement:

a. Notice of Violation: Whenever the city finds that the permittee has violated a prohibition or failed to meet a requirement of this section, the authorized enforcement agency may order compliance by written notice of violation to the permittee. Such notice may require, without limitation:

i. The performance of monitoring, analysis, and reporting;

ii. That violating practices or operations shall cease and desist;

iii. The abatement or remediation of contamination or hazards and the restoration of any affected property;

iv. The notice shall state that the determination of violation may be appealed to the city administrator by filing with the city clerk a written notice of appeal within seven calendar days of service of the notice of violation.

b. Appeal of Notice of Violation: Upon receiving a notice of violation, the permittee may appeal the determination of the authorized enforcement agency. The notice of appeal must be received by the city clerk within seven calendar days from the date of the notice of violation. Hearing on the appeal before the city administrator or the city administrator's designee shall take place within seven calendar days from the date of receipt of the notice of appeal. The decision of the city administrator or city administrator's designee shall be final.

c. Enforcement Measures After Appeal: If the violation had not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within 15 days of the decision of the municipal authority upholding the decision of the authorized enforcement agency, then representatives of the authorized enforcement agency shall enter upon the subject private property and are authorized to take any and all measures necessary to abate the violation and/or restore the property. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above.

d. Cost Of Abatement of the Violation: Within 30 days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative

costs. If the amount due is not paid within a timely manner as determined by the decision of the municipal authority, the enforcement agency may levy the charges as a special assessment against the property, which assessments shall constitute a lien on the property for the amount of the assessment. The permittee violating any of the provisions of this section shall become liable to the city by reason of such violation.

e. Legal Action: It shall be unlawful for the permittee to violate any provision or fail to comply with any of the requirements of this section. If the permittee has violated and continues to violate the provisions of this section, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the permittee from activities which would create further violations or compelling the permittee to perform abatement or remediation of the violation, or seek any other available remedy in law or equity.

f. Compensatory Action: In lieu of enforcement proceedings, penalties, and remedies authorized by this section, the authorized enforcement agency and violator may agree on alternative compensatory actions.

g. Nuisance: In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this section is a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken.

h. Criminal Prosecution: The permittee that has violated or continues to violate this section shall be liable to criminal prosecution to the fullest extent of the law, and shall be subject to a criminal penalty in accordance with section 1-4-1 of this code. The authorized enforcement agency may recover all attorney fees, court costs, and other expenses associated with enforcement of this section, including sampling and monitoring expenses.

i. Suspension or Revocation of Permit:

i. The city council may suspend or revoke a permit issued under this section upon a finding of a violation of any of the provisions of this section or violation of any condition of the annual operating permit.

ii. A revocation or suspension by the city council shall be preceded by written notice to the permittee and a public hearing. The written notice shall give at least eight days' notice of the time and place of the hearing and shall state the nature of the charges against the permittee. The notice may be served upon the permittee personally or by United States mail addressed to the most recent address in license application.

G. Large-scale mineral extraction, ancillary uses

1. An ancillary use may be allowed provided that any of the following conditions are met:

a. On a site that has an approved large scale mineral extraction permit in compliance with this section; or

b. In conjunction with large scale mineral extraction occurring within the approved EIS boundary, provided the adjoining municipality has approved the large-scale mineral extraction and provided the ancillary use facility was originally an interim use permit in conjunction with large scale mineral extraction in the city of Rosemount.

2. Ancillary Uses Considered: The following is a list of ancillary uses that may be considered in association with a large-scale mineral extraction operation and the issues and performance standards that shall be addressed within the interim use permit:

   a. Aggregate processing and recycled aggregate products production. The conveying, crushing, mixing, screening, and washing of aggregate and recycling concrete and asphalt may be allowed on a site that has an approved large scale mineral extraction permit in compliance with this section. In addition, the following performance standards shall apply:

      i. Location: The plant shall be located in such a way as to minimize its visibility from an adjacent residential use or a public right of way. This may be accomplished through topography, landscaping, existing vegetation, berming or setback.

      ii. Material Stockpiles: Stockpiles associated with these uses shall be limited to a height of 60 feet.

      iii. Hours of Operation: The hours of operation shall be limited to seven o'clock (7:00) A.M. to seven o'clock (7:00) P.M. Monday through Saturday unless special permission is granted by the city council within the interim use permit. The extra hours of operation may be conditioned on more restrictive performance standards to address the adverse impacts caused by the extra hours.

      iv. Ratio of Aggregate Processing to Recycled Aggregate Products Production: To maximize the use of mined aggregate material and minimize importing of recycled material transported from outside the associated gravel mine, a ratio of aggregate processing to recycled aggregate product processing shall be established within the interim use permit. The ratio shall have a minimum of 70% aggregate processing and a maximum of 30% recycled aggregate product processing. The ratio shall be based on tonnage sales and the actual tonnage sales shall be reported to the city on an annual basis. The city council may limit the area in the aggregate process facility in which the recycled aggregate products may be stored.

   b. Asphalt production. A plant for the production of asphalt may be allowed on a site that has an approved large scale mineral extraction permit in compliance with this section. In addition, the following performance standards shall apply:

      i. Location: The asphalt plant and all equipment associated with it shall be located a minimum of 660 feet from any nonagricultural zoned land.

      ii. Setback and Buffering: The plant and all equipment and materials associated with it shall be set back a minimum of 75 feet from any EIS boundary line and screened by natural features including berming or vegetation. Year round 100% opaque screening with earthen berms and landscaping shall be required from ground level to the first 30% of the overall height and 50% opaque to 50% of the overall height of the plant as viewed from eye level from surrounding rights of way or roadways.

      iii. Haul Routes: Traffic generated by this use shall utilize haul routes approved by the city and other agencies as required. The plant owner shall be responsible for road improvements and easements needed for ingress and egress subject to approval by the city. The haul routes may require Dakota County highway department or the Minnesota department of transportation approval as well.

iv. Access: Traffic generated by this use shall enter onto streets consistent with city access and design standards. The owner of these uses shall be responsible for all costs associated with road improvements required to serve the use.

v. Material Stockpiles: Stockpiles associated with these uses shall be limited to a height of 60 feet.

vi. Outdoor Storage: There shall be no outdoor storage of finished material or products. All equipment and raw material associated with the asphalt plant must be screened from view from an adjacent residential use or public right of way in conformance with section 11-7-6 Landscaping, Screening, and Buffering Standards of this title.

vii. Air Emissions: Asphalt operations shall comply with Minnesota rules, part 7011 for testing, monitoring and operational requirements.

viii. Waste Byproducts: This use shall operate so as not to discharge onto the soils within the EIS boundary, across the boundaries of the EIS boundary line or through percolation into the subsoil within the EIS boundary or beyond the EIS boundary line where such use is located, toxic or noxious matter in such concentrations as to be detrimental to or endanger the public health, safety, comfort or welfare; or, cause injury or damage to property or business.

ix. Odors: This use shall operate so as to prevent the emission of odorous matter of such quality as to be detectable beyond EIS boundary line.

x. Surety Bond: This use shall comply with the applicable operating, special requirements and bonding for restoration standards for mineral extraction specified in subsection K7 of this section.

xi. Hours of Operation: The hours of operation shall be limited to seven o'clock (7:00) A.M. to seven o'clock (7:00) P.M. Monday through Saturday unless special permission is granted by the city council within the interim use permit. The extra hours of operation may be conditioned on more restrictive performance standards to address the adverse impacts caused by the extra hours.

c. Casting yard. A facility for the manufacturing of precast concrete products may be allowed on a site that has an approved large scale mineral extraction permit in compliance with this section. The casting of the concrete products shall occur within a building while the curing of the products may occur outdoors. The city council may approve the outdoor casting of oversized concrete products provided that the oversized products are to be used in a construction project that the operator has been awarded and the outdoor oversized product casting ceases when the construction project is finished. The construction and design of a casting yard that will exist longer than 10 years shall comply with site, lot, and building standards established for the I-2 District.

d. Concrete production. A plant for the production of concrete may be allowed on a site that has an approved large scale mineral extraction permit in compliance with this section. In addition, the following performance standards shall apply:

i. Location: The plant shall be located in such a way as to minimize its visibility from an adjacent residential use or a public right of way. This may be accomplished through topography, landscaping, existing vegetation, berming or setback. The minimum

setback from any EIS boundary line shall be twice the height of the plant or applicable setback under this code, whichever is greater.

ii. Multiple Ready Mix Concrete Plants: If a facility is to have multiple concrete plants, each concrete plant shall have its own separate interim use permit. The primary ready mix concrete plant shall have the equipment, except for silos and the conveyors that transport materials into the building, enclosed within a building. One or more secondary concrete plants may be permitted if an active interim use permit for the primary concrete plant has been approved that includes a requirement that the primary concrete plant building be completed within 18 months of approval.

iii. Plant Height: The maximum height of any concrete plant shall be 105 feet.

iv. Material Stockpiles: Stockpiles associated with these uses shall be limited to a height of 60 feet.

v. Outdoor Storage: There shall be no outdoor storage of finished material or products. All equipment and raw material associated with the cement or concrete plant must be screened from view from an adjacent residential use or public right of way in conformance with section 11-7-6 Landscaping, Screening, and Buffering Standards of this title.

vi. Hours of Operation: The hours of operation shall be limited to seven o'clock (7:00) A.M. to seven o'clock (7:00) P.M. Monday through Saturday unless special permission is granted by the city council within the interim use permit. The extra hours of operation may be conditioned on more restrictive performance standards to address the additional adverse impacts resulting from the extra hours.

vii. Haul Routes: Traffic generated by this use shall utilize haul routes approved by the city and other agencies as required. The plant owner shall be responsible for road improvements and easements needed for ingress and egress subject to approval by the city. The haul routes may require Dakota County highway department or the Minnesota department of transportation approval as well.

e. Maintenance Facility. A facility for the repair of trucks, other vehicles and equipment used in a mineral extraction operation may be allowed on a site that has an approved large scale mineral extraction permit in compliance with this section. The construction and design of the maintenance facility shall comply with site, lot, and building standards established for the I-2 District.

H. Manufacturing, custom

1. This use includes accessory retail sales and display.

2. The size of a custom manufacturing facility shall be no greater than 10,000 gross square feet.

3. Such use shall be prohibited on property abutting a residential district.

I. Manufacturing, heavy

1. Asphalt Plant, Cement and Concrete Production and Related Processing of Stockpile Materials, subject to the following:

a. The asphalt, cement, or concrete plant and all equipment and materials associated with it shall be located a minimum of 600 feet from any nonindustrial district land, and 2,600 feet from any residential or public district.

b. The plant and all equipment and materials associated with it shall be set back a minimum of 300 feet from any property boundary line and screened by natural features including changes in elevation and vegetation. Year round 100% opaque screening with earthen berms and landscaping shall be required from ground level to the first 30% of the overall height and 50% opaque to 50% of the overall height of the plant as viewed from eye level from surrounding right of way or roadways.

c. Asphalt plant, cement and concrete production may be exempt from conformance with the following standards of the zoning ordinance at the discretion of the city council:

   i. Section 11-7-2 "Architectural Standards" of this title;

   ii. Subsection 11-7-3 C.7 "Off Street Parking Design and Construction Standards" of this title;

   iii. Section 11-7-6 "Landscaping, Screening, and Buffering Standards" of this title; and

   iv. Subsection 11-4-5 E.2 requiring a minimum building size of 10% of the subject property.

d. Traffic generated by these uses shall utilize haul routes approved by the city and other agencies as required. The plant owner shall be responsible for road improvements and easements needed for ingress and egress subject to approval by the city, as well as the county highway department or the Minnesota department of transportation as required.

e. Traffic generated by these uses shall enter onto streets consistent with city access and design standards. The owner of these uses shall be responsible for all costs associated with road improvements required to serve the use.

f. Stockpiles associated with these uses shall be limited to a height of 50 feet.

g. No smoke or particulate matter shall be discharged that is darker than no. 1 classification of the Ringelmann smoke chart furnished by the U.S. bureau of mines, or 20% opacity as determined by the MPCA. Further, emissions shall conform to standards set by EPA and MPCA.

h. These uses shall operate so as not to discharge onto the soils of the lot, across the boundaries of the lot or through percolation into the subsoil of the lot or beyond the boundary of the lot where such use is located, toxic or noxious matter in such concentrations as to be detrimental to or endanger the public health, safety, comfort or welfare; or, cause injury or damage to property or business.

i. These uses shall operate in a way so as to prevent the emission of odorous matter of such quality as to be readily detectable beyond the lot line of the site on which such use is located.

j. These uses shall comply with the applicable operating, special requirements and bonding for restoration standards for mineral extraction specified in subsection L “Small-scale Mineral Extraction” of this section.

k. In the A-2 District, cement or concrete production is permitted provided the site has an approved mineral extraction permit in compliance with subsection L “Small-scale Mineral Extraction” of this section.

2. Lumber and Construction Materials Businesses

a. A principal structure must be built on site.

b. Lumber and construction material yards are subject to the performance standards outlined for outdoor display, sales, and storage in the I-2 District.

c. In the I-2, wholesale lumber and construction materials businesses are permitted subject to the standards above.

J. Nonhazardous industrial waste containment facility

1. Permit applicants shall submit the following information together with any other information requested by the city:

a. The proposed project layout including site drawings showing building locations, access roads, buffers and all major facilities.

b. Proposed technology and design.

c. A complete description of the proposed project's operation, including, but not limited to, phasing and anticipated operating lifetime, types of wastes to be accepted and methods to verify the waste stream, recordkeeping methods, staffing, anticipated waste volumes, containment facilities, contingency and response plans.

d. A description of anticipated traffic generated by the facility, routes to be used, and access to the site.

e. Identification of known and potential environmental risks associated with the construction, operation and closure of the facility.

f. Closure, postclosure and contingency plans, including financing plans.

g. A description of the existing site and surrounding area including current ownership and land uses, current zoning, transportation access to the site, topography, existing soil and hydrogeologic conditions, vegetation, wildlife, surface waters.

h. Need for city emergency services including fire, police, emergency response, medical.

i. A description of the applicant's experience in operating the technology, proposed training for all operation staff, and the environmental record of the technology.

2. Permits for nonhazardous industrial waste land disposal facilities shall only be issued if the following standards are met or exceeded:

a. The facility must represent the best available technology for land disposal of nonhazardous industrial waste.

b. The operator and staff must have sufficient experience in the operation of such facilities to ensure competent operation.

c. The design, construction and operation of the facility must minimize negative environmental impacts and must mitigate such impacts to the fullest extent possible.

d. Public health, safety and welfare must be ensured.

e. Adequate closure, postclosure and contingency plans must be established.

f. An emergency response plan must be established and accepted by the city.

g. An environmental impact statement must be completed and declared adequate by the responsible governmental unit.

h. There must be adequate access to the site.

i. The proposed project must be compatible with surrounding land use.

j. The applicant provides financial security sufficient to guarantee compliance with the terms of the permit.

k. The economic benefits, incentives and other advantages to the city and community must outweigh any known or potential negative aspects of the facility.

l. The applicant must have a plan for working with industry to develop techniques and markets for recycling industrial waste streams.

m. An interim permit shall not be issued until all required local, state and/or federal permits have been obtained by the applicant. The city may allow interim permits that were previously approved and are in the process of being amended or reissued to continue to operate under the existing permit conditions during the review process by the city or other governmental agencies.

n. The applicant must notify each user of the site that free liquids cannot be placed in the containment cell; inspect each container of waste for the presence of free liquids; and have procedures to prevent any free liquid from being placed in the cell.

K. Recycling operation

1. Permit Required: It shall be unlawful for any person, firm or corporation to establish or expand, in any way, a recycling operation without first receiving a permit from the city. Such permit may only be issued in a zoning district where such use is listed as a permitted use.

2. Permit Application Requirements: Application for a permit shall be made in writing in the form specified by the city and shall contain the following information:

a. The correct legal description of the land.

b. The name and address of the applicant and the owner of the land if different from the applicant.

c. Maps, photographs and surveys illustrating the relationship of the site to the community and surrounding properties and existing site conditions including vegetation, surface waters and topography.

d. A description of the operation as regards the sales of parts and the use of cutting, compressing and packaging equipment.

e. A site plan, to scale, showing the location and intended use of all structures, storage areas, driveways, parking and equipment.

3. Development And Operating Standards:

a. The site shall be a minimum of five acres in size.

b. A solid wall or opaque fence at least eight feet in height shall be provided around the entire perimeter of the site to screen said site from public streets and surrounding property. Such fence shall be of sound construction and shall be properly maintained.

c. All activities shall be confined within the fenced in area. There shall be no stacking of material above the height of the fence or wall except that equipment used on the site may exceed the wall or fence height. No equipment, material, signs or lighting shall be used or stored outside the fenced area. There shall be no storage of materials within semitrailer units or other vehicles which would extend above the height of the fence.

d. All equipment used in industrial processes, including that used for cutting, compressing or packaging, shall be within a completely enclosed building.

e. The fenced area shall be set back at least 200 feet from any street and the area within front or street side yards shall be planted with trees, grass, and shrubs in accordance with section 11-7-6 "Landscaping, Screening, and Buffering Standards" of this title.

f. Whenever the operation abuts an R district, a transition strip of at least 200 feet in width shall be provided between the fenced area and the R district boundary. Said transition strip shall be landscaped as prescribed in provision 3.e above.

g. The fenced area shall be set back at least 30 feet from any nonresidential district.

4. Additional Requirements: The city may attach such additional conditions as may be required to ensure compliance with this title.

L. Self-service storage facility

1. All storage shall be maintained in the storage space and there shall be no outdoor storage of any products, equipment or other material within the storage facility; provided, however, open storage for licensed, operable recreation vehicles shall be permitted, provided the amount is not more than 25% of the area occupied by buildings.

   a. Within the I-1 District, all storage shall be maintained in the storage space and there shall be no outdoor storage of any products, equipment or other material within the storage facility site; except that outdoor storage for licensed, operable recreation vehicles shall be permitted provided the amount is not more than 90% of the area occupied by buildings.

2. The perimeter of the storage facility shall be entirely enclosed by a combination of buildings and decorative fencing. Chain link, barbed wire, or wood privacy fencing shall not be permitted as decorative material, except as may otherwise be approved by the city council. For the purposes of calculating foundation planting requirements, the decorative fencing of the perimeter shall be used in lieu of the building perimeter calculation.

3. All storage space openings shall be oriented internally to the facility and shall not directly face a public street or adjoining property.

4. Green space, planting clusters and berming shall be strategically designed and located around openings between storage facility structures.

5. The self-service storage facility shall be required to provide 1.25 times the required minimum for over story tree plantings so as to satisfy the requirements of provision K.4 above, and provided the minimum interval spacing requirement at the boulevard is satisfied

and met. All landscaped areas shall be required to include the proper installation of an underground irrigation system.

6. An accessory caretaker residence may be permitted with a storage facility, provided it is only used for resident security and management purposes and the exterior building materials shall match those of the principal and accessory storage facility structures.
7. The exterior wall surfaces of all building structures that comprise the development project shall consist of brick, decorative block, stone, architectural concrete cast in place or precast concrete panels. The "interior" wall surfaces where storage spaces are located at or below the top of the overhead door, and including the storage space doors and columns between such spaces, may be of metal, which shall consist of a decorative factory applied finish.
8. The hours of operation for the self-service storage facility shall be restricted to between the hours of 6:00 A.M. and 11:00 P.M.
9. Access to the interior of the fenced area shall be available to emergency responders in a manner to be acceptable to the fire marshal.
10. All internal driveways intended for access to individual storage spaces shall have minimum widths of 20 feet.
11. No internal driveway may exceed 150 feet without providing sufficient space to turn vehicles around allowing for a minimum turning radius of 45 feet, or as approved by the fire marshal.
12. Common parking space available to all storage units shall be provided at a rate no less than one space per 6,000 square feet of storage area.
13. The exterior buildings, driveways, open space and landscaping, front, side and rear yards shall be maintained and repaired or replaced in conformance with the approved plans by the property owner or landlord. This condition shall be kept that it will not cause a blighting of the area or a general deterioration of the self-storage facility.
14. If storage units are to be sold individually, and no landlord or property owner is available to assume site management responsibilities, an owners' association shall be required to assume the responsibilities of overall site management. The owners' association shall be governed by a declaration of covenants that shall be approved by the city and recorded at Dakota County. The open space and common areas shall be maintained and cared for by the developer of the self-storage facility until an owners' association is formed to maintain open space and common areas. This owners' association shall be responsible for the care and maintenance of all open space and common areas of the self-storage facility and also for the maintenance and appearance of the exterior of each unit. The owners' association shall levy charges to each owner for the maintenance cost, operating costs and improvement costs for the open or green space, and for the common and privately owned parking and paved areas beyond each storage unit. In addition, the owners' association will assume the responsibility to maintain the exterior of the building(s) and also in an acceptable condition which is compatible with adjoining properties. The owners' association will cause blighted individually owned units or areas within the facility to be repaired, restored and maintained as necessary to an acceptable standard for the area.
15. In the event that the developer or owner of the self-storage facility is unable to organize the property owners into an association for the maintenance of the open space and individually

owned storage units after 12 months from the completion of the construction, the council will call for a public hearing of all persons so concerned and ask for the creation of such an association. If no association is formed or if the association ceases to function any time after it is formed, the council will order such maintenance work and restoration of the area and then will assess such costs, together with a reasonable supervision charge, to the owners in the self-storage facility or the individual owner receiving the individual benefit.

16. The council may require that the declaration of covenants include provisions to meet the minimum requirements of this section or to satisfy conditions of city approval, may be enforced by the city, and may not be amended or released without city council approval.

M. Small-scale mineral extraction

1. Small-scale mineral extraction uses shall be allowed within the following boundary: a line one-half (0.5) mile north of County State Aid Highway 42, the municipal boundary to the east, a line one-half (0.5) mile south of County State Aid Highway 42, and US Highway 52 to the west.

2. Permit Required: It shall be unlawful for any person, firm or corporation to remove, store or excavate rock, sand, gravel, clay, silt or other like material in the city, or to fill or raise the existing surface grades, without receiving a permit for mineral extraction. Permits for small scale mineral extraction under this section may only be issued in a zoning district where mineral extraction is listed as an interim use and within the boundary identified above.

   a. Exceptions: An extraction permit shall not be required for any of the following:

      i. Excavation for a foundation, cellar or basement of a building if a building permit has been issued.

      ii. Excavation by state, county or city authorities in connection with construction or maintenance of roads, highways or utilities.

      iii. Curb cuts, utility hookups or street openings for which another permit has been issued by the city.

      iv. Excavation less than 100 square feet in area or one foot in depth.

      v. Excavation or grading for agricultural purposes.

3. Application, Public Hearing, Notice, and Procedure: The application, public hearing, public notice and procedure requirements for mineral extraction permits shall be the same as those for amendments as provided in section 11-9-2 “Zoning Code Amendment of this title, except that the permit shall be issued on the affirmative vote of a majority of the entire council. Application for the extraction permit shall be made in writing in the form specified by the city. The application shall contain the following information:

   a. The correct legal description of the land upon which excavation is proposed.

   b. The name and address of the applicant, the owner of the land and the person or corporation conducting the actual removal operation.

   c. The names and addresses of all adjacent landowners within 350 feet or, if the subject property is located in A-1, A-2, or RR districts, within one-fourth (0.25) mile.

   d. The purpose of the proposed excavation.

   e. The estimated time required to complete the proposed excavation and rehabilitation.

f. The names of the highways, streets or other public roadways within the city upon which the material shall be transported.

4. Standards: The following standards shall apply to all extraction operations:

   a. Boundary: Extraction operations shall be conducted within the confines of the excavation site described in the application.

   b. Access: Extraction operations shall only be allowed on sites which have direct access to either a principal arterial, minor arterial, a collector street, or to a local street if approved by the public works department, as designated in the city of Rosemount comprehensive guide plan.

   c. Prohibited Areas: Extraction operations shall not be conducted within the following:

      i. Five feet of the right of way or easement of an existing public utility.

      ii. 30 feet of the boundary of an adjoining property which is not being used for extraction operations.

      iii. 50 feet of the right of way of a public street or highway.

   d. Phasing Of Operations: Extraction operations to be conducted on a site larger than 15 acres shall be subject to the following requirements:

      i. A phasing plan must be prepared which limits operations to a maximum area of 15 acres per phase of operations.

      ii. A mineral extraction permit for the first phase of an extraction operation shall be limited to a maximum area of 15 acres. An extraction permit for phase two or subsequent phases of a mineral extraction operation shall not be issued until at least 70% of the previous phase of operations has been rehabilitated according to an approved comprehensive rehabilitation plan.

      iii. No mineral extraction permit shall authorize extraction operations to be conducted in more than two phases of an extraction operation concurrently.

      iv. No mineral extraction permit shall authorize extraction to be conducted on more than 19.5 acres at one time.

   e. Fencing: During excavation operations, access to any area where collections of water are one and one-half feet in depth or more or where excavation slopes are steeper than one foot vertical to one and one-half feet horizontal and any other areas where obvious danger to the public exists shall be controlled by a fence erected and maintained around the entire site or portions thereof and shall be a type specified by the council.

   f. Appearance and Screening:

      i. All machinery shall be kept operational.

      ii. Abandoned machinery and rubbish shall be promptly removed from the excavation site.

      iii. Within three months after the termination of excavation operations or within three months after the expiration of the extraction permit provided by this section, the applicant or owner shall dismantle buildings and structures incident to excavation

operations and shall grade the excavation site as well as complete all rehabilitation on the site as provided by the rehabilitation plan.

iv. When required, the perimeter of the excavation site shall be planted or otherwise screened.

v. Existing tree and ground cover shall be preserved to the maximum extent feasible, maintained or supplemented by selective cutting, transplanting and replanting of trees, shrubs and other ground cover along all setback areas.

g. Excavation Operating Standards:

i. Noise: Maximum noise level at the perimeter of the excavation site shall comply with the limits or standards established by the Minnesota pollution control agency and the United States environmental protection agency.

ii. Hours: All excavation operations shall be conducted between 7:00 A.M. and 7:00 P.M., Monday through Saturday only. The council may restrict excavation, processing or related operations on legal holidays if such activities cause noise or other disturbances offensive to adjacent property owners.

iii. Explosives: The use and handling of explosives at the excavation site shall be coordinated with the police department. Blasting shall occur only at hours specified in the extraction permit.

iv. Fugitive Dust: Excavation operators shall use all practical means to reduce the amount of fugitive dust generated by excavation operations. In any event, the amount of dust or other particulate matter generated by the excavation shall not exceed air pollution standards established by the Minnesota pollution control agency.

v. Water Pollution: Excavation operators shall comply with all applicable Minnesota pollution control agency and department of natural resources regulations and all applicable United States environmental protection agency regulations for the protection of water quality. No waste products or processed residue, including untreated wash water, shall be deposited in any public waters of the state of Minnesota.

vi. Topsoil Preservation: All topsoil shall be retained at the excavation site until the completion of rehabilitation work in accordance with the rehabilitation plan.

vii. Slopes During Excavation Operations: During the entire period of operations, all excavations other than the working face, shall be sloped on all sides to a maximum ratio of one foot horizontal to one foot vertical, unless a steeper slope is approved by the city. Where excavations are adjacent to a public roadway or other right of way, the excavation shall have a maximum slope of four feet horizontal to one foot vertical. Slopes adjacent to waterways shall not exceed six feet horizontal to one foot vertical.

viii. Equipment: All equipment and machinery shall be operated and maintained in such a manner as to minimize dust, noise and vibration. Power drives or power producing machines shall not be housed or operated less than 1,000 feet from a residential use. Access roads shall be maintained in dust free condition by surfacing or other treatment as may be specified by the city engineer.

ix. Processing: Crushing, washing and refining, or other similar processing may be authorized by the council as an accessory use, provided, however, that such accessory processing shall not be in conflict with the use regulations of the district in which the operation is located.

x. Council Waiver: The council, at the time of issuance of the extraction permit, may waive or modify any of the provisions in this section or impose additional requirements if it finds that the plan of operation or other materials submitted with the application or other factors make appropriate more suitable measures for standards consistent with the public health, safety and welfare.

5. Special Requirements: The council, as a prerequisite to the issuance of an extraction permit, or after an extraction permit has been granted, may require the applicant or owner of the premises to:

   a. Reimburse the city for the cost of periodic inspections for the purpose of determining that the provisions of the extraction permit and this title are being followed.

   b. Submit to council a detailed map of the streets on which the material removed shall be transported (haul roads). The city shall inspect the haul roads proposed to be used by the applicant or owner and shall recommend to the council necessary upgrading or repairing of the haul roads prior to their use by the applicant or owner. The council shall designate the haul roads and shall incorporate the recommendations of the responsible city officials in the extraction permit issued to the applicant. It shall be the responsibility of the applicant or owner to maintain the haul roads in accordance with the provisions set forth in the permit. The city shall periodically inspect haul roads to ensure compliance with the permit. During the period of or upon completion of the excavation operations, the applicant or owner shall make any necessary repairs to the haul roads as recommended by the city. All costs of inspection provided for in this subsection shall be borne by the applicant or owner. The use of the haul roads shall be further subject to any road and weight restrictions imposed by the city.

   c. Submit annually in writing to the council the estimated quantity of minerals to be excavated. If the quantity of minerals to be excavated is for any reason likely to exceed the original estimate herein required, the applicant or owner shall notify the council of the change in estimated quantity.

   d. Comply with such other requirements as the council shall from time to time deem proper and necessary for the protection of its citizens and the general welfare.

6. Inspections: The city may inspect all excavation sites where an extraction permit has been issued. The operator or owner of any excavation operation found in violation of the requirements of this title or its extraction permit shall remedy such violations within the time specified by written notice from the city.

7. Duration of Extraction Permit: The excavation license shall run from January 1 through December 31 of the next year or for a lesser period of time as the council may specify at the time of issuance of the extraction permit. If the extraction permit is to run for less than a full year, the fee shall be prorated as determined by the council.

8. Extraction Permit Fee: The applicant or owner of the premises on which the excavation operation is located shall annually submit to the council written estimates of:

a. The total area of the mineral extraction operation (expressed in acres) to be actively mined during the forthcoming year; and

b. The total area for which an extraction permit permitting mineral extraction operations has been granted (expressed in acres) which will not be actively mined in the forthcoming year.

c. The council shall, by resolution, establish an annual per acre permit fee.

9. Surety Bond: The council shall require the applicant or owner of the premises on which the excavation operation is located to post a surety bond with a surety acceptable to the city, cash escrow or letter of credit ("security") in an amount determined by the council, running to the city, conditioned to pay the city the extraordinary costs and expense of repairing any streets where such repair work is made necessary by the special burden resulting from hauling and travel, and removing material from any pit or excavation, and conducting required rehabilitation and conditioned further to comply with all the requirements of this title and the particular extraction permit, and to pay any expense the city may incur by reason of doing anything required to be done by any applicant to whom a permit is issued. The security shall remain in full force and effect for a minimum period of one year after expiration of the extraction permit to guarantee the required rehabilitation as well as the other requirements herein provided.

10. Cement or Concrete Production: Cement or concrete production may be allowed in the A-2 District as a conditional use provided the site has an approved mineral extraction permit in compliance with this section and section 11-9-3 "Conditional Use Permit" of this title. In addition to these sections, the following performance standards shall apply:

a. Council Review: The council, at the time of issuance of a CUP for cement or concrete production, may waive or modify any of the provisions of this section or section 11-9-3 “Conditional Use Permit” of this title or impose additional requirements if it finds that the plans or other factors make appropriate more suitable measures for standards consistent with the public health, safety, and welfare.

b. Inspection: The city may inspect all sites with or requesting a CUP for cement or concrete production. The operator or owner of any cement or concrete production site found in violation of the requirements of this section or its CUP shall remedy such violations within the time specified by written notice from the city. Failure to remedy any violations within the specified time frame may result in revocation of the CUP.

c. Location: The plant shall be located in such a way that it is not visible from an adjacent residential use or a public right of way. This may be accomplished through topography, berming or setback. The minimum setback from any property line shall be twice the height of the plant or applicable setback under this code, whichever is greater.

d. Height: The maximum height of any concrete plant shall be 75 feet.

e. Outdoor Storage: There shall be no outdoor storage of vehicles. All equipment and material associated with the cement or concrete plant must be screened from view from an adjacent residential use or public right of way in conformance with the provisions for outdoor storage in Section 11-6-8 of this chapter.

11-6-5 :Principal Uses, Agriculture, Open Space, and Natural Resources

A. Commercial horse stable

1. The site shall not be less than 20 acres in size;
2. All structures shall be located a minimum of 75 feet from all residential property lines.
3. Subject to the regulations regarding the care and keeping of horses within the City in title 7, chapter 4 of this Code.

B. Community solar garden or solar farm

1. Purpose And Intent: It is the goal of the city council, as expressed in the comprehensive plan, for Rosemount to become a more sustainable community by encouraging activities that conserve energy and result in less/no pollution output such as alternative energy sources. In accordance with that goal, the city finds that it is in the public interest to encourage alternative energy systems that have a positive impact on energy production and conservation while not having an adverse impact on the community. Therefore, the purposes of this section include:
    a. To promote rather than restrict development of alternative energy sources by removing regulatory barriers and creating a clear regulatory path for approving alternative energy systems.
    b. To create a livable community where development incorporates sustainable design elements such as resource and energy conservation and use of renewable energy.
    c. To protect and enhance air quality, limit the effects of climate change and decrease use of fossil fuels.
    d. To encourage alternative energy development in locations where the technology is viable and environmental, economic and social impacts can be mitigated.
2. Exemptions: Passive or building integrated solar energy systems are exempt from the requirements of this section and shall be regulated as any other building element.
3. Setbacks: Community solar gardens or solar farms shall comply with the principal structure setback standards for the applicable zoning district in which they are located.
4. Screening: Community solar gardens or solar farms shall be screened from view of the public right of way to the extent possible without reducing their efficiency by setback, berming, landscaping, walls or a combination thereof.
5. General Requirements for all Solar
    a. Feeder Lines: All power lines shall be placed underground within the interior of each parcel.
    b. Compliance with Building Code: All active solar energy systems shall meet approval of local building code officials, consistent with the state of Minnesota building code, and solar thermal systems shall comply with HVAC related requirements of the energy code.
    c. Compliance with State Electric Code: All photovoltaic systems shall comply with the Minnesota state electric code.
    d. Compliance with State Plumbing Code: Solar thermal systems shall comply with applicable Minnesota state plumbing code.
    e. Certifications: Solar electric system components shall be certified by Underwriters Laboratories, Inc., and solar thermal systems shall be certified by the Solar Rating and

Certification Corporation, or other appropriate certification(s) as determined by the city. The city reserves the right to deny a building permit for proposed solar energy systems deemed to have inadequate certification.

f. Utility Connection: All grid intertie systems shall have an agreement with the local utility prior to the issuance of a building permit. A visible external disconnect must be provided if required by the utility. Off grid systems are exempt from this requirement.

g. Abandonment: If the solar energy system remains nonfunctional or inoperative for a continuous period of one year, the system shall be deemed to be abandoned and shall constitute a public nuisance. The owner shall remove the abandoned system at their expense after a demolition permit has been obtained. Removal includes the entire structure including transmission equipment.

h. Permits: No solar energy system shall be erected, altered, improved, reconstructed, maintained or moved in the city without first securing a permit from the city. Community solar gardens or solar farms as defined in section 11-10-3 “Alternative Energy System Definitions” shall also require an interim use permit.

11-6-6 :Principal Uses, Utilities

A. Commercial use antenna and/or tower

1. Permit Required: No commercial use antenna and/or tower may be constructed in the city without first applying for a permit. The permit application must be accompanied by a nonrefundable application fee. The application fee shall be established by the city council. The permit fee shall be calculated according to the city's schedule of rates and fees. All technical data and all relevant information shall be submitted to the planning commission for its review.

   a. Upon receiving approval by the planning commission and obtaining the appropriate permits, the following standards for commercial use antennas and/or towers shall be met:

      i. Commercial use antenna and/or towers shall not be multicolored, and shall contain no signage, including logos, except as may be required by any state and federal regulations.

      ii. Commercial use antenna towers shall not be located within one-half (0.5) mile of another commercial use antenna tower.

      iii. No guywires shall be used.

      iv. The setbacks of commercial use antenna towers shall be no less than the height of the tower. The height of the tower shall not exceed 250 feet. A commercial use antenna tower cannot locate any closer than 500 feet from a residential structure.

      v. The structural integrity of a commercial use antenna tower shall be approved by a certified engineer.

      vi. A commercial use antenna tower shall not be artificially illuminated unless required by the FAA, FCC or other federal or state authority. Any illumination shall be oriented inward whenever possible while complying with federal or state requirements. If lighting is required, it shall be oriented inward, if possible, so as not to project onto surrounding residential property.

vii. Non-climbable fencing shall enclose the area on which the commercial use antenna tower is located.

viii. Accessory structures in accordance with applicable I-1 and I-2 standards shall enclose transmission equipment, power equipment, or any equipment located on the ground near the tower that is used in conjunction with the commercial use antenna tower.

ix. Commercial use antenna towers located within 660 feet (1/8 mile) of a public right of way (ROW) or a residential (R) or public (P) district shall be landscaped along the side adjacent to the ROW, R or P district with boulevard trees planted on 50-foot spacing in accordance with section 11-7-6 “Landscaping, Screening, and Buffering Standards” of this title.

x. Applicant must provide data indicating location of proposed antenna in relationship with nearest existing or anticipated antenna locations that would provide optimum service involving the city of Rosemount.

2. Violation of Standards: Should the commercial use antenna and/or tower owner engage in any activity that violates these standards or endangers the public health, safety, and welfare, the city may require the abatement of said antenna and/or tower from its current site. The city will provide notice to the commercial use antenna and/or tower owner of the violations, and provide an opportunity for the owner to address the city council regarding the proposed action. The city may require immediate abatement in the case that there is an immediate public health threat.

3. Obsolete or Unused Tower: An obsolete or unused commercial use antenna and/or tower and accompanying accessory facilities shall be removed within six months of the cessation of operations unless a time extension is approved by the city council. If a time extension is not approved, the commercial use antenna and/or tower may be deemed a nuisance pursuant to Minnesota Statutes, section 429. In the event an antenna or tower is determined to be a nuisance, the city of Rosemount may act to abate such nuisance and require the removal of the commercial use antenna and/or tower at the property owner's expense. The owner shall provide the city with a copy of the notice of the federal communications commission's (FCC) intent to cease operations and shall be given six months from the date of ceasing operations to remove the obsolete commercial use antenna and/or tower, and all accessory structures including anything that may have been placed belowground. In the case of multiple operators sharing the use of a single commercial use antenna tower, this provision shall not become effective until all users cease operations for a period of six months. The equipment on the ground shall not be removed until the tower structure has first been dismantled. After the facilities are removed, the site shall be restored to its original, or to an improved state.

4. Potential for Collocation Requirements: All commercial use antenna towers erected, constructed, or located within the city shall comply with the following requirements related to assessing the potential for collocation on an existing tower:

   a. A proposal for a commercial use antenna tower shall not be approved unless it can be documented by the applicant that the communications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower or building within a one-half (0.5) mile radius of the proposed tower due to one or more of the following reasons:

i. The planned equipment would exceed the structural capacity of the existing or approved tower or building, as documented by a qualified and licensed professional engineer, and the existing or approved tower cannot be reinforced or modified to accommodate planned equipment at a reasonable cost;

ii. The planned equipment would cause interference with other existing or planned equipment at the tower or building as documented by a qualified and licensed professional engineer, and the interference cannot be prevented at a reasonable cost;

iii. No existing or approved towers or commercial/industrial buildings within a half mile radius meet the radio frequency (RF) design criteria;

iv. Existing or approved towers and commercial/industrial buildings within a one-half (0.5) mile radius cannot accommodate the planned equipment at a height necessary to function reasonably as documented by a qualified and licensed professional radio frequency (RF) engineer; and/or

v. The applicant must demonstrate that a good faith effort to collocate on existing towers and structures within a one-half (0.5) mile radius was made, but an agreement could not be reached.

5. Tower Construction Requirements: All towers erected, constructed, or located within the city, and all wiring therefor, shall comply with the following requirements:

a. Monopoles using stealth technology are the preferred tower design. However, the city will consider alternative tower types in cases where structure RF design considerations, and/or the number of tenants required by the city preclude the use of a monopole.

b. Towers and their antennas shall comply with all applicable provisions of this code.

c. Any proposed commercial use antenna tower shall be designed, structurally, electrically, and all other respects to accommodate both the applicant's antennas and comparable antennas for at least one additional user. To allow for future rearrangement of antennas upon the tower, the tower shall be designed to accept antennas mounted at no less than 10-foot intervals.

d. All towers and their antennas shall utilize building materials, colors, textures, screening and landscaping that effectively blend the tower facilities within the surrounding natural setting and built environment to the greatest extent possible as determined by the city.

e. In addition to the submittal requirements required elsewhere in this code, applications for building permits for towers and their antennas shall be accompanied by the following information:

i. Written statements from the federal aviation administration, federal communications commission, and any appropriate state review authority stating that the proposed tower complies with regulations administered by that agency or that the tower is exempt from those regulations;

ii. A report from a qualified and licensed professional engineer that does the following: describes the tower height and design including a cross section and elevation; demonstrates the tower's compliance with the aforementioned structural and electrical standards; documents the height above grade for all potential mounting

positions for collocated antennas and the minimum separation distances between antennas; describes the tower's capacity, including the number and type of antennas that it can accommodate; and documents what steps the applicant will take to avoid interference with established public safety communications; and

iii. A letter of intent committing the tower owner and his or her successors to allow the shared use of the tower, as long as there is no negative structural impact upon the tower, and there is no disruption to the service provided.

6. Antennas Mounted on Roofs, Walls and Existing Towers: The placement of wireless communication antennas on roofs, walls, and existing towers may be permitted on public, institutional, commercial or industrial buildings or facilities, with a building permit approved by the appropriate city staff. In addition to the submittal requirements required elsewhere in this code, an application for a building permit for antennas to be mounted on an existing structure shall be accompanied by the following information:

   a. A site plan showing the location of the proposed antennas on the structure and documenting that the request meets the requirements of this code.

   b. A building plan showing the construction of the antennas, the proposed method of attaching them to the existing structure, and documenting that the request meets the requirements of this code.

   c. A report prepared by a qualified and licensed professional engineer indicating the existing structure or tower's ability to support the antennas.

   d. An intermodulation study to ensure there will be no interference with existing tenants or public safety telecommunication providers.

B. Essential Service Facilities

1. Electrical substations and switching stations are prohibited in all residential and public/institutional districts.

2. Essential service facilities shall be subject to all of the applicable district development standards as well as any overlay district standards with the following additional standards:

   a. Fenced Enclosure

      i. Every fenced enclosure is subject to the principal building setback or yard criteria of the district in which it is located.

   b. Electrical Substation

      i. Electrical substations and switching stations located on any lot or parcel which is adjacent to a lot or parcel in a residential (R), commercial (C), and/or public institutional (P) district or use must provide mechanical or vegetative screening in the yard adjacent to a public right of way or such lot or parcel in the R, C, or P district. Screening consisting of earthen berm, landscaping, and/or wall having 90% opacity to a height not less than six feet in height shall be provided within the yard adjacent to a public right of way or such lot or parcel in the R, C, or P district. Screening shall not be required in yards that are adjacent to wastewater treatment facilities.

   c. Transmission Facilities

i. An application for transmission facilities shall be required to be submitted to the city, including information related to the proposed design, proposed siting, and alternative sites together with such application fee as may be approved from time to time by the city council. All transmission facilities shall be required to receive a permit from the city, except for those that are less than or equal to one-fourth (0.25) mile in length. No application shall be considered until a public hearing has been held by the planning commission. A notice of such hearing shall be published at least 10 days prior to the hearing, and notices shall be mailed to each property owner within 350 feet of the affected property, except when located in the A-1, A-2, and RR districts which shall require mailed notice to each property owner within one-fourth (0.25) mile. The city council shall consider the recommendation of the planning commission and either approve or deny the application.

d. The application for transmission facilities must be approved based upon the following findings:

i. The proposed siting complies with the city's comprehensive plan.

ii. To the extent possible, the proposed siting is within or adjacent to existing public rights of way, private utility easements or other designated corridors for transportation or transmission facilities.

iii. The proposed siting is necessary based upon a need and locational analysis.

iv. Impacts, including, but not limited to, noise and views, are identified and mitigated.

v. The proposed siting will not create hazards to the health, safety and general welfare of surrounding property owners or natural environment.

C. Small wireless facility within ROW

1. Subject to the regulations contained in title 4, chapter 2 “Right-of-Way Management” of this code.

D. Truck stop

1. Location: Truck stops shall be located east of Blaine Avenue (County Road 71) and within one-fourth (0.25) mile or 1,320 feet of a principal arterial roadway.

2. Installation Standards: Truck stops shall be installed in accordance with State and City standards. Additionally, adequate space shall be provided to access gas pumps and allow maneuverability around the pumps. Underground fuel storage tanks are to be positioned to allow adequate access by motor fuel transports and unloading operations which do not conflict with circulation, access and other activities on the site. Fuel pumps shall be installed on pump islands.

3. Sanitary Dump: A sanitary dump shall be required at all truck stops. The sanitary dump must comply with all requirements of the Minnesota Pollution Control Agency (MPCA).

4. Canopy: A protective canopy structure may be located over the pump island(s) as a permitted accessory structure. The canopy shall meet the following performance standards:

a. The edge of the canopy shall be 70 feet or more from the front and/or side lot line, provided that adequate visibility both on site and off site is maintained.

b. The canopy shall not exceed 18 feet in height and must provide 14 feet of clearance to accommodate a semitrailer truck from passing underneath.

c. The canopy fascia shall not exceed three feet in vertical height.

d. Canopy lighting shall consist of canister spotlights recessed into the canopy. No portion of the light source or fixture may extend below the bottom face of the canopy. Total canopy illumination may not exceed 115 foot-candles below the canopy at ground level. The fascia of the canopy shall not be illuminated.

e. The architectural design, colors, and character of the canopy shall be consistent with the principal building on the site.

f. Signage may be allowed on a detached canopy in lieu of wall signage on the principal structure, provided that:

   i. The individual canopy sign does not exceed more than 20% of the canopy façade facing a public right-of-way.

   ii. The canopy fascia shall not be illuminated, except for permitted canopy signage.

g. Canopy posts/signposts shall not obstruct traffic or the safe operation of the gas pumps.

5. Pump Islands: Pump islands must be elevated six inches above the traveled surface of the site. Pump islands must be set at least 70 feet back from any property line. Setback between pump island curb face shall be sufficient for the servicing and maneuvering of semitrucks with trailers.

6. Dust Control and Drainage: The entire site other than taken up by a building, structure, or plantings shall be surfaced with asphalt, concrete, cobblestone or paving brick. Plans for surfacing and drainage shall be subject to approval of the city engineer. Drainage from all fueling areas shall be directed to an oil/grit separator. Minimum design standards for the oil/grit separator shall include the following:

   a. A minimum of 400 cubic feet of permanent pool storage capacity per acre of drainage area.

   b. A minimum pool depth of four feet.

   c. A minimum oil containment capacity of 800 gallons.

   d. Minimum maintenance/inspection of two times per year and/or after measurable spill events. A measurable spill shall be defined by the Minnesota Pollution Control Agency (MPCA). A measurable spill must be reported to the MPCA.

7. Access and Circulation: Vehicular access points shall create a minimum of conflict with through traffic movement. The site design must accommodate adequate turning radius and vertical clearance for a semitrailer truck. A site plan must be provided to illustrate adequate turning radius, using appropriate engineering templates.

8. Parking:

   a. Parking for motor fuel service shall be in addition to that required for other uses on the site.

   b. Parking spaces shall be determined on an individual basis by the city council. Factors to be considered in such determination shall include (without limitation) size of building,

type of use, number of employees, expected volume and turnover of customer traffic and expected frequency and number of delivery or service vehicles.

c. Parking stalls for trucks and trailers shall be a minimum of 12 feet wide and 70 feet long, exclusive of drive aisles.

9. Pedestrian Traffic:

a. An internal site pedestrian circulation system shall be defined and appropriate provisions made to protect such areas from encroachments by parked cars or moving vehicles.

10. Noise: Public address system shall not be audible at any property line. Play of music or advertisement from the public address system is prohibited.

11. Outside Storage, Sales, and Service: No outside storage or sales shall be allowed, except as follows:

12. Public phones may be located on site as long as they do not interrupt on site traffic circulation, and may not be located in a yard abutting residentially zoned property.

13. Propane sales limited to 20-pound capacity tanks may be located outside as long as the propane tanks are secured in a locker and meet all state uniform building and fire codes.

14. A compressed air service area may be located on site as long as it does not interrupt on site traffic circulation.

15. Signs: A comprehensive sign plan must be submitted as part of a conditional use permit application. All signing and informational or visual communication devices shall be minimized and shall be in compliance with chapter 8, “Signage” of this title.

E. Truck terminal

1. The minimum building size of the principal building associated with a truck terminal shall be at least 10% of the subject site.

11-6-7 :Accessory Uses, A-M

A. Accessory dwelling unit, internal or attached

1. The maximum size of an ADU may be no more than 75% of the living area of the principal dwelling or 800 square feet, whichever is less.

2. The primary exterior materials of an attached accessory dwelling unit shall match the primary exterior materials of the principal structure.

3. Balconies and decks shall not face an interior side yard.

4. In addition to the parking requirements for the principal use, one additional parking space shall be required per accessory dwelling unit.

B. Accessory retail

1. Retail sale floor area of products manufactured, fabricated, or assembled on site shall be limited to 15% of the gross floor area of the principal building.

C. Accessory structure

1. Accessory structures shall not be located within a drainage or utility easement.

2. Detached accessory structures shall not:
   a. Be located in the front yard, except for riparian lots; nor
   b. Be constructed prior to the principal structure.
3. Accessory structures shall have increased setbacks adjacent to arterial roadways as specified in the Comprehensive Plan as follows:
   a. 10 feet from a minor arterial
   b. 20 feet from a principal arterial
4. Temporary inflatable structures in the PI District which are incompatible with residential districts shall be located a minimum of 500 feet from any residential district or use.
5. The following provisions of this subsection shall not apply to properties within the A-2 district which are located west of County Road 73 and which are greater than 20 acres in size and/or used for agricultural use:
   a. The maximum aggregate detached accessory structure area allowed per lot is specified in Table 6.1.

      Table 6.1. Maximum Aggregate Detached Accessory Structure Area

District	Maximum Aggregate Detached Accessory Structure Area
A-1	2,400 sq. ft.
A-2, west of County Road 73	1,200 sq. ft. or 50% of the ground floor area of the principal building, whichever is greater[1]
A-2, east of County Road 73	2,400 sq. ft.
RR	1,200 sq. ft. or 50% of the ground floor area of the principal building, whichever is greater[1]
R-1, R-2	1,000 sq. ft.
[1] Maximum aggregate area may increase to 50% of the ground floor area of the principal building, provided that the total amount of impervious surface on the lot does not exceed 10%. 2 The allowable area of detached accessory structures shall not apply to uses which require additional covered parking spaces by section 11-7-3 “Off-Street Parking and Loading Standards.”	

   b. Prefabricated metal storage buildings are limited to a maximum area of 120 square feet.
   c. Any accessory structure exceeding 200 square feet in area shall be constructed of materials and styles comparable with and complementary to the principal structure. Comparable treatment includes the following requirements:

i. Minimum three to twelve (3:12) roof pitch.

ii. Roofs shingled with asphalt, wood, or tile to match the principal structure.

iii. Adequate number of windows shall be provided to break up the solid plane or exterior walls to simulate the character of the principal structure.

iv. Siding which is identical or closely matches the principal structure shall be incorporated into the design of the accessory structure.

d. In the A-2 and RR districts, existing accessory structures may be exempted from the aforementioned area and building material standards. This exemption applies only in the case of structures originally constructed for agricultural use, being in existence at the time of adoption hereof, and qualifying as a barn under this title.

i. This exemption does not apply to prefabricated structures and does not permit the expansion of the structure's footprint.

ii. Properties with structures (barns) qualifying for this exemption are located at the following addresses:

(a) 13345 Bonaire Path

(b) 12101 Dodd Boulevard

(c) 12391 Dodd Boulevard

(d) 3270 McAndrews Road

(e) 13429 South Robert Trail

iii. Any exterior improvements to these barns shall replicate the original appearance or agricultural character of the existing structure and shall be approved by the Planning Commission.

iv. Exterior materials shall be limited to wood, metal, vinyl, brick, or better materials and be comparable with the existing conditions of the barn in the areas of:

(a) Color;

(b) Texture or grain;

(c) Orientation of siding (vertical or horizontal); and

(d) Lap width.

v. Metal siding shall be noncorrugated and have a thickness of at least 19 millimeters while vinyl siding shall have a gauge of at least 0.044 inches. In addition, metal or vinyl siding shall have a manufacturer's guarantee of at least 25 years.

vi. Roof materials shall be noncorrugated standing seam metal, asphalt shingles, or better and shall be comparable to the original roof. Substitution of new materials will only be allowed in the case of replacing obsolete roofing materials.

D. AM radio antenna, supporting tower, and related accessory structures

1. In the A-2 District, this use may be permitted only on properties situated in that part of the City north and east of State Trunk Highway 55.

2. Submittal of Information: Permit applicants shall submit the following information together with any other information requested by the city:

    a. In submitting an application for a conditional use permit for the construction and maintenance of radio antennas, and accessory structures, the applicant shall provide sufficient information to indicate that construction, installation and maintenance of the antenna and tower will not create a hazard to the health, safety and general welfare of surrounding property owners, animal population or natural environment.

    b. This information shall include an outside consultant conducting an independent study at the cost of the applicant, demonstrating that the tower complies with structural standards for steel antenna towers and antenna supporting structures, engineering department, Electronic Industries Association (EIA); describing the capacity of the tower, including the number and type of antennas that it can accommodate and the basis for the calculation of capacity; and demonstrating that the application complies with FAA, FCC and, if applicable, state aeronautics division requirements.

    c. A site plan as specified in section 11-9-1 "Site Plan and Building Design Review" of this title.

    d. A written analysis of the impacts of the proposed project shall be required. The applicant must discuss issues related to the aesthetics of the project, any implications or nuisances in the operations of the project and property tax implications for long term use of the site.

3. Permit Requirements for Construction and Maintenance: Permits for AM radio communications antenna, towers and accessory structures erected, constructed or located on any property and all supporting devices thereof shall only be issued if the following standards are met or exceeded:

    a. The tower shall not exceed 400 feet above grade or less as authorized by law.

    b. Antenna and/or tower setbacks shall be such that the distance from the base to the nearest property line or non-owned structures is not less than the calculated structural collapse radius.

    c. No part of any antenna or tower nor any lines, cable, equipment or wires or braces in connection with either shall at any time extend across or over any part of the right of way, public street, highway, sidewalk or property line.

    d. Towers with antennas shall be designed to withstand a uniform wind loading as prescribed by the state building code and the Electronic Industries Association recognized national standards, whichever is more restrictive.

    e. Antenna and metal towers shall be properly protected against direct strike by lightening, either by adequate grounding or suitable circuits designed to provide such protection. The installation shall comply with all applicable electrical wiring codes, statutes, regulations and standards.

    f. The city shall determine whether self-supporting towers or towers supported by cables or guy wires serve to protect the public health, safety and welfare.

g. All signal and remote control conductors of low energy extending horizontally above the ground between the tower or antenna and structure, or between towers, not buried underground, shall be at least 12 feet above the ground at all points.

h. The base of the tower and all anchors shall be surrounded with a minimum six foot high security fence with the appropriate warning signs posted on all sides.

i. No accessory structure or appurtenances shall be temporarily or permanently affixed to AM radio antennas or supporting towers except as required to accomplish the license service for which the antenna or tower is authorized by the FCC, or as may be approved by city council.

j. The economic benefits, incentives and other advantages to the city and community must outweigh any known or potential negative aspects of the project.

k. The applicant shall furnish the city with copies of all correspondence with the FCC and FAA regarding permit performance of the AM radio antennas; or any matters affecting public health, safety and welfare.

l. If use of the tower is discontinued for a period of 12 months, or upon expiration of the interim use permit the AM radio communications antennas, supporting towers and all above and below ground appurtenances shall be removed.

m. The applicant shall be required to adequately maintain the AM radio communications antennas, supporting towers and related accessory structures and property upon which those facilities do not represent a hazard or nuisance to the public, animal population or natural environment.

4. Broadcast Interference: The applicant shall be responsible to investigate all and remedy legitimate complaints regarding interference to consumer electronic equipment alleged to be caused by signals from the broadcast facility.

5. Advisory Commission: The city council may establish an advisory commission to hear disputes that cannot be resolved between the broadcast representatives and affected parties.

6. Tower Use Fee: The city council may require an annual use fee in lieu of taxes.

7. In all districts, setbacks for all freestanding tower antennas shall be equal to the height of the antenna and its supporting structure.

E. Car wash, full- or self-service

1. See standards for car washes listed in section 11-6-3 “Principal Uses, Commercial” of this chapter.

F. Cemetery

1. See standards for cemeteries listed in section 11-6-2 “Principal Uses, Public and Institutional” of this chapter.

F. Construction-related temporary use

1. Temporary buildings incidental to construction work on the premises shall be permitted provided they receive a building permit and such buildings are removed upon completion or abandonment of said construction.

2. In the I-2 District, temporary buildings accessory to an approved construction project may be allowed with an interim use permit, subject to the following standards:

    a. Execution of an interim use permit agreement specifying the expiration of the IUP and removal of the temporary building(s).

    b. Temporary buildings are subject to the interim use permit standards, findings and conditions specified in this title.

    c. Temporary buildings may be exempt from conformance with the following standards of the zoning ordinance at the discretion of the city council:

        i. Section 11-7-2 "Architectural Standards" of this title;

        ii. Subsection 11-7-3 C.7 "Off Street Parking Design and Construction Standards" of this title;

        iii. Section 11-7-6 "Landscaping, Screening, and Buffering Standards" of this title; and

        iv. Subsection 11-4-5 E.2 requiring a minimum building size of 10% of the subject property.

    d. Temporary buildings shall conform to all other heavy industrial district standards specified within this title, and be set back 500 feet from adjoining public right of way or visually screened from public right of way, public/institutional or residential districts or uses. If the building is not appropriately screened, the city may require additional landscaping or enhanced treatment of the temporary structure.

    e. Temporary buildings are subject to building code permits and requirements.

    f. Temporary buildings are subject to fire code permits and requirements.

    g. The site must accommodate adequate parking for the intended use.

    h. Site grading and drainage must comply with city ordinances and engineering guidelines. The city may, at its discretion waive some of the requirements if alternative solutions are acceptable.

G. Day care, family and group family

3. The use shall be licensed by the state as necessary and shall comply with all state and local standards.

4. The use of any accessory structure for day care is not allowed.

5. In addition to the parking required for the dwelling unit as specified in section 11-7-3 “Off-Street Parking and Loading Standards,” one additional space shall be provided for pick-up/drop-off.

H. Drive-through facility

1. Drive-through facilities in any district shall adhere to the following standards:

    a. The site and structure(s) shall be designed to limit the effects of the drive-through, including noises, emissions, and headlight glare, on adjacent properties and public rights of way.

    b. No use with a drive-through window shall be located abutting any residential use or district.

c. Stacking lanes shall not interfere with circulation through any required parking, loading, maneuvering or pedestrian area.

d. Stacking and exiting areas shall be screened from adjacent properties and/or rights-of-way. Stacking areas shall have a minimum 90% opacity screen to a height of six feet while exiting areas shall have a minimum 50% opacity screen to a height of at least four feet

i. The principal structure shall be the primary source for screening the drive-through facility and stacking and exiting areas from adjacent properties and/or rights of way.

ii. Landscaping and berming shall be a secondary source for screening drive-through, stacking or exiting areas. Should landscaping and berming be found ineffective by the city, the city may approve screening walls and/or decorative fencing as an alternative.

iii. Screening walls shall be constructed of the same materials as the principal structure and shall not extend more than 25 feet without a change in architecture to reduce their mass and appearance.

2. In addition to the standards in subsection 1, the following standards shall apply to drive-throughs in the MX-2 and B-1 districts:

a. Drive-through facilities shall have a minimum six stacking spaces per drive-through window. Fast food uses operating more than one window per individual drive aisle shall meet the stacking requirements for a single drive-through facility. Each space shall be a minimum of nine feet wide by 18 feet long.

b. No public address system shall be audible from a noncommercial or nonindustrial use or district.

c. Fast food uses may display menu boards as follows:

i. The menu board(s) not encroach into any parking setback and shall be located directly adjacent to the drive-through aisle and oriented in such a manner that the sign provides information to the drive- through patrons only and does not provide supplemental advertising to pass-by traffic and does not impair visibility or obstruct circulation.

ii. Individual menu board(s) shall be single sided with an area not to exceed 32 square feet including both sign copy and sign cabinet.

iii. The height of the menu board(s) shall not exceed eight feet including its base or pole measured from grade to the top of the structure.

3. In addition to the standards in subsection H.1 above, the following standards shall apply for drive-throughs accessory to financial institutions in the MX-1 District:

a. Drive-up teller structures shall be located behind the building.

b. Drive-through canopies shall not extend beyond the sides of the building.

I. Garage sale

1. The sale shall not be more than four successive days in duration.

2. Not more than three such sales are permitted on the premises in a calendar year.

3. There shall be at least one month between sales on the same premises.

J. Home occupation

6. The conduct of a home occupation or the use of substances which may be hazardous to or may in any way jeopardize the health, safety, or welfare of neighbors and neighboring property shall not be permitted. The following activities shall be prohibited from being home occupations:

    a. Body art establishments, as defined by Minnesota Statute 146B;

    b. Business that rents vehicles or equipment;

    c. Dispatch business where persons come to a site and are dispatched to other locations; and

    d. Firearm training except for properties zoned A-2; and

    e. Other similar uses which pose a risk to the health, safety, or welfare of neighbors and neighboring property as determined by the Zoning Administrator.

7. The following uses are not considered home occupations and therefore are not required to meet the standards of this section:

    a. Family and group family day care uses

    b. Remote work

8. Home occupations are permitted so long as the following standards are met:

    a. Home occupations shall be conducted solely by persons residing in the residence.

    b. All business activity and storage shall take place within structures.

    c. There shall be no alteration to the exterior of the residential dwelling, accessory building(s), or yard that in any way alters the residential character of the premises.

    d. No sign, display, or device identifying the occupation shall be used.

    e. The occupation shall not be visible or audible from any property line.

    f. Said occupation shall not involve the retail sale or rental of products on the premises.

    g. Unless completely enclosed within an approved structure, no vehicle used in the conduct of the occupation shall be parked, stored, or otherwise present at the premises other than such as is customarily used for domestic or household purposes such as a van or three-quarter ton truck.

    h. Only on-site parking facilities normal for a residential use shall be used.

K. Keeping of animals (domestic and non-domestic)

1. All animal keeping uses shall adhere to the regulations contained in title 7, chapter 4 “Animal Control” of this code.

2. Horses

    a. All structures related to the keeping of horses shall be located a minimum of 75 feet from any abutting residential property.

b. The maximum number of horses allowed on the property shall not exceed one per two acres.

L. Keeping of bees

1. Annual permit required.
2. Applicant shall demonstrate that they have completed a full course on beekeeping.
3. Number of colonies

a. No person is permitted to keep more than the following numbers of colonies on any lot within the City, based upon the size or configuration of the apiary lot:

Table 6.2. Bee Colonies Allowed

Lot Size	Number of Colonies Allowed
Less than 0.5 acre	2
Between 0.5 and 1 acre	4
Between 1 and 5 acres	8
Larger than 5 acres	No restriction

b. For each colony permitted to be maintained under this ordinance, there may also be maintained upon the same apiary lot, one nucleus colony in a hive structure not to exceed one standard 9-5/8 inch depth 10-frame hive body with no supers.

c. If the beekeeper serves the community by removing a swarm or swarms of honey bees from locations where they are not desired, the beekeeper shall not be considered in violation of the portion of this ordinance limiting the number of colonies if he or she temporarily houses the swarm on the apiary lot in compliance with the standards of practice set out in this ordinance for no more than 30 days from the date acquired.

4. Location

a. No person shall establish or maintain any hive or keep any bees in the front yard of a property or within 10 feet of any property line, sidewalk, alley, or other public right-of-way as measured from the nearest point on the hive to the property line.

b. Where a colony is kept less than 25 feet from a property line, the beekeeper shall establish and maintain a flyway barrier of at least five feet in height. The flyway barrier may consist of a wall, fence, dense vegetation, or a combination thereof such that bees will fly over rather than through the materials to reach the colony. The flyway barrier shall be approved by the Zoning Administrator.

5. Honey bee colonies shall be kept in hives with removable frames.
6. Each beekeeper shall ensure that a convenient source of water is available within 10 feet of each of the colonies so long as colonies remain active outside of the hive.
7. Each apiary shall be visually screened from adjacent properties and public right-of-way. This may be achieved through a combination of buildings, fencing, or vegetation. Additional screening may be required at the discretion of the Zoning Administrator based on specific site characteristics.

8. Each beekeeper shall ensure that no wax comb or other materials that might encourage robbing by other bees are left upon the grounds of the apiary lot.
9. All beekeeping equipment shall be maintained in good condition. Unused equipment shall be secured from weather, potential theft or vandalism, and occupancy by swarms.

M. Keeping of chickens

1. Annual permit required.
2. No person shall keep more than five total hen chickens. No roosters shall be allowed.
3. Chickens shall be kept confined to the premises at all times and shall be secured inside of a shelter from sundown to sunrise each day to prevent nuisance noise and attracting predators. Chickens shall be housed within a coop and have access to the outdoors in a run. All chicken coops and runs shall meet the following requirements:
    a. No more than one coop and one run allowed per lot.
    b. The coop and run shall be located behind the principal structure, at least 10 feet from any property line, and outside of any drainage and utility easements. The coop or run shall be set back at least 20 feet from any adjacent habitable dwelling.
    c. Coops and runs shall be screened from all adjacent properties and streets. Screening may include an existing structure, a four-foot high solid fence, or a four foot high landscaped hedge. All fencing shall meet the requirements of Chapter 6, Article 6 of the Unified Development Regulations.
    d. Coops
        i. All coops shall provide at least four square feet and no more than eight square feet per chicken and must not exceed six feet in height.
        ii. Coops shall be elevated between 12 and 36 inches above grade to ensure circulation beneath the coop.
    e. Runs
        i. All runs shall provide at least six square feet and no more than 10 square feet per chicken with fencing not exceeding six feet in total height.
        ii. Runs may be enclosed with wood and/or woven wire materials, and may allow chickens to contact the ground.
        iii. Runs shall have a protective overhead netting to keep the chickens separated from other animals. Fencing shall be adequate to keep chickens in and predators out.
        iv. Runs may be located under coops with such areas counting towards minimum square footage requirements.
4. Chickens shall not be permanently housed in any part of the principal dwelling, including an attached garage.
5. Chicken grains and feed shall be stored in a rodent proof container.
6. All animal waste (fecal matter, bedding, food, etc.) shall be properly stored and disposed of at least once per week.
7. No slaughter of chickens or use of chickens for cockfighting is allowed within the City limits.

8. Dead chickens shall be disposed of according to the Minnesota Board of Animal Health.

N. Mobile food unit (MFU)

1. See regulations in Title 3, Chapter 10.
2. MFUs shall obtain the required state and/or county licensing and permits for operation.

11-6-8 :Accessory Uses, N-Z

A. Outdoor dining

1. The following standards for outdoor dining shall apply in all districts:
   a. The site and enclosure(s) shall be designed to limit the effects of outdoor seating or dining areas on contiguous properties and/or public rights-of-way.
   b. The seating area shall be located on private property along the front, side or rear of the principal building but shall not be located within a required setback or on the side abutting any residential use or district.
   c. The seating area shall not interfere with circulation in any required parking, loading, maneuvering or pedestrian area. A minimum four-foot passageway shall be maintained along the private sidewalk for pedestrians.
   d. No public address system shall be audible from a noncommercial or nonindustrial use or district.
2. For all outdoor dining areas in the B-1 District and for those dining areas in the MX-2 district with 11 or more seats, the following standards shall apply:
   a. The seating area shall be located in a controlled or cordoned area acceptable to the City with at least one opening to an acceptable pedestrian walk.
   b. When a liquor license is granted, an uninterrupted enclosure is required and the enclosure shall only have access through the principal building.
   c. The seating area shall not be permitted within 200 feet of any residential use or district as measured at the property line and shall be separated from residential use or district by the principal structure or other method of screening acceptable to the City. The minimum distance from a residential use or district may be reduced should the City determine the applicant has added sufficient elements to reduce the impact of this use.
3. In the MX-2 District, the following standards shall apply to outdoor seating or dining areas for 10 or fewer seats:
   a. Patrons shall not be served food or beverages outside, except that employees may refill beverage containers in the seating area. At no time shall the seating area be used for the consumption of alcoholic beverages.
   b. The outdoor seating or dining area shall be equipped with refuse containers. The business owner shall ensure that the area is properly maintained and litter free.

B. Outdoor display or sales

1. Outdoor display or sales related to trailer, construction, or agricultural machinery sales or rental shall be subject to those standards identified for vehicle sales or rental in Section 11-6-3 “Principal Uses, Commercial.”

2. Outdoor display or sales in all districts shall adhere to the following standards:
    a. The site and building(s) shall be designed to limit the effects of outdoor display or sales on adjacent properties and public rights of way.
    b. Displayed merchandise shall be maintained in a neat and orderly fashion.
    c. Outdoor sales shall be conducted by the owner or lessee of the premises or with the written consent of the owner or lessee.
    d. Only merchandise that is normally manufactured, sold, or stored by the occupant on the premises shall be sold and/or promoted.
    e. Merchandise shall consist only of finished products. Disassembled merchandise parts may be displayed outdoors only when new products are customarily sold unassembled and are intended for customer purchase and assembly.
    f. Display or sales areas shall meet all required setbacks.
    g. Display and sales activity shall be conducted on a paved surface and shall not take up, or interfere with access to, any required parking, loading, maneuvering or pedestrian area.
    h. Outdoor display or sales of goods shall be allowed on the private sidewalk immediately in front of the principal building, provided that the area shall not exceed four feet in height.
    i. No public address system shall be audible from a noncommercial or nonindustrial use or district.
    j. Temporary structures associated with sales lots that are in compliance with all building code, fire code, zoning ordinance, this code, county ordinance, or state statute may be allowed with an Interim Use Permit.
3. In addition to the standards listed in subsections B.1 and B.2 above, outdoor display or sales in the MX-1 District shall adhere to the following standards:
    a. Aggregate area of outdoor sales and display shall be limited to an area not more than 40% of the finished square feet of the principal building. The 40% outdoor sales and display area may be exceeded for up to a four-day period through an administrative permit approved by the Zoning Administrator. No business shall receive more than 12 permits per calendar year.
    b. There shall be no display of automobiles or recreation vehicles.
    c. Except while loading, unloading, or rendering a service in a designated loading area, no commercial trucks, truck-tractor, or semitrailer combinations are permitted to be parked and/or stored longer than 48 hours. The principal use of a semitrailer may not be for outdoor sales. Semitrailers that are principally used for education, training, and demonstration to the customer in the use or care of a product where sales are a secondary use of the trailer may be permitted. These educational and demonstration semitrailers are to be limited to a period not to exceed 96 hours.
4. In addition to the standards listed in subsections B.1 and B.2 above, outdoor display or sales in the MX-2 District shall adhere to the following standards:
    a. Outdoor display or sales is limited to an area equal to 45% of the gross floor area of the principal building.

b. Outdoor display or sales may be allowed in the following locations:

i. On the private sidewalk immediately in front of the principal building, provided that the area does not exceed four feet in height.

ii. At the pump island of an automobile fuel station, as specified in section 11-6-3 "Principal Uses, Commercial."

iii. Within an enclosure constructed of materials compatible to the building's architecture such as decorative fencing or a building wall, provided that:

(a) The enclosure shall provide a minimum 90% opacity screen.

(b) The square footage of the outdoor display area(s) shall be included in calculation of required off street parking for the use.

5. In addition to the standards listed in subsections B.1 and B.2 above, outdoor display or sales in the B-2 and I-1 districts shall adhere to the following standards:

a. The outdoor display/storage or sales area is limited to an area equal to 30% of the gross area of the site.

b. The outdoor display or sales area shall only be located in a side or rear yard.

c. Any outdoor display or sales area shall be completely enclosed by screening as follows:

i. Any portion of an outdoor display/storage or sales area adjacent to a public right-of-way or nonindustrial use or district shall be screened from eye level view from the public right-of-way or nonindustrial use or district by a 100% opacity screen to a height equal to the items being screened but not more than 35 feet. Screening shall be accomplished by buildings, landscaping and berming, natural topography, screening walls or a combination thereof. Any screening wall shall be made of the same materials as the principal building and shall not extend more than 70 feet without a change in architecture to reduce its mass and appearance.

ii. The portion(s) of outdoor display/storage or sales area(s) adjacent to an industrial use or district shall be required to be screened from eye level view from other industrial uses or districts by at least a 50% opacity screen to a height equal to the items being screened but not more than 35 feet. Screening shall be accomplished by any of the items listed in subsection 11-7-6 B "Screening" of this title or fencing.

d. The square footage of the outdoor display or sales area(s) shall be included in calculation of required off street parking for the use.

e. The perimeter measurement of the outdoor display/storage or sales area shall be included in the calculation of required foundation plantings.

C. Outdoor industrial equipment

1. I-1 District

a. Functioning structures such as conveyor belt systems, cooling towers, storage silos or the like that are accessory and integral to the principal use of the site may be allowed, subject to the following:

i. The applicant shall demonstrate that the outdoor structure or equipment cannot be integrated into a building design.

ii. The site and building(s) shall be designed to screen and limit the effects of the outdoor structure or equipment on adjacent properties and public right(s)- of-way.

iii. Each property may have up to four outdoor structures or equipment clustered together in a total aggregate area not to exceed 5,000 square feet.

iv. The height of outdoor structure or equipment shall not exceed 60 feet.

v. The outdoor structure or equipment shall not take up, encroach upon or interfere with access to any required yard, parking, loading, maneuvering or pedestrian area.

vi. The outdoor structure or equipment shall be located on an approved surface.

vii. The City may exempt outdoor structure or equipment from the site and building performance standards in chapter 7 "Development Standards" of this title; however, all such structures or equipment must be functional and shall be made of high-quality long-lasting material compatible with both adjacent properties and other buildings in the I-1 District.

2. I-1 District

a. Functioning structures such as conveyor belt systems, cooling towers, storage silos or the like that are accessory and integral to the principal use of the site may be exempt from the outdoor storage requirements in subsection 11-6-8D of this section, subject to the following:

i. The applicant shall demonstrate that the outdoor structure or equipment cannot be integrated into a building design.

ii. The site and building(s) shall be designed to screen and limit the effects of the outdoor structure or equipment (noise, vibrations, illumination, particulate, or the like) on adjacent properties and public right(s)-of-way.

iii. The outdoor structure or equipment shall be located on an approved surface in a remote location that is not adjacent to any public right-of-way or nonindustrial use or district.

iv. The aggregate area for outdoor structure or equipment shall be limited to an area equal to 15% of the gross floor area of the principal building and to a height not to exceed 70 feet. Larger areas or taller structures or equipment may be approved by the City through a conditional use permit.

v. The outdoor structure or equipment shall not take up, encroach upon or interfere with access to, any required yard, parking, loading, maneuvering or pedestrian area.

vi. The City may exempt outdoor structure or equipment from the site and building performance standards in chapter 7 "Development Standards" of this title; however all such structures or equipment must be functional and shall be made of high quality long lasting material compatible with both adjacent properties and other buildings in the I-1 District.

b. Up to two fuel storage tanks with a maximum capacity of 1,100 gallons each and a 30-foot setback from all properties, may be allowed on properties located west of County Road 73.

D. Outdoor storage

1. Outdoor storage in all districts shall adhere to the following standards:
    a. The storage area shall not take up, or interfere with access to, any required parking, loading, maneuvering, or pedestrian area.
    b. The storage area shall be maintained in a neat and orderly fashion.
    c. The outdoor display/storage or sales area shall be clearly identified on the approved site plan for the project, may only be located in either a side or rear yard, and shall not encroach into any required setback.
    d. The square footage of the outdoor storage area (except those areas used for vehicle storage and not considered a required parking area) shall be included in calculation of required off street parking for the use.
    e. The perimeter measurement of the outdoor storage area shall be included in the calculation of required foundation plantings.
    f. Outdoor storage of woodpiles is allowed as follows:
        i. Firewood shall not be stored in the front yard or nearer the front lot line than the principal building or less than five feet from a lot line.
        ii. Firewood shall be stacked on an impervious surface or be elevated at least four inches off the ground.
        iii. Stacks shall not exceed six feet in height.
    g. Storage of junked motor vehicles:
        i. Outdoor storage of any junked motor vehicle is prohibited on any public or private property with the exception of property lawfully zoned and operated as a recycling operation.
        ii. It is unlawful for any person to park, store or leave any junked motor vehicle, whether attended or not, upon any public or private property within the city, or for any person, as an owner of or an occupant having control of private property within the city to permit the parking, storing or leaving of any junked vehicle upon such private property unless such junked motor vehicle is within an enclosed building or structure.
2. In addition to the standards listed in subsection 1, outdoor storage in the B-2 District shall adhere to the following standards:
    a. The outdoor storage area is limited to an area equal to 30% of the gross area of the site.
    b. The outdoor storage area shall be surfaced with concrete or an approved equivalent to control dust.
    c. Any outdoor storage area shall be completely enclosed by screening as follows:
        i. Any portion of an outdoor storage area adjacent to a public right-of-way or nonindustrial use or district shall be screened from eye level view from the public right-of-way or nonindustrial use or district by a 100% opacity screen to a height equal to the items being screened but not more than 35 feet.
            (a) Screening shall be accomplished by buildings, landscaping and berming, natural topography, screening walls or a combination thereof.

(b) Any screening wall shall be made of the same materials as the principal building and shall not extend more than 70 feet without a change in architecture to reduce its mass and appearance.

ii. The portion(s) of outdoor storage area adjacent to an industrial use or district shall be required to be screened from eye level view from other industrial uses or districts by at least a 50% opacity screen to a height equal to the items being screened but not more than 35 feet.

(a) Screening shall be accomplished by any of the items listed in section 11-7-6 "Landscaping, Screening, and Buffering Standards" of this title or fencing.

3. In addition to the standards listed in subsections 1 and 2 above, outdoor storage in the I-1 District shall adhere to the following standards:

a. Outdoor storage uses are exempt from the site and building standards outlined in section 11-7-2 "Architectural Standards" of this title.

b. The outdoor storage area shall be designed to limit its effects on adjacent properties and public right(s)- of-way.

c. The storage area shall be surfaced with paving, porous paving, gravel, vegetation, or a combination thereof. If necessary, this covering shall include additional materials so as to comply with subsection 11-7-1 "Performance Standards" of this title.

d. No public address system shall be audible from a noncommercial or nonindustrial use or district. This subsection shall not be read to prohibit or proscribe safety alarms or sirens.

e. All outdoor storage areas shall be set back and screened by buildings, structures, landscaping and berming, natural topography, screening wall, or a combination thereof. In no case shall any outdoor storage area be located within 75 feet of any public right-of-way or property line.

i. Screening for the outdoor storage area shall be established equal to the height of the items being screened, but not more than 35 feet.

ii. Outdoor storage areas located between 75 feet and 300 feet from a public right-of-way or property line:

(a) Shall be screened from eye level view from the public right of way by a 100% opacity screen.

(b) Screening walls shall be made of masonry material and shall include a change in architecture every 100 linear feet to reduce its mass and appearance.

iii. Outdoor storage areas located between 300 and 1,000 feet from a public right-of-way or property line:

(a) Shall be screened from the eye level view from the public right of way by a 75% opacity screen.

(b) Screening walls shall be made of masonry material and shall include a change in architecture every 300 linear feet to reduce its mass and appearance.

iv. If an outdoor storage area is located more than 1,000 feet from a public right of way or property line, no screening shall be required.

E. Recreational amenity, private

1. Recreational amenities shall not be located in front of a principal structure.
2. Recreational amenities shall meet accessory structure setback requirements for zoning district in which they are placed.
3. Swimming pools shall be subject to section 5-3-1 “Swimming Pools” of this Code.

F. Recreational vehicle parking or storage

1. See section 8-2-5 “Parking and Storage of Recreation Vehicles” of this code.

G. Residential swimming pool

1. See regulations listed in title 5 chapter 3 “Swimming Pools” of this Code.

H. Sacred community

1. Any sacred community use shall meet all requirements listed in Minnesota Statute 327.30.

I. Sales office, temporary

1. All temporary sales offices shall receive a building permit.
2. The temporary sales office shall be removed within 30 days of the certificate of occupancy for the development's model unit or leasing office, or within six months of the issuance of the building permit for the temporary sales office, whichever occurs first. If requested in writing prior to expiration of the original six month period, six month extensions may be granted by staff. Said extensions shall also expire within six months or 30 days of the certificate of occupancy for the development's model unit or leasing office, whichever occurs first.
3. Each development project shall be limited to one temporary sales office.
4. All temporary sales offices shall be required to meet the standards of the current Minnesota state building code and Americans with Disabilities Act (ADA).
5. All temporary sales offices shall meet the setback standards as required for any structure within the applicable zoning district.
6. Temporary sales offices shall have skirting around the entire base of the unit.
7. Prior to use by the public, all temporary sales offices shall provide at least six off street parking stalls for every 1,000 square feet of gross floor area. In addition, the surface of the parking area shall at a minimum consist of class V crushed rock. Should the temporary sales office exist longer than one year, the off-street parking area shall be paved. Each parking stall shall be delineated by a concrete parking stop, sign or landscape planter.
8. Temporary sales offices shall be permitted only for residential subdivisions for which a final plat has been approved by the city council. Additionally, a temporary sales office shall be located on the property for which the final plat was approved. No off-site temporary sales offices will be permitted.
9. All temporary sales trailers shall have access from a public or private paved street.

J. Satellite Dish

1. Satellite dishes shall not be closer than 10 feet from a side or rear lot line and shall not be placed in front or street front yards.
2. Exception: Satellite dish antennas less than one meter (39.7") in diameter are exempted from this requirement.

K. Short-term vacation rental (STVR)

1. The maximum number of overnight guests will be limited to two times the number of bedrooms rented plus one.
2. Dwelling requirements
    a. Rooms used for sleeping shall have an egress window and functioning smoke detectors.
    b. The guest(s) must have access during their entire stay to a full bathroom, including sink, toilet, and tub or shower.
3. Parking
    a. All STVR parking shall be accommodated on improved surfaces on the premises. No on-street parking is allowed for guests.
    b. Where the property owner resides on the premise, additional off-street parking shall be provided to accommodate both the principal use and the STVR use.
4. If not residing on the property, the property owner or manager/representative must be located within 30 miles of the property. The property owner shall maintain with the city the contact information for the local contact or managing agent for the property.
5. A guest record shall be maintained, including the name, address, phone number, and vehicle license plate information for all guests. This record must be provided to the city within 48 hours of a request for the guest record.
6. Guest disclosures. The property owner must disclose in writing to their transient guests the following rules and regulations. This disclosure shall be conspicuously displayed in the home:
    a. The name, phone number and address of the owner, operating lessee or managing agent/representative;
    b. The maximum number of guests allowed at the property;
    c. The maximum number of vehicles allowed at the property and where they are to be parked;
    d. City nuisance ordinances requirement that noise levels be reduced between 10:00 p.m. and 7:00 a.m. on weekdays and midnight to 7:00 a.m. on weekends and that this will be enforced by the Rosemount Police Department; and
    e. Property rules related to use of outdoor features, such as decks, patios, grills, recreational fires, saunas, and other recreational facilities.
7. All garbage must be kept in rubbish containers issued by a contracted collection service.
8. Signage shall be limited to a four square foot, non-illuminated name plate attached to the building entrance.

L. Small-scale solar energy system, ground-mounted

1. Ground-mounted solar energy systems shall comply with all general requirements for solar energy systems listed in section 11-6-5 “Principal Uses, Agriculture, Open Space, and Natural Resources.”
2. Ground-mounted solar energy systems shall comply with the accessory structure setback standards for the applicable zoning district in which they are located.
3. Ground-mounted solar energy systems shall not exceed 15 feet in height.
4. The surface area of ground mounted systems shall not exceed the maximum lot coverage standard of the applicable zoning district.
5. Ground mounted solar energy systems shall be screened from view of the public right-of-way to the extent possible without reducing their efficiency by setback, berming, landscaping, walls or a combination thereof.

M. Small-scale solar energy system, roof-mounted

1. Roof-mounted solar energy systems shall comply with all general requirements for solar energy systems listed in section 11-6-5 “Principal Uses, Agriculture, Open Space, and Natural Resources.”
2. Roof-mounted solar energy systems shall comply with the setback requirement for the applicable zoning district and structure type (principal or accessory) on which they are mounted and may encroach those setbacks per section 11-2-5 “General Lot, Building, and Yard Provisions” of this title.
3. Roof mounted solar energy systems shall comply with the height standards of the applicable zoning district.
    a. Roof mounted solar energy systems may be mounted at an angle to the roof to improve their efficiency; however, the highest point of a solar panel in any residential district shall not be more than three feet, measured in a straight line, above the roof upon which the panel is mounted.
    b. This three-foot height limitation does not apply to roof mounted solar energy systems located in nonresidential districts or on nonresidential uses.
4. Roof-mounted solar energy systems shall not cover more than 80% of the south facing or flat roof upon which the panels are mounted and shall be set back a minimum of one foot from the edge of the roof.
5. Roof-mounted solar energy systems shall be designed to blend into the architecture of the building, provided that design considerations shall not diminish energy production. The color of the solar collector is not required to be consistent with other roofing materials. Reflection angles from collector surfaces shall be oriented away from neighboring windows. Where necessary, screening may be required to address glare.
6. Roof-mounted solar energy systems located in nonresidential districts or on nonresidential uses shall be screened in accordance with the requirements of subsection 11-7-6 B “Screening” of this title and the screening requirements of the applicable zoning district to the extent possible without reducing their efficiency.

N. Spent bauxite disposal facility

1. Permits for spent bauxite disposal facilities shall only be issued if the following standards are met or exceeded:
    a. The facility shall represent the best available technology for land disposal of spent bauxite.
    b. The operator and staff shall have sufficient experience in the operation of such facilities to ensure competent operation.
    c. The design, construction and operation of the facility shall minimize negative environmental impacts and must mitigate such impacts to the fullest extent possible.
    d. Public health, safety and welfare shall be ensured.
    e. Adequate closure, postclosure and contingency plans shall be established.
    f. An emergency response plan shall be established and accepted by the city.
    g. All environmental studies required shall be completed and declared adequate by the responsible governmental units.
    h. There shall be adequate access to the site.
    i. The proposed project shall be compatible with surrounding land uses.
    j. The applicant provides financial security sufficient to guarantee compliance with the terms of the permit.
    k. The economic benefits, incentives and other advantages to the city and community must outweigh any known or potential negative aspects of the facility.
    l. The applicant shall demonstrate that reuse or recycling of spent bauxite is not feasible during the term of the permit and that land disposal is the only practical alternative.
    m. An interim use permit shall not be issued until all required local, state and/or federal permits have been obtained by the applicant.

O. Transient merchant sales lot
    1. See regulations listed in title 3, chapter 5 “Licensing of Peddlers, Solicitors and Transient Merchants” of this code.

P. Uses accessory to large-scale mineral extraction
    1. A separate Interim Use Permit or approval is not required for an accessory use.
    2. Accessory uses shall meet the same performance standards as the large-scale mineral extraction operation listed in section 11-6-4 “Principal Uses, Industrial.”

Q. Uses accessory to small-scale mineral extraction
    1. A separate Interim Use Permit or approval is not required for an accessory use.
    2. Accessory uses shall meet the same performance standards as the small-scale mineral extraction operation listed in Section 11-6-4 “Principal Uses, Industrial.”

TITLE 11 ZONING REGULATIONS

CHAPTER 7 DEVELOPMENT STANDARDS

11-7-1 :Performance Standards

Uses which because of the nature of their operation are accompanied by excess of noise, vibration, dust, dirt, smoke, odor, noxious gases, glare or wastes shall not be permitted. These residual features shall be considered "excessive" when they either exceed or deviate from the limitations set forth in the following performance standards:

1. Noise: Noise shall be muffled so as not to become objectionable due to intermittence, beat frequency, shrillness or intensity. Noise levels shall be regulated by the standards of the Minnesota pollution control agency (MPCA).
2. Vibration: No activity or operation shall at any time cause earth vibrations perceptible beyond the limits of the immediate site in which the operation is conducted. Temporary vibrations resulting from normal construction or reconstruction projects may be excepted.
3. Dust, Dirt, Smoke, Odor, Gases: The release of solid and liquid particulates, smoke, gases, toxic or noxious materials and other materials or odors shall be regulated by the standards of the MPCA.
4. Glare: Glare from high intensity lighting or high temperature processes, whether direct or indirect, and as differentiated from street lighting or general illumination, shall not be visible beyond the limits of the immediate site from which it originates. General lot lighting or security spotlighting shall be directed away from adjacent properties, eliminating or reducing the illumination generated on the site.
5. Waste
    a. All solid waste materials, debris, rubbish, junk, refuse or garbage shall be kept within a completely enclosed building or properly contained within a closed container specifically designed for such purpose. The containers shall be kept in an enclosed area between days of scheduled pick up.
    b. In no case shall noxious or odorous refuse or garbage be kept outside of a completely enclosed building for a period of time exceeding the average interval of refuse collection by commercial rubbish haulers.
    c. Hazardous wastes generated from any activity or operation shall be properly contained, labeled and stored for transfer to an authorized processing, storage or burial facility, according to the laws of the state of Minnesota.
    d. All waste storage shall comply with sections 5-1-2 and 5-1-3 of this code.
6. Explosives
    a. Any activity or operation requiring the use, storage or manufacturing of explosives shall be located no closer than 500 feet from any residential district, provided further that the location of said activity or operation is such that damage from explosion, including flying debris, vibration or smoke, is limited to the site on which the activity or operation is permitted.

11-7-2 :Architectural Standards

A. Buildings in all zoning districts shall maintain a high standard of architectural and aesthetic compatibility with surrounding properties to ensure that they will not adversely impact the property values of the abutting properties or adversely impact the community's public health, safety, and general welfare.

B. Exterior Wall Materials and Colors

1. Unadorned concrete as an exterior material shall be prohibited in all districts.
2. No galvanized or unfinished steel, galvalume, or unfinished aluminum buildings (walls or roofs), except those specifically intended to have a corrosive designed finish such as Cor-ten steel shall be permitted in any zoning district, except in association with farming activities. Metal siding with exposed panels exceeding 16 inches in width is prohibited.
3. For single-unit detached dwellings, except for earth sheltered homes, all exterior vertical surfaces of principal and accessory structures shall be treated as a front and have an equally attractive, or the same, fascia. Any exterior building finish shall consist of a combination of the following materials: wood, brick, natural stone, aluminum and glass, steel, or vinyl siding. Steel siding with exposed panels exceeding sixteen inches in width, shall not be permitted.
4. For single-unit attached and townhome dwellings, all exterior vertical surfaces of principal and accessory structures shall be treated as a front and have an equally attractive or the same fascia. At least 50% of any exterior building finish shall consist of a combination of materials which are noncombustible, nondegradable and maintenance free (for example, base brick, natural stone, glass and aluminum, steel or vinyl siding) or those comparable in grade and quality. No exterior building finish shall be sheet aluminum, asbestos, iron, steel, corrugated aluminum or untreated block.
5. Exterior building finishes for any multi-unit residential or non-residential structure shall consist of materials comparable in grade and quality to the following:
   a. Brick.
   b. Natural stone.
   c. Decorative concrete block - "rock face", "breakaway" or other types of decorative block.
   d. Cast in place concrete or precast concrete panels.
   e. Wood, provided the surfaces are finished for exterior use and wood of proven exterior durability is used, such as cedar, redwood, cypress.
   f. Curtain wall panels of steel, fiberglass and aluminum (nonstructural, nonload bearing), provided such panels are factory fabricated and finished with a durable nonfade surface and their fasteners are of a corrosion resistant design.
   g. Glass curtain wall panels.
   h. Stucco.
6. Color of exterior wall materials shall be compatible and complementary with brick and stone colors naturally occurring in the Upper Midwest.
   a. Non-earth tone materials shall be limited to architectural accents or signs.

b. The color of the non-brick or stone portion of the building shall match the predominant brick or stone color portion.

7. While variation in materials and colors that support the general theme may be allowed, the overall building shall have “360 degree” architecture. All side and rear wall surfaces shall use similar materials, colors, and architectural elements as the front wall surfaces.

   a. Any variations shall focus the highest level of architectural detail, material variation, façade articulation, or roofline enhancements on those elevations that face a public right-of-way.

8. Lots with multiple right-of-way frontages shall have all façades facing the rights-of-way treated equally in their level of architecture.

9. In the MX-1 District, the following standards shall apply:

   a. Exterior Walls Facing Public Right-of-Way

      i. Exterior wall surfaces excluding doors and windows shall be a minimum of 75% brick or natural stone.

      ii. A maximum of 20% specialty integral colored concrete block (including textured, burnished, and rock faced block) may be used for the base of the exterior wall.

      iii. A maximum of 10% EIFS, masonry stucco, or similar products may be used for architectural details such as cornices, dentil molding, parapets, or sign bands. Any other material used shall be compatible with the materials commonly used in the architectural style of the building (i.e. tile or polished metal for art deco style buildings).

   b. Exterior Walls Not Facing Public Right-of-Way

      i. Exterior wall surfaces excluding doors and windows shall be a minimum of 60% brick or natural stone.

      ii. The remaining 40% of the exterior wall surface may be specialty integral colored concrete block (including textured, burnished, and rock faced block), tile (masonry, stone or clay), architectural textured concrete panels cast in place, or better.

      iii. A maximum of 10% EIFS, masonry stucco, or similar products may be used for sign bands or architectural accents.

10. In the MX-2, B-1, and PI districts, the following standards shall apply:

    a. Exterior wall surfaces except for doors and windows shall be a minimum of 50% brick or natural stone.

    b. The remaining 50% of the exterior wall surface may be specialty integral colored concrete block (including textured, burnished, and rock faced block), tile (masonry, stone or clay), architectural textured concrete panels cast in place, or better.

    c. EIFS or masonry stucco may be used for the sign band areas and/or architectural accents totaling no more than 10% of the non-glass, brick, or stone portion of the building.

11. In the B-2 and I-1 districts, the following standards shall apply:

    a. Exterior wall surfaces facing a public right-of-way or residential uses or residential districts shall be constructed of a combination of glass, brick, natural stone, specialty

integral colored concrete block (including textured, burnished, and rock faced block), tile (masonry, stone or clay), architectural textured concrete panels cast in place, precast concrete panels or better.

b. All other wall surfaces shall be constructed of a minimum of 40% of these materials. The remaining 60% of these exterior wall surfaces may be finished steel or aluminum.

C. Façade Articulation

1. Façades shall be articulated to reduce their mass and scale and provide visual interest consistent with Rosemount's identity, character, and scale.

2. In the MX-1, MX-2, B-1, and PI districts, any wall more than 100 feet in length shall be divided into increments of no more than 30 feet through the articulation of the façade.

3. In the B-2 District, any wall more than 100 feet in length shall be divided into increments of no more than 35 feet through the articulation of the façade.

4. In the I-1 District, any wall more than 100 feet in length shall be divided into increments of no more than 50 feet through the articulation of the façade.

D. Architectural Elements

1. In the MX-1 District, the following architectural elements are required:

a. Façades facing a public right-of-way shall include a minimum of four architectural detail and variation elements, listed in subsection c. below, across the entire façade.

b. Façades not facing the public right-of-way shall include a minimum of one architectural detail and variation element, listed in subsection c. below, across the entire façade.

c. The following architectural detail and variation elements or similar elements may be used to increase the interest and compatibility of buildings:

i. Roofline Elements:

(a) Commercial and civic buildings

(1) Parapets

(2) Cornices

(3) Entablature

(4) Dentil molding

(5) Pediments

(b) Residential buildings

(1) Dormers

(2) Mansard roofs

(3) Hip roofs

(4) Clipped gables

ii. Window Elements

(a) Lintels, pediments

(b) Rounded pediments

(c) Hoodmolds

(d) Foils

(e) Chicago style windows

iii. Building Corner, Doorway, or Sub-façade Edge Elements

(a) Rusticated corners

(b) Gibbs surrounds

iv. Multiple-Story Façade Elements

(a) Pilasters

(b) Window columns

(c) Stone bases

v. Single-Story Or First Floor Commercial Elements

(a) Transom windows

(b) Clerestories

(c) Awnings

(d) Heighted parapet walls

(e) Arcades

(f) Colonnades

2. In the MX-1, MX-2, B-1, B-2, and PI districts, the following standards apply to architectural elements around entryways:

a. Primary building entrances facing a public right-of-way or abutting a required parking area shall be accented by visually pleasing entry elements. This element shall extend a minimum 300 square feet around a single entrance.

b. Should the building have more than one entrance facing a public right-of-way or abutting a required parking area, this element shall extend a minimum 150 square feet around each individual entrance.

E. Roofs in the agricultural and residential districts shall have the following minimum standards:

1. In the A-1, A-2, and RR districts, the main roofs shall have a minimum pitch of five to twelve (5:12) per definition of the applicable building code.

2. In the R-1 district, the main roofs shall have a minimum pitch of three to twelve (3:12) per definition of the applicable building code.

3. Roofs shall be shingled with asphalt, wood, tiles, sod or other comparable materials as approved by the applicable building code.

11-7-3 :Off-Street Parking and Loading Standards

A. Purpose and Intent: It is the intent of these regulations that off street parking be provided and maintained by each property owner for the use of occupants, employees and patrons. These

regulations are further intended to promote the safe and efficient storage, circulation, and channelization of motor vehicles on site to avoid undue congestion of the public streets.

B. Driveways

1. All driveways shall be surfaced with concrete or asphalt, and shall be defined by continuous concrete perimeter curbing.

2. Except for single-unit detached residential driveways, no driveway from private property entering a public or private street shall be less than 24 feet nor more than 36 feet in width (not including medians).

   a. One-way driveways shall be no less than 12 feet wide.

3. Single-unit detached residential driveways are subject to the following requirements when connecting to and within the street right of way:

   a. Maximum Width: They shall not exceed 22 feet in width (curb cut radii excluded).

   b. Encroachment: Curb cut radii shall not encroach upon the boulevard of abutting properties.

   c. Number of Curb Cuts: Only one curb cut shall be permitted from a street, provided:

      i. The required driveway setback shall be a minimum of five feet from interior lot lines, and the greater of the applicable front yard setback or the required sight triangle from the street side yard property line on corner lots. In the event that a lot of record does not have sufficient width to meet the applicable driveway standards, the width and placement of the required driveway shall be subject to the approval of the city engineer.

      ii. The proposed curb cut is in compliance with subsection 11-7-3 B.4 below of this title.

      iii. All district setback regulations for surface parking and impervious surface limitations are met.

      iv. A single-unit lot of record in the RR District may have a horseshoe or loop driveway, with no more than two curb cuts, subject to the following criteria:

         (a) The driveway must be constructed in accordance with the standards established by the City Engineer.

         (b) The property shall have a minimum width of 200 feet.

         (c) The top inner arc of the drive shall be located a minimum of 10 feet from the front property line.

         (d) No access shall be allowed to a non-city road where there is at least one other existing access to the property.

4. Requirements for Developments along Major Roadways

   a. One-unit and two-unit dwellings located on any street listed in subsection 11-7-3 B.4.c below shall be provided with, and shall maintain, a driveway that has a paved turnout or turnaround area that is so designed and located as to allow the safe and convenient turning of vehicles on the lot of the dwelling so that cars may avoid backing into such streets.

i. No certificate of occupancy will be issued for any such dwelling until such driveway is completed.

ii. The requirement of this subsection applies to dwellings that have not been issued a certificate of occupancy before the effective date hereof.

b. Driveways for one- and two-unit dwellings on corner lots having one side on a street listed in subsection 11-7-3 B.4.c below and one side on a street having a lower volume of traffic shall be constructed and maintained to the street with the lower volume of traffic and no closer than 63 feet from the corner of the lot nearest the intersection of the two streets.

c. Major roadways within the City include:

i. Auburn Avenue

ii. Bacardi Avenue

iii. Bloomfield Path

iv. Chippendale Avenue

v. Connemara Trail

vi. County Road 38

vii. County Road 42/150th Street

viii. County Road 46

ix. County Road 73/Akron Avenue

x. Diamond Path

xi. Emery Avenue

xii. Evermoor Parkway

xiii. Fahey Avenue

xiv. Fischer Avenue

xv. McAndrews Road

xvi. Pine Bend Trail

xvii. Rich Valley Boulevard

xviii. Shannon Parkway

xix. South Robert Trail

xx. STH 3

xxi. STH 52

xxii. STH 55

xxiii. 126th Street W

xxiv. 130th Street W

xxv. 140th Street W

xxvi. 145th Street W

xxvii. 160th Street W

C. Off-Street Parking Requirements

1. Compliance Required: In all districts except where exempt by subsection 5.c of this section, off street parking shall be provided as follows:

   a. New Construction: Full off street parking compliance is required for all newly erected buildings.

   b. Enlargement: Whenever a use or building requiring off street parking is increased in floor area or when interior building modifications or structural alterations result in an increase in effective capacity for any use, additional parking shall be provided in proper ratio to the increase in floor area or capacity.

   c. Change in Use: Whenever a building or use or part thereof is changed in usage such that the new use requires more parking than the old, the extent to which the use is changed shall be required to comply fully with the provisions of this title.

   d. Parking Lot Construction and Expansion: All new parking lots and improvements and extensions to existing lots shall comply fully with the requirements of this title.

2. Permits and Improvement Guarantees Required:

   a. Permits: Building permits shall be required for parking lot construction in all districts except for one- and two-unit dwellings.

   b. Improvement Guarantees: For any parking improvement for which a building permit is required, a performance bond, letter of credit or other financial guarantee, as approved by the city attorney, in the amount of 125% of the estimated construction cost shall be submitted prior to issuance of a building permit and retained until said parking improvement is completed and acceptable to the city. Where plant materials are used in lieu of a masonry screen wall, this portion of the financial guarantee shall remain in effect for a period of not less than one year after planting to ensure plant material life.

3. Limitations On Use:

   a. No commercial repair work or service of any kind, or sale or display thereof, or the storage of new or used vehicles which are not for the use of the occupant, employees, and patrons shall be conducted in such parking area.

   b. Off street parking once designated as required off street parking shall not be changed to any other use until equal facilities as required by this code are provided elsewhere.

   c. Off street parking existing at the date of adoption hereof in connection with the operation of an existing building or use shall not be reduced to an amount less than hereinafter required for a similar new building or use.

   d. Except while loading, unloading, or rendering a service in a designated loading area, no commercial trucks, truck-tractor, or semitrailer combinations shall be parked and/or stored longer than 24 hours. Semitrailers may not be used for outdoor sales, storage or display.

4. Location: All off street parking required by this chapter shall be located on the same lot and in the same district as the use of the property intended to be served. In the R districts, all required parking shall be located on the lot it is intended to serve.
5. Off Street Parking Spaces Required:
    a. Fractional Spaces: When determining the number of required parking spaces results in a fractional space, any fraction up to and including one-half (1/2) shall be disregarded and fractions over one-half (1/2) shall be rounded to require one additional space.
    b. The minimum number of off-street parking spaces required shall be as follows:

Table 7.1. Parking Spaces Required

Use	Minimum Parking Spaces Required
Residential	
Assisted living facility	1 per 4 client rooms
Continuing care senior facility	Parking provided to meet each use included in the facility
Cottage courtyard development	1.5 per unit
Dwelling, apartment	1.25 per studio or 1 bedroom unit 1.75 per 2 bedroom unit 2 per 3+ bedroom unit 1 additional guest space for every 5 units is required.
Dwelling, apartment mixed use	1 enclosed space per unit
Dwelling, attached townhouse or rowhouse	2 enclosed spaces per unit plus 0.5 space per unit within the common space for visitor parking
Dwelling, live/work	1 per unit plus 1 per 1,000 square feet of nonresidential GFA
Dwelling, single unit detached (includes manufactured home)	2 enclosed spaces per unit
Dwelling, three- to four-unit	2 enclosed spaces per unit
Dwelling, twinhome or two-unit	2 enclosed spaces per unit
Hotel or motel	1.25 per guestroom
Long-term or transitional care facility	1 per 5 client rooms
Manufactured home park	2 per unit
Residential care facility, licensed in-home	1 per 3 client rooms
Senior (55+) independent living	0.5 per bedroom plus 1 additional guest space for every 5 units

Use	Minimum Parking Spaces Required
Public, Social, & Institutional	
Day care center	1 per classroom, plus additional spaces necessary to accommodate the parking of vans and buses used for client transport by the center and 1 off-street loading space per 5 children
Educational services	1 per 4 persons of the maximum occupancy
Funeral home	1 per 4 persons of the maximum occupancy
Hospital	1 per 400 square feet GFA
Place of worship	1 per 4 persons of the maximum occupancy
Public assembly	1 per 4 persons of the maximum occupancy
Public or governmental services	1 per 300 square feet GFA
Medical or dental clinic or office	5 per doctor plus 1 per 300 square feet GFA
Municipal social, cultural, or recreational facility	1 per 4 persons of the maximum occupancy
School, elementary	1 space for each classroom plus 1 additional space for each 50 student capacity
School, secondary	1 per classroom plus 1 per 20 students
School, post-secondary	1 per classroom plus 1 per 5 students
Commercial	
Adult establishment	1 per 4 persons of the maximum occupancy
Animal boarding, shelter, or daycare center	1 per 300 square feet used for office space
Animal/veterinary clinic or hospital	1 per 400 square feet GFA
Art studio	1 per 1,000 square feet GFA
Automobile fuel station	1 per 2 gas pumps
Automotive repair and service, major	1 per 300 square feet GFA plus 1 per repair bay
Automotive repair and service, minor	1 per 300 square feet GFA plus 1 per repair bay
Bar or drinking place	1 per 4 persons of the maximum occupancy
Brewpub	1 per 4 persons of the maximum occupancy
Restaurant	1 per 4 persons of the maximum occupancy
Specialty food or coffee shop	1 per 4 persons of the maximum occupancy
Recreation facility, indoor	1 per 4 persons of the maximum occupancy

Use	Minimum Parking Spaces Required
Recreation facility, outdoor	50 per field or sports court plus 1 per 3 fixed seats for spectator area
Business or professional office	1 per 300 square feet GFA
Car wash	6 stacking spaces per wash stall
Commercial center	1 per 300 square feet GFA
Commercial event center	1 per 2 persons of the maximum occupancy plus 7 stalls
General repair, excluding automotive repair	1 per 300 square feet GFA
Health and athletic club facility	1 per 4 persons of the maximum occupancy
Landscape and horticultural service	1 per 300 square feet of office space, plus 1 for each company-owned truck (if stored outdoors)
Off-site service business	1 per 300 square feet of office space plus 1 space for each company-owned truck stored outdoors
Production studio, including motion picture, recording, television, and radio	1 per 300 square feet GFA
Showroom	1 per 500 square feet GFA
Standalone retail or service business	1 per 300 square feet GFA
Testing or research laboratory use	1 per 500 square feet GFA
Vehicle sales or rental	1 per 400 square feet GFA
Industrial	
Brewery, winery, or distillery	1 per 500 square feet GFA
Commercial bakery	1 per 300 square feet of office space plus 1 per 2,000 square feet
Data center	1 per 3,500 square feet GFA
Manufacturing	1 per 1,000 square feet GFA
Scrap or salvage yard	1 per 200 square feet of office space plus 1 per 2,000 square feet of outdoor yard space
Self-service storage facility	1 per 6,000 square feet of indoor storage area plus 2 visitor spaces
Storage and sale of machinery and equipment	1 per 300 square feet of office space plus 1 space per 2,000 square feet of outdoor yard space
Warehouse and distribution facility	1 per 2,000 square feet GFA
Wholesale trade establishment	1 per 2,000 square feet GFA

Use	Minimum Parking Spaces Required
Agriculture, Open Space, & Natural Resources	
Agriculture research and testing facility	1 per 200 square feet of office space
Commercial greenhouse or nursery	1 per 250 square feet of retail GFA, plus 1 space per 2,000 square feet of outdoor display area
Commercial horse stable	1 per 200 square feet of office space plus 2 visitor spaces
Utilities & Transportation	
Truck stop	1 per 300 square feet GFA
Truck terminal	1 per 200 square feet of office space plus 1 for each 1,250 square feet of outdoor yard space

1. GFA = Gross floor area.

2. Uses with multiple functions may be required to provide parking in accordance with more than 1 minimum standard.

3. Off-street parking requirements for uses not specifically mentioned herein shall be determined on an individual basis by the City Council. Factors to be considered in such determination shall include (without limitation) national parking standards, parking standards for similar businesses or land uses, size of building, type of use, number of employees, expected volume and turnover of customer traffic and expected frequency and number of delivery or service vehicles.

c. Off Street Parking Exceptions:

i. Compact Cars: Up to 15% of the parking required for a given use may be designed specifically for compact cars, provided:

(a) Signage is erected at appropriate locations indicating "For Compacts Only".

(b) Compact stalls are located in one continuous area and signage is erected at the parking lot entry showing directions to compact only parking.

(c) The minimum design and construction standards apply.

ii. Proof of Parking Required: Establishments shall be capable of providing the number of on-site parking spaces required by this chapter at any time said parking is needed. However, all such required parking need not be constructed initially if it is demonstrated by the owner to be in excess of the real parking demand. Future parking sufficient in quantity to meet the ordinance requirement shall be shown on the official site plan for which a building permit request is made and said parking shall be constructed at the discretion of the city if it proves to be needed later.

iii. Central Business District: Uses constructed in the MX-1 District shall be exempt from this section except that all such parking provided shall comply with the parking design standards in subsection C.7 below of this section.

6. Joint Use of Parking Areas:

a. Two or more buildings or uses may collectively provide off street parking in which case the required number of parking spaces shall not be less than the sum of the requirements for the individual uses computed separately.

b. In the case of the joint use of off-street parking spaces where operating hours do not overlap, the board of appeals and adjustments may grant an exception to allow the total parking required to be reduced below the sum total of the individual uses provided a copy of an agreement between joint users is filed with the application.

7. Off Street Parking Design and Construction Standards:

Table 7.2. Minimum Parking Construction Standards

Minimum Requirements						
Parking Angle (Degrees)	0°	30°	45°	60°	75°	90°
Full size cars:						
Maneuvering lane width	12’	12’	14’	18’	21’	24’
Parking space width	8’	8.5’	8.5’	8.5’	8.5’	8.5’
Parking space length	22’	18’	18’	18’	18’	19’
Bay dimension (1 tier)	20’	29’	41’	38’	41’	43’
Bay dimension (2 tiers)	28’	46’	61’	58’	61’	62’
Compact cars:						
Maneuvering lane width	12’	12’	12’	16’	19’	22’
Parking space width	7.5’	8’	8’	8’	8’	8’
Parking space length	20’	16’	16’	16’	16’	17’
Bay dimension (1 tier)	19.5’	27’	29’	34’	37’	39’
Bay dimension (2 tiers)	27’	42’	46’	52’	55’	56’

a. Handicapped parking shall be provided as required by the applicable building code.

b. Bumper Overhang: The minimum parking space length may be decreased by up to two feet for spaces which allow the bumper of the auto to project beyond the terminus of the parking space without obstructing other parking spaces or vehicle circulation.

c. Maneuvering Lanes: All maneuvering lanes shall permit only one-way traffic movements with the exception of the 90 degree (90°) pattern where two-way traffic may be permitted. Each parking space shall have direct unimpeded access to a maneuvering lane and dead end maneuvering lanes shall only be permitted with the 90 degree (90°) pattern which is designed to accommodate two-way traffic.

d. Driveways and surface parking shall be set back from adjacent property lines in Table 7.3 below:

Table 7.3 Required Parking Setbacks

District	Required Setbacks (ft.)		
	Front	Side	Rear
A-1	50	5	5
A-2	50	5	30
RR	40	5	5
R-1		5	5
R-2	30	5' Townhouses and non-residential uses: 10'	5' Townhouses and non-residential uses: 10'
R-3	30	10	10
R-4	30	10	10
MX-1			
MX-2	20	10	10
B-1	20	10	10
B-2	20	10	10
I-1	40	25	50
I-2	75	75	75
PI	20	10	10

e. Driveways and surface parking shall have increased setbacks when located adjacent to freeways and arterial highways as designated by the transportation element of the comprehensive plan to provide space for earthen berms, buffer yards, or planting strips as follows:

   i. 10 feet from a minor arterial highway

   ii. 20 feet from a principal arterial (freeway)

f. Surfacing: All parking lots and drives other than for a single-unit detached residence without public sewer shall be paved with a concrete or bituminous surface in accordance with standards as established by the city. All parking spaces shall be striped with suitable paint in accordance with approved plans except for single-unit detached residences.

g. Curb and Gutter and/or Barriers: All parking lots, access roads, driveways, alleys, circulation drives, loading, stacking, and maneuvering areas shall have concrete curb and gutter not less than six inches above the adjacent pavement surface grade on the edges of all pavement surfaces to channelize the flow of traffic, define parking utilization and conflict minimization, and to facilitate drainage and provide maximum protection to pavement integrity.

h. Drainage: All parking lots shall have a drainage system which is approved by the city.

i. Screening: When a required off street parking lot for six or more cars is located adjacent to an R district, landscaping and berming to meet 90% opacity year-round must be provided along the R district property line. In certain situations, the city may consider, but not necessarily approve, installation of a fence or screen wall not more than six feet in height but not within the required front yard.

j. Lighting: Lighting shall be so arranged to deflect the light away from R districts and public streets.

k. Maintenance: It shall be the joint responsibility of the operator and owner of any principal use to maintain, in a neat and aesthetic manner, the parking space, accessway, landscaping and required fences and walls.

l. Exception: The off-street parking and design and construction standards may be waived by the city upon issuance of an interim use permit (IUP) for temporary buildings in the I-1 District.

D. Off-Street Loading Requirements

1. Loading facilities shall be provided for every retail establishment, warehouse, manufacturing or industrial use, in excess of 10,000 square feet gross floor area, with a general requirement of one dock or berth per 75,000 square feet gross floor area (loading facilities include docks, berths and maneuvering area).

2. All docks shall be located within the perimeter of the structure housing the principal or accessory use and shall be completely enclosed.

3. Off street loading spaces shall be equal to at least 10 feet by 40 feet, excluding maneuvering area.

4. At no time shall any vehicle be permitted to extend into a pedestrianway or public right of way while loading or unloading.

5. All berths shall be screened from view of all dissimilar abutting zoning districts by plant materials, walls, earthen berms, fences or combinations thereof.

11-7-4 :Pedestrian Circulation Standards

A. In all non-residential districts, appropriate provisions shall be made to protect pedestrian areas from encroachments by parked or moving vehicles:

1. Clear and well lighted walkways shall extend throughout the site and parking area(s) connecting building entrances to adjacent public sidewalks and any parking facilities located on the site.

2. A walkway at least six feet wide shall extend along any façade featuring a building entrance and any façade abutting a required parking area.

3. Concrete sidewalks, five feet in width, shall be provided along any collector or arterial street.

4. Walkway(s) shall be made of high quality, long lasting, and decorative materials and incorporate architectural themes present in the surrounding building. Bituminous or asphalt materials are prohibited.

11-7-5 :Fencing Standards

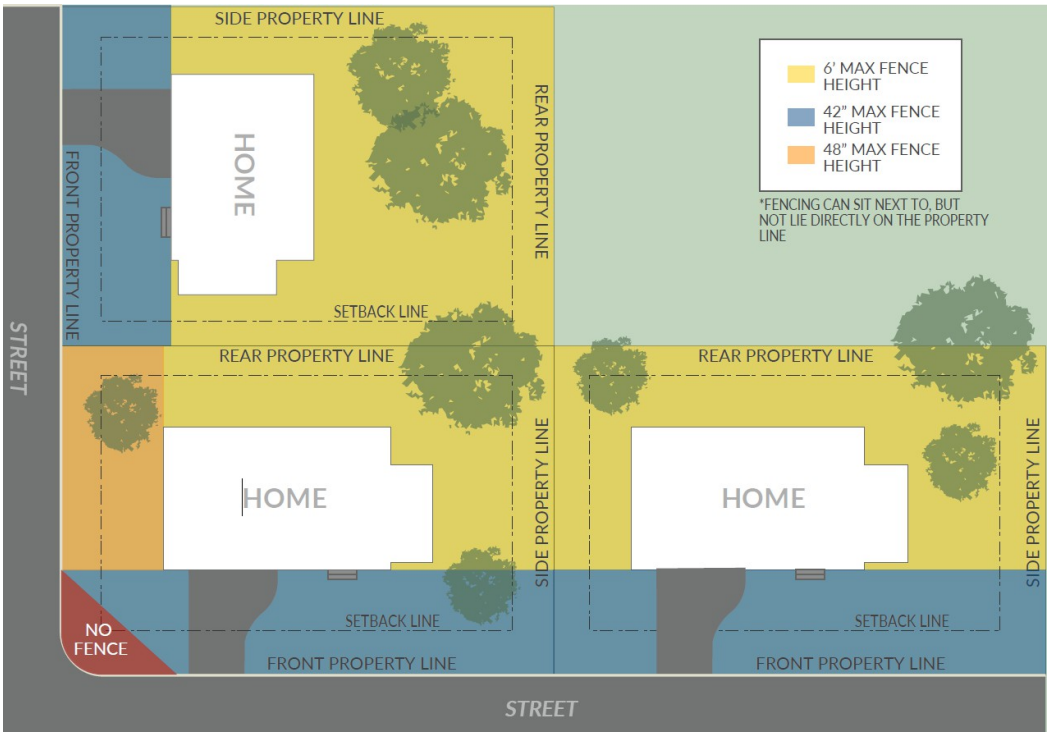
A. General Provisions

1. All fences shall require a fence permit from the City unless otherwise specified in this section.
2. All fences shall be maintained in accordance with section 9-4-7, "Public Nuisance Defined", of this code and all other applicable sections of this code.
3. All fences located in recorded easements are the sole risk of the property owner; and the cost of any removal, relocation, or placement of said structures caused by any activity permitted in said easements is the sole responsibility of the property owner.
4. Fences may be installed up to but not on the property line.

B. Fence Height

1. Fences and walls in residential districts shall be subject to the following maximum heights:
   a. Six feet in the rear or side yard
   b. 42 inches in the front yard
   c. 48 inches in street side yards of corner lots that abut another front yard, provided that no structure shall interfere with sight distances for vehicles approaching intersections.

Figure 7.1. Fence Height Standards



2. Fences and walls in non-residential districts shall not exceed eight feet in height. Along property lines adjacent to residential districts, the appropriate maximum fence height for residential districts shall apply.

C. Materials and Construction:

1. Every fence shall be constructed in a workmanlike manner of substantial materials widely accepted in the fencing industry and reasonably suited for the purpose for which the fence is intended.
2. The side of any fence considered to be its "face" (i.e., the finished side having no structural supports) shall face the abutting property or street right of way.
3. No plywood boards, canvas, plastic sheeting, metal sheeting or similar materials shall be used for any fence construction.
4. Link fences shall be constructed in a manner that no barbed ends shall be at the top.
5. Barbed wire and electric boundary fences not exceeding six feet in height shall only be permitted in the AG, AG-P, and RR districts when related to agricultural or permitted uses relative to animal husbandry.

D. Security Fences:

1. Security fences not exceeding eight feet in height are permitted in the I-2 District and may be permitted in the PI District with a conditional use permit. Said security fences are subject to the applicable standards listed below and throughout this title:

a. Security fences in the PI district shall meet the conditional use standards in 11-9-3 of this title.

b. Barbed wire may be permitted on top of a security fence where the applicant demonstrates the barbed wire is necessary for greater security and will not be harmful to the health, safety, or welfare of the community.

c. The barbed wire portion of the fence may not have more than three strands, the lowest of which shall be at least six feet from finished grade.

d. No portion of the barbed wire shall project over the public right of way or any adjacent public or private property.

2. No security fence (with or without barbed wire) shall be constructed without issuance of the applicable city permit.

E. Temporary or Seasonal Fences: Temporary or seasonal fences (such as snow fences, erosion control fences, fences to protect newly seeded areas and the like) are allowed without a permit provided:

1. No such fence may be left in place for more than six months without written city approval; and

2. Any such fence must be removed within 15 days of the city providing written notice to the landowner that the city has determined the fence no longer serves its originally intended temporary or seasonal purpose.

11-7-6 :Landscaping, Screening, and Buffering Standards

A. Landscaping

1. General

a. Landscaping Required.

i. All areas of land other than those occupied by building or hardcover shall be landscaped with a combination of sod and plantings.

(a) Rock or mulch may only be used as an accent material around sod or plantings.

(b) Trees, shrubs, flowers, and ground cover needed in these areas shall be in addition to the minimum number of trees and foundation plantings required by subsection 2 below.

ii. Portions of the site may be exempt from these requirements with City approval where future development or expansion is planned within a reasonable period of time.

(a) These areas shall either be graded and seeded with native vegetation or maintained grass in accordance with the City of Rosemount grading requirements or remain as undisturbed natural areas containing existing viable natural vegetation that can be maintained free of foreign and noxious plant material and will not produce soil erosion due to potential increases in stormwater runoff.

b. Detailed landscaping plans shall be required in all development proposals requiring site plan review. Landscaping plans shall be prepared consistent with the general site plan requirements in section 11-9-1 of this title.

c. Grade: Final grades in all developments shall not exceed a three to one (3:1) ratio unless plans for retaining walls, terraces, or similar controls have been approved by the City.

d. Planting Materials: All planting materials used in site developments shall be indigenous to the appropriate hardiness zone and physical characteristics of the site.

e. Standards: All stock to be planted (shade and flowering trees, deciduous shrubs, coniferous evergreens, broad leaf evergreens, roses, vines and ground covers and fruit trees) must follow the standards set forth by the "American Standards for Nursery Stock" as adopted by the American Association of Nurserymen.

f. Materials In Healthy Condition: All planting materials shall be disease free and able to survive in assigned locations in a healthy condition with the benefit of only minor maintenance.

g. Boulevard Trees: All boulevard trees proposed to satisfy the minimum requirements shall be long lived hardwood species and guaranteed for no less than one full growing season from completion of site planting.

h. Shade Trees: When entire streets or blocks are proposed for development, shade tree species must be diversified so each side of a city block would contain at least 3 different varieties of tree genera with at least two different species (if same genus used more than once).

i. Exception: The required plantings may be waived by the city council upon issuance of an interim use permit (IUP) for temporary buildings in the general industrial district.

j. Damaged, diseased, or dead landscape materials shall be replaced so that the requirements of this chapter are met at all times. This requirement shall run with the land and be binding upon all future property owners.

2. Required Tree and Foundation Plantings:

a. All residential one- and two-unit developments shall require one deciduous tree per street frontage.

i. This tree shall be placed within the street side yard.

ii. The trees must be planted before the issuance of an occupancy permit. If occupancy occurs during the non-planting season, a bond or other guarantee acceptable to the City in an amount determined by the City may be posted for landscaping installation.

b. All multi-unit residential, mixed-use, and non-residential uses:

i. Each multi-unit residential site shall provide a minimum of 1 overstory or coniferous tree per 1,000 square feet of land area. Spacing between the trees shall be a maximum of 50 feet along the perimeter of the site adjacent to any roadway.

ii. Each mixed-use or non-residential site shall provide a minimum of 1 overstory tree per 3,000 square feet of land area. Spacing between the trees shall be a maximum of 50 feet along the perimeter of the site adjacent to any roadway.

iii. One linear foot of foundation planting per 10 linear feet of any principal or accessory structure perimeter.

iv. At least 50% of the total number of required overstory trees shall be deciduous. All trees planted along the site perimeter adjacent to a roadway shall be of shade or flowering tree types.

v. All landscaped areas shall be irrigated.

c. Credit For Existing Trees: Credit for the retention of existing trees which are of acceptable species, size and location may be given to satisfy the minimum number of requirements set forth in this section.

3. Minimum Planting Standards. All trees installed to meet the requirements of this section shall meet the minimum planting size as identified in Table 7.3.

Table 7.4. Minimum Planting Size at Installation

Vegetation Type	**Minimum Planting Size at Installation**
Overstory deciduous tree	2.5 caliper inches
Overstory coniferous tree	6 feet in height
Foundation plantings – shrubs	1/3 the mature spread and height

4. Planting Location. Planting materials within landscape designs shall be compatible with planned site use. As a result, trees and shrubs (except low creeping shrubs) shall not be planted:

a. Under existing or planned utility lines when the mature height and spread of the planting may conflict with utility lines.

b. Over existing or planned utility lines so that upon plant maturity the root system conflicts with the utility lines.

c. So that upon mature height and width of plant growth its form conflicts with local vehicular or pedestrian traffic.

d. So that upon mature height and width of the plant its growth habits would conflict with any public service or safety device such as stop signs, traffic lights, streetlights, etc.

e. Any closer than 15 feet from any fireplug.

f. Any closer than 30 feet from any intersection as measured from the back of the curb line.

5. Parking Lot Landscaping

a. All parking areas for multi-unit residential, mixed-use, and non-residential developments (including driveways and drive aisles) shall be screened and landscaped subject to Planning Commission review to reduce the impact of large expanses of paved surfaces, provide a more pedestrian friendly environment and provide adequate room for snow storage.

b. Trees, shrubs, flowers, and ground cover needed in these areas shall be in addition to the minimum number of trees and foundation plantings required by this title.

c. Required Landscaping

i. In the MX-1, MX-2, B-1, and PI districts, a minimum of 10% of the parking area shall be landscaped.

ii. In the B-2 and I-1 districts, a minimum of five percent of the parking area shall be landscaped.

iii. This landscaping shall be located on islands or peninsulas within the parking area or along its perimeter.

(a) The islands or peninsulas shall be a minimum eight and one-half feet wide with a minimum area of 324 square feet. These dimensions may be altered to provide sufficient area for the proposed landscaping to mature.

(b) To ensure this landscaping is properly dispersed, a minimum of one island, peninsulas or the like shall be located within each 6,000 square feet of vehicular use area.

iv. A minimum of one tree meeting the standards in subsection A.3 above shall be required for each 10 parking spaces. The remaining area shall be landscaped with shrubs or ground cover (not to include rocks or gravel except as a mulch around shrubs and ground cover) not to exceed two feet in height.

d. When the internal planting islands are required, the island boundaries shall be constructed of concrete nondegradable material. The interior depth and total area of the island must allow the root zone of all planted materials to develop to their natural growth potential.

6. Landscaping Performance Security: The city may, at its option, withhold occupancy certification or require cash, a letter of credit or a bond satisfactory to the city in the amount of 110% of the value of the landscaping, securing the full performance of landscaping requirements. The amount of the security shall be determined by the contract value of the required improvements and may be held by the city for one full year from the date improvements were completed.

B. Screening

1. Screening shall be used to provide a visual and noise separation of more intensive uses from less intensive uses.

a. Where natural materials such as trees, hedges, or berms are approved in lieu of required screening by means of walls or fences, the density and species of such plantings shall be such to achieve 90% opacity year-round at a height of six feet.

b. Conifers used for screening must meet overstory planting requirements.

2. For all multi-unit residential, mixed-use, and non-residential uses, the following site elements shall be screened from public streets and adjacent R-1 and R-2 districts in compatibility with the design elements, materials, and colors used elsewhere on the site:

a. Parking areas

i. Landscaping and berming shall be a primary source for screening parking areas. Should landscaping and berming be found ineffective by the City, the City may approve screening walls and/or decorative fencing as an alternative.

(a) Screening walls shall be constructed of the same materials as the principal building.

(b) In the MX-1, MX-2, B-1, and PI districts: Screening walls shall not extend more than 25 feet without a change in architecture or landscaping accent to reduce their mass and appearance.

(c) In the B-2 district, screening walls shall not extend more than 35 feet without a change in architecture or landscaping accent to reduce their mass and appearance.

(d) In the I-1 district, screening walls shall not extend more than 70 feet without a change in architecture or landscaping accent to reduce their mass and appearance.

ii. Parking area screening shall provide a minimum 50% opacity screen to a height of at least four feet.

b. Loading areas

i. In B-2 and I-1 districts, the above screening standards also apply to loading areas. In addition, no loading area may face a public right of way or nonindustrial use or district.

ii. Loading area screening shall provide a minimum 90% opacity screen to a height of at least 18 feet.

c. Rooftop utilities

i. The ground level view of all rooftop equipment, including, but not limited to, rooftop structures related to elevators and other mechanical utilities, shall be screened from public right-of-way and adjacent or nearby residential uses and districts.

ii. Screening should be accomplished by incorporating architectural building design features such as a parapet wall or sloping roof structures.

iii. Wood fencing shall not be permitted.

iv. If due to factors unique to the property or the project, it is physically impossible or impractical to screen these utilities, the City's Planning Commission may approve alternative solutions that render them aesthetically compatible with the building.

d. Refuse and recycling containers

C. Buffering

1. Buffering in the MX-1 District

a. Where the MX-1 District abuts a residential district, a 10-foot-wide buffer yard shall be required.

b. This buffer shall contain no structures, shall not be used for parking, off street loading or storage, and shall be landscaped.

c. Landscaping shall include sod or seeded grass or native vegetation and planting of trees and shrubbery.

2. Buffering in the MX-2, B-1, B-2, I-1, and PI Districts

    a. In the MX-2, B-1, B-2, I-1, and PI districts, a buffer yard equal to 30 feet or two times the height of the building, whichever is greater, shall be required along any side or rear property line abutting any residential or institutional use or district. Institutional uses abutting institutional uses or districts shall not be required to provide a buffer.

        i. The minimum buffer yard for any single occupancy building with a footprint equal to or larger than 40,000 square feet, but not greater than 100,000 square feet, shall be increased by 50% of the required buffer yard.

        ii. Buffer yards for buildings with a footprint exceeding 100,000 square feet shall be increased by 100%.

    b. This area shall contain landscaping and berming to provide a 90% opacity screen to a height of at least six feet and shall not contain any structures, parking, off street loading, or storage.

    c. Should landscaping and berming be found ineffective by the city, the city may approve screening walls and/or decorative fencing as an alternative.

        i. Screening walls shall be constructed of the same materials as the principal building.

        ii. Screening walls in the MX-2, B-1, and PI districts shall not extend more than 25 feet without a change in architecture to reduce their mass and appearance.

        iii. Screening walls in the B-2 and I-1 districts shall not extend more than 35 feet without a change in architecture to reduce their mass and appearance.

11-7-7 :Tree Preservation Standards

A. Findings and Purpose Statement: The city council finds it is in the best interest of the city to protect, preserve, and enhance the natural environment of the community and to encourage a resourceful and prudent approach to the development and alteration of wooded areas. In the interest of achieving these objectives, the city has established the comprehensive tree preservation regulations herein to promote the furtherance of the following:

    1. Protection and preservation of the environment and natural beauty of the city;

    2. Assurance of orderly development within wooded areas to minimize tree and habitat loss;

    3. Evaluation of the impacts to trees and wooded areas resulting from development;

    4. Establishment of minimal standards for tree preservation and the mitigation of environmental impacts resulting from tree removal;

    5. Provision of incentives for creative land use and environmentally compatible site design which preserves trees and minimizes tree removal and clear cutting during development; and

    6. Enforcement of tree preservation standards to promote and protect the public health, safety and welfare of the community.

B. Application: The provisions of this section shall apply to all subdivision, grading permits, or construction, except for preliminary plats approved by the city prior to the adoption hereof.

C. Process:

1. For Developers: Unless otherwise determined by the city council, the following process for preserving trees shall be required from the developer:

    a. Prepare a tree preservation plan which shall be incorporated on the grading plan.

    b. Implement the tree preservation plan prior to and during site development.

    c. Submit a performance of financial guarantee for compliance with the approved tree preservation plan.

    d. Comply with the city's tree replacement procedure.

    e. The tree preservation plan shall be submitted with preliminary plat plans or as part of the application for a grading permit. The tree preservation plan must be certified by a forester, landscape architect, or nurseryman retained by the developer.

    f. The plat and grading plans will not be approved by the city without an approved tree preservation plan. In the case of grading permit applications, the tree preservation plan will be approved by the Zoning Administrator. This decision may be appealed directly to the city council.

2. For Home and Business Owners: The following process for preserving trees shall be required from the home and business owner if trees are being removed during grading or construction:

    a. Identify:

        i. The significant trees and heritage trees on the property.

        ii. The significant trees and/or heritage trees to be removed due to grading or construction.

        iii. Protection measures used to protect the preserved trees during grading or construction.

    b. Comply with the city's tree replacement procedure.

    c. The tree preservation plan shall be submitted with the grading permit or building permit application. The tree preservation plan may be prepared by the applicant of the grading permit or the building permit. The tree preservation plan will be approved by city staff. This decision may be appealed directly to the board of appeal and adjustments.

D. Tree Preservation Plan:

1. The developer shall be responsible for implementing the tree preservation plan prior to and during site grading and plan development.

2. The tree preservation plan will be reviewed by the Zoning Administrator to assess the best overall design for the project taking into account significant trees and ways to enhance the efforts of the developer to mitigate corresponding damage.

3. The developer is encouraged to meet with staff prior to submission of the preliminary plat application or prior to application for the grading permit, whichever is sooner, to determine the placement of buildings, parking, driveways, streets, storage and other physical features which result in the fewest significant trees being destroyed or damaged.

E. Mandatory Protection: Measures to protect significant trees shall include:

1. Installation of snow fencing, silt fence, or polyethylene laminate safety netting placed at the drip line of significant trees to be preserved.
2. Identification of any oak trees requiring pruning between April 15 and July 1; any oak trees so pruned shall be required to have any cut areas sealed with an appropriate tree wound sealant.

F. Discretionary Protection: Measures to preserve or protect significant trees, which may be required by the city, include, but are not limited to:

1. Installation of retaining walls or tree wells to preserve trees by eliminating the filling or cutting of soil within drip zones.
2. Placement of utilities in common trenches outside of the drip line of significant trees, or use of tunneled installation.
3. Prevention of change in soil chemistry due to concrete washout and leakage or spillage of toxic materials, such as fuels or paints.
4. Use of tree root aeration, fertilization, and/or irrigation systems.
5. Transplanting of significant trees into a protected area for later moving into permanent sites within the construction area.
6. Safety pruning.

G. Significant Tree Removal:

1. Heritage Trees:
   a. Heritage trees are unique trees to Rosemount due to their size and age.
   b. All possible measures shall be taken to preserve these trees.
   c. Heritage tree removal may occur only when there is not a practical alternative, such as the alignment of a collector or arterial street or the installation of a trunk utility corridor. There is a 0% removal threshold on heritage trees, meaning every caliper inch of heritage tree removed will require replacement in accordance with the standards of subsection I below.
2. Significant Tree Removal for Developments:
   a. Applicant shall retain the maximum amount of significant trees possible.
   b. 25% of the existing caliper inches of significant trees may be removed during development without obligation of replacement.
   c. Any removal beyond 25% will require replacement as described in subsection I below.
3. Significant Tree Removal for Home and Business Owners:
   a. 10% of the existing caliper inches of trees may be removed during home or business construction without obligation of replacement.
   b. Any removal beyond 10% will require replacement as described in subsection I below.
4. Trees Exempt from Replacement: The following types of trees shall not be included as part of the tally of tree removals and shall not be required to be replaced:

a. Dead, diseased, or dying trees;

b. Invasive species

c. Trees that are transplanted from the site to another appropriate area within the city; or

d. Trees that were planted as part of a commercial business such as a tree farm or nursery.

H. Financial Guarantee: Refer to subsection 11-7-6A.6 above.

I. Tree Replacement

1. Tree Replacement Formula: Replacement of removed or disturbed trees in excess of the percentage allowed by this subsection shall be according to the following guidelines:

   a. For development which exceeds the percentage of allowable removal of significant trees, all significant trees shall be replaced at the ratio of one-half (0.5) caliper inch per one caliper inch removed.

   b. For each heritage tree removed by the developer, all heritage trees shall be replaced at the ratio of one caliper inch per one caliper inch removed.

2. Size, Types, and Diversification of Replacement Trees: Replacement trees shall be of a similar species to those that are removed, but also shall be a minimum of 25% conifers and 25% deciduous hardwoods. Required heritage tree replacement must be of the same species as the heritage tree removed. Replacement trees must be no less than the following sizes:

   a. Deciduous trees shall be no less than two and one-half (2.5) caliper inches; and

   b. Coniferous trees shall be no less than six feet high.

3. Acceptable Tree Replacement Species: The following list of trees are acceptable for tree replacement species. The city may, at its discretion, approve additional species if circumstances such as soil conditions, hydrology, topography, or recent tree diseases warrant.

   a. Black cherry

   b. Cedar

   c. Fir

   d. Hickory

   e. Linden

   f. Maple (except silver maples)

   g. Oak

   h. Pine

   i. Spruce

   j. Walnut

4. Other Replacement Tree Requirements: Choice of replacement trees species and location of the trees should also be contingent on the following information:

a. Soil Composition: Comparisons should be made between soil conditions and the ecology of the proposed species to make sure they are compatible.

b. Spatial Requirements: The potential height and crown spread of the proposed replacement trees should be known. Usually, half of the adult tree crown diameter is the amount of distance a tree should be planted from any aboveground objects.

c. Diseases and Insect Problems: Appropriate replacement choices shall also consider insect and disease problems that may be common with particular species in the part of the state in which the City of Rosemount is located.

5. Fee in Lieu of Tree Replacement or Replacement Trees Planted in Public Areas: The City recognizes that there may be instances where the total amount of tree replacement required cannot occur on site or that there are some land uses (such as refining) that are not compatible with trees. In those instances, the City may, at its option, accept a fee in lieu of tree placement or allow the planting of replacement trees in public areas. Tree replacement is encouraged to happen on site as much as possible and fee in lieu of tree replacement should be used only when replacement cannot occur on site. The fee in lieu of tree replacement will be determined annually by the City Council through the City fee schedule.

11-7-8 :Lighting Standards

A. Lighting shall be consistent in character throughout the entire property site, in both design and bulb type.

B. Any light fixture must be placed in such a manner that no light emitting surface is visible from any residential area or public/private roadway, walkway, trail or other public way when viewed at ground level.

C. Light shall be directed toward the ground. Externally lit signs, display, building, and aesthetic lighting must be lit from the top and shine downward. Lighting must be shielded to prevent direct glare.

D. The level of lighting shall not exceed 0.5 lumens at any residential property line or 1.0 lumen at any nonresidential property line.

E. All nonessential lighting will be required to be turned off after business hours, leaving only the necessary lighting for site security.

F. Maximum Height

1. The maximum height for exterior lighting is 30 feet. The maximum height for exterior lighting within 100 feet of a residential use or district shall be 20 feet.

2. In the PI district, the maximum height for ball field lights is 80 feet. The minimum setback for such lights shall be no less than the height of the light.

TITLE 11 ZONING REGULATIONS

CHAPTER 8 SIGNAGE

11-8-1 :Purpose:

A. It is not the purpose or intent of this sign ordinance to regulate the message displayed on any sign nor is it the purpose or intent of this chapter to regulate any building design or any display not defined as a sign or any sign which cannot be viewed from outside a building.

B. The purpose and intent of this chapter is to:

1. Regulate the number, location, size, type, illumination and other physical characteristics of signs within the city in order to promote the public health, safety and welfare.
2. Maintain, enhance and improve the aesthetic environment of the city by preventing visual clutter that is harmful to the appearance of the community.
3. Improve the visual appearance of the city while providing for effective means of communication consistent with constitutional guarantees and the city's goals of public safety and aesthetics.
4. Provide for fair and consistent enforcement of the sign regulations set forth herein under the zoning authority of the city.
5. Promote the economic development and welfare of the city and its residents by allowing for the temporary promotion of the sale and use of real estate.
6. Protect individual property rights consistent with constitutional guarantees.
7. Safeguard and enhance property values.
8. Encourage signs which by their design are integrated with and harmonious to the surrounding environment and the buildings and sites they occupy.
9. Control nuisances.
10. Eliminate or minimize hazards to motorists and pedestrians using the public streets, sidewalks, and rights of way.
11. Promote the use of new and changing technology to enhance variety and flexibility in signage, while maintaining certain restrictions to protect the public safety and welfare.

11-8-2 :Administration and Enforcement

A. Permit Required: Except as noted elsewhere in this chapter, no sign shall be erected, altered, improved, reconstructed, maintained, or moved in the city without first securing a permit from the city:

1. The content of the message or speech displayed on the sign shall not be reviewed or considered in determining whether to approve or deny a sign permit.
2. Application for a permit shall be filed by the property owner or designated agent with the Zoning Administrator on forms provided by the city.
3. The application shall be accompanied by a fee as established by city council resolution.

4. The community development department designee shall notify the applicant, in writing, of an incomplete application within 15 days of the date of submission.
5. The community development department designee shall review the application and related materials and shall determine whether the proposal is in compliance with all applicable evaluation criteria, codes, ordinances, and applicable performance standards set forth in this title within 60 days of submission of a complete application in accordance with Minnesota statutes, section 15.99.

B. Nonconforming Signs and Uses:

1. Nonconforming Signs: A nonconforming sign lawfully existing upon the effective date of this chapter shall be regulated in accordance with section 11-1-8 of this title.
2. Nonconforming Uses: When the principal use of land is legally nonconforming under section 11-1-8 of this title, all existing or proposed signs in conjunction with that land use shall be considered conforming if they are in compliance with the sign provisions for the most restrictive zoning district in which the principal use is allowed.

C. Enforcement And Penalties:

1. Administration: This chapter shall be administered and enforced by the community development department designee. The Zoning Administrator may institute in the name of the city appropriate actions or proceedings against a violator.
2. Inspection: All signs for which a permit is required shall be subject to inspection by the community development department designee.
3. Removal At Owner's Expense: The city reserves the right to require the removal at the owner's expense of any sign when the requirements of this section are not completely followed and adhered to, or if a sign is not properly maintained or falls into a state of disrepair. The city shall not have any obligation or liability to replace any sign when removed by the city.
4. Misdemeanor: Any person who violates, disobeys, omits, neglects or refuses to comply with, or resists the enforcement of any of the provisions of this chapter shall, upon conviction thereof, be fined or penalized not more than the maximum levels established by the state for misdemeanor offenses.

11-8-3 :General Regulations

A. Construction and Placement

1. No sign, except official signs, may be located within the public right of way, a corner sight triangle, or any easement.
2. Except in the MX-1 District and as otherwise regulated herein, all freestanding signs shall be set back at least 10 feet from any property line.
3. No sign shall be erected in or overhang upon a public right of way or otherwise interfere with safe pedestrian or vehicular movement, except official signs.
4. No sign or sign structure shall be permitted to interfere with the safe access to doors, windows or fire escapes. No sign or sign structure shall be attached to a standpipe or fire escape.

5. Electrical signs shall be installed according to state electrical codes and shall require underground wiring.
6. No sign may contain more than two sides.
7. No sign shall be attached or be allowed to hang from any building until all necessary wall and roof attachments have been approved by the Zoning Administrator designee.
8. Illuminated signs shall be shielded to prevent lights from being directed at oncoming traffic in such brilliance that it impairs the vision of the driver and may not interfere with or obscure traffic signs or signals. Lighting may not illuminate any adjacent properties, buildings or streets.
9. No sign shall be erected, placed, or located upon private property without the permission of the property owner. This includes obtaining permission of the adjacent property owner for any sign placed in the public right-of-way.

B. All signs shall be maintained in a safe, presentable and good structural condition at all times, including the replacement of defective parts, cleaning and other items required for maintenance of the sign.

C. Landscaping

1. Subject to the standards of the individual zoning district in which the sign is placed, the area around freestanding signs shall be landscaped with plantings and maintained in such a manner to accent and enhance the sign while remaining sensitive to the natural features of the site.
2. Vegetation around, in front of, behind, and underneath the base of ground signs for a distance of 10 feet shall be neatly trimmed and free of weeds, and no rubbish or debris that would constitute a fire or health hazard shall be permitted under or near the sign.

D. The Planning Commission and/or City Council may recognize separate sign plans for a project, site, or multi-building PUD which will supersede this chapter. The sign plans which have been approved by the city will have the effect of a sign ordinance for the specific project, site, or multi-building PUD.

11-8-4 :Prohibited Signs

The following signs shall not be permitted, erected, or maintained on any property within the City:

A. Hazardous Sign: Any sign or sign structure which:

1. Is structurally unsafe;
2. Constitutes a hazard to safety or health by reason of inadequate maintenance, dilapidation, or abandonment; or
3. Is not kept in good repair.

B. Traffic Hazard

1. Any sign, signal, marking or device which purports to be or is an imitation of or resembles any official traffic control device or railroad sign or signal, or emergency vehicle signs, or which attempts to direct the movement of traffic or which hides from view or interferes with the effectiveness of any official traffic control device or any railroad sign or signal.

2. Any sign which contains colors, shapes, intermittent lighting or words such as "stop", "warning", "caution", etc., which may be confused with traffic signing or controls unless such signs are intended or approved for such use.

C. Content classified as "obscene" as defined by Minnesota Statutes, section 617.241.

D. All signs over 250 square feet in area.

E. Audio speakers or any form of pyrotechnics in association with any sign.

F. Inflatable signs.

G. Off premises signs except those specifically allowed by this chapter.

H. Permanent freestanding or wall mounted signs supported by guywires.

I. Portable signs except as allowed by this chapter.

J. Roof signs.

K. Rotating signs.

L. Shimmering signs.

M. Signs which contain intermittent, flashing, or any other type of lighting which changes in intensity or color when artificially illuminated.

N. Signs painted directly on the exterior surface of any building except within the MX-1 District.

O. Signs painted, attached or in any other manner affixed to trees or similar natural surfaces, or attached to utility poles, bridges, towers, transit shelters, benches or similar public structures except official signs.

P. Signs which pivot, move, rotate, or display any moving parts.

11-8-5 :Exempt Signs

The following signs shall not require a permit and are allowed in addition to those signs allowed by section 12-8-6 of this chapter. These exemptions, however, shall not be construed as relieving the owner of the sign from the responsibility of its erection and maintenance, and its compliance with the provisions of this chapter, or any other law or ordinance regulating the same.

A. Painted or printed signs: The changing of the display surface on a painted or printed sign only. This exemption, however, shall apply only to poster replacement and/or on-site changes involving sign painting elsewhere than directly on a building.

B. Property address information visible from the street or road fronting the property for public safety purposes:

1. Address numbers shall be Arabic numerals which contrast with their background.

2. Numbers shall be a minimum of four inches high with a minimum stroke width of one-half inch.

3. These numbers shall be affixed to the principal structure, except in nonsewered areas where address numbers shall be affixed to mailboxes or a separate structure plainly legible and visible from the street or road fronting the access to the property.

C. Official signs

D. Flags

1. Flags displayed in commercial and industrial districts shall not exceed in surface area the maximum permitted for freestanding signs.
2. The display of more than three flags shall be debited against the total freestanding signage area permitted.

E. Warning and restrictive signs, such as “No Trespassing” and “No Hunting” signs placed upon private property by the owner, not to exceed one square foot in area.

11-8-6 :Temporary Signs

Temporary signs are exempt from permit requirements unless otherwise specified, but shall otherwise conform to the requirements of this chapter and all other applicable zoning and building code standards:

A. On Premises Temporary Signs

1. Signs specified in M.S. Ch. 211B.045 are allowed in all districts.
2. Signs in the MX-1, MX-2, B-1, B-2, I-1, I-2, or PI districts:
    a. Each property may have one temporary sign with the issuance of a temporary sign permit.
        i. Each property may have one temporary sign permit at any given time.
        ii. Permits for temporary signs may be issued a maximum of six times within a 12-month period for a maximum of 14 days per permit.
            (a) Permits shall not be issued for consecutive 14-day periods. There shall be a period of at least one week between the expiration of one permit and the beginning of another.
            (b) Businesses only open to customers on an intermittent basis may assign the 14-day permit to the days they are actually open to customers.
        iii. Permits for searchlight signs may be issued a maximum of three times per year for a maximum of three days per permit.
    b. Portable changeable copy signs are prohibited in the MX-1 District.
    c. Temporary signs shall not exceed 32 square feet in area or the maximum height of a permanent freestanding ground sign in the given district.
    d. Temporary signs shall be set back a minimum of 10 feet from any property line and shall not encroach upon any right of way, easement, or sight triangle.
3. Noncommercial signs in the A-1, A-2, RR, R-1, R-2, R-3, and R-4 districts:
    a. Each lot may contain one noncommercial sign, subject to the following:
        i. Such signs may not exceed six square feet in area or four feet in height.
        ii. Such signs shall be set back at least 10 feet from any property line and shall not be located within the 25-foot sight triangle of an intersection.
        iii. Illumination: Such signs shall not be illuminated.

4. Properties for sale or lease:
    a. In the A-1 and A-2 districts, each property shall be allowed one sign per frontage on a public street limited to 32 square feet and six feet in height.
    b. In the RR, R-1, R-2, R-3, and R-3 districts, each property shall be allowed one sign per site.
        i. Sites with multiple frontages along a public right of way will be allowed one additional sign per right of way frontage provided that the frontage faces another commercial or industrial use or a collector, minor arterial, or principal arterial road as identified in the comprehensive plan.
        ii. Each sign is limited to eight square feet and eight feet in height.
    c. Institutional uses or residential subdivisions containing five or more lots are allowed one sign per frontage on a public street of the subdivision.
        i. Each sign is limited to 32 square feet and six feet in height.
        ii. These signs shall be removed once 90% of the lots are sold.
        iii. These signs shall be located on private property and shall not be located within any sight triangle.
        iv. Such signs, if illuminated, shall use only indirect light with the light source fully diffused and aimed toward the ground.
    d. In the MX-1, MX-2, B-1, B-2, I-1, and I-2 districts, each property shall be allowed one sign per frontage on a public street limited to 32 square feet in area and six feet in height.

B. Sidewalk Signs: Sidewalk signs are allowed in the MX-1 District, subject to the following standards:
    1. Signs shall be limited to two feet in width and three and one-half feet (3.5') in height, including support members.
    2. Signs shall not limit the normal pedestrian use of the sidewalk, and a minimum passable contiguous space of three feet shall be maintained at all times.
    3. One sign is permitted for each building adjacent to the public right of way, unless multiple businesses within one building allow separate business signs to be spaced no closer than 30 feet from another sidewalk sign.
    4. A business or building with two right of way frontages may display a sidewalk sign on either frontage.
    5. All signs must be removed from the sidewalk at the end of each business day.
    6. No sidewalk sign shall be lighted by attached external or individual internal lights.

C. Off Premises Temporary Signs subject to the following:
    1. These signs are limited to four square feet in size and three feet in height.
    2. These signs are allowed to be displayed from 4:30 P.M. on Thursdays to 8:00 A.M. on Mondays.
    3. Placement

a. These signs shall not be placed farther than six blocks or a one and one-half (1.5) mile radius, whichever is greater, from the subject property.

b. These signs shall be set back at least five feet from the street surface and shall not be located within the 25-foot sight triangle of an intersection.

4. Number and Spacing

a. These signs are limited to two signs per property for sale or lease per intersection.

b. These signs shall not be located closer than one block from another sign containing information about the same property for sale or lease except that these signs may be located on the opposite corners of the same intersection.

5. These signs shall conform to all other applicable zoning and building code standards.

11-8-7 :District Regulations

The following signs are allowed by specific zoning district subject to the site and building standards of the applicable district:

A. Signs Allowed by Permit in Agricultural Districts:

1. Two signs per farm.

2. Each sign is limited to 32 square feet.

B. Signs Allowed by Permit in Residential Districts:

1. Residential subdivisions having five or more lots are allowed up to two freestanding monument signs per principal entrance to the subdivision.

a. Each sign is limited to 32 square feet and six feet in height.

b. These signs shall be located on private property and shall not be located within any sight triangle.

c. Such signs, if illuminated, shall use only indirect light with the light source fully diffused and aimed toward the ground.

2. Multi-unit buildings are allowed one freestanding monument sign per site. Sites with multiple frontages along a public right of way will be allowed one additional sign per right of way frontage provided that the frontage faces a nonresidential use or a collector or arterial road as identified in the comprehensive plan.

a. Each sign is limited to 32 square feet and six feet in height.

b. These signs shall have a base made of decorative materials compatible with the exterior materials of the principal structure on site. At a minimum, the base width dimension shall be larger than 50% of the greatest width of the sign.

c. These signs shall be located on private property and shall not be located within any sight triangle.

d. Such signs, if illuminated, shall use only indirect light with the light source fully diffused and aimed toward the ground.

3. Public and institutional uses may have signs subject to the standards in subsection E below of this section.

C. Signs Allowed by Permit in MX-1, MX-2, and B-1 Districts: Signs should be architecturally compatible with the style, composition, materials, colors and details of the building which it identifies while differing from signs on surrounding sites and providing a unique identity.

4. MX-1 and B-1 districts as follows:

a. Wall Signs:

i. Permanent wall signs shall not exceed 15% of the total area of the wall on which the signs are affixed.

ii. Wall signage may be affixed to windows but shall not exceed 30% of the window on which it is placed and is counted toward the overall 15% maximum wall signage.

iii. Wall signs may be located on any side of a commercial building that faces another commercial or industrial use, a collector, minor arterial, or principal arterial road as identified in the comprehensive plan, or a parking area.

iv. Signage placed on a wall facing a parking area and abutting a residential use shall not exceed 10% of the total area of the wall on which it is placed and shall not be illuminated past 9:00 P.M. nor before 6:00 A.M.

v. All permanent wall signs shall be individual channel letters mounted flush with the building or on a raceway. Channel letters shall have a minimum depth of at least three inches.

vi. Box or panel signs are prohibited.

vii. Wall signs constructed on structures with more than one sign shall be designed according to an approved sign concept plan in which all signs have complementary designs, similar shapes and sign areas. Consideration may be made by PUD to permit variation in size and design of signs for major tenants or anchor businesses in larger complexes.

b. Projecting Signs:

i. In the MX-1 District only, properties may have a sign that projects from the side of the building in addition to the maximum 15% wall sign standard.

ii. This sign may not exceed 12 square feet in size or three feet in width.

iii. The maximum distance between sign and building face is one foot; however, at no time shall any projecting sign encroach the public right of way.

iv. No portion of a projecting sign may extend beyond the second floor of the building.

v. No less than seven and one-half feet (7.5') of clearance shall be provided between the sidewalk elevation and the lowest point of the projecting sign.

vi. Signs shall not block or diminish design details, windows, or cornices of the building upon which they are placed.

c. Freestanding Signs:

i. One permanent freestanding sign is allowed per site.

ii. Sites with multiple frontages along a public right of way will be allowed one additional sign per right of way frontage provided that the frontage faces another

commercial or industrial use or a collector, minor arterial, or principal arterial road as identified in the comprehensive plan.

iii. Each sign is limited to 40 square feet and 10 feet in height.

iv. Such signs, if illuminated, shall use only indirect light with the light source fully diffused and aimed toward the ground.

v. All permanent freestanding signs shall have a base made of decorative materials compatible with the exterior materials of the principal structure on site. At a minimum, the base width dimension shall be larger than 50% of the greatest width of the sign.

d. Changeable Copy Signs

i. One changeable copy sign (but not including dynamic signs) shall be allowed per site provided that the area of the sign does not exceed 50% of the allowable sign area or 50 square feet, whichever is less, for a freestanding or wall sign.

ii. On properties used for automobile fuel stations in the B-1 District, an area not to exceed 16 square feet within a freestanding sign shall be allowed for continuous display (no flashing, scrolling or other animation) of electronic or non-electronic changeable copy in accordance with Minnesota Statutes section 239.751.

e. Dynamic Signs in the MX-1 District in accordance with section 11-8-8.

5. MX-2 District as follows:

a. Wall Signs:

i. Permanent wall signs shall not exceed 20% of the total area of the wall on which the signs are affixed.

ii. Wall signs may be affixed to windows but shall not exceed 30% of the window on which it is placed and is counted toward the overall 20% maximum wall signage.

iii. Wall signs may be located on any side of a commercial building that faces another commercial or industrial use or a collector, minor arterial, or principal arterial road as identified in the comprehensive plan.

iv. All permanent wall signs shall be individual channel letters mounted flush with the building or on a raceway. Channel letters shall have a minimum depth of at least three inches.

v. Box or panel signs are prohibited.

vi. Wall signs constructed on structures with more than one sign shall be designed according to an approved sign concept plan in which all signs have complementary designs, similar shapes and sign areas. Consideration may be made by PUD to permit variation in size and design of signs for major tenants or anchor businesses in larger complexes.

b. Freestanding Signs:

i. One permanent freestanding sign is allowed per site.

ii. Sites with multiple frontages along a public right of way will be allowed one additional sign per right of way frontage provided that the frontage faces another

commercial or industrial use or a collector, minor arterial, or principal arterial road as identified in the comprehensive plan.

iii. Each sign is limited to 100 square feet and 20 feet in height.

iv. Such signs, if illuminated, shall use only indirect light with the light source fully diffused and aimed toward the ground.

v. All permanent freestanding signs shall have a base made of decorative materials compatible with the exterior materials of the principal structure on site. At a minimum, the base width dimension shall be larger than 50% of the greatest width of the sign.

vi. Common Freestanding Sign Bonus

(a) The city may approve up to a 25% size bonus for adjoining properties with a common lot line that construct a common freestanding ground sign.

(b) No property shall be part of more than one common freestanding sign bonus, and the sign bonus is limited to one 25% increase regardless of the number of participating properties.

(c) Properties eligible to participate in the common freestanding sign bonus must directly adjoin the site on which the common freestanding sign is constructed.

(d) The sign shall conform to all applicable performance standards for the zoning district in which it is located, except that the size of the sign may be up to 125% of the maximum permanent freestanding ground sign size standard.

(e) The bonus sign area shall not increase the sign height.

(f) Should the sign include a dynamic sign, the dynamic portion of the sign shall not exceed 35 square feet, regardless of the total area of the sign.

(g) All parties to the common freestanding sign shall enter into an agreement addressing construction, maintenance and repair responsibilities, and trespass rights. This agreement shall be filed with the Dakota County recorder against the title of all properties involved. Amendment or cancellation of the agreement shall be allowed only upon written approval by the community development director or their designee.

vii. In addition to other freestanding signs allowed by this chapter, one freestanding sign shall be allowed per subdivision or development:

(a) This sign shall be limited to 100 square feet and 10 feet in height.

(b) This sign shall only be permitted on property within the subdivision or development which is situated on a principal or minor arterial road as identified in the comprehensive plan.

(c) Furthermore, this sign shall not be situated closer than 100 feet to any other permitted freestanding sign.

c. Changeable Copy Signs

i. One changeable copy sign (but not including dynamic signs) shall be allowed per site provided that the area of the sign does not exceed 50% of the allowable sign area or 50 square feet, whichever is less, for a freestanding or wall sign.

ii. On properties used for automobile fuel stations, an area not to exceed 16 square feet within a freestanding sign shall be allowed for continuous display (no flashing, scrolling or other animation) of electronic or non-electronic changeable copy in accordance with Minnesota Statutes section 239.751.

d. Dynamic Signs in accordance with section 11-8-8.

6. Marquee Signs: Movie theaters are allowed chasing and running lights on marquees subject to the requirements for wall signs in commercial districts and the following standards:

a. Running and chasing lights are only allowed in the MX-1 and B-1 districts;

b. Signs with running and chasing lights are not permitted on walls that are within 250 feet of residential districts or uses from which the sign is visible, and the lights shall not exceed an illumination intensity of 0.5 lumens at the property line;

c. No signs with running and chasing lights are allowed in a front yard setback;

d. Signs with running and chasing lights shall be a minimum of 12 feet above the adjacent grade elevation and street grade elevation;

e. The power of illumination of running and chasing lights shall be limited to 15 watts per bulb;

f. Running and chasing lights shall not be located near intersections nor within the sight triangle adjacent to an intersection;

g. Only permanent wall signs shall be allowed running and chasing lights; and

h. Hours of illumination shall be limited to between the hours of 11:30 A.M. and 11:00 P.M.

D. Signs Allowed by Permit in the B-2, I-1, and I-2 districts:

1. Wall Signs:

a. Permanent wall signs shall not exceed 20% of the total area of the wall on which the signs are affixed.

b. Wall signs may be located on any side of a commercial building that faces another commercial or industrial use or a collector, minor arterial or principal arterial road as identified in the comprehensive plan.

c. All permanent wall signs shall be individual channel letters mounted flush with the building or on a raceway.

d. Box or panel signs are prohibited.

e. Wall signs constructed on structures with more than one sign shall be designed according to an approved sign concept plan in which all signs have complementary designs, similar shapes and sign areas. Consideration may be made by PUD to permit variation in size and design of signs for major tenants or anchor businesses in larger complexes.

f. In the B-2 and I-1 districts, the following standards shall apply:

i. Wall signs shall consist of permanent high quality materials with finished edges.

ii. No wood signs shall be permitted.

iii. Where more than one wall sign is requested per building frontage (i.e., a multi-tenant center), a uniform sign criteria shall be prescribed by the building owner, subject to review and approval by the city. The sign criteria shall, among other things, describe the uniform type of sign to be allowed, limitations of placement on the building, the method of fastening, and the procedure for tenant sign approval.

2. Freestanding Signs:

a. One permanent freestanding sign per site.

b. Sites with multiple frontages along a public right of way will be allowed one additional sign per right of way frontage provided that the frontage faces another commercial or industrial use or a collector, minor arterial or principal arterial road as identified in the comprehensive plan.

c. Each sign is limited to 100 square feet and 10 feet in height.

d. Such signs, if illuminated, shall use only indirect light with the light source fully diffused and aimed toward the ground.

e. All permanent freestanding signs shall have a base made of decorative materials compatible with the exterior materials of the principal structure on site. At a minimum, the base width dimension shall be larger than 50% of the greatest width of the sign.

f. In addition to other freestanding signs allowed by this chapter, one freestanding sign shall be allowed per subdivision or development:

i. This sign shall be limited to 100 square feet and 10 feet in height.

ii. This sign shall only be permitted on property within the subdivision or development which is situated on a principal or minor arterial road as identified in the comprehensive plan.

iii. Furthermore, this sign shall not be situated closer than 100 feet to any other permitted freestanding sign.

g. In the B-2 and I-1 districts, any freestanding ground monument signs shall be appropriately landscaped and subject to the same requirements for all landscaping on the property.

E. Signs Allowed by Permit in the PI District and for Public and Institutional Uses in Residential Districts:

1. Wall Signs:

a. Permanent wall signs shall not exceed 15% of the total area of the wall on which the signs are affixed.

b. Wall signage may be affixed to windows but shall not exceed 30% of the window on which it is placed and is counted toward the overall 15% maximum wall signage.

c. Wall signs may be located on any side of a commercial building that faces another commercial or industrial use, a collector, minor arterial, or principal arterial road as identified in the comprehensive plan, or a parking area.

d. All permanent wall signs shall be individual channel letters mounted flush with the building or on a raceway. Channel letters shall have a minimum depth of at least three inches.

e. Box or panel signs are prohibited.

f. Wall signs constructed on structures with more than one sign shall be designed according to an approved sign concept plan in which all signs have complementary designs, similar shapes and sign areas. Consideration may be made by PUD to permit variation in size and design of signs for major tenants or anchor businesses in larger complexes.

2. Freestanding Signs:

a. One freestanding monument sign per site.

b. Sites with multiple frontages along a public right-of-way will be allowed one additional sign per right-of-way frontage provided that the frontage faces another commercial or industrial use or collector or arterial road as identified in the Comprehensive Plan.

c. Each sign is limited to 50 square feet and six feet in height.

d. These signs shall be located on private property and shall not be located within any sight triangle.

e. All permanent freestanding signs shall have a base made of decorative materials compatible with the exterior materials of the principal structure on site. At a minimum, the base width dimension shall be larger than 50% of the greatest width of the sign.

3. Changeable Copy Signs:

a. One changeable copy sign (but not including dynamic signs) shall be allowed per site provided that the area of the sign does not exceed 50% of the allowable sign area or 50 square feet, whichever is less, for a freestanding or wall sign.

b. On properties used for automobile fuel stations in the I-1 District, an area not to exceed 16 square feet within a freestanding sign shall be allowed for continuous display (no flashing, scrolling or other animation) of electronic or non-electronic changeable copy in accordance with Minnesota Statutes section 239.751.

4. Dynamic Signs in accordance with section 11-8-8.

11-8-8 :Dynamic Signs

A. On-premise dynamic signs are allowed subject to the following standards:

1. Districts Allowed:

a. Dynamic signs may be located on properties within the B-1 and MX-2 Districts.

b. Dynamic signs are also permitted in the PI and MX-1 districts, so long as the property has frontage along an arterial road or major collector as designated in the Comprehensive Plan.

c. Dynamic signs may also be located on public and institutional uses within a residential district, provided that the site:

i. Has an approved conditional use permit (CUP);

ii. Is located on a designated arterial or major collector road; and

iii. Complies with all other sign standards.

2. Number of Signs: Each site can have only one dynamic sign and that sign can have only one dynamic display.

3. When located within 150 feet of a residential use or zone, dynamic signs shall be oriented so that no portion of the sign face is visible from the residential use or zoning district.

4. Mode: Dynamic signs shall only be allowed to operate in a static mode. Animation, motion or video displays are prohibited. Any change from one static display to another must be instantaneous and shall not include any distracting effects, such as dissolving, spinning or fading. The images and messages displayed must be complete in themselves, without continuation in content to the next image or message or to any other sign.

5. Size of Dynamic Display:

a. The dynamic display portion of any sign shall not exceed 35% of the total allowable area of the sign, except for the Public and Institutional District and public and institutional uses within residential districts where the maximum percentage shall be 50%. Within the MX-1 district, the dynamic portion of signs is 35% or 14 square feet, whichever is less.

b. The remaining percentage of the allowable sign area cannot have dynamic display capabilities even if it is not used.

6. Minimum Display Time: The minimum display time shall be 30 seconds.

7. Brightness: Dynamic signs shall not exceed a maximum illumination of 5,000 nits during daylight hours and a maximum illumination of 500 nits between dusk to dawn as measured from the sign's face at maximum brightness. All dynamic sign applications shall include certification from the sign's manufacturer that the sign has been preset to conform to the luminance levels noted above and these settings are protected from end users' manipulation by password protected software.

8. Color: The use of color shall not create distraction or a hazard to the public health, safety or welfare.

9. Operation: Dynamic signs shall be equipped with a means to immediately discontinue the display if it malfunctions. The owner of a dynamic sign must immediately cease operation of their sign when notified by the city that it fails to comply with the standards of this chapter. The dynamic sign shall remain inoperable until such time that the owner demonstrates to the city that the device is in satisfactory working condition and conforms to the standards of this chapter. Appeals of the city's direction regarding the operation of a dynamic sign shall follow the appeals process outlined in section 11-9-7, "Appeals", of this title.

B. Application to Existing Signs: The dynamic sign standards shall apply to all existing and future dynamic signs, unless otherwise determined by the city that an existing sign qualifies as a nonconforming use under State statute or this Code. Any existing dynamic sign that cannot

meet the minimum text size as required by the speed limit must use the largest size possible for one line of copy to fit in the available display space.

TITLE 11 ZONING REGULATIONS

CHAPTER 9 DEVELOPMENT PROCEDURES

11-9-1 :Site Plan and Building Design Review

A. Purpose: The purpose of this section is to establish a formal site plan review procedure for commercial, industrial, institutional, and multiple-unit residential development projects and provide regulations pertaining to the enforcement of site design standards consistent with the requirements of this title.

B. Exemptions: Unless otherwise specifically required in this title, the following shall be exempt from the requirements for commission review. All exemptions remain subject to the requirements of this title.

   1. The erection or alteration of permitted agricultural structures, when all other provisions of this title are met.
   2. Single-unit and two-unit dwellings, when all other provisions of this title are met.
   3. Construction of or addition to an accessory structure not exceeding 50% of the building footprint of the principal structure, when all other provisions of this title are met.
   4. Interior alterations of all structures that do not affect the existing uses or intensity of use, when all other provisions of this title are met.
   5. Minor revisions or additions to existing principal structures, provided the proposed modifications do not exceed 30% of the floor area of said structure or 10,000 square feet, whichever is less and all other provisions of this title are met.
   6. The erection or alteration of commercial or industrial structures or accessory structures permitted in the B-2 District, when all other provisions of this title are met.

C. Review Procedures: Applicants shall submit to the city a completed official city application, the associated application fee set by council resolution and all supportive or supplementary information required by this section prior to any consideration for a site plan review. The city shall process all site plan applications in conformance with all applicable city, county, and state standards and requirements.

D. Review Process:

   1. Prior to filing a formal site plan application, applicants may present a concept plan to the city. The Zoning Administrator shall have the authority to refer said plan to the planning commission and/or city council for discussion, review, and informal comment. Any opinions or comments provided to the applicant regarding a concept site plan application are to be considered advisory only and shall not constitute a binding decision on the request.
   2. Subsequent to any concept plan review, an applicant may present a formal site plan application to the city.
   3. The Zoning Administrator shall have the authority to require the applicant to hold a neighborhood meeting to inform nearby property owners of the request. If required, this

meeting shall take place following the submittal of the formal application to the City but before notices for the public hearing are published.

4. The Zoning Administrator shall refer all formal site plan applications to the planning commission. The commission shall hold a public hearing to review the formal site plan application and act on said application in accordance with subsection C above of this section or applicable state statute.

E. Public Hearing:

1. Unless exempted by this section, no site plan shall be considered until a public hearing has been held by the commission.
2. A notice of the time, place and purpose of the hearing shall be published in the city's official newspaper, at least 10 days prior to the hearing.
3. Notices shall be mailed to each property owner within 500 feet of the affected property, except when located in A-1, A-2, and RR districts in which case notice shall be mailed to each property owner within one-fourth (1/4) mile of the affected property. The city shall use its best available records to determine the names and addresses of property owners to receive notice.
4. Failure to give notice to individual property owners or defects in the notice shall not invalidate the proceedings, provided a bona fide attempt was made to comply with these provisions.
5. During the public hearing city staff shall present their findings with regard to the site plan application.

F. Review Standards: The Zoning Administrator shall review each application for site plan review for compliance with the performance standards contained in the comprehensive plan, this title and other applicable city codes and policies. These standards may include, but are not limited to, the following:

1. Land use designations and zoning districts.
2. Access, parking and loading.
3. Exterior building materials.
4. Trash enclosure.
5. Landscaping and berming.
6. Signage.
7. Lighting.
8. Engineering, grading and drainage.
9. Traffic and pedestrian circulation.
10. Parks and open space.

G. Building Permit: No person, firm or corporation shall erect, alter, construct, enlarge, repair, move, improve, convert, demolish, equip, use, occupy, or maintain any building, structure, or portion thereof, within the city of Rosemount until proper permits and/or a certificate of occupancy has been issued by the protective inspections division of the city. All work for which a

permit has been issued must be completed in accordance with title 9, “Building Regulations,” of this code and applicable federal, state and county laws, codes and regulations.

1. Except as provided for by this section, no building permit shall be issued until a site plan has been prepared in accordance with the provisions of this title and approved by the commission. Upon approval of the site plan by the commission, the building official will be authorized to process a building permit for the proposed project pursuant to adopted building and fire codes. The site plan approval process does not imply compliance with the requirements of said building and fire codes.

H. Plan Conformance: Development of the site shall conform to all site and construction plans officially submitted to and approved by the city. Once approved, no changes, modifications or alterations shall be made to any plan detail, standard, or specification without prior submission of a plan modification request.

I. Plan Modifications: Major amendments to an approved site plan may be approved by the planning commission. The notification, public hearing, and appeal procedure for such amendments shall be the same as those for the original site plan review. Any other amendments may be made administratively when the Zoning Administrator determines that review and approval by the planning commission of a detailed site and building plan is unnecessary to meet the purpose and intent of this section. The Zoning Administrator's decision regarding classification of an amendment is final. When determining if an amendment is major, the Zoning Administrator may consider their determination on whether the amendment:

1. Substantially alters the location of buildings, parking areas or vehicle access.
2. Increases the total gross floor area of all buildings by more than five percent or increases the gross floor area of any individual building by more than 10%.
3. Increases the number of stories of any building.
4. Decreases the amount of open space by more than five percent or alters it in such a way as to change its original design or intended use.
5. Changes the exterior building materials or color of the building.
6. Creates noncompliance with any special condition attached to the approval of the site plan or applicable provision of this title.

J. Term of Approval: Unless otherwise specified, an approved site plan shall become null and void one year from the date of approval unless the property owner or applicant has substantially commenced construction of any building, structure, addition or alteration, or use requested as part of the approved plan or unless a petition for a time extension has been granted by the planning commission. All extension requests shall be submitted in writing to the community development department at least 30 days prior to expiration of the site plan and shall state facts showing a good faith effort to complete work permitted under the original approval.

K. Site Improvement Performance Agreement and Financial Guarantee: Following the approval of a site plan required by this title and prior to issuance of a building permit, the applicant, if deemed necessary by the planning commission, shall guarantee to the city the completion of all improvements as shown on the approved site plan and as required by the site plan approval. This guarantee shall be made by means of a site performance agreement and a financial guarantee as provided below.

1. The applicant shall execute the site performance agreement on forms provided by the city. The agreement shall define the required work and reflect the terms of this section as to the required guarantee of the performance of the work by the applicant.
2. The required work includes, but is not limited to, private exterior amenities such as landscaping, turf establishment, private driveways, parking areas, curb and gutter, recreational facilities, wetland buffers, erosion control, fences and screening, and other similar facilities. The required work shall also include all aspects of the tree preservation plan, if applicable.
3. A financial guarantee shall be submitted with the executed site performance agreement as provided herein:
    a. Financial guarantees acceptable to the city include cash escrow, an irrevocable letter of credit, or other financial instrument that provides equivalent assurance to the city and that is approved by the Zoning Administrator.
    b. The term of the financial guarantee shall be for the life of the site improvement performance agreement, and it shall be the applicant's responsibility to ensure that a submitted financial guarantee shall continue in full force and effect until the Zoning Administrator shall have approved and accepted all of the work undertaken to be done and shall thereby have released the guarantee or reduced the amount of the guarantee as provided in this section.
    c. When any instrument submitted as a financial guarantee contains provision for an automatic expiration date, after which the instrument may not be drawn upon, notwithstanding the status of the site performance agreement or of the required work, it shall be the applicant's responsibility to notify the city in writing, by certified mail, at least 60 days in advance of the expiration date of the intent either to renew or not to renew the instrument. If the instrument is to be renewed, a written renewal shall be provided at least 30 days prior to the expiration date. If the instrument is not to be renewed, and has not been released by the Zoning Administrator, another acceptable financial guarantee in the appropriate amount shall be submitted at least 30 days prior to the expiration date. Upon receipt of an acceptable substitute financial guarantee, the Zoning Administrator may release the original guarantee.
    d. The amount of the financial guarantee shall be established by the Zoning Administrator based upon an itemized estimate of the cost of all required work as provided by the applicant. A cash escrow or irrevocable letter of credit shall be in the amount of 125% of the approved estimated cost. The amount of any other approved financial instrument shall be determined by the Zoning Administrator.
    e. At the option of the city the applicant may submit a separate financial guarantee for that portion of the required work consisting solely of landscaping improvements with another financial guarantee for all other exterior amenities and improvements that comprise the work. All trees shall be warrantied to be alive, of good quality, and disease free for 12 months from the time of planting. Any subsequent replacement shall be warrantied for 12 months from the time of planting.
4. The time allowed for completion of the required improvements shall be set forth in the site performance agreement. This agreement and the financial guarantee shall guarantee compensation for the required improvements and provide for reimbursement to the city of

the cost of enforcement measures. As the applicant completes various portions of such required work, the Zoning Administrator may release such portion of the financial guarantee as it is attributable to such completed work. Landscaping improvements shall not be deemed complete until the city has verified survivability of all required plantings through one winter season, defined for the purposes of this section as the period between October 31 and April 30.

5. The applicant shall notify the Zoning Administrator in writing when all or part of the required improvements have been completed in accordance with the approved plan and may be inspected. Upon receipt of such notice, the Zoning Administrator shall be responsible for the inspection of the improvements to determine that the work performed meets the standards of this title and any conditions imposed by the planning commission and the standards for the particular industry, profession or material used in the performance of the work. Any required work failing to meet such standards shall not be deemed complete and the applicant shall be notified in writing as to required corrections. Upon determination that required work has been completed, including the winter season survivability of landscape plantings, notice shall be given to the applicant of the date of completion and action taken by the Zoning Administrator to release, or to reduce the amount of, the financial guarantee.

11-9-2 :Zoning Code Amendment (Text or Map)

A. Purpose: The purpose of this section is to allow for additions or revisions to the provisions of this title and changes in zoning district boundaries.

B. Procedures:

1. Initiation: An amendment to this title may be initiated by the council, commission, or by petition of an affected landowner.

2. Application:

   a. Applications provided by the city shall be completed in writing prior to any consideration of an amendment of this title.

   b. Zoning amendment fees are established by resolution of the council.

   c. Applications shall not be formally accepted until all supportive or supplementary information has been furnished by the applicant.

   d. Applications for an amendment to the text of this title shall be submitted by an affected property owner on forms provided by the city and shall include the proposed text for the ordinance amendment in proper ordinance form.

   e. Applications to amend the text of this title must be received by the council, which will then forward the petition to the commission for public hearing and recommendation.

3. The Zoning Administrator shall have the authority to require the applicant to hold a neighborhood meeting to inform nearby property owners of the request. If required, this meeting shall take place following the submittal of the formal application to the City but before notices for the public hearing are published.

4. Commission Recommendation: An amendment not initiated by the commission shall be referred to the commission for study and report and may not be acted upon by the council until it has received the recommendation of the commission on the proposed amendment

or until 60 days have elapsed from the date of reference of the amendment without a report by the commission.

5. Public Hearing

   a. No amendment to this title shall be considered until a public hearing has been held by the commission. When the amendment application is complete, the city shall conduct a public hearing before the commission according to the procedures specified in section 11-9-1 of this chapter.

6. Council Action: Amendments to this title require a majority vote of all members of council. The adoption or amendment of any portion of a zoning ordinance which changes all or part of the existing classification of a zoning district from residential to either commercial or industrial requires a two-thirds (2/3) majority vote of all members of the council.

7. Reapplication: No application for the same or substantially the same amendment shall be made within six months of the date of denial.

8. Generally: Notice requirement and procedures set forth in this section in excess of those required by state law are directory. Failure to comply with such procedures will not invalidate the proceedings.

11-9-3 :Conditional Use Permit (CUP)

A. Purpose: The purpose of CUPs is to allow for those uses which are not generally suitable within the zoning district, but which under some circumstances may be suitable. The applicant for a CUP shall have the burden of proof that the use is suitable and that the standards set forth in this chapter have been met.

B. Application, Public Hearing, Notice, and Procedure: The application, public hearing, notice and procedure requirements for CUPs shall be the same as those identified in section 11-9-1 of this chapter. CUPs may be granted by majority vote of the entire council. Specific submissions required to complete an application for a CUP shall address all standards applicable to the proposed use. The applicant shall provide information as required in the site plan review.

C. Standards: The commission shall recommend a CUP and the council may issue such CUP if it finds that such use at the proposed location:

   1. Will not be detrimental to or endanger the public health, safety, or general welfare of the neighborhood or the city.

   2. Will be harmonious with the objectives of the comprehensive plan and city code provisions.

   3. Will be designed, constructed, operated and maintained so as to be compatible or similar in an architectural and landscape appearance with the existing or intended character of the general vicinity and will not change the essential character of that area, nor substantially diminish or impair property values within the neighborhood.

   4. Will be served adequately by existing (or those proposed in the project) essential public facilities and services, including streets, police and fire protection, drainage, structures, refuse disposal, water and sewer systems and schools.

   5. Will not involve uses, activities, processes, material equipment, and conditions of operation that will be hazardous or detrimental to any persons, property, or the general welfare because of excessive production of traffic, noise, smoke, fumes, glare or odors.

6. Will have vehicular ingress and egress to the property which does not create traffic congestion or interfere with traffic on surrounding public streets.
7. Will not result in the destruction, loss or damage of a natural, scenic, or historic feature of major importance and will comply with all local, state, and federal environmental quality standards.
8. These standards apply in addition to specific conditions as may be applied throughout this code.

D. Conditions: In reviewing applications for CUPs, the Commission and the Council may attach whatever reasonable conditions they deem necessary to mitigate anticipated adverse impacts associated with these uses, to protect the value of other property within the district, and to achieve the goals and objectives of the comprehensive plan and city code provisions. Such conditions may include, but are not limited to, the following:

1. Controlling the number, area, bulk, height, density, intensity, and location of such uses.
2. Regulating ingress and egress to the property and the proposed structures thereon with particular reference to vehicle and pedestrian safety and convenience, traffic flow and control, and access in case of fire or other catastrophe.
3. Regulating off street parking and loading areas where required.
4. Specifying utilities with reference to location availability and compatibility.
5. Requiring berming, fencing, screening, landscaping or other facilities to protect nearby property.
6. Ensuring compatibility of appearance.
7. In determining such conditions, special consideration shall be given to protecting immediately adjacent properties from objectionable views, noise, traffic and other negative characteristics associated with such uses.

E. Revocation: Failure to comply with any condition set forth in a CUP, or any other violation of city code provisions, shall also constitute sufficient cause for the termination of the CUP by the council following a public hearing.

F. Expiration:

1. In any case where a conditional use has not been established within one year of the date on which the CUP was granted, the permit shall be null and void unless a petition for extension is requested in writing and filed with the Zoning Administrator at least 30 days before the expiration of the deadline. The extension request shall be sent to the City Council for review and decision.
2. If the conditional use is discontinued for six months, the CUP shall be null and void.

G. Permittee: A CUP shall be issued for a particular use and not for a particular person.

11-9-4 :Interim Use Permit (IUP)

A. Purpose. The purpose of an IUP is to permit a use which would not be appropriate generally, but which may be allowed within a certain zoning district with appropriate restrictions. An IUP is not intended to last indefinitely, but is meant to have a specific end date for when the use will no longer be allowed on the property.

B. Application, Public Hearing, Notice, and Procedure: The application, public hearing, public notice and procedure requirements for interim use permits shall be the same as those for amendments as provided in section 11-9-2 above of this chapter, except that the permit shall be issued on the affirmative vote of a majority of the entire council. Specific submissions required to complete an application for an interim use permit shall be specified for each type of interim use allowed.

C. Standards:

1. The interim use must be allowed in the zoning district where the property is located.
2. The interim use must meet or exceed the performance standards set forth in this title and other applicable city ordinances.
3. The interim use must comply with the specific standards for the use identified in this title, and must comply with all conditions of approval which shall be included in an IUP agreement.

D. Conditions: The city may attach conditions to approval of a permit to mitigate anticipated adverse impacts associated with the use, to ensure compliance with the standards of approval, to protect the value of other property, and to achieve the goals and objectives of the comprehensive plan.

E. Findings for Interim Use Permits:

1. The extent, location, and intensity of the use will be in substantial compliance with the comprehensive plan.
2. The use will provide adequate ingress and egress to minimize traffic congestion in the public streets.
3. The use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety, and general welfare.
4. The use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.
5. The use shall, in all other respects, conform to the applicable regulations of the district in which it is located.

F. Termination: An IUP shall terminate on the happening of any of the following events, whichever first occurs:

1. The date stated in the permit.
2. Upon violation of the condition(s) under which the permit was issued.
3. Upon change in the city's zoning regulation which renders the use nonconforming.

G. Modification of Standards or Conditions: The council, after public hearing, may modify standards or conditions required for the IUP, when strict application of such standards or conditions would unreasonably limit or prevent otherwise lawful use of a property or an existing structure and would result in exceptional undue hardship to the owner of such property or structure; provided, that such modification will not impair the intent and purpose of such standards or conditions and is consistent with reasonable enjoyment of adjacent property.

11-9-5 :Variance

A. Purpose: A variance is a modification or variation of the provisions of this zoning code as applied to a specific piece of property. A variance may be granted when strict enforcement of the provisions of the zoning code would cause practical difficulties to the property owner, and when it can be demonstrated that such action will be in keeping with the spirit and intent of the code.

B. Applications: Applications provided by the city must be completed in writing prior to any consideration of variance petitions. Fees for variances are established by resolution of the city council.

C. The Zoning Administrator shall have the authority to require the applicant to hold a neighborhood meeting to inform nearby property owners of the request. If required, this meeting shall take place following the submittal of the formal application to the City but before notices for the public hearing are published.

D. Public Hearing: No amendment to this title shall be considered until a public hearing has been held by the commission. When the amendment application is complete, the city shall conduct a public hearing before the commission according to the procedures specified in section 11-9-1 of this chapter.

E. Approval Or Denial: The board of appeals and adjustments shall either approve or deny variances based on Minnesota Statute 462.357, subdivision 6. Conditions of approval that are directly related to and bear a rough proportionality to the impact created by the variance may be attached to any variance granted.

F. Generally: Notice of requirement and procedures that are set forth in this section in excess of those required by state law are directory. Failure to comply with such procedures will not invalidate the proceedings.

G. Findings: The board of appeals and adjustments must find as follows in the granting of a variance from this title. Variances may be granted when the applicant for the variance establishes that there are practical difficulties in complying with the zoning ordinance. Economic considerations alone do not constitute practical difficulties.

   1. The variance request is in harmony with the purposes and intent of the ordinance.
   2. The variance is consistent with the comprehensive plan.
   3. The property owner proposes to use the property in a reasonable manner.
   4. There are unique circumstances to the property which are not created by the landowner.
   5. Granting of the variance does not alter the essential character of the locality.

H. Lapse and Reapplication:

   1. A variance granted but not used shall become void one year after its effective date.
   2. No application for the same or substantially the same variance shall be made within six months of the date of denial.

11-9-6 :Planned Unit Development (PUD)

A. Application and Review Process:

1. All applications for a (PUD) shall include both a master development plan and final site and building plan. Prior to submission of these formal applications, an applicant may submit a concept plan for review and comment by the planning commission and city council.
2. Upon receipt of a complete application for concept plan, master development plan, or final site and building plan, the Zoning Administrator shall set a date for a public hearing as outlined in section 11-9-1 of this chapter for formal review of the PUD application.
    a. The Zoning Administrator shall have the authority to require the applicant to hold a neighborhood meeting to inform nearby property owners of the request. If required, this meeting shall take place following the submittal of the formal application to the City but before notices for the public hearing are published.
    b. The applicant shall make a presentation of the applicable PUD application at a public hearing before the commission. The commission shall recommend approval, revision, reapplication, or denial of the applicable plan to the council.

B. PUD Concept Plan

1. In order to receive guidance in the design of a PUD prior to submission of a formal application, an applicant may submit a concept plan for review and comment by the planning commission and city council.
2. The comments of the planning commission and city council shall address the consistency of the concept plan with this chapter. The comments of the planning commission and city council shall be for guidance only and shall not be considered binding upon the city regarding approval of the formal PUD application when submitted.
3. Submission of a concept plan is optional but is highly recommended for large PUDs.

C. PUD Master Development Plan and Rezoning

1. Classification of PUD District
    a. All PUD master development plan applications shall include a proposed rezoning to a specific PUD district. The district shall be designated by the letters "PUD" followed by the alphanumeric designation of the underlying zoning district, which may be either the prior zoning classification or a new classification.
    b. For mixed use PUDs, the city council shall, whenever reasonably practical, specify underlying zoning classifications for the various parts of the PUD. When it is not reasonably practical to specify the underlying zoning classification, the city council may rezone the district, or any part thereof, to "PUD-mixed".
2. Approval of a rezoning to PUD and master development plan shall occur simultaneously and be subject to the procedures outlined in sections 11-9-2 and 11-9-1 of this chapter. After rezoning of the property to PUD, nothing shall be constructed on the PUD site except in conformance with the approved plans and this chapter.
3. Regulations governing uses and structures in the PUD shall be the same as those governing the underlying zoning district subject to the following:
    a. Regulations may be modified expressly by conditions imposed by the planning commission and city council at the time of rezoning to PUD.

b. In the case of districts rezoned to PUD-mixed, the planning commission and city council shall specify regulations applicable to uses and structures in various parts of the district.

4. No building or other permits shall be issued for any work on property included within a proposed or approved PUD nor shall any work occur unless such work is in compliance with an approved PUD.

D. PUD Final Site and Building Plan

1. Approval of a final site and building plan for the entire PUD or for specific parts of the PUD shall be subject to the procedures outlined in section 11-9-1 of this title.

2. Applicants may combine the final site and building plan review with the master development plan review by submitting all information required for both stages simultaneously.

3. Approval of a final site and building plan shall signify approval of all plans necessary prior to application for a building permit subject to other necessary approvals by the city including, but not limited to, platting.

4. Substantial Compliance: The final site and building plan shall be in substantial compliance with the approved master development plan. Substantial compliance shall be determined by the Zoning Administrator based on the following standards:

a. Buildings, parking areas and roads are in substantially the same location as previously approved.

b. The number of residential living units has not increased or decreased by more than five percent from that approved in the master development plan.

c. The floor area of nonresidential uses has not been increased by more than five percent nor has the gross floor area of any individual building been increased by more than 10% from that approved in the master development plan.

d. There has been no increase in the number of stories in any building.

e. Open space has not been decreased or altered to change its original design or intended use.

f. All special conditions required on the master development plan by the city have been incorporated into the final site and building plan.

5. Term of Approval: If an application has not been made for a final site and building plan pursuant to the approved master development plan for all or a part of the property within a PUD or construction on the property has not been initiated in conformance with the approved site and building plan within one calendar year of the date on which the PUD rezoning became effective or if within that period no extension of time has been granted, the city council may rezone the property to the zoning classification at the time of the PUD application or to a zoning classification consistent with the comprehensive plan designation for the property. In the absence of a rezoning, the approved master development plan and approved site and building plan, if applicable, shall remain the legal control governing development of the property included within the PUD.

E. Conditions of Approval: The city may impose such conditions on approval of a master development plan and rezoning or final site and building plan as the council deems necessary to assure compliance with the purposes of this section, including the requirement that the

developer execute and record such covenants and restrictions on the PUD property as the city deems necessary to assure that the property is developed and used in accordance with the approved plans.

F. Basis for Action: The planning commission and city council shall base their recommendations and actions regarding the applicable PUD application on consideration of the items listed below. The planning commission and city council may attach such conditions to their actions as they shall determine necessary to better accomplish the purposes of this chapter.

   g. Compatibility of the proposed plan with this chapter and the goals and policies of the comprehensive plan.

   h. Effect of the proposed plan on the neighborhood in which it is to be located.

   i. Internal organization and adequacy of various uses or densities, circulation and parking facilities, public facilities, recreation areas, open spaces, screening and landscaping.

   j. Consistency with the standards of section 11-9-1 of this chapter pertaining to site and building plan review.

   k. Such other factors as the planning commission or city council deems relevant.

G. Amendments

   1. Major amendments to an approved master development plan may be approved by the city council after review by the planning commission. The notification and public hearing procedure for such amendment shall be the same as for approval of the original PUD.

   2. Any other amendment may be made administratively where the Zoning Administrator determines that review and approval by the planning commission and city council of a detailed site and building plan is unnecessary to meet the objectives of this chapter.

   1. When determining if an amendment is major, the Zoning Administrator shall base their determination on whether the amendment:

      a. Substantially alters the location of buildings, parking areas or roads.

      b. Increases or decreases the number of residential dwelling units by more than five percent.

      c. Increases the gross floor area of nonresidential buildings by more than five percent or increases the gross floor area of any individual building by more than 10%.

      d. Increases the number of stories of any building.

      e. Decreases the amount of open space by more than five percent or alters it in such a way as to change its original design or intended use.

      f. Creates noncompliance with any special condition attached to the approval of the master development plan.

H. Exemptions: This chapter shall not apply to any PUD that has received final approval by the city council prior to the effective date hereof unless such is requested by the property owner and approved by the city council.

11-9-7 :Appeals

A. Board of Appeals and Adjustments

1. The Planning Commission shall act as the Board of Appeals and Adjustments and shall have the power to hear and decide, subject to appeal to the City Council, requests in the following cases:
    a. Interpretation: Hearing appeals where it is alleged that there is an error in a decision or judgment made by the Zoning Administrator in the interpretation or enforcement of this title or in the interpretation of zoning district boundaries.
    b. Variances: Grant variances from literal ordinance requirements in instances where strict enforcement would cause undue hardship because of circumstances unique to the individual property under consideration.
2. Interpretations may be requested to be heard by the board of appeals and adjustments at any regularly scheduled meeting of the planning commission.

B. Appeals to City Council
1. The city council shall have the power to hear and decide appeals where it is alleged by the appellant that there is an error in any fact, procedure, or finding made by the board of appeals and adjustments.
2. Building permits shall not be issued after an appeal has been filed with the Zoning Administrator. If permits have been issued before an appeal has been filed, then the permits are suspended and construction shall cease until the city council has made a final determination of the appeal.
3. Within 10 working days of the action of the board of appeals and adjustments, the applicant, the Zoning Administrator, a member of the city council, or any aggrieved person may appeal the decision to the city council. The appeal must be filed with the Zoning Administrator.
4. The city council shall conduct a hearing within 30 days after the receipt of the appeal from the action of the board of appeals and adjustments. As provided in section 11-9-5 of this chapter, the city council shall give due notice of the hearing. The city council shall render a decision on the appeal without unreasonable delay.
5. Any person may appear and testify at the hearing either in person or by duly authorized agent or attorney.
6. A fee to be established by resolution of the city council shall be paid to the planning department by the appellant at the time the notice of appeal is filed. Such resolution may provide for waiver or refund of such fee under specific circumstances.

11-9-8 :Enforcement

A. Any person who violates or fails to comply with any provisions of this title shall be guilty of a misdemeanor and upon conviction thereof shall be punished to the maximum extent authorized in Minnesota Statutes section 412.231, as amended from time to time. Each day the violation continues shall constitute a separate offense.

B. Enforcement: This title shall be enforced by the Zoning Administrator, who is authorized to take any appropriate actions or proceedings against a violator as provided by statute or ordinance. Such activities may include, but not be limited to, the following:

1. Periodically inspect buildings, structures, or uses of land to determine compliance with the terms of this title.
2. Notify, in writing, any person responsible for violating a provision of this title, indicating the nature of the violation and ordering the action necessary to correct it.
3. Order discontinuance of illegal use of land, buildings or structures; order removal of illegal buildings, structures, additions or alterations; order discontinuance of illegal work being done; or take any other action authorized by this title to ensure compliance with or to prevent violation of its provisions, including cooperation with the city attorney in the prosecution of complaints.
4. Seek immediate enforcement, without prior written notice, whenever it is determined that an emergency exists in relation to the enforcement of a provision of this title that requires immediate action to protect the health, safety, or welfare of occupants of any structure, or the public.

TITLE 11 ZONING REGULATIONS

CHAPTER 10 DEFINITIONS

11-10-1 : General Definitions

ABUTTING: Contiguous to. For example, two adjoining lots with a common property line are considered to be abutting. Sites or properties separated by a public right of way shall not be considered abutting.

ACCESSORY BUILDINGS: A subordinate building or structure on the same lot with a principal or main building.

ACCESSORY STRUCTURE: A structure, with or without a roof and/or walls, detached from a principal building located on the same lot and customarily incidental and subordinate to the principal building.

ACCESSORY USE: A use of land or a building or portion thereof customarily incidental and subordinate to the principal use of the land or building and located on the same lot with the principal use.

ALLEY: A public right of way which affords a secondary means of access to abutting property.

ALTERATIONS: Any modification, additions, or change in construction or type of occupancy; any enlargement of a building, either horizontally or vertically; or the moving of a structure from one location to another.

ANIMAL, DOMESTIC: A domestic animal is an animal or fowl that is typically accessory to occupancy in a principal dwelling such as a dog, cat, rabbit, or potbellied pig, and is tame or domesticated. Domestic animals of a smaller nature include gerbils, hamsters, guinea pigs, mice, birds, snakes, ferrets, and other similar animals maintained as pets and not for breeding purposes.

ANIMAL, NON-DOMESTIC: Non-domestic animals may consist of small caged animals and fowl such as falcons, pigeons, pheasants, quail, chickens, ducks, geese, and other small animals and fowl of this nature which are kept outside the dwelling and of such type and nature that state and national associations exist establishing norms for breeding, confining and rearing. Pygmy goats and miniature horses are not included.

ATTORNEY: The city attorney of Rosemount, Minnesota, or his designated representative.

BARN: The largest accessory building on a property, constructed before 1940, for the exclusive storage of agricultural products and/or farm animals and larger 1,200 square feet, with a gabled or gambrel roof.

BASEMENT: A portion of a building located partly underground, having more than 50% of its floor to ceiling height below the average grade of the adjoining ground. Split level, split entry and earth sheltered homes shall be construed to satisfy basement requirements.

BUILDING: Any structure having a roof which may provide shelter or enclosure for persons, animals or chattel, and when said structure is divided by party walls without openings, each portion of such building so separated shall be deemed a separate building.

BUILDING HEIGHT: The vertical distance from finished grade to the top of the highest roof beams on a flat or shed roof, the deck level on a mansard roof, and the average distance between the eaves and ridge level for gable, hip and gambrel roofs.

BUILDING LINE: That line measured across the width of the lot at the point where the main structure is placed in accordance with setback provisions.

BUILDING, PRINCIPAL: A building in which is conducted the main or primary use of the lot on which it is located.

CERTIFIED ENGINEER: An engineer who is licensed by the Minnesota board of architecture, engineering, land surveying, landscape architecture and interior design.

CITY: The city of Rosemount, Dakota County, Minnesota.

CITY ENGINEER: The professional engineer employed by the city of Rosemount.

CLEAR CUTTING: The removal of an entire stand of trees.

COMMERCIAL EVENT CENTER: A facility located on private property that primarily functions to provide a facility for any type of social gathering that is available for use by various groups for such activities as public assemblies, meetings, private meetings, parties, weddings, receptions and dances.

COMMISSION: The Planning Commission of the City of Rosemount.

COMMISSIONER: The Commissioner of the Department of Natural Resources.

COMPOSTING: The controlled biological decomposition and management of selected solid waste to produce an innocuous, humus-like material, which can be used as a soil conditioner.

COMPREHENSIVE PLAN: A compilation of policy statements, goals, standards and maps for guiding the physical, social and economic development of the City and including a land use plan, a community facilities plan and a transportation plan which has been prepared and adopted by the City of Rosemount.

CONSTRUCTION DEBRIS: Waste building materials, packaging, asbestos and rubble resulting from construction, remodeling, repair, and demolition of buildings and roads.

CONSTRUCTION MATERIALS: Materials that are commonly used in the construction, repair, remodeling or landscaping of a building or building site. Examples of such materials include, but are not limited to, plywood, brick, concrete, tools, roofing materials, dumpsters, and landscaping items.

COUNCIL: The city council of the city of Rosemount.

DECORATIVE FENCE: A fence made of high quality, long lasting and ornamental materials including finished aluminum, wrought iron, brick and the like, but not including wood, unfinished metal, vinyl, PVC, chainlink, wire, barbed wire or like materials.

DENSITY: The number of dwelling units per acre of land. Gross density is based on the total land area of the development site excluding existing public streets or highways. Net density is based on the total land area of the development site excluding wetlands, parks, existing public streets or highways, other land that will remain permanently undeveloped, but including newly platted streets.

DISTRICT: An area of land for which there are uniform regulations governing the use of the buildings and premises.

EQUAL DEGREE OF ENCROACHMENT: A method of determining the location of floodway boundaries so that the hydraulic capacity of floodplain lands on each side of a stream are calculating proportionate increases in flood stages.

FAMILY: An individual, or two or more persons related by blood, marriage or adoption, or a group of not more than five persons not so related, living together as a single housekeeping unit using common cooking and kitchen facilities.

FENCE: Any partition, structure or wall, or gate erected as a dividing marker, barrier or enclosure and located along the boundary or within the required yard. All fences are subject to building permit review and approval.

FINISHED PRODUCT: The end result of a manufacturing process that is ready for utilization or consumption by the ultimate consumer.

FLOOR AREA: The sum of the gross horizontal areas of the floors of a building or dwelling unit, measured from the exterior walls, or from the centerline of party walls separating buildings, excluding basements.

GARAGE/YARD SALE: The temporary display and sale of goods within the garage and/or driveway of a residence.

GROSS FLOOR AREA (GFA): For the purpose of computing required parking, gross floor area is the floor area for the building excluding accessory garages, underground parking, areas not enclosed by exterior walls, mechanical rooms, patios, decks, restrooms, elevator shafts, or stairwells.

GROUP USABLE OPEN SPACE: Open space associated with a multiple-unit development that is not part of a required yard, is relatively free of buildings and is available for recreational usage by the residents.

GUESTROOM: A room or group of rooms occupied, arranged or designed for occupancy by one or more guests for compensation.

HOMEOWNERS' ASSOCIATION: A community association, other than a condominium association, which is organized in a development in which individual owners share common interests in open space or facilities.

IMPERVIOUS SURFACE: A surface that allows very little or no penetration of water or moisture into the soil or ground. Examples include concrete, asphalt, and various compacted materials including aggregate, limestone and recycled bituminous. Buildings, rooftops, patios and driveways and any other structure shall be included for the purpose of calculating maximum lot coverage. Exception: Decks will not be considered when calculating lot coverage percentage.

INTERIM USE: A temporary use of property until a particular date, until the occurrence of a particular event, or until zoning regulations no longer permit it.

JUNKED VEHICLE: Any vehicle, as defined in this section, which does not have lawfully affixed or attached thereto an unexpired state registration or license plate or plates, or the condition of which is wrecked, dismantled, partially dismantled, inoperative, abandoned or discarded.

LOT: A separate parcel, tract, or area of land undivided by any public street or approved private road, which has been established by plat, metes and bounds subdivision, or as otherwise permitted by law, and which is occupied by or intended to be developed for and occupied by a principal building or group of such buildings and accessory buildings, or utilized for a principal use and uses

accessory thereto, including such open spaces and yards as are designed and arranged or required by this title for such building, use or development.

LOT AREA: The area of a horizontal plane bounded by the front, side or rear lot lines, but not including any area occupied by the waters of lakes or rivers or by street rights of way.

LOT, CORNER: A lot which has at least two contiguous sides abutting upon a street for their full length.

LOT COVERAGE: The percent of the lot covered with structures, paved areas, and other impervious surfaces.

LOT DEPTH: The mean distance between the front and rear lot lines. In order to allow flexibility in determining lot depth for parcels of unusual configuration, lot depth can be measured by averaging side property lines or by measuring a straight perpendicular line extending from the front line to the rear lot line and passing through the building zone, subject to determination by the community development director or the director's designee. In no case would the perpendicular line passing through the building zone be less than the minimum lot depth standard.

LOT, INTERIOR: A lot other than a corner lot.

LOT LINE: The lines bounding a lot as herein described.

LOT LINE, REAR: Any boundary of a lot which is opposite the front lot line. If the rear lot line is less than 10 feet in length, the rear lot line shall be a line 10 feet in length within the lot, connecting the side lot lines and parallel to the front lot line.

LOT OF RECORD: A lot which is part of a subdivision or plat, an auditor's subdivision or a registered land survey; or a parcel of land not so platted, for which a deed has been recorded in the Dakota County recorder's office prior to October 19, 1972.

LOT, THROUGH: A lot where opposite lot lines abut two parallel streets and which is not a corner lot.

LOT WIDTH: The width measured along the front yard setback line.

MSW INCINERATOR ASH: Ash from combustion of mixed municipal solid waste (MSW) or refuse derived fuel at a waste combustor.

MEMORIAL PARK: A cemetery developed with gravesite monuments that are flush with the ground surface.

MIXED USE DEVELOPMENTS: Development of one tract of land that will include two or more complementary and integrated uses. All uses will be approved under the planned unit development (PUD) process.

MONTESSORI SCHOOL: A school for children where the fundamental aim is self-education.

NONCONFORMING USE: A building or use of land which does not conform to the regulations of the district or zone in which it is situated.

NONHAZARDOUS INDUSTRIAL SOLID WASTE: Solid waste generated from an industrial or manufacturing process; MSW incinerator ash; and solid waste generated from nonmanufacturing activities such as service and commercial establishments and chemical and debris contaminated soil from spills; property cleanup, and development activities. Nonhazardous industrial waste shall not include: office materials; restaurant and food preparation waste; discarded machinery; demolition waste; household waste; or hazardous waste.

OBSTRUCTION: Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel rectification, culvert, building, wire, fence, stockpile, refuse, fill, structure, or matter in, along, across, or projecting into any channel, watercourse, or regulatory flood hazard area which may impede, retard, or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water, or that is placed where the flow of water might carry the same downstream to the damage of life or property.

OPEN SPACE: Any unoccupied space open to the sky on the same lot with a building.

ORDINARY HIGH WATER LINE (OHWL): A line delineating the highest water level which has been maintained for a sufficient period of time to leave evidence on the landscape. The ordinary high water mark is commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial.

OVERLAY DISTRICT: An area within a zoning district that has an additional set of restrictions governing permitted uses with the intent of preserving natural amenities or resources; or, an area within a district or subdistrict that permits a use or uses, based upon meeting specified criteria, which may not be allowed or permitted elsewhere in the district because of the absence of said criteria.

OVERSIZED RECREATION VEHICLE: A recreation vehicle 23 feet or more in length or 6,500 pounds or more in empty weight.

PASSENGER VEHICLE: A motor vehicle which meets the criteria for "passenger" class registration and license plate as established by the Minnesota department of public safety.

PERFORMANCE STANDARD: A criterion established to control noise, odor, toxic or noxious matter, vibration, fire and explosive hazards, or glare or heat generated by or inherent in uses of land or buildings.

PLANNED UNIT DEVELOPMENT: An area to be planned, developed, operated and/or maintained as a single entity and containing one or more land uses or building types, which allows variances from the strict interpretation of this title in order to achieve other community or design objectives.

PRINCIPAL USE OR STRUCTURE: The main use to which the premises are devoted and the principal purpose for which the premises exist.

PRIVATE PROPERTY: Any real property within the city which is privately owned and which is not "public property" as defined in this section.

PROTECTED WATERS: Any waters of the state which serve a beneficial public purpose, as defined in Minnesota Statutes 1976, section 103G.005. However, no lake, pond or flowage of less than 10 acres in size and no river or stream having a total drainage area less than two square miles shall be regulated as protected waters for the purposes of shoreland management.

PUBLIC HEARING: An official public meeting for which notice has been published in the official newspaper.

PUBLIC PROPERTY: Any street or highway and includes the entire width between the boundary lines of every way publicly maintained for the purposes of vehicular travel, and shall also mean any other publicly owned property or facility.

PUBLICATION: A notice placed in the official newspaper.

REACH: A hydraulic engineering term to describe a longitudinal segment of a stream or river influenced by a natural or manmade obstruction. In an urban area the segment of a stream or river between two consecutive bridge crossings would most typically constitute a reach.

RECREATION VEHICLE: Any vehicle which meets the criteria for "recreation" class registration and license plate, DNR registration, or trailer registration used for conveyance of recreation vehicles as established by the Minnesota department of public safety, Minnesota department of natural resources, or this title, including, but not limited to: travel trailers, stock car trailers, campers, motor homes, tent trailers, vehicles converted to motor homes, boat trailers, snowmobiles, snowmobile trailers, boats, personal watercraft, all-terrain vehicles, and all-terrain vehicle trailers.

RECYCLING: The process of collecting and preparing recyclable materials and reusing the materials in their original form or using them in manufacturing processes that do not cause the destruction of recyclable material in a manner that precludes further use.

RIGHT OF WAY: A street, alley or easement permanently established for the passage of persons and vehicles including the traveled surface of lands adjacent that are formally dedicated to such usage.

SALES LOT: An outdoor area, not enclosed within a building, that may include allowed temporary structures, used for temporary display of merchandise for sale, which display is not the principal use of the property but is in compliance with the requirements of the zoning district in which it is located. Examples of such use include seasonal display and sale of Christmas trees, gardening or nursery products, consumer fireworks, or other similar goods.

SEMIFINISHED PRODUCT: The end result of a manufacturing process that will become a raw material for an establishment engaged in further manufacturing.

SETBACK: The minimum horizontal distance between a lot line and a building line or use.

SHORE IMPACT ZONE: Lands located adjacent to and within 100 feet of the OHWL of public water.

SHORELAND: Lands located within 1,000 feet of the OHWL of a lake, pond or flowage and within 300 feet of a river or stream or the landward extent of a floodway designated by ordinance and the zoning map on such river or stream, whichever is greater. The practical limits of shorelands may be less than the statutory limits whenever the waters involved are bounded by topographic divides which extend landward from the OHWL for lesser distances.

SOLID WASTE: Garbage, refuse, sludge from a water supply treatment plant or air contaminant treatment facility, and other discarded waste materials and sludges, in solid, semisolid, liquid, or contained gaseous form, resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include hazardous waste; animal waste used as fertilizer; earthen fill, boulders, rock; concrete diamond grinding and saw slurry associated with the construction, improvement, or repair of a road when deposited on the road project site in a manner that is in compliance with best management practices and rules of the pollution control agency; sewage sludge; solid or dissolved material in domestic sewage or other common pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents or discharges which are point sources subject to permits under section 402 of the federal water pollution control act, as amended, dissolved materials in irrigation return flows; or source, special nuclear, or byproduct material as defined by the atomic energy act of 1954, as amended.

SPECIAL WASTE: A nonhazardous industrial waste that is not mixed municipal solid waste and is managed as a separate waste stream.

SPENT BAUXITE: A nonhazardous industrial waste, consisting primarily of aluminum oxide, aluminum silicate and silica material.

STREET: A public thoroughfare which affords the principal means of access to abutting property.

STREET LINE: The legal line of demarcation between a street and abutting land.

STRUCTURE: Anything constructed or erected, the use of which requires a location on the ground, or attached to something having a location on the ground.

USE: The purpose or activity for which the land or building thereof is designed, arranged, or intended, or for which it is occupied or maintained and shall include any manner of performance of such activity with respect to the performance standards of this title.

USE, PERMITTED BY PUD: A use which is permitted only if the PUD procedure is used and a plan is formally approved by the city.

USE, PERMITTED BY RIGHT: A use which is unconditionally permitted in the district under which it is listed.

USE, PUBLIC OR INSTITUTIONAL: A government, nonprofit or quasi- public use or institution such as a church, library, public or private school, hospital or municipally owned or operated building, structure or land use for public purpose, or a use owned or operated by a nonprofit, religious or eleemosynary institution and providing educational, cultural, recreational, religious or similar types of public programs.

VEHICLE: Any vehicle which is self-propelled or designed to be pushed or pulled and shall include, but not be limited to, automobiles, buses, motor bikes, motorcycles, motor scooters, trucks, tractors, go-carts, golf carts, campers, trailers, boats, planes and gliders.

WETLAND ALTERATION: Any activity that will change or diminish the course, current, or cross section of a public water.

WETLANDS: Swamps, marshes or drainage basins as defined in "U.S. Fish and Wildlife Circular No. 39" (1971 edition). For the purposes of shoreland/wetland regulations, wetland types 3, 4 and 5, of at least two and one-half (2.5) acres in size, will be regulated.

YARD OR SETBACK: A required open space on a lot which is unoccupied and unobstructed from the ground upward, except as otherwise provided for herein. The measurement of a yard shall be construed as the minimum horizontal distance between the lot line and the building line.

YARD, FRONT: A yard extending along the full width of the front lot line between side lot lines and extending from the abutting front street right of way line to the nearest line of the principal building. On a corner lot the narrowest street dimension shall be the front yard.

YARD, INTERIOR SIDE: A side yard which is not adjacent to a street.

YARD, REAR: A yard extending along the full width of the rear lot line between side lot lines and extending from the abutting rear property line to the nearest line of the principal building.

YARD, STREET SIDE: A side yard which is adjacent to a street.

ZONING DISTRICT: See definition of District.

11-10-2 : Use Definitions

ACCESSORY AGRICULTURE: A tract of land primarily used for residential purposes on which crops and often livestock are raised but not as a principal source of income.

ACCESSORY DWELLING UNIT, INTERNAL OR ATTACHED: An accessory living space which is located within or attached to an existing residential dwelling. This living space should be accessible from within the principal structure.

ACCESSORY RETAIL: The sale of goods or services located within the same building or on the same lot as the principal use and which supports or is cohesive with the principal use.

ADULT ESTABLISHMENT: Refer to definitions in section 3-8-2 of this code.

AGRICULTURE: The use of the land for agricultural purposes, including farming, dairying, pasturage, horticulture, storage, animal and poultry husbandry and accessory uses and buildings. The care and keeping of agricultural animals is also subject to the regulations for the care and keeping of animals within the city contained in title 7, chapter 4 of this code.

AGRICULTURAL BUILDING: A structure meeting the definition listed in Minnesota Statutes 326B.103, Subd.3.

AGRICULTURAL PRODUCT STAND: A booth or stall located on a farm from which farm products raised exclusively on that farm are sold to the general public.

AGRICULTURE RESEARCH AND TESTING FACILITY: The use of land in conjunction with research, testing, and marketing of agricultural activities. The uses may include those necessary accessory uses subordinate to the principal use including packing, treating or storing produce or raising livestock. The operation of the accessory uses may include laboratory, office and greenhouse activities subordinate to the research activity.

AM RADIO ANTENNA: That portion of any communication equipment located on the exterior or outside of any structure used for continuous or standby transmission or reception of AM radio waves.

ANIMAL BOARDING, KENNEL, OR DAYCARE CENTER: Any structure or premises on which more than five dogs or cats over six months of age are temporarily or permanently boarded, including animal day care/spa facilities. Veterinary clinics providing boarding as part of medical services are not included in this use.

ANIMAL KEEPING, DOMESTIC: A domestic animal is an animal or fowl that is typically accessory to occupancy in a principal dwelling such as a dog, cat, rabbit, or potbellied pig, and is tame or domesticated. Domestic animals of a smaller nature include gerbils, hamsters, guinea pigs, mice, birds, snakes, ferrets, and other similar animals maintained as pets and not for breeding purposes.

ANIMAL KEEPING, NON-DOMESTIC: Non-domestic animals may consist of small caged animals and fowl such as falcons, pigeons, pheasants, quail, chickens, ducks, geese, and other small animals and fowl of this nature which are kept outside the dwelling and of such type and nature that state and national associations exist establishing norms for breeding, confining and rearing. Pygmy goats and miniature horses are not included.

ANIMAL/VETERINARY CLINIC OR HOSPITAL: A clinic operated by a licensed veterinarian exclusively for the diagnosis, treatment, correction, relief, or prevention of animal disease, deformity, defect, injury, or other physical or mental conditions; the performance of obstetrical procedures for animals, including determination of pregnancy and correction of sterility or infertility; and the

rendering of advice or recommendations with regard to any of the above. The facility may also provide boarding for animals as part of medical services.

ART STUDIO: An establishment engaged in the creation or display of visual works of art.

ASSISTED LIVING FACILITY: A residential facility licensed by the state which provides services on a regular basis, such as personal services, 24-hour supervision, social activities, and health-related care and services, to individuals who require the assistance, but who do not require the degree of care and treatment that a hospital or skilled nursing facility provides.

AUTOMOBILE FUEL STATION: A building, land area, or other premises used or intended to be used for the retail dispensing or sale of vehicular fuels. Additional services provided may include, but are not limited to, the sale of automobile accessories, groceries, and household products. Major or minor auto repair is not included in this use.

AUTOMOBILE REPAIR, MAJOR: Repair garages and specialty establishments for motorcycles, passenger automobiles and trucks of all sizes, such as machine, body and fender, auto glass, painting, radiator, transmission, and vehicle upholstery services. May also include repair of machinery and equipment.

AUTOMOBILE REPAIR, MINOR: Minor automotive servicing and replacement of parts, usually in the same day, for passenger automobiles and/or motorcycles not in excess of 7,000 pounds gross weight. Services include, but are not limited to, engine tune up, lubrication, and tire, muffler, brake, and electrical services but shall not include any operation specified under "automobile repair, major".

BAR: An establishment or part of an establishment used primarily for the sale or dispensing of liquor for consumption on the premises.

BARGE TERMINAL: Any premises used for the loading, unloading, storage, and distribution of barge cargo. This use includes barge loading facilities and barge slips, but does not include barge fleeting.

BEEKEEPING: The keeping of bees in one or more colonies.

BREWERY: A facility that produces more than 20,000 barrels of malt liquor in a calendar year as regulated by Minnesota statutes, as may be amended, and may or may not include a brewer taproom.

BREWERY, MICRO: A facility that produces not more than 3,500 barrels of malt liquor in a calendar year as regulated by Minnesota statutes, as may be amended, and may or may not include a brewer taproom.

BREWERY, SMALL: A facility that produces not more than 20,000 barrels of malt liquor in a calendar year as regulated by Minnesota statutes, as may be amended, and may or may not include a brewer taproom.

BREWPUB: A restaurant with a microbrewery or microdistillery use operated on the same premises as the restaurant.

CAR WASH, FULL SERVICE: A car wash wherein operating functions are performed primarily by an operator owner through the use of washing, waxing, and drying equipment supplemented with manual detailing by the operator owner.

CAR WASH, SELF-SERVICE OR DRIVE-THROUGH: A car wash wherein the customer provides labor and where only limited self-propelled wash racks are provided.

CEMETERY: A parcel of land intended for the burial of human dead. A marker or memorial is erected at each gravesite for permanent remembrance of the deceased. Cemeteries may include columbariums, crematories, mausoleums, mortuaries, and chapels when operated in conjunction with and within the boundary of such cemetery.

CHICKEN KEEPING: The keeping of chickens.

COMBINED HEAT AND POWER PLANT: A facility that generates electricity and useful thermal energy in a single, integrated system. Also known as cogeneration, or cogen, plants.

COMMERCIAL ANIMAL BREEDING: Any structure, land, or combination thereof designed or arranged for the breeding of animals for sale purposes.

COMMERCIAL BAKERY: An establishment that is primarily engaged in the production and/or wholesaling of baked goods, but where retail sales are prohibited.

COMMERCIAL CENTER: A group of unified commercial establishments located on a single land parcel and consisting of not less than two distinct business entities which share or jointly use parking facilities.

COMMERCIAL EVENT CENTER: A structure or designated area used for celebration, weddings, ceremonies, receptions, corporate functions, or similar activities for the benefit for someone other than the property owner that takes place on an occasional basis. This does not include uses accessory to single-family uses, such as private parties, gatherings and similar activities.

COMMERCIAL GREENHOUSE OR NURSERY: An establishment conducted within or without an enclosed building for the growth, display, and sale of trees, shrubs, flowers, and other plants for wholesale to retailers and jobbers. Exterior storage and accessory sales are prohibited.

COMMERCIAL HORSE STABLE: A use where horses and ponies owned or used by someone other than the property owner are boarded in exchange for compensation.

COMMERCIAL RECREATION FACILITY, INDOOR: Indoor facilities operated as a business and which are open to the public for a fee that shall include, but are not limited to, billiard parlors, skating rinks, inflatable domes or structures, indoor swimming pools, bowling alleys, movie theaters, arcades, health clubs, reception halls, and other similar businesses. Such businesses may also provide a snack bar, restaurant, retail sales of related items, and other support facilities.

COMMERCIAL RECREATION FACILITY, OUTDOOR: Outdoor facilities operated as a business and which are open to the public for a fee that shall include, but are not limited to, golf courses, outdoor swimming pools, amusement parks, and other similar businesses. Such facility may also provide a snack bar, restaurant, retail sales of related items, and other support facilities.

COMMUNITY GARDEN: A piece of land gardened or cultivated by a group of people individually or collectively.

COMPOSTING: The controlled biological decomposition and management of selected solid waste to produce an innocuous, humuslike material, which can be used as a soil conditioner.

CONSTRUCTION CONTRACTOR YARD: A lot or portion of a lot or parcel used to store and maintain construction equipment and other materials customarily required in the building trades by a construction contractor.

CONSTRUCTION DEMOLITION WASTE FACILITY: A facility that accepts and disposes of construction debris and industrial waste in accordance with permits and plans approved by the State of Minnesota, Dakota County, and all other applicable local, State, and Federal laws.

CONSTRUCTION-RELATED TEMPORARY USE: A temporary use or structure related to construction activities on the same site. This use may consist of construction-related trailers, mobile structures used for construction offices and storage, batch plans, and temporary offices to replace permanent facilities being reconstructed.

CONTINUING CARE SENIOR FACILITY: A residential facility or complex which provides a variety of senior living choices, from independent living to long-term care, with a goal of helping residents to age in place.

DATA CENTER: A facility used primarily for the storage, management, processing, and transmission of digital data which houses computer or network equipment, systems, services, appliances, and other associated components related to digital data storage and operations.

DAY CARE CENTER: A state-licensed facility other than a private residence that provides for the care of children and adults during only part of a 24-hour day. This term includes nursery schools, preschools, day care facilities, and other similar uses but excludes public and private schools or any facility offering care of individuals for a full 24-hour period.

DAY CARE, GROUP FAMILY: A dwelling unit where a resident of the dwelling is providing care under Minnesota Rules 9502 for up to 14 children.

DISTILLERY: A facility that produces distilled spirits as regulated by Minnesota statutes, as may be amended.

DISTILLERY, MICRO: A facility that produces not more than 40,000 proof gallons of distilled spirits in a calendar year as regulated by Minnesota statutes, as may be amended.

DRIVE-THROUGH FACILITY: An accessory use, structure, or portion of a principal structure where patrons may purchase products or receive service without having to leave their motor vehicle (and enter a building).

DWELLING, APARTMENT: A residential building consisting of five or more independent dwelling units, but sharing hallways and main entrances and exits.

DWELLING, APARTMENT MIXED USE: A building designed for one or more dwelling units as well as non-residential uses that are permitted in the zoning district, with all dwelling units sharing a joint entrance from the outside.

DWELLING, ATTACHED TOWNHOUSE OR ROWHOUSE: A single residential unit which is located within a larger residential structure containing three or more units and which is separated from the adjoining dwelling unit(s) by at least one common wall. Each unit shall have separate and individual entrances. Each dwelling may be located on its own individual lot or on a common lot containing all of the attached units.

DWELLING, COURTYARD COTTAGE: A cluster of single-unit dwellings in the form of smaller houses, arranged around a shared courtyard or open space that is typically perpendicular to the street. The shared courtyard takes the place of individual rear yards and becomes an important community-enhancing element of this housing type.

DWELLING, LIVE/WORK: A dwelling unit used jointly for both residential and commercial uses.

DWELLING, MANUFACTURED HOME: A structure, transportable in one or more sections, which in the traveling mode, is eight body feet or more in width or 40 body feet or more in length, or, when erected on the site, is 320 or more square feet, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the

required utilities; except that the term herein includes any structure which meets all the requirements and with respect to which the manufacturer voluntarily files a certification required by the state of Minnesota and complies with the standards established under this title.

DWELLING, SINGLE-UNIT DETACHED: A site-built or factory-built residential structure containing one dwelling unit on a single lot and which is not attached to any other dwelling unit by any means, including roof, wall, or floor.

DWELLING, TWINHOME: A dwelling which is joined to one other dwelling at one or more sides by a common wall or walls, each unit on a separate lot, and each unit having at least two walls exposed to the outdoors.

DWELLING, TWO- TO FOUR-UNIT: A single residential structure on a single lot which contains two, three, or four separate dwelling units.

DWELLING UNIT: A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

EDUCATIONAL SERVICES: Educational services, excluding elementary and secondary schools, as part of a multi-tenant or mixed-use building, including arts and crafts, dance and music instruction and self-defense and similar individual or small group educational services.

ESSENTIAL SERVICE FACILITY: Underground or overhead gas, electrical, steam or water distribution systems; collection, communication, supply or disposal systems including poles, wires, mains, drains, sewers, pipes, conduits, cables, water pumping or storage facilities, gas regulation stations, sewer lift or pumping facilities, traffic signals, hydrants, electrical substations and switching stations, or other associated equipment and accessories in conjunction therewith, including associated equipment enclosure buildings (but not including any other buildings or commercial use antenna towers), which systems are owned and operated by public utilities or by municipal or other governmental agencies for the purpose of providing an essential service to the public.

FARM WINERY: A winery operated by the owner of a Minnesota farm with a majority of the ingredients produced on the premises as regulated by Minnesota statutes, as may be amended, and may or may not include associated event spaces, retail, and restaurants without drive-through facilities.

FUNERAL HOME: A building or part thereof used for human funeral services. Such building may contain space and facilities for:

1. Embalming and the performance of other services used in preparation of the dead for burial:
2. The performance of autopsies and other surgical procedures;
3. The storage of caskets, urns, and other related funeral supplies;
4. The storage of funeral vehicles;
5. Facilities for cremation; and
6. A funeral chapel or other area used for the performance of funeral ceremonies, mourning, and viewing of the deceased.

GENERAL REPAIR: Any establishment within an enclosed building which is engaged in the repair of consumer goods such as furniture, jewelry, watches, clocks, radios, small electronics, and televisions. Repair of vehicles or industrial equipment is not included.

GREENHOUSE: A private building or structure constructed chiefly of glass, glasslike or translucent material which is devoted to the protection or cultivation of flowers or other tender plants.

HEALTH AND ATHLETIC CLUB FACILITY: An establishment which provides physical fitness facilities and services to the public for a fee, including but not limited to; game courts, exercise equipment, exercise areas, running tracks, swimming pools, physical fitness maintenance and weight control services and instructors, locker rooms, saunas and associated retail shop intended for members of the club only.

HOME OCCUPATION: Any occupation or profession engaged in by the occupant of a residential dwelling unit, which is clearly incidental and secondary to the residential use of the premises and does not change the character of said premises.

HOSPITAL: An establishment providing physical or mental health services, inpatient or overnight accommodations, and medical or surgical care of the sick or injured.

HOTEL: A building containing eight or more guestrooms in which lodging is provided with or without meals for compensation and which is open to transient or permanent guests or both, and where no provision is made for cooking in any guestroom, and in which ingress and egress to and from all rooms is made through an inside lobby or office supervised by a person in charge.

LANDSCAPE AND HORTICULTURAL SERVICE: A service business principally engaged in the decorative and functional alteration, planting, and maintenance of grounds. This use may include limited outdoor storage of equipment and materials.

LONG-TERM OR TRANSITIONAL CARE FACILITY: A facility that provides meals, lodging, and nursing care to two or more individuals due to illness, age, or infirmity. Long-term care facilities include skilled nursing facilities such as nursing homes, rest homes, boarding care homes, convalescent care, and other transitional care facilities.

MANUFACTURED HOME PARK: Any site, lot, field or tract of land upon which two or more occupied manufactured homes are located and includes any building, structure, tent, vehicle or enclosure used or intended for use as part of the equipment of the manufactured home park. Also referred to in this title simply as "park".

1. APPURTENANCE: The visible, functional, or ornamental objects accessory to and part of a building.
2. CLOSURE STATEMENT: A statement prepared by the park owner clearly stating the park is closing, addressing the availability, location, and potential costs of adequate replacement rental sites within a 25-mile radius of the manufactured home park that is closing and the probable relocation costs of the manufactured homes located in the park to other parks within the 25-mile radius.
3. DISPLACED RESIDENT: A resident of an owner-occupied manufactured home who rents a lot in a manufactured home park, including members of the resident's household, as of the date the park owner submits a closure statement to the city community development department.
4. LOT: An area within a manufactured home park, designed and used for the accommodation of a manufactured home.
5. PARK OWNER: The owner of a manufactured home park and any person acting on behalf of the owner in the operation or management of a manufactured home park.

6. PERSON: Any individual, corporation, firm, partnership, incorporated and unincorporated association or any other legal or commercial entity.
7. PURCHASER: The person buying the manufactured home park from the park owner. In the event that the park owner intends to retain ownership and convert the park to a different use, all references to the purchaser refer to the park owner.
8. RELOCATION COSTS: The reasonable cost of relocating a manufactured home from a manufactured home park within the city that is being closed or converted to another use to another manufactured home park within a 25-mile radius of the park, as follows:
    a. Preparation for Move: Reasonable costs incurred to prepare the eligible manufactured home for transportation to another site. This category includes crane services, tire and/or axle rental if needed, and the cost of repairs or modifications that are required in order to take down, move and set up the manufactured home.
    b. Transportation to Another Site: Reasonable costs incurred to transport the eligible manufactured home and any attached appurtenances, such as porches, decks, skirting and awnings, which were not acquired after notice of closure or conversion of the park to another manufactured home park within a 25-mile radius. This category also includes the cost of insuring the manufactured home while the home is in the process of being relocated, and the cost of obtaining moving permits provided that the park owner shall not be required to pay delinquent taxes on a manufactured home if necessary in order to obtain a moving permit. This category does not include the cost of moving personal property separate and distinct from the mobile home and separate and distinct from the appliances and appurtenances of the mobile home.
    c. Hookup at a New Location:
        i. The reasonable cost of connecting the eligible manufactured home to utilities at the relocation site, including crane services if needed. The park owner shall not be required to upgrade the electrical or plumbing systems of the manufactured home.
        ii. Relocation costs do not include the cost of any repairs or modifications to the manufactured home needed to bring the home into compliance with the state and federal manufactured home building standards for the year in which the home was constructed. Relocation costs also do not include the cost of any repairs or modifications to the home or appurtenances into compliance with the rules and regulations of the manufactured home park to which the manufactured home is to be relocated, if those rules and regulations are no more stringent than the rules and regulations of the park in which the home is located, and the resident was notified of noncompliance with the rules and regulations of the park in which it is located within 60 days prior to delivery of the closure statement.

MANUFACTURING, CUSTOM: The production and sale on the premises of hand manufactured products involving only the use of hand tools and domestic mechanical equipment.

MANUFACTURING, HEAVY: An establishment or use of land that manufactures, assembles, or fabricates using processes that generally create odor, noise, vibration, illumination or particulates that may impact surrounding properties. This category shall also include any use of land that needs large outdoor structures or storage that cannot be incorporated into the building. Examples include, but are not limited to the following: large-scale food and bottling operations; lumber, milling and

planning facilities; grain milling; gas manufacture, aggregate, concrete, and asphalt plants; foundries, forge shops, and other intensive metal fabrication; and chemical manufacturing.

MANUFACTURING, LIGHT: An establishment or use of land for the assembly or processing of previously processed components or manufactured parts using processes that do not create significant amounts of noise, vibration, illumination, or particulates that may impact surrounding properties. Odors produced on-site shall not negatively affect other businesses or properties in the area. Examples include but are not limited to the following: food; pharmaceuticals; clothes; furniture (where wood is milled off-site); hardware; toys; light sheet metal products; mechanical components; printing; small vehicle assembly; and computer software.

MEDICAL OR DENTAL CLINIC: A facility used primarily for the provision of outpatient medical, dental, chiropractic, therapeutic, optometric or mental health care and treatment.

MINERAL EXTRACTION: The extraction of sand, gravel, rock or other such material from the land.

1. ASPHALT PLANT: A facility used to manufacture asphalt or other forms of coated road stone, sometimes known as blacktop. This facility allows the combination of a number of aggregates, sand, and filler, in the correct proportions, heated and finally coated with a binder. Increasingly, recycled asphalt or aggregate products (RAP) are used as part of the mix.
2. BATHYMETRIC OR HYDROGRAPHIC CHARTS: Charts that show lake bottom relief or terrain as contour lines (called depth contours or isobaths) and selected depths (soundings).
3. BERM: A level space, shelf, or raised barrier separating two areas.
4. CLEAN FILL: As defined in Dakota County ordinance 110, section 2.00.
5. CONCRETE: A mixture of paste and aggregates (sand and rock). The paste, composed of cement and water, coats the surface of the fine (sand) and coarse aggregates (rocks) and binds them together into a rocklike mass known as concrete.
6. CONSTRUCTION AGGREGATES OR AGGREGATE: A broad category of coarse particulate material used in construction, including sand, gravel, crushed stone, slag, and recycled concrete.
7. CONVEYING (CONVEYOR): A common piece of mechanical handling equipment that moves materials from one location to another.
8. CRUSHING/CRUSHING PLANT: A machine or plant designed to reduce large rocks into smaller rocks or gravel.
9. DRY MINING: Mining and excavation that takes place above the ground water table.
10. EIS: The environmental impact statement as defined by the Minnesota environmental quality board rules.
11. FLOATING DREDGE (DREDGING): An activity of mining that is carried out underwater with a machine equipped to excavate material from underwater and bring it to shore where they can be processed into construction grade aggregates.
12. HAUL ROAD: An internal private road used to transport material.
13. HAUL ROUTE: An external public road used to transport material.

14. LARGE SCALE MINERAL EXTRACTION: Mineral extraction at a scale that would require a mandatory environmental impact statement as described in Minnesota Rules, part 4410.4400 subpart 9 nonmetallic mineral mining.
15. MINERAL EXTRACTION ACCESSORY USE: Any use customarily incidental to a mineral extraction operation, including but not limited to: gravel crushing, gravel washing, minor vehicle and mining equipment maintenance, offices associated with the mining operation, stockpiling, storage of machinery used daily in the extraction area, and truck washing.
16. MINERAL EXTRACTION ANCILLARY USE: Any use and production facility that either uses significant quantities of aggregate resources or benefits from close proximity to large scale mineral extraction operation but which also generates issues, nuisances, and adverse land use impacts beyond the scope of the operation itself.
17. MINING BUFFER/SETBACK: The distance a structure or activity must be from the edge of an EIS boundary line.
18. PORTABLE PROCESSING EQUIPMENT: Equipment designed on a skid or axle assembly that can move from point to point allowing for shorter travel times and reduced emissions.
19. PRECAST/CAST CONCRETE PRODUCTS: Products such as bridge beams or plank, concrete pipe or culverts that are cast at a facility and later transported to a specific construction site after a proper curing time has been achieved.
20. READY MIXED CONCRETE PLANT: A facility that manufactures specifically designed concrete for delivery to a customer's construction site in a freshly mixed or plastic unhardened state.
21. RECLAMATION/END USE: The process of creating useful landscapes that meet a variety of goals. It includes all aspects of this work, including material placement, stabilizing, capping, regrading, and placing cover soils, revegetation, and maintenance.
22. RECYCLED ASPHALT AND/OR AGGREGATE PRODUCTS (RAP): Left over or demolished concrete or asphalt products. These products are recycled (reproduced) and reused in production of new products or road base products used on construction sites.
23. SCREENING/SCREENING PLANT: A machine that takes granulated material and separates it into multiple grades by particle size.
24. SMALL SCALE MINERAL EXTRACTION: Mineral extraction at a scale less than would require a mandatory environmental impact statement as described in Minnesota rules, part 4410.4400 subpart 9 nonmetallic mineral mining.
25. STAGING: Setting up of equipment or a truck fleet in preparation for a day's activity.
26. STOCKPILE: A pile or storage location for bulk materials, forming part of the bulk material handling process. Stockpiles are normally created by a stacking conveyor.
27. STRIPPING: Removing topsoil (black dirt), clay, timber, brush and waste aggregate products from the top of the mining deposit to expose the quality sand and gravel needed in the production of high-quality construction aggregates.
28. TON OF MATERIAL: A U.S. short ton (2,000 pounds) of material.
29. TOPSOIL: The upper outermost layer of soil, usually in the top two to eight inches. It has the highest concentration of organic matter and is where most of the earth's biological soil activity occurs.

30. TRUCK SCALE: A platform device that a truck will drive onto for weighing to ensure that the truck is of legal weight and/or dimension.
31. WASHING/WASH PLANT: A machine into which sand and gravel is conveyed, separated by size, washed, dewatered, and then sent to stockpiles for load out.
32. WET MINING: Mining and excavation area that will take place below the ground water table.

MOBILE FOOD UNIT: A food service operation as defined in section 3-10-2 of this code.

MOTEL: A building or group of attached or detached buildings under common ownership containing eight or more guest or sleeping rooms which is used or intended to be used primarily for the accommodation of transient automobile travelers. This term shall include buildings designated as auto courts, tourist courts, motor courts, motor hotels and similar names.

MUNICIPAL SOCIAL, CULTURAL, OR RECREATIONAL FACILITY: An area of land, water or any building in which social and cultural events, teen center, recreation or athletic sports are provided for public or semi-public use, whether temporary or permanent.

NATURE PRESERVE/CONSERVATION AREA: Any area or parcel of undeveloped land which remains in its natural state in perpetuity through deeds or other legal means.

NONHAZARDOUS INDUSTRIAL WASTE CONTAINMENT FACILITY: A facility that accepts and land disposes of only nonhazardous industrial waste. The facility may accept nonhazardous industrial liquid waste if such liquids are processed to ensure no free liquids are land disposed. A facility shall include containment cells and all other appurtenances necessary for its operation.

OFFICE: An establishment used primarily for conducting the predominantly administrative or clerical service affairs of a business, profession, service, industry or government, or like activity. This use may include ancillary services for office workers, such as a restaurant, coffee shop, newspaper or candy stand, and child care facilities.

OFF-SITE SERVICE BUSINESS: Any establishment including but not limited to plumbing, installation, electrical, or IT services where services are rendered off of the premises of the primary business location.

OFF-STREET PARKING OR LOADING FACILITY: A land surface or facility providing off-street vehicular parking spaces with drives and maneuvering lanes so as to provide access for entrance and exit. Parking facilities may include public garages, parking ramps, surface parking lots, and other similar uses.

OUTDOOR DINING: A specified outdoor area for dining which is accessory to a principal restaurant or food service establishment use.

OUTDOOR DISPLAY OR SALES: Sales or the arrangement of the products a business sells outside of the building the business occupies.

OUTDOOR INDUSTRIAL EQUIPMENT: Functioning structures such as conveyor belt systems, cooling towers, storage silos, or similar that are accessory and integral to the principal use of the site.

OUTDOOR STORAGE: The storage of personal or business property for a period greater than 24 hours outside of an enclosed building.

PARK: An area of land developed and maintained for active and/or passive recreational pursuits, including tot-lots, playgrounds, neighborhood parks, play fields, and special purpose areas.

PLACE OF WORSHIP: Building(s) or structure(s) which by design, construction, and/or adaptation are primarily intended for the conducting of organized religious services and associated accessory uses such as daycares or nurseries.

PRODUCTION STUDIO: Structures or land involved in the staging, creation, and/or production of motion pictures, radio or television shows, and recording and broadcast facilities.

PUBLIC ASSEMBLY: An establishment or use to which members of the general public are invited, induced, or permitted to attend. Public assembly uses may include but is not limited to, art gallery, museum, club or lodge, governmental service building, auditorium, civic or community center, conference or convention center, or live performance facilities.

PUBLIC OR GOVERNMENTAL SERVICES: A structure or use which provides services available to the public and managed by public entities including but not limited to libraries, city offices, auditoriums, civic centers, and public administration buildings.

PUBLIC PARKING OR LOADING FACILITY: A land surface or facility providing off-street vehicular parking spaces with drives and maneuvering lanes so as to provide access for entrance and exit. Parking facilities may include public garages, parking ramps, surface parking lots, and other similar uses.

PUBLIC RECREATION FACILITY: An indoor or outdoor public complex or destination designed and equipped for the conduct of sports and leisure-time activities. This facility may include swimming pools, tennis courts, or other similar uses associated with a designated recreation area. This use includes related accessory buildings and structures.

RECREATIONAL AMENITY, PRIVATE: A private area or facility intended to serve the recreational needs of a specific residential population. Private recreational amenities include but are not limited to: tennis courts, walking trails, basketball courts, or playground equipment.

RECREATION VEHICLE: Any vehicle which meets the criteria for "recreation" class registration and license plate, DNR registration, or trailer registration used for conveyance of recreation vehicles as established by the Minnesota department of public safety, Minnesota department of natural resources, or this title, including, but not limited to: travel trailers, stock car trailers, campers, motor homes, tent trailers, vehicles converted to motor homes, boat trailers, snowmobiles, snowmobile trailers, boats, personal watercraft, all-terrain vehicles, and all-terrain vehicle trailers.

RECYCLING OPERATION: An area where used, waste, discarded, or salvaged materials are bought, sold, exchanged, stored, baled, cleaned, packed, disassembled or handled, including, but not limited to, scrap iron, and other metals, paper, rags, bottles and lumber. Recycling operation shall not include businesses that use recycled materials to manufacture a finished product.

RESIDENTIAL CARE FACILITY: An in-home residential facility licensed by the state which provides primarily nonmedical care to individuals who are in need of personal assistance to manage the activities of daily life or for the protection of the individual.

RESTAURANT: An establishment where food and drink are prepared and served for human consumption, principally within the establishment or for take-out to be consumed off-premises. Alcohol sales may be permitted with this use. This use includes sit-down and fast casual establishments.

SACRED COMMUNITY: A residential settlement established on or contiguous to the grounds of a religious institution’s primary worship location primarily for the purpose of providing permanent

housing for chronically homeless persons, extremely low-income persons, and designated volunteers.

SACRED COMMUNITY MICRO UNIT: A mobile residential dwelling providing permanent housing within a sacred community.

SALES OFFICE, TEMPORARY: The temporary use of a dwelling unit or other structure within a residential development project as a sales or rental office for the units within the same development.

SATELLITE DISH: An apparatus capable of receiving communications from a transmitter or a transmitter relay located in a planetary orbit.

SCHOOL, ELEMENTARY: A building used for the purpose of public or private elementary education, including special needs education, which meets all the requirements of compulsory education laws of the State of Minnesota, and not providing residential accommodations.

SCHOOL, POST-SECONDARY: A building or area of land used for the purpose of public or private post-secondary education, including but not limited to colleges, universities, and trade or business schools.

SCHOOL, SECONDARY: A building used for the purpose of public or private secondary education, including special needs education, which meets all the requirements of compulsory education laws of the State of Minnesota, and not providing residential accommodations.

SCRAP OR SALVAGE YARD: Any area, lot, land, parcel, building or structure, or part thereof used for the storage, collection, processing, purchase, sale, salvage, or disposal of scrap, waste, reclaimable material, or debris.

SELF-SERVICE STORAGE FACILITY: A building or group of buildings consisting of two or more individual, self-contained units leased to individuals, organizations, or businesses for self-service storage of personal property.

SHORT-TERM VACATION RENTAL: A dwelling, or portion thereof, that is used for accommodations or lodging of guests paying a fee or other compensation for a period of less than 30 consecutive days.

SHOWROOM: A building, structure, or part thereof used for the display of merchandise or equipment and its sale to a customer where delivery of purchased merchandise is made directly to the ultimate consumer from a warehouse.

SMALL-SCALE SOLAR ENERGY GENERATION SYSTEM: A solar collector or other device mounted on the ground or on a building, pole, or rack whose primary purpose is to harvest energy by transferring solar energy into another form of energy.

SPECIALTY FOOD OR BEVERAGE SHOP: An establishment whose primary business is the sale of a single specialty type of food or beverage that is not considered a complete meal (e.g. candy, coffee, ice cream) for consumption on or off premises. The sale of other food, beverages, or merchandise is incidental to the sale of the specialty food or beverage.

SPENT BAUXITE DISPOSAL FACILITY: A facility that accepts and land disposes of only spent bauxite. A facility shall include containment cells, leachate collection systems, monitoring systems and other appurtenances necessary for its operation.

STANDALONE RETAIL BUSINESS, LARGE: A detached structure 50,000 square feet or greater in gross floor area where goods are sold.

STANDALONE RETAIL BUSINESS, SMALL: A detached structure under 50,000 square feet in gross floor area where goods are sold.

STANDALONE SERVICE BUSINESS: A detached structure where services are sold or provided.

STORAGE AND SALE OF MACHINERY AND EQUIPMENT: The storage and sale of machinery and equipment, including but not limited to trailers, motorcycles, boats, and farm implements.

SWIMMING POOL: A constructed or pre-fabricated in-ground or above-ground structure over 24 inches deep and containing more than 5,000 gallons of water designed or used for recreational purposes including swimming, diving and bathing.

TESTING OR RESEARCH LABORATORY: A facility involved in scientific research, investigation, testing, or experimentation, but not including manufacture or sale of products, except as incidental to the main purpose of the laboratory.

TOBACCO OR SMOKE SHOP: A retail establishment dedicated to the sale of tobacco, tobacco products, or associated smoking devices and accessories as its primary source of income.

TRANSIENT MERCHANT SALES LOT: An outdoor area, not enclosed within a building, that may include allowed temporary structures, used for temporary display of merchandise for sale, which display is not the principal use of the property but is in compliance with the requirements of the zoning district in which it is located. Examples of such use include seasonal display and sale of Christmas trees, gardening or nursery products, consumer fireworks, or other similar goods.

TRANSIT STATION: Any structure, area, or transit facility that is primarily used as part of a transit system for the purpose of loading, unloading, or transferring passengers or accommodating the movement of passengers from one mode of transportation to another.

TRUCK STOP: Any building, premises or land in which or upon which a business, service or industry involving the maintenance, cleaning, servicing, storage or repair of commercial vehicles is conducted. Primary activities include the dispensing of motor fuel and the sale of accessories or equipment for trucks and similar commercial vehicles but may also include overnight accommodations, restaurant facilities, a car wash and truck wash or other ancillary uses.

TRUCK TERMINAL: A building or area in which freight brought by truck is assembled and/or temporarily stored for re-routing or re-shipment. The terminal facility may also include storage and/or parking areas for truck tractor and/or trailer units.

VEHICLE SALES OR RENTAL: Any land or buildings, other than a street, used for the display, sale, or rental of new or used motor vehicles or trailers in operable condition. Leasing of vehicles is also included in this use.

WAREHOUSE AND DISTRIBUTION FACILITY: An establishment engaged in the storage and distribution of manufactured products, supplies, and equipment.

WASTE PROCESSING FACILITY: A facility that treats solid waste after collection and before disposal. Processing includes, but is not limited to, reduction; storage; separation; exchange; resource recovery; physical, chemical, or biological modification; and transfer from one waste facility to another.

WASTE TRANSFER STATION: A facility in which collected solid waste from any source is temporarily stored, concentrated or deposited to await subsequent transportation.

WHOLESALE TRADE ESTABLISHMENT: An establishment primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional or professional business users; to other wholesalers;

or acting as agents or brokers and buying merchandise for, or selling merchandise to, individuals or companies.

WILDLIFE RECREATION AREA: An area involved in the preservation and production of both animal and plant life. This use includes but is not limited to game farms and fish hatcheries.

11-10-3 : Alternative Energy Definitions

For the purposes of alternative energy systems, the following definitions shall apply:

ALTERNATIVE ENERGY SYSTEM: A ground source heat pump, wind or solar energy system.

COMMUNITY SOLAR GARDEN OR SOLAR FARM: A solar energy system that provides electric power to multiple users residing or located off-site from the location of the solar energy system.

PHOTOVOLTAIC SYSTEM: An active solar energy system that converts solar energy directly into electricity.

SOLAR COLLECTOR: A device, structure or a part of a device or structure for which the primary purpose is to capture sunlight and transform it into thermal, mechanical, chemical, or electrical energy.

SOLAR ENERGY: Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

SOLAR ENERGY SYSTEM: A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage and distribution of solar energy for space heating or cooling, electricity generation or water heating.

SOLAR ENERGY SYSTEM, ACTIVE: A solar energy system whose primary purpose is to harvest energy by transferring solar energy into another form of energy or transferring heat from a solar collector to another medium using mechanical, electrical, or chemical means.

SOLAR ENERGY SYSTEM, BUILDING INTEGRATED: A solar energy system that is an integral part of a principal or accessory building, replacing or substituting for an architectural or structural component of the building. Building integrated systems include, but are not limited to, photovoltaic or hot water solar energy systems that are contained within or substitute for roofing materials, windows, skylights, awnings and shade devices.

SOLAR ENERGY SYSTEM, GRID INTERTIE: A photovoltaic solar energy system that is connected to an electric circuit served by an electric utility company.

SOLAR ENERGY SYSTEM, GROUND MOUNTED: A freestanding solar system mounted directly to the ground using a rack or pole rather than being mounted on a building.

SOLAR ENERGY SYSTEM, OFF GRID: A photovoltaic solar energy system in which the circuits energized by the solar energy system are not electrically connected in any way to electric circuits that are served by an electric utility company.

SOLAR ENERGY SYSTEM, PASSIVE: A system that captures solar light or heat without transforming it to another form of energy or transferring the energy via a heat exchanger.

SOLAR ENERGY SYSTEM, ROOF MOUNTED: A solar energy system mounted directly or abutting the roof of a principal or accessory building.

SOLAR FARM: A commercial facility that converts sunlight into electricity, whether by photovoltaic (PV), concentrating solar thermal devices (CST), or other conversion technology, for the principal purpose of wholesale sales of generated electricity.

SOLAR HOT WATER SYSTEM (Also THERMAL SYSTEM): A system that includes a solar collector and a heat exchanger that heats or preheats water for building heating systems or other hot water needs, including residential domestic hot water and hot water for commercial processes.

SOLAR RESOURCE: A view of the sun from a specific point on a lot or building that is not obscured by any vegetation, building, or object for a minimum of four hours between the hours of nine o'clock (9:00) A.M. and three o'clock (3:00) P.M. standard time on any day of the year.

11-10-4 : Floodplain Definitions

For the purposes of floodplain overlay district, the following definitions shall apply:

BASE FLOOD**.** The flood having a one-percent chance of being equaled or exceeded in any given year. “Base flood” is synonymous with the term “regional flood” used in Minnesota Rules, part 6120.5000.

BASE FLOOD ELEVATION (BFE). The elevation of the base flood, regional flood, or one-percent annual chance flood. The term “base flood elevation” is used in the flood insurance study.

DEVELOPMENT. Any man-made change to improved or unimproved real estate including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of materials or equipment.

FARM FENCE**.** An open type of fence of posts and horizontally run wire, further specified in Minnesota Statutes, section 344.02 Subd. 1(a - d).

FLOOD FRINGE**.** The portion of the one-percent annual chance floodplain located outside of the floodway.

FLOOD INSURANCE RATE MAP (FIRM). An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

FLOODPLAIN. The beds, channel and the areas adjoining a wetland, lake or watercourse, or other source which have been or hereafter may be inundated by the base flood.

FLOODWAY. The bed of a wetland or lake and the channel of a watercourse and those portions of the adjoining floodplain which must be reserved to carry or store the base flood discharge without cumulatively increasing the water surface elevation more than one-half foot.

MANUFACTURED HOME**.** A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured home” does not include the term “recreational vehicle.”

RECREATIONAL VEHICLE. A vehicle that is built on a single chassis, is 400 square feet or less when measured at the largest horizontal projection, is designed to be self-propelled or permanently towable by a light duty truck, and is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use. Those vehicles not meeting this definition shall be considered a structure for the purposes of this ordinance. For the

purposes of this ordinance, the term recreational vehicle is synonymous with the term "travel trailer/travel vehicle."

REGULATORY FLOOD PROTECTION ELEVATION (RFPE). An elevation no lower than one foot above the elevation of the base flood plus any increases in water surface elevation caused by encroachments on the floodplain that result from designation of a floodway. These increases in water surface elevations are typically identified in the Floodway Data Tables, found in the Flood Insurance Study.

STRUCTURE. A roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. Recreational vehicles not considered travel ready, as detailed in Section 4.40, shall also be considered a nonconforming structure for the purposes of this ordinance.

SUBSTANTIAL DAMAGE. Damage of any origin sustained by a structure where the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT**.** Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures that have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.
2. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure." For the purpose of this ordinance, "historic structure" is defined in 44 CFR § 59.1.

11-10-5 : Shoreland Definitions

For the purposes of the MRCCA overlay district, the following definitions shall apply:

ACCESSORY STRUCTURE OR FACILITY**.** Any building or improvement subordinate to a principal use which, because of the nature of its use, can reasonably be located at or greater than normal structure setbacks. Examples include: swimming pools, saunas, detached garages, and storage sheds.

ANIMAL FEEDLOT. A facility as defined by Minnesota Rules, part 7020.0300.

BLUFF. A topographic feature such as a hill, cliff, or embankment having the following characteristics:

1. Part or all of the feature is located in a shoreland area;
2. The slope must drain toward the waterbody;
3. The slope rises at least 25 feet above the ordinary high water level; and
4. The grade of the slope from the toe of the bluff to a point 25 feet or more above the ordinary high water level averages 30 percent or greater (see Figure 1), except that an area with an average slope of less than 18 percent over a distance of at least 50 feet shall not be considered part of the bluff (see Figure 2).

Figure 1. Illustration of Bluff

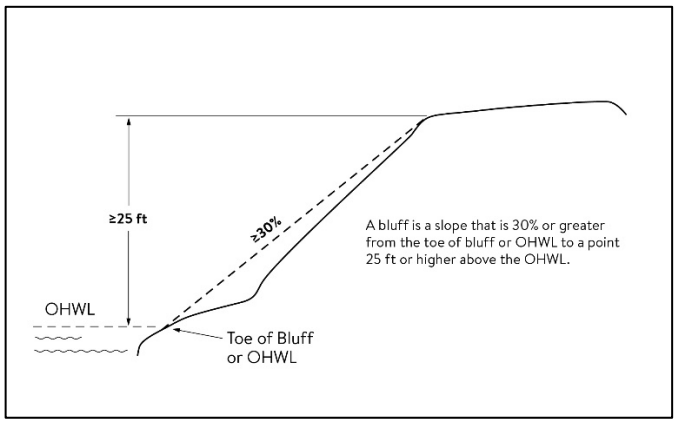
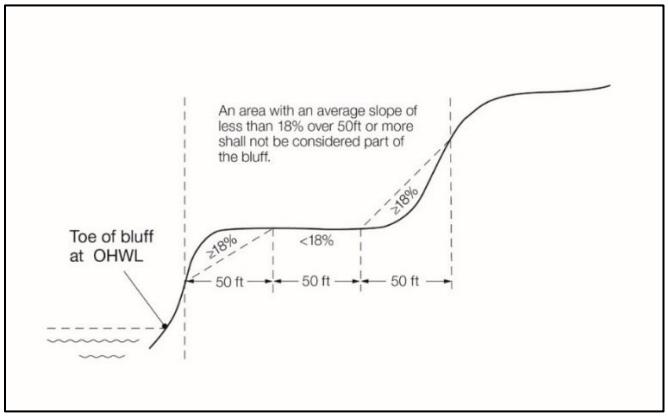
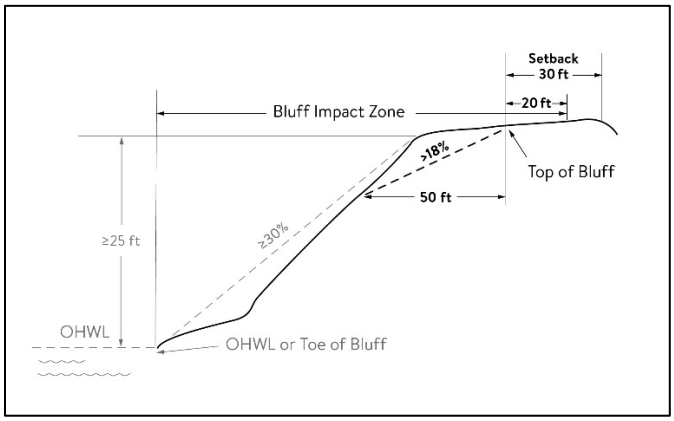


Figure 2. Exception to Bluff



BLUFF IMPACT ZONE. A bluff and land located within 20 feet of the top of a bluff. See Figure 3

Figure 3. Bluff Impact Zone and Top of Bluff



BLUFF, TOE OF. The lower point of a 50-foot segment with an average slope exceeding 18 percent or the ordinary high water level, whichever is higher.

BLUFF, TOP OF. For the purposes of measuring setbacks, bluff impact zone, and administering vegetation management standards, the higher point of a 50-foot segment with an average slope exceeding 18 percent. See Figure 3.

BOATHOUSE. A facility as defined by Minnesota Statutes, Section 103G.245.

BUFFER. A vegetative feature as defined by Minnesota Statutes, Section 103F.48.

BUILDING LINE. A line parallel to a lot line or the ordinary high water level at the required setback beyond which a structure may not extend.

CONTROLLED ACCESS LOT. A lot used to access public waters or as a recreation area for owners of nonriparian lots within the same subdivision containing the controlled access lot.

COMMERCIAL PLANNED UNIT DEVELOPMENTS. Developments that provide transient, short-term lodging spaces, rooms, or parcels and their operations are essentially service-oriented. For example, hotel/motel accommodations, resorts, recreational vehicle and camping parks, and other primarily service-oriented activities are commercial planned unit developments.

COMMERCIAL USE. The principal use of land or buildings for the sale, lease, rental, or trade of products, goods, and services.

COMMISSIONER. The commissioner of the Department of Natural Resources.

CONDITIONAL USE. A land use or development as defined by ordinance that would not be appropriate generally but may be allowed with appropriate restrictions upon a finding that certain conditions as detailed in the zoning ordinance exist, the use or development conforms to the comprehensive land use plan of the community, and the use is compatible with the existing neighborhood.

DECK. A horizontal, unenclosed platform with or without attached railings, seats, trellises, or other features, attached or functionally related to a principal use or site and at any point extending more than three feet above ground.

DUPLEX, TRIPLEX, AND QUAD. A dwelling structure on a single lot, having two, three, and four units, respectively, attached by common walls and each unit equipped with separate sleeping, cooking, eating, living, and sanitation facilities.

DWELLING SITE. A designated location for residential use by one or more persons using temporary or movable shelter, including camping and recreational vehicle sites.

DWELLING UNIT. Any structure or portion of a structure, or other shelter designed as short- or long-term living quarters for one or more persons, including rental or timeshare accommodations such as motel, hotel, and resort rooms and cabins.

EXPANSION. Any increase in a dimension such as number of units or size, area, volume, or height of an existing structure or accessory structure or facility.

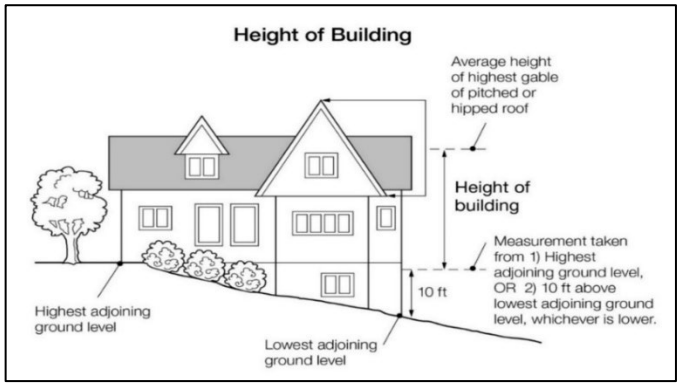
EXTRACTIVE USE. The use of land for surface or subsurface removal of sand, gravel, rock, industrial minerals, other nonmetallic minerals, and peat not regulated under Minnesota Statutes, Sections 93.44 to 93.51.

FOREST LAND CONVERSION. The clear cutting of forested lands to prepare for a new land use other than reestablishment of a subsequent forest stand.

GUEST COTTAGE. A structure used as a dwelling unit that may contain sleeping spaces and kitchen and bathroom facilities in addition to those provided in the primary dwelling unit on a lot.

HEIGHT OF BUILDING. The vertical distance between the highest adjoining ground level at the building or ten feet above the lowest adjoining ground level, whichever is lower, and the highest point of a flat roof or average height of the highest gable of a pitched or hipped roof (see Figure 4).

Figure 4. Height of Building



IMPERVIOUS SURFACE. A constructed hard surface that prevents or retards entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development, including rooftops; decks; sidewalks; patios; swimming pools; parking lots; concrete, asphalt, gravel driveways, or permeable pavers; and other similar surfaces.

IMPROVEMENT. Making an existing structure or accessory structure or facility of better quality, more efficient, or more aesthetically pleasing, that does not replicate what pre-existed, but does not include an expansion, enlargement, or intensification.

INDUSTRIAL USE. The use of land or buildings for the production, manufacture, warehousing, storage, or transfer of goods, products, commodities, or other wholesale items.

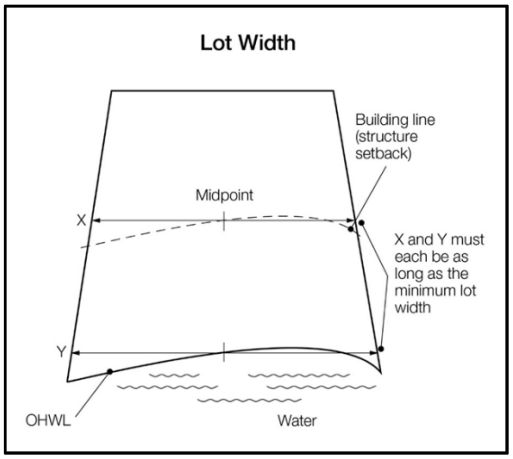
INTENSIVE VEGETATION CLEARING. The complete removal of trees or shrubs in a contiguous patch, strip, row, or block.

LOT. A parcel of land designated by plat, metes and bounds, registered land survey, auditors plot, or other accepted means and separated from other parcels or portions by said description for the purpose of sale, lease, or separation.

LOT WIDTH. The minimum distance between:

1. Side lot lines measured at the midpoint of the building line; and
2. Side lot lines at the ordinary high water level, if applicable (see Figure 5).

Figure 5. Lot Width



MAINTENANCE AND REPAIR. Upkeep or preservation of an existing structure or accessory structure or facility against normal wear and tear or degradation over time that does not change exterior dimensions. Examples include the rehabilitation or replacement of windows, siding, a roof, or exterior finishes such as paint or stain.

METALLIC MINERALS AND PEAT. “Metallic minerals and peat” has the meaning given under Minnesota Statutes, Sections 93.44 to 93.51.

NONCONFORMITY. Any legal use, structure or parcel of land already in existence, recorded, or authorized before the adoption of official controls or amendments to those controls that would not have been permitted to become established under the terms of the official controls as now written.

ORDINARY HIGH WATER LEVEL. The boundary of public waters and wetlands, and shall be an elevation delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly that point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel. For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.

PLANNED UNIT DEVELOPMENT. A type of development characterized by a unified site design for a number of dwelling units or dwelling sites on a parcel, whether for sale, rent, or lease, and also usually involving clustering of these units or sites to provide areas of common open space, density increases, and a mix of structure types and land uses. These developments may be organized and operated as condominiums, time-share condominiums, cooperatives, full fee ownership, commercial enterprises, or any combination of these, or cluster subdivisions of dwelling units, residential condominiums, townhouses, apartment buildings, dwelling grounds, recreational vehicle parks, resorts, hotels, motels, and conversions of structures and land uses to these uses.

PUBLIC WATERS. Any water as defined in Minnesota Statutes, Section 103G.005, Subd. 15, 15a.

REPLACEMENT AND RESTORATION. Reconstruction of part or all of an existing structure or accessory structure or facility that closely matches or replicates the preexisting structure or facility.

RESIDENTIAL PLANNED UNIT DEVELOPMENT. A use where the nature of residency is nontransient and the major or primary focus of the development is not service-oriented. For example, residential apartments, manufactured home parks, time-share condominiums, townhouses, cooperatives, and full fee ownership residences would be considered as residential planned unit developments. To

qualify as a residential planned unit development, a development must contain at least five dwelling units or sites.

RESORT. “Resort” has the meaning in Minnesota Statute, Section 103F.227.

SEMIPUBLIC USE. The use of land by a private, nonprofit organization to provide a public service that is ordinarily open to some persons outside the regular constituency of the organization.

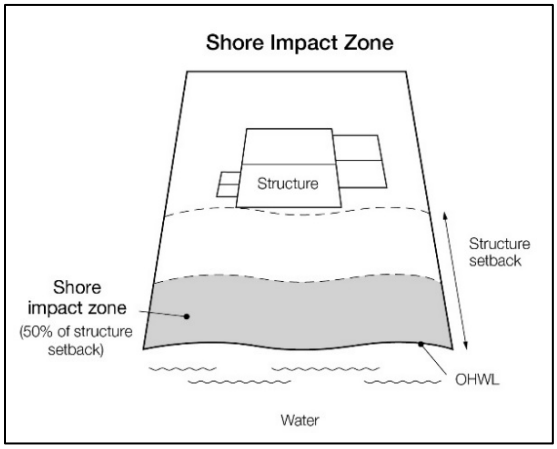
SETBACK. The minimum horizontal distance between a structure, sewage treatment system, or other facility and an ordinary high water level, sewage treatment system, top of a bluff, road, highway, property line, or other facility.

SEWAGE TREATMENT SYSTEM. “Sewage treatment system” has the meaning given under Minnesota Rules, part 7080.1100, Subp. 82.

SEWER SYSTEM. Pipelines or conduits, pumping stations, and force main, and all other construction, devices, appliances, or appurtenances used for conducting sewage or industrial waste or other wastes to a point of ultimate disposal.

SHORE IMPACT ZONE. Land located between the ordinary high-water level of a public water and a line parallel to it at a setback of 50 percent of the structure setback (see Figure 6).

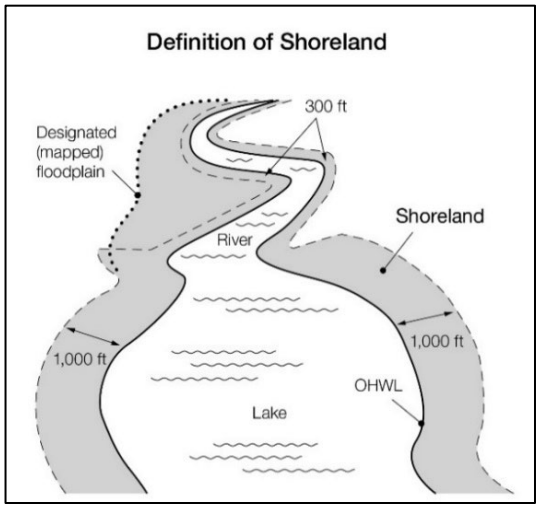
Figure 6. Shore Impact Zone



SHORELAND. “Shoreland” means land located within the following distances from public waters:

1. 1,000 feet from the ordinary high water level of a lake, pond, or flowage; and
2. 300 feet from a river or stream, or the landward extent of a floodplain designated by ordinance on a river or stream, whichever is greater (see Figure 7).

Figure 7. Definition of Shoreland



SHORE RECREATION FACILITIES. Swimming areas, docks, watercraft mooring areas and launching ramps and other water recreation facilities.

SIGNIFICANT HISTORIC SITE. Any archaeological site, standing structure, or other property that meets the criteria for eligibility to the National Register of Historic Places or is listed in the State Register of Historic Sites, or is determined to be an unplatted cemetery that falls under the provisions of Minnesota Statutes, Section 307.08. A historic site meets these criteria if it is presently listed on either register or if it is determined to meet the qualifications for listing after review by the Minnesota state archaeologist or the director of the Minnesota Historical Society. All unplatted cemeteries are automatically considered to be significant historic sites.

STEEP SLOPE. Lands having average slopes over 12 percent, as measured over horizontal distances of 50 feet or more, which are not bluffs.

STRUCTURE. Any building or appurtenance, including decks, except aerial or underground utility lines, such as sewer, electric, telephone, telegraph, gas lines, towers, poles, and other supporting facilities.

SUBDIVISION. Land that is divided for the purpose of sale, rent, or lease, including planned unit developments.

SUITABILITY ANALYSIS. An evaluation of land to determine if it is appropriate for the proposed use. The analysis considers factors relevant to the proposed use and may include the following features: susceptibility to flooding; existence of wetlands; soils, erosion potential; slope steepness; water supply, sewage treatment capabilities; water depth, depth to groundwater and bedrock, vegetation, near-shore aquatic conditions unsuitable for water-based recreation; fish and wildlife habitat; presence of significant historic sites; or any other relevant feature of the natural land.

VARIANCE. “Variance” means the same as that defined in Minnesota Statutes, Section 394.27 Subd. 7 (for counties) or Section 462.357 Subd. 6 (2) (for municipalities).

WATER-ORIENTED ACCESSORY STRUCTURE OR FACILITY. A small, above ground building or other improvement, except stairways, fences, docks, and retaining walls, which, because of the relationship of its use to surface water, reasonably needs to be located closer to public waters than the normal structure setback. Examples of such structures and facilities include, watercraft and watercraft equipment storage structures, gazebos, screen houses, fish houses, pump houses, patios,

and detached decks. Boathouses and boat storage structures given the meaning under Minnesota Statutes, Section 103G.245 are not a water-oriented accessory structures.

WATER-DEPENDENT USE. The use of land for commercial, industrial, public or semi-public purposes, where access to and use of a public water is an integral part of the normal conduct of operation. Marinas, resorts, and restaurants with transient docking facilities are examples of uses typically found in shoreland areas.

WETLAND. “Wetland” has the meaning given under Minnesota Rule, part 8420.0111.

11-10-6 : Mississippi River Corridor Critical Area (MRCCA) Definitions

For the purposes of the MRCCA overlay district, the following definitions shall apply:

ACCESS PATH: An area designated to provide ingress and egress to public waters.

ADJACENT: Having a boundary that physically touches or adjoins.

AGRICULTURAL USE: A use having the meaning given under Minnesota Statutes, section 40A.02.

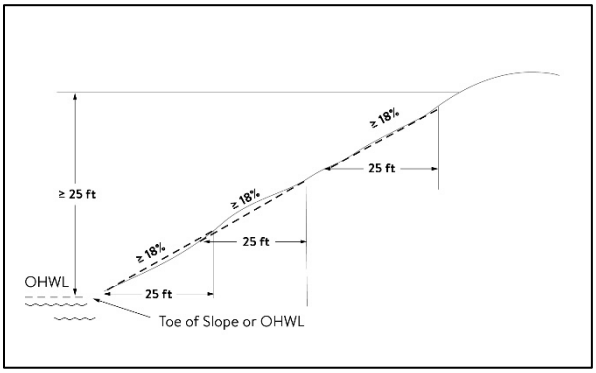
ALTERNATIVE DESIGN: Subdivision design methods such as conservation design, transfer of development density, or similar zoning and site design techniques that protect open space and natural areas.

BIOLOGICAL AND ECOLOGICAL FUNCTIONS: The functions of vegetation in stabilizing soils and slopes, retaining and filtering runoff, providing habitat, and recharging groundwater.

BLUFF: A natural topographic feature having:

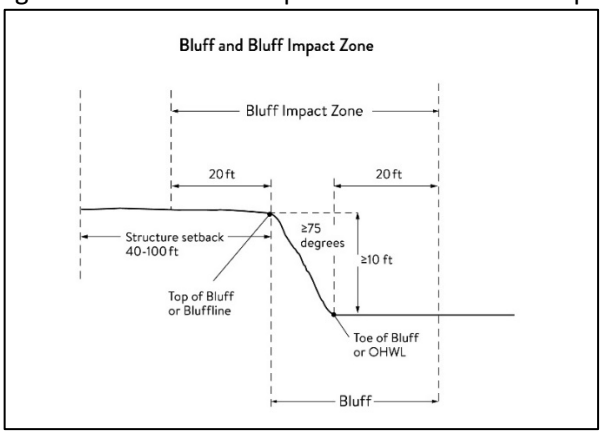
1. A slope that rises at least 25 feet where the grade of the slope averages 18 percent or greater, measured over any horizontal distance of 25 feet, from the toe of the slope to the top of the slope. Where the slope begins below the ordinary high water level, the ordinary high water level is the toe of the slope. See Figure 5.1; or

Figure 5.1. Bluff



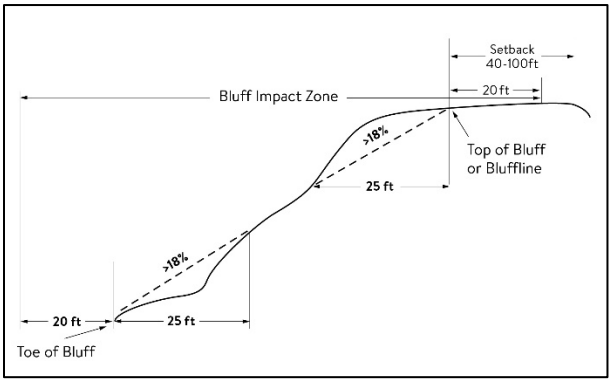
B. A natural escarpment or cliff with a slope that rises at least ten feet above the ordinary high water level or toe of the slope, whichever is applicable, to the top of the slope, with a slope of 75 degrees or greater. See Figure 5.2.

Figure 5.2. Natural Escarpment Bluff and Bluff Impact Zone



BLUFF IMPACT ZONE (BIZ): A bluff and land located within 20 feet of the bluff. See Figure 5.2 for natural escarpment or cliff example and Figure 5.3 for more common bluff example.

Figure 5.3. Bluff Impact Zone, Bluffline, Toe of bluff, and Top of Bluff



BLUFFLINE: A line delineating the top of the bluff. More than one bluffline may be encountered proceeding landward from the river. See Figure 5.2 for natural escarpment or cliff example and Figure 5.3 for more common bluff example.

BLUFF, TOE OF: A line along the bottom of a bluff, requiring field verification, such that the slope above the line exceeds 18 percent and the slope below the line is 18 percent or less, measured over a horizontal distance of 25 feet. See Figures 5.2 for natural escarpment or cliff example and Figure 5.3 for more common bluff example.

BLUFF, TOP OF: A line along the top of a bluff, requiring field verification, such that the slope below the line exceeds 18 percent and the slope above the line is 18 percent or less, measured over a horizontal distance of 25 feet. See Figures 5.2 for natural escarpment or cliff example and Figure 5.3 for more common bluff example.

BUILDABLE AREA: The area upon which structures may be placed on a lot or parcel of land and excludes areas needed to meet requirements for setback, rights-of-way, bluff impact zones, historic properties, wetlands, designated floodways, land below the ordinary high water level of public waters, and other unbuildable areas.

BUILDING: A structure with two or more outside rigid walls and a fully secured roof and affixed to a permanent site.

CERTIFICATE OF COMPLIANCE: A document written after a compliance inspection, certifying that the development complies with applicable requirements at the time of the inspection.

COMMISSIONER: The commissioner of the Minnesota Department of Natural Resources.

CONDITIONAL USE: A use having the meaning given under Minnesota Statutes, chapters 394 and 462.

CONSERVATION DESIGN: A pattern of subdivision that is characterized by grouping lots within a portion of a parcel, where the remaining portion of the parcel is permanently protected as open space.

CONVENTIONAL SUBDIVISION: A pattern of subdivision that is characterized by lots that are spread regularly throughout a parcel in a lot and block design.

DECK: A horizontal, unenclosed, aboveground level structure open to the sky, with or without attached railings, seats, trellises, or other features, attached or functionally related to a principal use or site.

DEVELOPER: Having the meaning given under Minnesota Statutes, section 116G.03.

DEVELOPMENT: Having the meaning given under Minnesota Statutes, section 116G.03.

DISCRETIONARY ACTION: An action under this chapter related to land use that requires a public hearing by local ordinance or statute, such as preliminary plats, final subdivision plats, planned unit developments, conditional use permits, interim use permits, variances, appeals, and rezonings.

DOCK: Having the meaning given under Minnesota Rules part 6115.0170.

ELECTRIC POWER FACILITIES: Equipment and associated facilities for generating electric power or devices for converting wind energy to electrical energy as identified and defined under Minnesota Statutes, section 216E.

ESSENTIAL SERVICES: Underground or overhead gas, electrical, communications, steam, or water distribution, collection, supply, or disposal systems, including storm water. Essential services include poles, wires, mains, drains, pipes, conduits, cables, fire alarm boxes, traffic signals, hydrants, navigational structures, aviation safety facilities or other similar equipment and accessories in conjunction with the systems. Essential services does not include buildings, treatment works as defined in Minnesota Statutes, section 115.01, electric power facilities or transmission services.

FEEDLOT: Having the meaning given for animal feedlots under Minnesota Rules chapter 7020.

FLOODPLAIN: Having the meaning given under Minnesota Rules chapter 6120.

FULLY RECONSTRUCTS: The reconstruction of an existing impervious surface that involves site grading and subsurface excavation so that soil is exposed. Mill and overlay and other resurfacing activities are not considered fully reconstructed.

HARD-SURFACE TRAIL: A trail surfaced in asphalt, crushed aggregate, or other hard surface, for multi-purpose use, as determined by local, regional, or state agency plans.

HISTORIC PROPERTY: An archaeological site, standing structure, site, district, or other property that is:

1. Listed in the National Register of Historic Places or the State Register of Historic Places or locally designated as a historic site under Minnesota Statutes, chapter 471;
2. Determined to meet the criteria for eligibility to the National Register of Historic Places or the State Register of Historic Places as determined by the director of the Minnesota Historical Society; or
3. An unplatted cemetery that falls under the provisions of Minnesota Statutes, chapter 307, in consultation with the Office of the State Archaeologist.

IMPERVIOUS SURFACE: A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, decks, sidewalks, patios, parking lots, storage areas, and driveways, including those with concrete, asphalt, or gravel surfaces.

INTENSIVE VEGETATION CLEARING: The removal of all or a majority of the trees or shrubs in a contiguous patch, strip, row, or block.

INTERIM USE: A use having the meaning given under Minnesota Statutes, chapters 394 and 462.

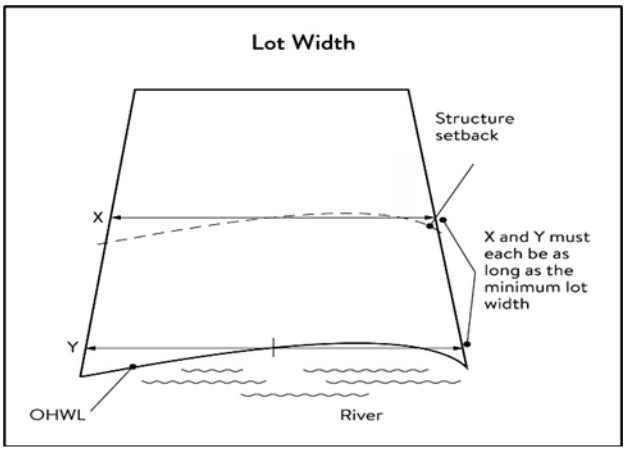
LAND ALTERATION: An activity that exposes the soil or changes the topography, drainage, or cross section of the land, excluding gardening or similar minor soil disturbances.

LOCAL GOVERNMENT: Counties, cities, and townships.

LOT: Having the meaning given under Minnesota Rules chapter 6120.

LOT WIDTH: The shortest distance between lot lines measured at both the ordinary high water level and at the required structure setback from the ordinary high water level. See Figure 5.4.

Figure 5.4. Lot Width



MARINA: Having the meaning given under Minnesota Rules part 6115.0170.

MISSISSIPPI RIVER CORRIDOR CRITICAL AREA (MRCCA): The area within the River Corridor Boundary.

MOORING FACILITY: Having the meaning given under Minnesota Rules part 6115.0170.

NATIVE PLANT COMMUNITY: A plant community identified by the Minnesota Biological Survey or biological survey issued or adopted by a local, state, or federal agency.

NATURAL-SURFACE TRAIL: A trail composed of native soil and rock or compacted granular stone, primarily intended for hiking, equestrian, or mountain bike use, as determined by local, regional, or state agency plans.

NATURAL VEGETATION: Any combination of ground cover, understory, and tree canopy that, while it may have been altered by human activity, continues to stabilize soils, retain and filter runoff, provide habitat, and recharge groundwater.

NONCONFORMITY: Having the meaning given under Minnesota Statutes, section 394.22.

NONMETALLIC MINING: Construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of nonmetallic minerals such a stone, sand, and gravel. Nonmetallic mining does not include ancillary facilities such as access roads, bridges, culverts, and water level control structures. For purposes of this subpart, “facility” includes all mine pits, quarries, stockpiles, basins, processing structures and equipment, and any structures that drain or divert public waters to allow mining.

OFF-PREMISE ADVERTISING SIGNS: Those signs that direct attention to a product, service, business, or entertainment venue that is not exclusively related to the premises where the sign is located.

ORDINARY HIGH WATER LEVEL (OHWL): Having the meaning given under Minnesota Statutes, section 103G.005.

OVERLAY DISTRICT: A zoning district applied over one or more previously established zoning districts, establishing additional or stricter standards and criteria for covered properties in addition to those of the underlying zoning district. Overlay districts are often used to protect historic features and natural resources such as shoreland or floodplain.

PARCEL: Having the meaning given under Minnesota Statutes, section 116G.03.

PATIO: A constructed hard surface located at ground level with no railings and open to the sky.

PICNIC SHELTER: A roofed structure open on all sides, accessory to a recreational use.

PLANNED UNIT DEVELOPMENT (PUD): A method of land development that merges zoning and subdivision controls, allowing developers to plan and develop a large area as a single entity, characterized by a unified site design, a mix of structure types and land uses, and phasing of development over a number of years. Planned unit development includes any conversion of existing structures and land uses that utilize this method of development.

PLAT: Having the meaning given under Minnesota Statutes, sections 505 and 515B.

PORT: A water transportation complex established and operated under the jurisdiction of a port authority according to Minnesota Statutes, chapter 458.

PRIMARY CONSERVATION AREAS (PCAs): Key resources and features, including shore impact zones, bluff impact zones, floodplains, wetlands, gorges, areas of confluence with tributaries, natural drainage routes, unstable soils and bedrock, native plant communities, cultural and historic properties, and significant existing vegetative stands, tree canopies, and other resources identified in local government plans.

PRIVATE FACILITIES: Private roads, driveways, and parking areas, private water access and viewing facilities, decks and patios in setback areas, and private signs.

PROFESSIONAL ENGINEER: An engineer licensed to practice in Minnesota.

PUBLIC FACILITIES: Public utilities, public transportation facilities, and public recreational facilities.

PUBLIC RECREATION FACILITIES: Recreational facilities provided by the state or a local government and dedicated to public use, including parks, scenic overlooks, observation platforms, trails, docks, fishing piers, picnic shelters, water access ramps, and other similar water-oriented public facilities used for recreation.

PUBLIC RIVER CORRIDOR VIEWS (PRCVs): Views toward the river from public parkland, historic properties, and public overlooks, as well as views toward bluffs from the ordinary high water level of the opposite shore, as seen during the summer months and documented in the MRCCA plan/chapter of the comprehensive plan.

PUBLIC TRANSPORTATION FACILITIES: All transportation facilities provided by federal, state, or local government and dedicated to public use, such as roadways, transit facilities, railroads, and bikeways.

PUBLIC UTILITIES: Electric power facilities, essential services, and transmission services.

PUBLIC WATERS: Having the meaning given under Minnesota Statutes, section 103G.005.

READILY VISIBLE: Land and development that are easily seen from the ordinary high water level of the opposite shore during summer months.

RESOURCE AGENCY: A federal, state, regional, or local agency that engages in environmental, natural, or cultural resource protection or restoration activities, including planning, implementation, and monitoring.

RETAINING WALL: A vertical or nearly vertical structures constructed of mortar and rubble masonry, rock, or stone regardless of size, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable materials.

ROCK RIPRAP: Natural coarse rock placed or constructed to armor shorelines, streambeds, bridge abutments, pilings and other shoreline structures against scour, or water or ice erosion.

RIVER CORRIDOR BOUNDARY: The boundary approved and adopted by the Metropolitan Council under Minnesota Statutes, section 116G.06, as approved and adopted by the legislature in Minnesota Statutes, section 116G.15, and as legally described in the State Register, volume 43, pages 508 to 518.

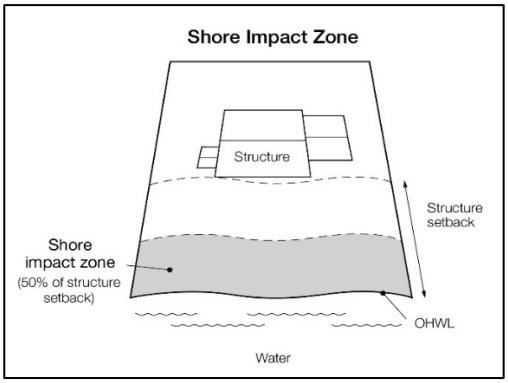
RIVER-DEPENDENT USE: The use of land for commercial, industrial, or utility purposes, where access to and use of a public water feature is an integral part of the normal conduct of business and where the use is dependent on shoreline facilities.

SELECTIVE VEGETATION REMOVAL: The removal of isolated individual trees or shrubs that are not in a contiguous patch, strip, row, or block and that does not substantially reduce the tree canopy or understory cover.

SETBACK: A separation distance measured horizontally.

SHORE IMPACT ZONE (SIZ): Land located between the ordinary high water level of public waters and a line parallel to it at a setback of 50 percent of the required structure setback or, for agricultural use, 50 feet landward of the ordinary high water level. See Figure 5.5.

Figure 5.5. Shore Impact Zone



SHORELINE FACILITIES: Facilities that require a location adjoining public waters for ingress and egress, loading and unloading, and public water intake and outflow, such as barge facilities, port facilities, commodity loading and unloading equipment, watercraft lifts, marinas, short-term watercraft mooring facilities for patrons, and water access ramps. Structures that would be enhanced by a shoreline location, but do not require a location adjoining public waters as part of their function, are not shoreline facilities, such as restaurants, bait shops, and boat dealerships.

STEEP SLOPE: A natural topographic feature with an average slope of 12 to 18 percent, measured over a horizontal distance equal to or greater than 50 feet, and any slopes greater than 18 percent that are not bluffs.

STORM WATER MANAGEMENT FACILITIES: Facilities for the collection, conveyance, treatment, or disposal of storm water.

STRUCTURE: A building, sign, or appurtenance thereto, except for aerial or underground utility lines, such as sewer, electric, telephone, or gas lines, and utility line towers, poles, and other supporting appurtenances.

SUBDIVISION: Having the meaning given under Minnesota Statutes, section 462.352.

SUBSURFACE SEWAGE TREATMENT SYSTEM: Having the meaning given under Minnesota Rules, part 7080.1100.

TRANSMISSION SERVICES:

1. Electric power lines, cables, pipelines, or conduits that are:
    a. Used to transport power between two points, as identified and defined under Minnesota Statutes, section 216E.01, Subd. 4; or
    b. For mains or pipelines for gas, liquids, or solids in suspension, used to transport gas, liquids, or solids in suspension between two points; and
2. Telecommunication lines, cables, pipelines, or conduits.

TREELINE: The more or less continuous line formed by the tops of trees in a wooded area when viewed from a particular point. The treeline is determined during all seasons as if under full foliage.

VARIANCE: Having the meaning given under Minnesota Statutes, section 394.22.

WATER ACCESS RAMP: A boat ramp, carry-down site, boarding dock, and approach road, or other access that allows launching and removal of a boat, canoe, or other watercraft with or without a vehicle and trailer.

WATER-ORIENTED ACCESSORY STRUCTURE: A small building or other improvement, except stairways, fences, docks, and retaining walls, that, because of the relationship of its use to public waters, needs to be located closer to public waters than the normal structure setback. Examples include gazebos, screen houses, fish houses, pump houses, and detached decks and patios.

WATER QUALITY IMPACT ZONE: Land within the shore impact zone or within 50 feet of the OHWL of the river, whichever is greater, and land within 50 feet of a public water, wetland, or natural drainage route.

WETLAND: Having the meaning given under Minnesota Statutes, section 103G.005.

WHARF: Having the meaning given under Minnesota Rules, part 6115.0170.

11-10-7 : Signage Definitions

For the purposes of signage uses, the following definitions shall apply:

BANNERS: Attention getting devices which resemble flags and are of a paper, cloth or plastic like consistency.

FLAG: A rectangular piece of fabric of distinctive design which is mounted on a pole that is used as a symbol (as a nation), signaling device (nautical), or attention getting device (advertising, commercial or noncommercial).

HEIGHT: The height of a sign shall be measured from the centerline of the street or highway toward which the sign is principally displayed to the top of the sign.

IDENTIFICATION SIGN: A sign which displays only the name, address and title of an occupant or the name and address of a building or development.

NIT: A measure of luminance equal to the total amount of light emitted from a sign divided by the surface area of the sign (candelas per square meter).

PENNANT: A flag or banner which tapers to a point.

SIGN: Any letter, work, symbol, model, printed, projected or affixed device, poster, picture, reading matter, or other representation in the nature of an advertisement, announcement, direction or informative device including structural and component parts.

SIGN AREA: The area of a sign includes the space inside a continuous line drawn around and enclosing all letters, designs and background materials exclusive of border, trim and structural supports. For the purpose of calculating the area of multiple faced or back-to-back signs, the stipulated maximum sign area shall refer to a single face.

SIGN, CHANGEABLE COPY: A sign or portion thereof that has a reader board for the display of text information in which each alphanumeric character, graphic or symbol is defined by objects not consisting of an illumination device and may be changed or rearranged manually or mechanically with characters, illustrations, letters or numbers that can be changed or rearranged without altering the face or surface of the sign structure.

SIGN, DYNAMIC: Any sign, except official signs, with characteristics of a sign that appear to have movement or that appear to change, caused by any method other than physically removing and replacing the sign or its components, whether the apparent movement or change is in the display, the sign structure itself, or any other component of the sign. This includes a display that incorporates a technology or method allowing the sign face to change the image without having to physically or mechanically replace the sign face or its components. This also includes any rotating, revolving, moving, flashing, blinking, or animated display and any display that incorporates rotating panels, LED lights manipulated through digital input, "digital ink" or any other method or technology that allows the sign face to present a series of images or displays.

SIGN, FLASHING: A directly or indirectly illuminated sign or portion thereof that exhibits changing light or color effect by any means, so as to provide intermittent illumination that changes light intensity in sudden transitory bursts and creates the illusion of intermittent flashing light by streaming, graphic bursts showing movement, or any mode of lighting which resembles zooming, twinkling or sparkling.

SIGN, FREESTANDING: Any sign that is attached directly to the ground or is supported vertically by any structure having a source of support independent of any building existing on the premises on which the sign is located.

SIGN, LEGAL NONCONFORMING: Any sign lawfully in existence on the effective date hereof or any sign lawfully in existence on the date of any amendment to this chapter which does not conform to the regulations affecting signs for the district in which the sign is situated.

SIGN, NONCOMMERCIAL OPINION: A sign that does not advertise products, goods, businesses, or services and that expresses an opinion or other point of view.

SIGN, NONCONFORMING: Any sign which does not conform to the regulations of this chapter.

SIGN, OFF PREMISES: A commercial speech sign which directs the attention of the public to a business, activity conducted, or product sold or offered at a location not on the same lot where such sign is located. For purposes of this sign ordinance, easements and other appurtenances shall be considered to be outside such lot and any sign located or proposed to be located in an easement or other appurtenance shall be considered an off premises sign.

SIGN, OFFICIAL: Signs of a public noncommercial nature including public notification signs, safety signs, traffic signs, direction to public facilities when erected by or on behalf of a public official or employee in the performance of official duty.

SIGN, ON PREMISES: Any sign that directs attention to the name of the building, premises, or to the name of the building management firm, or to the business, principal product, service, entertainment, or activity conducted, sold or offered upon the premises on which such sign is located or to noncommercial speech.

SIGN, PORTABLE: A sign so designed as to be movable from one location to another, and which is not permanently attached to the ground, sales display device or structure.

SIGN, PROJECTING: Any sign which is affixed to the outside of the exterior wall or soffit of any building and is not parallel to the plane of the wall or soffit.

SIGN, ROOF: Any sign erected and constructed wholly on and above the roof of a building, supported by the roof structure, and extending vertically above the highest portion of the roof.

SIGN, ROOF INTEGRAL: Any building sign erected or constructed as an integral or essentially integral part of a normal roof structure of any design, so that no part of the sign extends vertically above the highest portion of the roof and so that no part of the sign is separated from the rest of the roof by a space of more than six inches.

SIGN, ROTATING: A sign or portion of a sign which turns about on an axis.

SIGN, SEARCHLIGHT: Searchlights shall be considered signs if they announce, direct attention to, or advertise business, professional, commodity, service or entertainment activities.

SIGN, SHIMMERING: A sign which reflects an oscillating sometimes distorted visual image.

SIGN, SIDEWALK: A portable sign for temporary placement on a sidewalk in the public right of way, intended for a building or business located adjacent to the right of way with no front yard or a front yard that will not accommodate a permanent freestanding sign as permitted by this title.

SIGN, TEMPORARY: A sign, banner, pennant, portable changeable copy sign, portable sign, searchlight sign, or similar device designed and/or displayed to promote brief business, professional, commodity, service or entertainment activities such as, but not limited to, grand openings, sales, or special promotions or events.

SIGN, TIME AND TEMPERATURE: A sign that displays only current time and temperature information.

SIGN, WALL: A sign which is affixed to the exterior wall, mansard roof or soffit of a building and which is parallel to the building wall. A wall sign does not project more than 12 inches from the surface to which it is attached, nor extend beyond the top of the parapet wall.

SPEECH, COMMERCIAL: Speech advertising a business, profession, commodity, service or entertainment.

SPEECH, NONCOMMERCIAL: Speech dissemination of messages not classified as commercial which include, but are not limited to, messages concerning political, religious, social, ideological, public service and informational topics.

11-10-8 : Tree Preservation Definitions

For the purposes of tree preservation, the following definitions shall apply:

CANOPY OF TREE: The horizontal extension of a tree's branches and foliage in all directions from its trunk and upper layer of green crown.

CONIFEROUS TREE: A woody plant bearing seeds and cones oftentimes, but not always, retaining foliage throughout the year.

CONSTRUCTION AREA: Any area in which movement of earth, alteration in topography, soil compaction, disruption of vegetation, change in soil chemistry, or any other change in the natural character of the land occurs as a result of site preparation, grading, building construction or any other construction activity.

DECIDUOUS TREE: A woody plant which has a defined crown, and which loses leaves annually.

DEVELOPER: Any person or entity who undertakes to improve a parcel of land, by platting for the purposes of establishing two or more dwelling units, or grading which requires a grading permit.

DIAMETER OF CONIFEROUS TREE: Every two feet in height of a coniferous tree is equivalent to one caliper inch of diameter.

DIAMETER OF DECIDUOUS TREE: The length of a straight line measured in caliper inches through the trunk of a tree at four and one-half feet above the ground.

DRIP LINE OR ROOT ZONE OF A TREE: An imaginary vertical line which extends from the outermost branches of a canopy to the ground.

FORESTER: A person holding at least a Bachelor's Degree in Forestry from an accredited four year college of forestry or any official appointed by the city.

HARDWOOD DECIDUOUS TREE: Includes ironwood, catalpa, oak, maple (hard), walnut, ash, hickory, birch, black cherry, hackberry, locust and basswood.

HEALTHY TREE: Average or better condition and vigor for area as may be determined by the forester.

HERITAGE TREE: A healthy hardwood deciduous tree measuring equal to or greater than 27 inches in diameter or a healthy coniferous evergreen tree greater than 50 feet in height.

LANDSCAPE ARCHITECT: A person licensed by the state of Minnesota as a landscape architect.

NEW DEVELOPMENT: A piece of property that is being platted for the purpose of establishing urban residential use with two or more dwelling units or is being improved by grading which requires a grading permit. This definition does not apply to agricultural lot splits or to public street/utility projects.

NURSERYMAN: A person licensed by the state of Minnesota as a nurseryman.

PROPERTY OWNER: The owner of a buildable property who is constructing or expanding a dwelling or a business on that property.

SIGNIFICANT TREE: A healthy deciduous hardwood tree measuring a minimum of six caliper inches in diameter, a healthy softwood deciduous tree measuring a minimum of 12 caliper inches, or a healthy coniferous tree measuring a minimum of 12 feet in height.

SOFTWOOD DECIDUOUS TREE: Includes cottonwood, poplars/aspen, box elder, willow, silver maple and elm.

TITLE 12 SUBDIVISION REGULATIONS

CHAPTER 1 INTRODUCTORY PROVISIONS

12-1-1 :Title

A. This title shall be known and may be cited as the SUBDIVISION ORDINANCE of the city of Rosemount except as herein referred to as “this title.”

12-1-2 :Purpose

A. All subdivisions of land hereafter submitted for approval shall comply in all respects with the regulations set forth herein. It is the purpose of these regulations to:

1. Encourage well planned, efficient, and attractive developments by establishing adequate standards for design and construction.
2. Provide for the health, safety, and welfare of people by requiring properly designed and coordinated streets and adequate sewage, water, and drainage facilities.
3. Secure the rights of the public with respect to public land and waters.
4. Serve as a tool to carry out the objectives and policies of the comprehensive guide plan.
5. Provide for a means to provide adequate recreational areas, school sites, and other public facilities.

12-1-3 :Applicability

A. This title shall apply to the subdivision of land in the city.

B. Subdivisions which meet the following circumstances are exempt from the regulations of this title:

1. Where all the resulting parcels, tracts, lots, or interests will be 20 acres or larger in size and 500 feet in width for agricultural or residential uses;
2. Where all the resulting parcels, tracts, lots, or interests will be five acres or larger in size for commercial and industrial uses;
3. Creating cemetery lots; or
4. Subdivisions resulting from court orders or the adjustment of a lot line by the relocation of a common boundary.

12-1-4 :Authority

A. The effective date of this title is June 4, 2024. This chapter hereby supersedes and replaces in its entirety, Title 11 of the Rosemount, Minnesota Code on the effective date hereof.

B. The authority to adopt this title within the City of Rosemount is derived from M.S. Chapter 462, including but not limited to M.S. §§ 462.357 and 462.358, as well as other applicable state statutes and rules. Whenever other applicable city, state, or federal laws or rules referenced in this title have been amended or superseded, this title shall also be considered amended accordingly.

C. The City Council shall be the platting authority.

D. The Zoning Administrator, or the Zoning Administrator's designee, shall administer and enforce the provisions of this title and shall have said authority to:

1. Enter upon the land or within a building during reasonable working hours as found necessary to fulfill his/her duties as administrator of this title.

2. Conduct inspections of buildings and use of land to determine compliance with the terms of this title.

3. Maintain permanent and current records of this title, including, but not limited to, maps, amendments, bonds, variances, waivers, plats, development agreements, and applications thereto.

4. Institute in the name of Rosemount appropriate citations or proceedings against a violator as provided by law.

12-1-5 :Lots of Record, Recording and Conveying of Land

A. Whenever any subdivision of land is proposed, before any binding contract is made for the sale of any part thereof, before the subdivision is recorded with the county and before any permit for the erection of a structure in such proposed subdivision shall be granted, the subdividing owner, or its authorized agent, shall apply for and secure approval of such subdivision in accordance with the procedures herein.

B. No conveyance involving the division of land to which these regulations are applicable shall be filed or recorded with the Dakota County recorder's office if the land is described in the conveyance by reference to an unapproved registered land survey made after or to an unapproved plat made after such regulations became effective. No building permit shall be issued and no public utilities provided to a lot, piece or parcel of land created by a division of land made in violation of the subdivision regulations of the city.

12-1-6 :Interpretation

A. Relationship to Comprehensive Plan

1. The Comprehensive Plan for the City of Rosemount or “comprehensive plan,” including amendments adopted by the City Council, is the guiding policy document for the city. A primary intent of this title is to implement the policies and goals of the comprehensive plan while remaining consistent with all applicable requirements of federal and state laws.

B. Conflicting Regulations or Provisions

1. In their interpretation and application, the provisions of this title shall be held to minimum requirements.

2. Where any provision of these regulations imposes restrictions different from those imposed by any other provision of these regulations or any other ordinance, rule, or regulation, or other provision of the law, whichever provisions are more restrictive or impose higher standards shall control.

C. Abrogation and Greater Restrictions

1. It is not intended by this title to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this title imposes greater restrictions, the

provisions of this title shall prevail. All other ordinances inconsistent with this title are hereby repealed to the extent of the inconsistency only.

12-1-7 :Severability

A. The provisions of this title are severable. If any section, clause, provision, or portion of this title is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this title shall not be affected thereby.

12-1-8 :Definitions

The following definitions shall apply within Title 12 Subdivision Regulations:

ADMINISTRATOR: The Rosemount city administrator or the administrator's designee.

ALLEY: A right of way that provides a secondary means of vehicular access to the side or rear of two or more properties abutting on a street.

APPLICANT: The person or persons requesting approval of a subdivision by the council. Consent shall be required from the legal owner of the property proposed for subdivision in the event that the applicant does not own the affected property.

ATTORNEY: The Rosemount city attorney.

BLOCK: An area of land within a subdivision that is entirely bounded by streets, or by streets and the exterior boundary or boundaries of the subdivision, or a combination of the above with a river, lake, wetland or railroad right of way.

BOARD: The Rosemount board of appeals and adjustments.

BOULEVARD: That portion of a street right of way between the curb or curb line and the property line.

BUILDING: As defined in the city's zoning ordinance.

BUILDING SETBACK: The minimum horizontal distance from a lot boundary to the nearest part of the foundation wall of a building as defined in title 11 of this code.

CITY: The city of Rosemount, Dakota County, state of Minnesota.

CLERK: The Rosemount city clerk.

COMMISSION: The planning commission of the city.

COMPREHENSIVE PLAN: As defined in the city's zoning ordinance.

COUNCIL: The city council of the city of Rosemount.

COUNTY RECORDER: The county recorder of Dakota County, Minnesota.

DEVELOPER: The applicant or owner of land proposed to be subdivided or his/her representative who has petitioned the city for the installation of public improvements including streets and/or utilities. Consent shall be required from the legal owner of the proposed subdivision if the developer does not own the affected property.

EASEMENT: Authorization by a property owner for another to use the owner's property for a specified use.

EASEMENT, DRAINAGE: As defined and described within Minnesota Statute 505.01, Subdivision 3, Paragraph (b).

EASEMENT, NONACCESS: An easement restricting vehicular access from a public or private property.

EASEMENT, UTILITY: As defined and described within Minnesota Statute 505.01, Subdivision 3, Paragraph (j).

ENGINEER: The professional engineer employed by the city of Rosemount.

ENGINEERING GUIDELINES: City of Rosemount Engineering Guidelines as approved by the City Council.

ESCROW: A deposit of funds held by the city for the purpose of securing public infrastructure or subdivision improvements or other costs or obligations of the developer as required or specified by resolution by the city council, ordinance, subdivision agreement or agreed to by the developer.

FINANCE DIRECTOR: The Rosemount finance director or treasurer.

FRONTAGE: That side of a lot abutting on a public street right of way.

GRADE: The ratio of horizontal or vertical dimensions of slope of the road, street, or other public way specified as a percentage of slope.

HIGHWAY, LIMITED ACCESS: A freeway or expressway, providing a trafficway for through traffic, in respect to which owners or occupants of abutting property of lands and other persons have no legal right to accesses to or from the same, except at such points and in such manner as may be determined by the public authority having jurisdiction over such trafficway.

HOMEOWNERS' ASSOCIATION: A community association which is organized in a development in which individual owners share common interests in open space or facilities.

IMPROVEMENTS: See definition of Public Improvement.

LETTER OF CREDIT: A letter provided to the city authorizing person(s) to pay money or extend credit to another on the credit of the writer to secure the promise to perform some act.

LOT: As defined in the city's zoning ordinance.

METES AND BOUNDS: A method of property description whereby properties are described by means of their direction and distance from an easily identified location.

MONUMENT: An iron stake or pin placed in the ground indicating the location of intersecting property boundary lines.

OUTLOT: A parcel of land designated on a plat intended for future development purposes that is restricted from private development or use, and will be replatted in accordance with an adopted preliminary plat, or a platted parcel intended for public or quasi-public use including parks or ponding.

OWNER: Any individual, firm, corporation, association, syndicate, partnership, or trust with an interest in the land sought to be subdivided under these regulations.

PEDESTRIANWAY: A public pedestrian walkway provided between lots where required by the city to allow for pedestrian accessibility to streets or public areas. This may also be referred to as a "trailway".

PLANNED UNIT DEVELOPMENT: As defined in the city of Rosemount's zoning ordinance.

PLAT: The drawing or map of a subdivision prepared for filing or recording pursuant to Minnesota Statute, chapter 505 and containing all elements and requirements set forth in applicable local regulations adopted pursuant to Minnesota Statutes, section 462.358 and chapter 505.

PLAT, FINAL: A drawing, in final form, showing a proposed subdivision containing all information and detail required by state statutes and by this title to be presented to the city council for approval, and which, if approved, may be duly filed with the county recorder.

PLAT, PRELIMINARY: A plat submitted to the city for preliminary consideration and approval.

PROTECTIVE COVENANT: A contract between parties which constitutes a restriction on the use of the property. Such restrictions are not enforced by the city.

PUBLIC IMPROVEMENT: An infrastructure facility such as sanitary sewer, water main, storm sewer, street, or other facilities intended for the public welfare for which the city may ultimately assume the responsibility for maintenance and operation.

PUBLIC LAND: Land owned and/or operated by a governmental unit dedicated for public use.

PUBLICATION: As defined in the city's zoning ordinance.

REGISTERED LAND SURVEY (RLS): A drawing of a tract (or tracts) of unplatted land meant to be conveyed as a separate parcel as defined by Minnesota Statutes, section 508.47, subd. 2.

REPLATTING: The platting of an area that was previously final platted and recorded with Dakota County.

RIGHT OF WAY: As defined in the city's zoning ordinance.

RURAL SUBDIVISION: A low density subdivision in the agriculture or rural area beyond the metropolitan urban service area (MUSA) with on-site individual sewage treatment facilities.

SHALL: Mandatory.

SIDEWALK: A paved pedestrian walkway separate from the street surface.

STREET: As defined in the city's zoning ordinance.

STREET, COLLECTOR: A street intended to move traffic from local streets to arterial streets across the city.

STREET, CUL-DE-SAC: A street with only one vehicular outlet.

STREET FRONTAGE: That part of a lot which abuts a public right of way.

STREET, LOCAL: A street to serve primarily as an access to abutting properties.

STREET, MINOR ARTERIAL: A street intended to collect and distribute traffic from minor traffic generating areas such as community commercial areas, primary and secondary educational facilities, hospitals, major recreational areas, churches, and offices. They are designed to carry traffic from collector streets across the county to regional system of principal arterial highways.

STREET, PRINCIPAL ARTERIAL: A road intended to move through traffic to and from major traffic generators such as central business districts, regional shopping centers, colleges, and/or universities, military installations, major industrial areas, and similar traffic generators within

the governmental unit; and/or as a route for traffic between communities or large areas and/or which carries interstate and/or high volumes of traffic.

STREET, PRIVATE: A street which is not dedicated to the city for public use.

STREET WIDTH: On a street with curbs, a measurement from the face of curb, or the measurement of the paved or improved surface of a street perpendicular to the centerline.

STRUCTURE: As defined in the city's zoning ordinance.

SUBDIVIDER: Any person, firm, corporation, partnership, or association, who shall lay out any subdivision or part thereof as defined therein, either by themselves or with others.

SUBDIVISION: The separation of an area, parcel or tract of land under single ownership into two or more parcels, tracts, lots or long-term leasehold interests where the creation of the leasehold necessitates the creation of streets, roads, or alleys for residential, commercial industrial, or any other use, or any combination thereof, except those separations:

1. Where all the resulting parcels, tracts, lots, or interests will be 20 acres or larger in size and 500 feet in width for residential uses and five acres or larger in size for commercial and industrial uses;
2. Creating cemetery lots;
3. Resulting from court orders or the adjustment of a lot line by the relocation of a common boundary.

SUBDIVISION AGREEMENT: A contractual agreement providing for public infrastructure improvements and land development entered into between the city and subdivider to be completed prior to final plat approval.

SUBDIVISION, MINOR: A subdivision that creates no more than four lots and depends upon existing infrastructure for development and may be waived of some platting requirement.

SURVEY MONUMENT: See definition of Monument.

SURVEYOR: A person duly registered as a land surveyor by the state of Minnesota.

URBAN RESIDENTIAL SUBDIVISION: A subdivision serviced or to be serviced with municipal sanitary sewer, storm sewer and municipal water developed within the metropolitan urban service area (MUSA).

VARIANCE: As defined in the city's zoning ordinance, title 11, section11-9-5.A of this code.

ZONING DISTRICT: As defined in the city's zoning ordinance.

ZONING ORDINANCE: Title 11 of this code.

CHAPTER 2 SUBDIVISION DESIGN STANDARDS AND IMPROVEMENTS

12-2-1 :Street Design Standards

A. A subdivision shall provide for the continuation or appropriate projection of existing streets in surrounding areas; or a subdivision shall conform to a plan for the neighborhood approved, or adopted by the council to meet a particular situation where topography or other conditions make continuance or conformance to existing streets impractical.

B. Local streets shall be so laid out that their use by through traffic will be discouraged and so that they will not function as collector streets.

C. Where a subdivision abuts or contains an existing or proposed collector or arterial street, the city may require such treatment as may be necessary for adequate protection of residential property and to afford separation of through and local traffic.

D. Where a subdivision borders on or contains a railroad right of way, or limited access highway right of way, the city may require a frontage street approximately parallel to and on each side of such right of way, at a distance suitable for the appropriate use of the intervening land. Such distances shall also be determined with due regard for the requirements of approach grades and future grade separations.

E. Centerline offsets at shall conform with the standards listed within the Engineering Guidelines.

F. Sight easements with tangent distances of 25 feet shall be provided at street intersections or the city may permit property lines at street intersections to be rounded with a radius deemed necessary.

G. Street right of way and widths shall conform with the standards listed within the Engineering Guidelines.

H. The construction of half streets shall be prohibited, but half of the required right of way shall be platted within such tract where streets are appropriate as determined by the city.

I. Cul-de-sac dead end streets, designated to be so permanently, shall not serve more than 15 single-unit dwellings or 25 multiple dwelling units.

J. Cul-de-sacs shall only be developed where justified by irregular topography or where adjacent to limited access streets.

K. Street grades shall conform with the standards listed within the Engineering Guidelines.

12-2-2 :Street Sections

A. The street section shall comply with design standards as set forth in the city standard specification.

B. All street designs are subject to review and approval of the engineer.

12-2-3 :Sidewalks, Trails, or Pathways

A. Sidewalks shall be required along one side of any local street. Where possible, the required sidewalk shall be located on the same side of the street as previously existing sidewalks in the area to ensure continuity and reduce the need for road crossings.

B. Sidewalks, trails, or paved pathways shall be located along both sides of any collector or arterial street.

12-2-4 :Easement Details

A. Utility and drainage easements abutting public street right of way and centered on rear or side lot lines shall be at least 10 feet wide or wider as may be required by the city.

B. Where a subdivision is traversed by a ponding area, watercourse, ponding or utility easements, drainage, channel, or stream there shall be provided a drainage easement conforming substantially with the lines of such watercourse, and such further width or construction, or both,

as will be adequate for the purpose as determined by the city. Said drainage or ponding easements shall be laid out and located in such a manner as to provide reasonable access for maintenance and dredging purposes without undue infringement upon the property over which access is taken.

C. Trails or pedestrianways shall be shown as trailways on the plat as separate easements or recorded at the county as the city may direct.

D. When double frontage or reverse frontage lots are incorporated in a plat, a planting screen easement of at least 10 feet in width may be required along the line of lots abutting a collector street or minor or principal arterial highways.

12-2-5 :Landlocked Parcels

A. As a general rule, the city shall not permit landlocked parcels or parcels that are only served by private easements. However, the city may permit the following:

1. Landlocked parcels in multiple dwelling or commercial complex provided said parcel(s) have access to public street by an easement over another parcel within the same multiple dwelling or commercial complex.

2. Landlocked parcels which are unbuildable (outlots) and reserved as permanent public open spaces such use as ponding areas may be permitted. A conservation easement may be required by the city to ensure that the property is preserved as open space.

12-2-6 :Park Dedication

A. Comprehensive Plans

1. Where a proposed park, trailway, ponding, or open space area, shown on the city's comprehensive plan, park development guide, comprehensive storm sewer plan or official map, is located in the whole or in part in a subdivision, such area or areas shall be shown on the preliminary plat.

2. Such area or areas shall also be dedicated to the City by the subdivider if the Council requests such dedication under the provisions of the subsections below.

B. Dedication: In all subdivisions, the City shall require that a reasonable portion of such land be set aside and dedicated to the public for parks, playgrounds or other public use exclusive of property dedicated for streets and other public ways.

1. In all residential subdivisions it shall be presumed that a reasonable amount of land has been dedicated for parks and playgrounds if the subdivider dedicates at least one twenty-fifth (1/25) of an acre for each Low Density Residential dwelling unit of the proposed subdivision (acres to be dedicated = 0.04 x number of dwelling units), 0.03 of an acre for Medium Density Residential (acres to be dedicated = 0.03 x number of dwelling units) or 0.02 of an acre for High Density Residential (acres to be dedicated = 0.02 x number of dwelling units). The land use density determination will be based upon the approved Comprehensive Land Use Plan. The City shall determine whether a cash payment in lieu of land dedication is appropriate. The amount of cash dedication shall be determined by multiplying the number of dwelling units of the proposed subdivision times the designed fee per dwelling which may be set from time to time by resolution of the Council.

2. In all commercial, industrial and other subdivisions, it shall be presumed that a reasonable amount of land has been dedicated to serve the needs of the resident and working population for parks and playgrounds if the subdivider dedicates at least 10% of the land in the subdivision for parks, recreation and usable open space. The City shall determine whether a cash payment in lieu of land dedication is appropriate. The amount of the cash dedication shall be determined by multiplying the number of acres (determined by application of the formula stated above) times the designated fee per acre which may be set from time to time by resolution of the Council.
3. The dedication of a portion of land for parks or playgrounds, or the payment of cash in lieu thereof, provided for above shall be presumed to be reasonable. However, upon the request of the applicant, the recommendation of the Park and Recreation Commission, or at the discretion of the Council, the City may either increase or decrease such dedication or payment upon a determination by the Council that such dedication or payment is unreasonable or insufficient given the specific characteristics of the proposed subdivision and its intended use.
4. Ponding areas, needed as part of the overall City storm drainage plan, shall be dedicated as land or easement at the option of the City and as accepted by the City. However, no credit shall be given for park dedication unless said area meets the criteria for public parks as stated in the City's park dedication resolution and is approved by the Council. Said dedication of land or easement shall be in a form approved by the Council.
5. In the case of subdivisions of land which have previously been subdivided and for which land has been dedicated for parks or playgrounds, or cash payments in lieu of such dedication have been made, the Council shall make reasonable adjustments to recognize such previous dedication or payment.

C. Timing of Park Dedication: If a new subdivision is designed to be platted into more than one addition, all park and other public use lands contemplated under this section in the total subdivision area shall be dedicated with the final plat of the first phase or addition of the subdivision unless otherwise approved by the Council.

D. Condition of Land to be Dedicated: Land to be dedicated for public park, trail, or ponding shall be brought to a suitable condition by the subdivider in accordance with City policy. All disturbed areas shall have topsoil restored, be regraded with turf established according to specifications provided by the City.

E. Abstract: Such lands shall be free and clear of all liens and encumbrances including special assessments as evidenced by a recent abstract of title or registered property abstract to be submitted at developer's cost to the City for its examination.

F. Dedicated Property: City must have received warranty deed or equivalent for dedicated park property by the City before final plat is approved.

12-2-7 :Required Improvements

The following required improvements shall be installed in accordance with the engineering policy, standards, and specifications which have been or may in the future be adopted by the Council. Where standards and specifications have not been adopted, the improvements shall be made in accordance with good engineering practices. No building permit shall be issued until public improvements have been accepted by the city.

A. Roads and Highways:

1. Unless otherwise exempted, all lots shall be provided frontage along existing roads and highways or road and highway to be constructed in conjunction with the development of the subdivision and where not premature under subsection 12-3-1 H.11.c of this title.

B. Sanitary Sewer Systems:

1. Where available, Municipal sewer facilities shall be provided in the development of the subdivision and where not premature under subsection 12-3-1 H.11.c of this title.

2. Where Municipal sewer facilities are not available, individual sewage systems shall be provided in accordance with this Code.

C. Water Systems:

1. Where available, Municipal water facilities shall be provided in the development of the subdivision and where not premature under subsection 12-3-1 H.11.b of this title.

2. Where Municipal water facilities are not available, individual water systems shall be provided in accordance with the Minnesota Department of Health and Dakota County adopted standards.

D. Drainage Facilities: Storm sewer, open drainage, or other facilities and easements shall be installed and provided, which will adequately provide for the drainage of surface waters and where not premature under subsection 12-3-1 H.11.a of this title.

1. Said drainage facilities shall be provided as approved by the City Engineer.

2. Storm sewer and/or other drainage facilities shall be installed as determined to be necessary by the City Engineer for proper drainage of the surface waters.

E. All streets and utilities not located within a public right of way must be maintained by the owner.

F. Turf: Prior to the issuance of occupancy permits for a dwelling so provided, seeding shall be established and maintainable as a lawn, sod shall be installed upon the unpaved street right-of-way fronting the lot and in any drainage swales adjacent to the lot.

12-2-8 :Grading of Site Prior to Final Plat

A. Approval of a subdivision grading permit does not obligate the City in any manner to approve a final plat. For further example, please refer to title 9, “Building Regulations,” of this code.

12-2-9 :Homeowners Association

A. The declaration of covenants for a homeowners' association shall be approved by the city and shall contain the following:

1. Duties of Homeowners' Association: The open space and common areas of a development shall be maintained and cared for by the developer of the project until a homeowners' association is formed to maintain open space and common areas. This homeowners' association shall be responsible for the care and maintenance of all open space and common areas of this project and also for the maintenance and appearance of the exterior of each unit.

2. Homeowners' Charges: The homeowners' association shall levy charges to each owner for the maintenance cost, operating costs and improvement costs for the open space, parks, and green areas and also for the parking and bituminous surfaced areas which are not publicly owned and maintained. In addition, the homeowners' association will assume the responsibility to maintain the exterior of the building and also their front and rear yards in an acceptable condition which is compatible to the neighboring property. This condition shall be so kept that it will not cause a blighting of the area or a general deterioration of the development. The homeowners' association will cause blighted properties to be repaired, restored, and maintained as necessary to a proper standard for the area.
3. Failure to Organize Homeowners' Association: In the event that the developer or owner of the project is unable to organize the property owners into an association for the maintenance of the project after 12 months from the completion of the construction, the council will call for a public hearing of all persons so concerned and ask for the creation of such an association. If no association is formed or if the association ceases to function any time after it is formed, the council will order such maintenance work and restoration of the area and then will assess such costs, together with a reasonable supervision charge, to the property owners in the single-family attached project or the individual property owner receiving the individual benefit.
4. Declaration of Covenants: The council may require that the declaration of covenants include provisions to meet the minimum requirements of this section or to satisfy conditions of city approval, may be enforced by the city, and may not be amended or released without city council approval.

CHAPTER 3 SUBDIVISION PROCEDURES AND ENFORCEMENT

12-3-1 :Subdivision Platting Process

A. All subdivisions are subject to platting requirements unless otherwise provided for within this Title.

B. Preapplication: The subdividers or owners should meet with city officials (engineer and planner) in order to be made fully aware of all applicable ordinances, policies, regulations, and plans pertinent to the proposed subdivision. Staff will then inform the subdividers of the specific processes and requirements for subdivision approval.

C. Application and Fees: All applications for subdivisions shall be filed with the city and shall include all of the information required on the application form provided by the city and all of the information required by this title. Failure by the applicant to provide all of the required information may result in immediate rejection of the application by staff. Application and processing fees shall be established by fee resolution adopted from time to time by the council.

D. Staff Review of Application: Within 15 days of the receipt of the application, staff shall complete the initial review to determine if all required information has been filed. The applicant will be notified of incomplete or unacceptable application upon completion of initial review. Failure by the city to inform the applicant does not obligate the city in any manner.

E. Neighborhood Meeting: The Zoning Administrator shall have the authority to require the applicant to hold a neighborhood meeting to inform nearby property owners of the request. If required, this meeting shall take place following the submittal of the formal application to the City but before notices for the public hearing are published.

F. Public Hearing: When the application is complete, the city shall conduct a public hearing before the commission according to the procedures specified in the city's zoning ordinance, title 11, section 11-9-1of this code.

G. Council Approval: The council shall act following the receipt of a complete application as required accompanied by recommendations forwarded by the parks and recreation committee, planning commission, and utilities commission regarding the subdivision in accordance with Minnesota statutes 462.358.

H. Qualifications Governing Approval of Subdivisions

All subdivisions shall conform to the following criteria:

1. That the proposed subdivision complies with applicable ordinances and the comprehensive guide plan.
2. That the design or improvement of the proposed subdivision complies with applicable plans of Dakota County, state of Minnesota or the metropolitan council.
3. That the physical characteristics of the site, including, but not limited to, topography, vegetation, susceptibility to erosion, and filtration, susceptibility to flooding, water storage and retention, are such that the site is suitable for the type of development or use contemplated.
4. That the site physically is suitable for the proposed density of development.
5. That the design of the subdivision or the proposed improvements are not likely to cause environmental damage.
6. That the design of the subdivision or the type of improvements are not likely to cause health problems.
7. That the design of the subdivision or the type of improvements will not conflict with the easements of record or with easements established by judgment of court.
8. That completion of the proposed development of the subdivision can be completed in a timely manner so as not to cause an economic burden upon the city for maintenance, repayment of bonds, or similar burden.
9. That the design of the subdivision is compatible and consistent with the platting or approved preliminary plat on adjacent lands.
10. That all proposed urban residential subdivisions are in the metropolitan urban service area (MUSA).
11. That the subdivision is not premature. A premature subdivision may include any of the following scenarios:
    a. Lack of Adequate Drainage: A condition of inadequate drainage shall be deemed to exist if:
        i. Surface or subsurface water retention and runoff is such that it constitutes a danger to the structural security of the proposed structures.
        ii. The proposed subdivision will cause pollution of water sources or damage from erosion and situation on downhill or downstream land.

iii. The proposed site grading and development will cause harmful and irreparable damage from erosion and situation on downhill or downstream land.

iv. Factors to be considered in making these determinations may include: average rainfall for the area; the relation of the land to floodplains; the nature of soils and subsoils and their ability to adequately support surface water runoff and waste disposal systems; the slope of the land and its effect on effluents; and the presence of streams as related to effluent disposal.

b. Lack of Adequate Water Supply: A proposed subdivision shall be deemed to lack an adequate water supply if the proposed subdivision does not have adequate sources of water to serve the proposed subdivision if developed to its maximum permissible density without causing an unreasonable depreciation of existing water supplies for surrounding areas.

c. Lack of Adequate Roads or Highways to Serve the Subdivision: A proposed subdivision shall be deemed to lack adequate roads or highways to serve the subdivision when:

i. Roads which serve the proposed subdivision are of such a width, grade, stability, vertical and horizontal alignment, site distance and surface condition that an increase in traffic volume generated by the proposed subdivision would create a hazard to public safety and general welfare, or seriously aggravate an already hazardous condition, and when, with due regard to the advice of the county and/or the Mn-DOT, said roads are inadequate for the intended use.

ii. The traffic volume generated by the proposed subdivision would create unreasonable highway congestion or unsafe conditions on highways existing at the time of the application or proposed for completion within the next two years.

d. Lack of Adequate Waste Disposal Systems: A proposed subdivision shall be deemed to lack adequate waste disposal systems if in subdivisions for which sewer lines are proposed, there is inadequate sewer capacity in the present system to support the subdivision if developed to its maximum permissible density after reasonable sewer capacity is reserved for schools, planned public facilities, and commercial and industrial development projected for the next five years; or if in subdivisions where sewer lines are neither available nor proposed, there is inadequate on site sewer capacity potential to support the subdivision if developed to the maximum permissible density.

e. Inconsistency with Comprehensive Plan: A proposed subdivision shall be deemed inconsistent with the city's comprehensive plan when the subdivision is inconsistent with the purposes, objectives and recommendations of the adopted comprehensive plan of Rosemount, as may be amended. Subdivisions which do not follow planned public improvements shall be deemed inconsistent with the city's growth strategies as outlined in the comprehensive plan.

f. Public Service Capacity: A proposed subdivision shall be determined to lack necessary public service capacity when services such as recreational facilities, schools, police and fire protection and other public facilities, which must be provided at public expense, cannot reasonably be provided for within the next two years.

g. Minnesota Environmental Quality Board (EQB) Policies: The proposed subdivision is inconsistent with the policies of the environmental quality board, as may be amended, and could adversely impact critical environmental areas or potentially disrupt or destroy

historic areas, which are designated or officially recognized by the council, in violation of federal and state historical preservation laws.

(a) Inconsistency with Capital Improvement Plan: A proposed subdivision shall be deemed inconsistent with capital improvement plans when improvements and/or services necessary to accommodate the proposed subdivision have not been programmed in the Rosemount, county or other regional capital improvement plans. The council may waive this criteria when it can be demonstrated that a revision to capital improvement programs can be accommodated.

I. Appeals of Decisions

1. An appeal of any decision made under this title may be filed and reviewed according to the procedures in section 11-9-7 "Appeals."

12-3-2 :Preliminary Plat

A. A preliminary plat is required for overall public infrastructure phasing and capital improvement planning.

B. Staff Review, Public Hearing, and Approval: The city shall complete the review, public hearing, and approval process according to the requirements of section 12-3-1 of this title.

C. Final Requirements: Prior to a final plat submission, the following information shall have been reviewed and approved by the council:

1. A preliminary plat in accordance with the provisions of this title;
2. An environmental assessment worksheet (EAW) when required and subject to the provisions of Minnesota state statutes;
3. Approval of other governmental jurisdictions that have approval authority of preliminary plats;
4. An engineering feasibility report unless this requirement has been waived by the council; and
5. A tree preservation plan in accordance with section 11-7-7 of this code.

D. Lapse and Extension Provision:

1. Approval shall be effective for a period of five years after action by the council unless otherwise specified by the council.
2. Upon expiration of the time limit, all approvals for preliminary plat or portions thereof for which a final plat has not been recorded with the county, shall be null and void and a new petition and processing shall be necessary to revalidate the preliminary plat unless the council shall grant an extension of time prior to the expiration date.
3. This subsection will pertain to all preliminary plats approved after January 1, 2015.

12-3-3 :Final Plat

A. A final plat is required for recording each phase or addition of a subdivision. Prior to granting final plat approval, the council may permit or require the plat to be divided into two or more

additions or may impose such conditions upon filing of the additions as it may deem necessary to ensure the orderly development of the plat.

B. Review and Approval:

1. The Zoning Administrator shall review the final plat and forward a recommendation to the City Council for review and final decision.
2. If found acceptable, the final plat shall be approved by City Council resolution. The City Council shall state, in writing, its findings for approval or denial, as well as any conditions of approval.
3. Following the decision by the City Council, the Zoning Administrator shall notify the applicant of the Council's action and reasons thereof.

C. Final Requirements: Prior to the city executing the final plat, the following information shall have been received and approved by the council:

1. A subdivision agreement, drafted by the city that identifies all requirements of the developer and the city;
2. The approved phasing of the subdivision, which may include the use of additions and/or outlots with dedication of public rights of way and/or public easements;
3. Approval of other governmental jurisdictions that have approval authority of preliminary plats;
4. An engineering feasibility report;
5. Review and approval by the city's public utilities commission and park and recreation committee; and
6. A copy of the abstract when required by the city for a title search.

D. Recording Requirements

1. Vested Rights: No vested rights, in terms of conveying lots, shall accrue to any plat by reason of preliminary or final approval until the actual signing of the plat by the city after all requirements are met and recorded with the county.
2. Signing of Plat: Signatures shall be recorded upon the final plat as required by the county.
   a. The signature of the mayor or vice mayor attesting to the date upon which the council approved the final plat.
   b. The signature from the clerk's office and seal of the city attesting to the above referenced actions by the city and valid signatures.
3. Release of Plat: The final plat shall not be released by the clerk for recording with the county until the following have been completed:
   a. The recording of signatures upon the final plat as listed in subsections D.1 and D.2 above of this section.
   b. The recording of signatures upon the appropriate subdivision agreement(s).
   c. The submittal of all required fees and appropriate financial guarantees to the city, if any, ensuring the applicant's performance of the terms of these regulations.

4. Recording of Plat:
    a. It shall be the responsibility of the subdivider to file the plat with the county recorder within two years after the plat has been released for recording by the city unless a time extension has been granted by the council.
    b. Failure to record the plat within two years of council approval shall render all approvals by the city null and void until a new application has been processed and approved by the city or until the city has granted an extension in time in which the final plat shall be recorded.
5. Proof of Recording: The city shall not take any action related to the plat such as issuing building permits or awarding public utility or street contracts on the platted property until such time as the clerk has been satisfied that the plat has been recorded with the county recorder.

12-3-4 :Platting Alternatives

Alternatives to the standard preliminary and final plat procedures and requirements may be permitted under certain conditions as defined below.

A. Lot Line Adjustment.
    1. When owners of adjacent properties intend to modify the areas of the existing parcels while not creating an additional buildable lot, approval of a lot line adjustment can be requested when all of the following apply:
        a. The new legal descriptions for the properties are metes and bounds or simple, easily described division of two platted lots of record (for example, east ½ of lot 31, north 150 feet of lot 31);
        b. The adjustment does not result in the creation of a new lot, does not make one of the lots large enough to be eligible for further subdivision, and does not make an unbuildable lot buildable; and
        c. The resulting parcels meet all applicable ordinance requirements, except that if one of the parcels was previously non-conforming, it must become more conforming as a result of the subdivision.
    2. The Zoning Administrator shall approve or deny the application and provide the applicant with written notice of the decision and reasons for approval or denial.

B. Agricultural Lot Divisions
    1. Lot divisions for single-unit dwellings in the agricultural district may be exempted from platting requirements in accordance with the requirements of title 11 chapter 3 of this code.

C. Minor Subdivision:
    1. Property may be subdivided through a minor subdivision procedure which combines the preliminary and final plat procedures in sections 12-3-1 and 12-3-3 in conformance with the following conditions:
        a. The resulting subdivision shall contain no more than four parcels.
        b. The proposed subdivision shall be in areas where municipal streets and utilities are already in place and capable of serving the plat.

c. Future streets shall not be constructed and the proposed subdivision shall not interfere with proper development of neighboring adjacent properties.

d. Resulting parcels shall conform with all zoning ordinance requirements.

2. Minor subdivision shall conform to all requirements of standard subdivision except that some of the information requirements such as the engineering feasibility report may be waived by the city staff.

D. Registered Land Survey (RLS)

1. Registered land surveys shall not be used to avoid the requirements of this title.

2. A registered land survey for parcels of less than five acres in size or 300 feet in width shall be reviewed by the commission and approved by the council in the same manner as a preliminary plat. Such approval shall be attached to the survey.

3. All registered land surveys shall be prepared in conformance with Minnesota Statutes, section 508.47, subdivision 4.

E. Corrections

1. When a survey or description of a parcel or lot has been found to be inadequate to describe the actual boundaries, approval of a corrective plat may be requested.

2. This type of subdivision creates no new lots or streets.

3. The proposed corrective subdivision, in sketch plan form, along with a letter signed by both property owners agreeing to the new subdivision, shall be submitted to the council for approval. No hearing or commission review is necessary unless the proposal is referred to the commission by the planner for clarification.

4. The proposed lots shall not cause any portion of the existing lots, parcel, or existing buildings to be in violation of this regulation or the zoning code. A certificate of survey may be required on any proposed lot with existing buildings in order to determine the placement of the building on the proposed lot.

12-3-5 :Subdivision Variance

A. Purpose: The purpose of this section is to provide for variations from the literal provisions of this title in instances where an unusual hardship exists upon the land.

B. Board of Appeals and Adjustments: The Board of Appeals and Adjustments as defined within section 11-9-7 shall review all variances to this title.

C. Procedures: The Board of Appeals of Adjustments shall follow the procedures in section 11-9-7 of the Zoning Ordinance.

D. Review Criteria: The Board of Appeals and Adjustments shall not approve a variance unless they find that the following criteria, as applicable, have been met:

1. The variance, and its resulting construction or project, would be in keeping with the spirit and intent of this chapter.

2. The variance would alleviate an unusual hardship existing upon the land such as physical surroundings, shape, or topographical conditions. Unusual hardship includes, but is not limited to, inadequate access to direct sunlight for solar energy systems.

3. The variance and its resulting construction or project would not be detrimental to the public welfare or injurious to other nearby properties.
4. The variance requested is the minimum action required to alleviate the hardship.

12-3-6 : Planned Unit Development

A. The city may combine public hearing requirements for subdivisions with those required for planned unit developments.

B. Dimensional deviations in the development of the subdivision under this chapter shall relate to lot area, lot width, lot depth, frontage on a public street, street width, setbacks for any yard, height, setback from adjacent zoning district or use, length of cul-de-sac, length of block, and radius of cul-de-sac.

C. Said dimensional deviations shall be clearly stated and documented at the time of approval by the council before they shall have full form and effect.

D. Unless waived by the Zoning Administrator, all data required on a preliminary plat and on a final plat as set forth in this chapter, including streets, utility easements, existing or proposed subdivisions of ownership and such other information, if any, as required by this chapter, shall be required as a part of the planned unit development as set forth in section 11-9-6 of this code. Such waiver shall not constitute a verification that all required data has been submitted.

12-3-7 :Violations and Penalties

A. Any person who violates or fails to comply with any provisions of this title shall be guilty of a misdemeanor, and upon conviction thereof shall be punished according to Minnesota Statutes, section 609.02, subdivision 3.

SECTION 2. This Ordinance shall be effective the day following its publication.

Adopted by the City Council of the City of Rosemount, Minnesota, the 4th day of June, 2024.

_____
Mayor Jeffery D. Weisensel

ATTEST:

_____
Erin Fasbender, City Clerk

COUNTY OF DAKOTA
STATE OF MINNESOTA

RESOLUTION NO. 2024 - _____

RESOLUTION APPROVING SUMMARY PUBLICATION OF ORDINANCE NO. 2024 - _____

WHEREAS, the City has adopted the above referenced ordinance; and

WHEREAS, the verbatim text of the ordinance is cumbersome, and the expense of publication of the complete text is not justified; and

WHEREAS, Minnesota Statutes §412.191, subd. 4, allows publication by title and summary in the case of lengthy ordinances or those containing charts or maps; and

WHEREAS, the following summary clearly informs the public of the intent and effect of the ordinance.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Rosemount that the following summary is hereby approved for official publication in lieu of the entire ordinance:

SUMMARY PUBLICATION
ORDINANCE NO. 2024 - _____

TITLE 11: ZONING REGULATIONS AND TITLE 12: SUBDIVISION REGULATIONS

On June 4, 2024, the Rosemount City Council adopted an ordinance designated as Ordinance No. 2024 – ___, the title of which is stated above. The purpose of the ordinance is to repeal Title 11: Zoning Regulations and Title 12: Subdivision Regulations, and replace it with a new Title 11: Zoning Regulations and Title 12: Subdivision Regulations. The ordinance applies to the use and development of land within the City of Rosemount as well as the subdivision of land. The adopted ordinance modernizes and makes consistent the zoning and subdivision regulations within the City Code to make them more user-friendly. Copies of the ordinance are available for public inspection in the office of the City Clerk during normal business hours or upon request by calling 651-322-2003.

/s/ Erin Fasbender, City Clerk

BE IT FURTHER RESOLVED, that the City Clerk is directed to keep a copy of the ordinance in her office at City Hall for public inspection and to post a full copy of the ordinance in a public place in the City for a period of two weeks.

Adopted by the City Council of the City of Rosemount, Minnesota this 4th day of June, 2024.

_____
Jeffery D. Weisensel, Mayor

ATTEST:

_____
Erin Fasbender, City Clerk

City Council Meeting Memo

To:	Rosemount City Council
From:	Jeff Miller and Beth Richmond, HKGi
Date:	June 4, 2024
Subject:	Zoning & Subdivision Code and Zoning Map Adoption

Overview

At the June 4th City Council meeting, planning consultants (HKGi) and city staff will present an overview of the proposed zoning & subdivision code and zoning map amendments. While the public hearings required by state law were held by the Planning Commission on March 18th (zoning/subdivision code text amendments) and May 28th (zoning map amendments), City Council will also hold a public hearing at the June 4th meeting in an effort to provide an additional opportunity for public input. Following the public hearing and City Council discussion, the Council will take action on the amended code and zoning map. The proposed amended zoning/subdivision code and zoning map are available for public review on the City's website.

Purpose of the Zoning & Subdivision Code and Map Update

The Zoning & Subdivision Code Update project is required to ensure consistency between the zoning/subdivision codes and the 2040 Comprehensive Plan. The City Council adopted the 2040 Comprehensive Plan Update in March 2020. This project is not making any changes to the 2040 Comprehensive Plan, and the 2040 Future Land Use Map remains in place.

The intent of this update is to address the aspects of the zoning/subdivision codes and zoning map that are don't align with the 2040 Comprehensive Plan or have not been updated to address the City's current development market trends/changes. The project's intent is also to create zoning and subdivision regulations that are modern, consistent, and user-friendly. While both the zoning and subdivision codes are part of this project, there are not major updates to the subdivision code since it was recently updated in 2020.

As part of the Zoning/Subdivision Code Update project, the City's zoning districts are proposed to be consolidated from 21 today to 14 proposed districts. A new mixed-use district (MX-2) has also been created for the Hwy 42 mixed use nodes. The purpose of the zoning map amendments is to ensure consistency with the 2040 Future Land Use Map, consolidate districts that have similar standards, create more flexible and simplified districts, and eliminate districts that are not used or needed.

Updated Structure of the Zoning Code (Title 11)

The Zoning Code has been reorganized from 13 chapters today down to 10 chapters:

Chapter 1 Purpose and Interpretation

800 Washington Avenue North, Suite 103
Minneapolis, MN 55401

Chapter 2	General Provisions
Chapter 3	Residential Districts
Chapter 4	Non-Residential Districts
Chapter 5	Special/Overlay Districts (shoreland, wetland, MRCCA, floodplain, planned unit development).
Chapter 6	Use Specific Standards
Chapter 7	Development Standards (e.g., parking, landscaping, tree preservation, lighting, fencing, architectural design)
Chapter 8	Signage
Chapter 9	Development Procedures (e.g., conditional use, variance, planned unit development)
Chapter 10	Definitions

Updated Structure of the Zoning Code (Title 11)

The Subdivision Code has been reorganized from 5 chapters today down to 3 chapters:

Chapter 1	Introductory Provisions
Chapter 2	Subdivision Design Standards and Improvements
Chapter 3	Subdivision Procedures and Enforcement

Highlights of Code Reorganization and Updates

Code Reorganization

One of the intents of the update project is to improve the code's structure to make it easier for users to navigate and find needed regulations, as well as for staff to administer it. Some key highlights of the code reorganization are:

- Streamlined current zoning districts by reorganizing allowed uses and dimensional standards (lot size, building height, building setbacks, etc.) into tables and relocating other standards to more appropriate sections
- Reduced zoning districts chapter from 96 pages down to 8 tables and 5-6 pages of text
- Reorganized standards by scale: all districts (parking, landscaping, screening, lighting, etc.), individual districts (lot size, building height, setbacks, etc.), specific uses (e.g. drive-thru facility, home occupation, daycare center, car wash)
- Added a new chapter focused on use specific standards so they are easier to find
- Added a new chapter to consolidate all definitions in one place, which are currently located in six different chapters in today's zoning code, and added new definitions
- Addressed the confusing content of Chapter 2 (General Provisions) which is currently a catch-all chapter with 20 sections that are not necessarily related – most of the sections have been relocated to other chapters that make sense

Zoning Districts, Uses, and Standards

- Reduced the number of zoning districts from 21 to 14
- A new mixed use district (MX-2) has been created for the Hwy 42 mixed use nodes
- Updated each district's purpose statement, allowed uses, and standards
- Use definitions updated and expanded, particularly related to housing types

General Development Standards and Procedures

- Parking – updates to the minimum number of parking spaces requirements
- Signs – updates to dynamic sign, temporary sign, and directional sign standards, and to make the sign regulations content neutral
- Landscaping – updates to minimum planting requirements to address current issues with standards being too high
- Development procedures – all development procedures consolidated into one chapter, including site plan/building design, conditional use permit, variance, amendments, planned unit developments, interim use permits, and appeals

Planning Commission Review and Recommendation

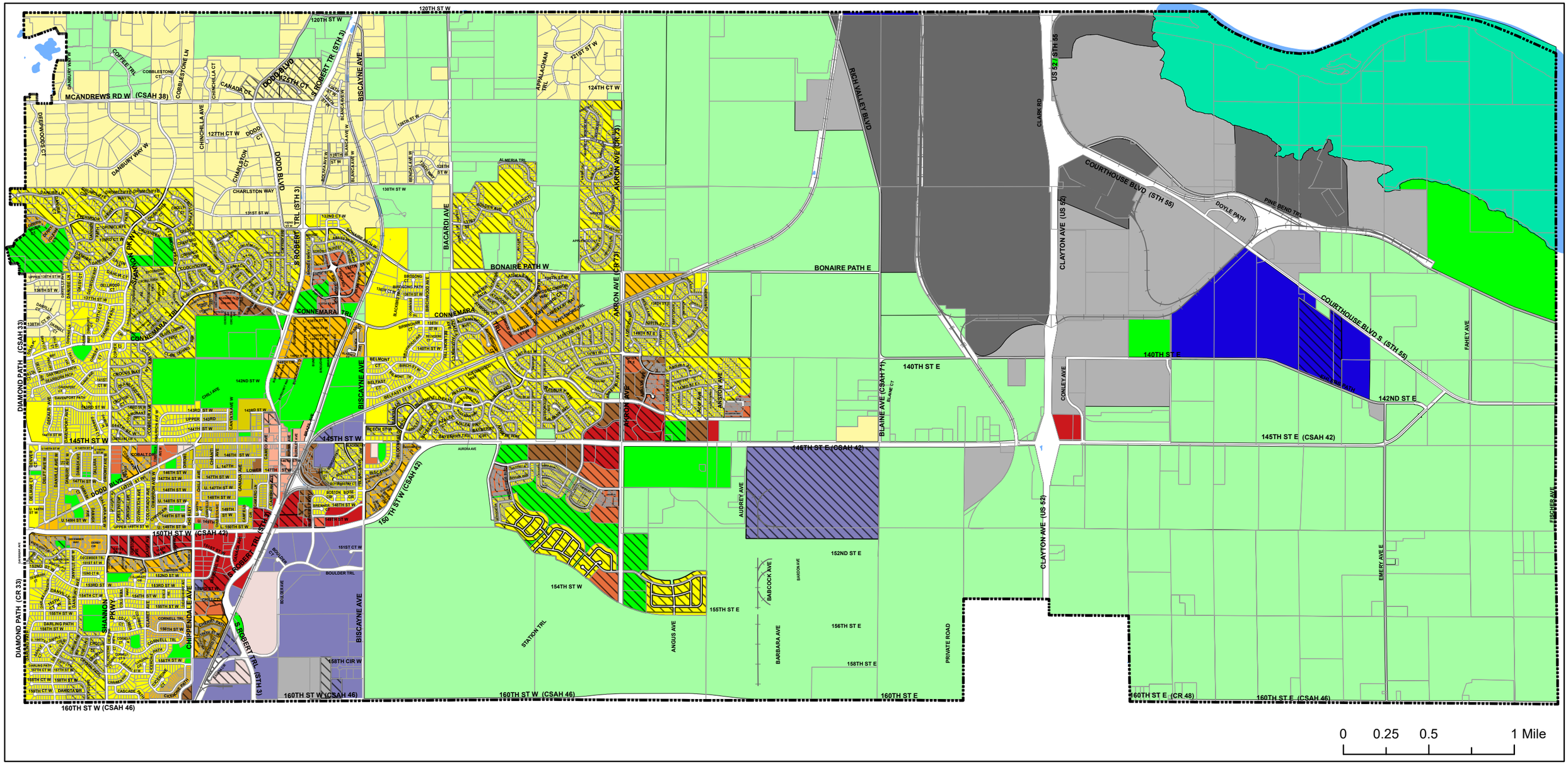
The Planning Commission held a public hearing for the Zoning and Subdivision Code amendments on March 18th and a public hearing for the zoning map amendments on May 28th. No comments were submitted from members of the public at either meeting.

After discussion, the Planning Commission unanimously recommended approval of the code amendments on March 18th and recommended approval of the zoning map updates on May 28th. Comments from the Planning Commission relative to landscaping maintenance, commercial uses in the MX-2 District, and roadway name consistency were incorporated into the most recent code drafts.

The most recent code drafts have been available for review online since May 24th. As of the writing of this memo, no comments have been posted on these drafts.

City Council Action

The City Council is asked to review the Zoning and Subdivision Code text and map amendments, hold a public hearing, and take action on the amendments.



Zoning

ROSEMOUNT
MINNESOTA

PUD

Residential:

- RR - Rural Residential
- R1 - Low Density Residential
- R1A - Low Density Residential
- R2 - Moderate Density Residential
- R3 - Medium Density Residential
- R4 - High Density Residential

Commercial:

- C1 - Convenience Commercial
- DT - Downtown District
- C3 - Highway Service Commercial
- C4 - General Commercial

Industrial:

- BP - Business Park
- IP - Industrial Park
- GI - General Industrial
- HI - Heavy Industrial
- LI - Light Industrial

Other:

- AGP - Agricultural Preserve
- AG - Agricultural
- C4R4 - Residental Commercial mixed use
- PI - Public/Institutional
- FP - Flood Plain
- WM - Waste Management
- W - Water
- ROW - Right-of-Way
- Parcels

N

2/29/2024

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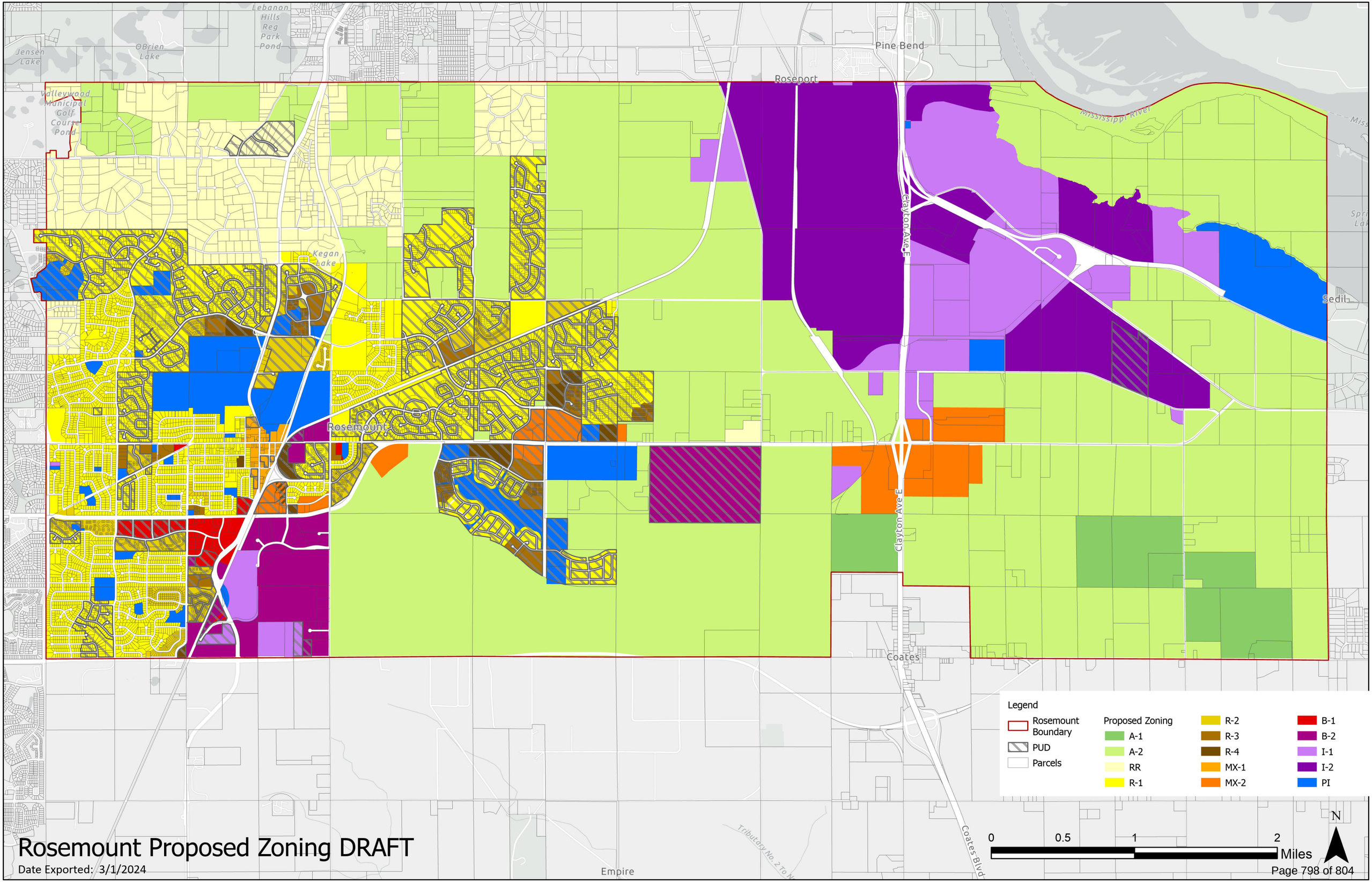

Rosemount Proposed Zoning DRAFT

Date Exported: 3/1/2024

Residential Districts

Existing Residential Districts		Proposed Residential Districts	
RR	Rural Residential	**RR**	Rural Residential
RL	Very Low Density Single-Family Residential	Eliminate – not applied anywhere	
R-1A	Low Density Residential	Eliminate and rezone properties to R-1 and R-2	
R-1	Low Density Residential	**R-1**	Low Density Traditional Residential
R-2	Moderate Density Residential	**R-2**	Low Density Mixed Residential
R-3	Medium Density Residential	**R-3**	Medium Density Residential
R-4	High Density Residential	**R-4**	High Density Residential

Mixed Use and Commercial Districts

Existing MX and C Districts		Proposed MX and C Districts	
DT	Downtown	**MX-1**	Downtown Mixed Use
C-3	Highway Commercial	**MX-2**	Highway Mixed Use
C-4	General Commercial		
C-1	Convenience Commercial	**B-1**	General Business
BP	Business Park	**B-2**	Employment

Industrial Districts

Existing Industrial Districts		Proposed Industrial Districts	
IP	Industrial Park	**I-1**	General Industrial
LI	Light Industrial		
GI	General Industrial		
HI	Heavy Industrial	**I-2**	Heavy Industrial
WM	Waste Management		

Other Districts

Existing Other Districts		Proposed Other Districts	
AG-P	Agricultural Preserve	**A-1**	Agricultural Preserve
AG	Agricultural	**A-2**	Agricultural
PI	Public/Institutional	**PI**	Public/Institutional

June 2024

Su	M	Tu	W	Th	F	Sa
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	1	2	3	4	5	6

Main Calendar

City Council Work Session Meeting
June 4, 2024, 4:30 PM - 7:00 PM
More Details

City Council Meeting
June 4, 2024, 7:00 PM - 8:00 PM
More Details

Environment & Sustainability Commission Work Session
June 11, 2024, 5:30 PM - 6:00 PM
More Details

Environment and Sustainability Commission Meeting
June 11, 2024, 6:00 PM - 7:00 PM
More Details

Port Authority Meeting
June 18, 2024, 6:00 PM - 7:00 PM
More Details

City Council Meeting
June 18, 2024, 7:00 PM - 8:00 PM
More Details

CITY HALL CLOSED - Juneteenth
June 19, 2024, All Day
More Details

Public Safety in the Park
June 20, 2024, 5:00 PM - 8:00 PM @ Central Park
More Details

Utility Commission Regular Meeting
June 24, 2024, 6:30 PM - 7:30 PM
More Details

Parks and Recreation Commission Meeting
June 24, 2024, 7:00 PM - 8:00 PM
More Details

Planning Commission
June 25, 2024, 6:30 PM - 7:30 PM
More Details

Youth Commission Meeting
June 26, 2024, 3:45 PM - 4:45 PM
More Details

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ASK LUCKY

July 2024

Su	M	Tu	W	Th	F	Sa
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

Main Calendar

City Council Work Session Meeting
July 2, 2024, 5:00 PM - 7:00 PM
More Details

Environment & Sustainability Commission Work Session
July 2, 2024, 5:30 PM - 6:30 PM
More Details

City Council Meeting
July 2, 2024, 7:00 PM - 8:00 PM
More Details

CITY HALL CLOSED - Independence Day
July 4, 2024, All Day
More Details

Port Authority Meeting
July 16, 2024, 6:00 PM - 7:00 PM
More Details

City Council Meeting
July 16, 2024, 7:00 PM - 8:00 PM
More Details

Youth Commission Summer Splash Pad Event
July 18, 2024, 11:00 AM - 12:00 PM @ Central Park
More Details

Parks and Recreation Commission Meeting
July 22, 2024, 7:00 PM - 8:00 PM
More Details

Planning Commission
July 23, 2024, 6:30 PM - 7:30 PM
More Details

Leprechaun Days Midsummer Faire
July 25, 2024, 5:00 PM - July 27, 2024, 11:00 PM @ Central Park
More Details

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