



SITE PLAN AND TRAFFIC ADVISORY REVIEW COMMITTEE
Internal Staff Meeting
Minnesota Valley Room, First Floor, Intergovernmental Center

1. **SITE PLAN ITEMS**

1.

CY01-26

Request of HTG Architects, on behalf of the owner, Blaze Credit Union, for a conditional use permit to allow a drive through with driving lanes between the building and the property frontage in the Highway Gateway Overlay District; for a certificate of design compliance for the construction of a new, approximately 6,830 square foot structure in the Highway Gateway Overlay District; for a preliminary and final plat review of Blaze Mankato Addition; and for the vacation of a portion of a 10' utility easement located between Lots 1 and 2, Block 1, as per the recorded plat of Mills Addition to Mankato. The subject properties are described as Lot 2, Block 1 and the north 132.20 feet of Lot 1, Block 1, Mills Addition to Mankato (BEC PID R010909227005 and R010909227003, 1831 Premier Drive).

2.

CY02-26

*****FOR INFORMATION ONLY. Request of the Planning Agency to amend Chapter 10 of Mankato City Code related to floodplain ordinances.**

3.

CYV01-26

Request of Bolton and Menk, on behalf of the property owner Ron Goodrich, for a variance from Chapter 10, Article VII, Division 3, Sec.10-1005 of the Mankato City Code to decrease the transitional yard setback from thirty (30) feet to six (6) feet in the M-1, Light Industrial, zoning district. The variance is being requested in order to allow for paving and parking lot expansion and improvement. The property is generally described as east half of Lots 9 and 10, Block 24 except the west 12.75 feet, and including the west half of the adjacent vacated alley; Lots 1-4, Block 24, except the railroad, and including the east half of the vacated alley; and Lot 8, Block 24 and the westerly half of the vacated adjacent alley and except the railroad, Mankato City (120 Pine Street and 1700 3rd Avenue).

4.

CYV02-26

Request of KJ2 Properties for a variance from Chapter 10, Article VIII, Division 1, Sec.10-1059 of the Mankato City Code to increase the number of units in a building from 4 to 5 in the Shoreland District. The property is described as Lots 17-22 Block 5 Groh Farm Subdivision (3120, 3122, 3124, 3126, 3130, 3132, 3134, 3136, 3200, 3202, 3204, 3206, 3210, 3212, 3214, 3216, 3220, 3222, 3224, 3226, 3230, 3232 Bassett Drive and 1120, 1124 Fraser Lane).

5.

CYV03-26

Request of APX Construction for a variance from Chapter 10, Article X, Division 2, Sec.10-1500 Letter e of the Mankato City Code to reduce the required setback from a wetland from 16.5 feet to 5 feet for the purpose of constructing a sidewalk. The property is described as South Victory Drive adjacent Lot 1, Block 1 Evenson Subdivision (905 S. Victory Drive).

2. **TRAFFIC ITEMS**

1. **Trestle Trail Yield Sign**
2. **Spruce Street Stop Sign**
3. **Augusta Drive Speed Limit**
4. **1st Avenue and 3rd Avenue Intersection No Outlet Sign**
5. **Riverfront Drive No Parking Sign (SE Quadrant of N Riverfront Drive and E Rock Street)**

Meeting Date: 01/13/2026

Title

CY01-26

Request of HTG Architects, on behalf of the owner, Blaze Credit Union, for a conditional use permit to allow a drive through with driving lanes between the building and the property frontage in the Highway Gateway Overlay District; for a certificate of design compliance for the construction of a new, approximately 6,830 square foot structure in the Highway Gateway Overlay District; for a preliminary and final plat review of Blaze Mankato Addition; and for the vacation of a portion of a 10' utility easement located between Lots 1 and 2, Block 1, as per the recorded plat of Mills Addition to Mankato. The subject properties are described as Lot 2, Block 1 and the north 132.20 feet of Lot 1, Block 1, Mills Addition to Mankato (BEC PID R010909227005 and R010909227003, 1831 Premier Drive).

Applicant

The applicant is Blaze Credit Union, with permission of the property owner.

Request

The applicant is seeking a conditional use permit to allow a drive through with driving lanes between the building and the property frontage in the Highway Gateway Overlay District; a certificate of design compliance for the construction of a new, approximately 6,830 square foot structure in the Highway Gateway Overlay District; a preliminary and final plat review of Blaze Mankato Addition; and the vacation of a portion of a 10' utility easement located between Lots 1 and 2, Block 1, as per the recorded plat of Mills Addition to Mankato.

Location

The subject properties are addressed at 1831 Premier Drive and are described as Lot 2, Block 1 and the north 132.20 feet of Lot 1, Block 1, Mills Addition to Mankato. The Blue Earth County Parcel Identification Numbers are R010909227005 and R010909227003.

Existing Land Use

The parcels are currently vacant land.

Zoning

The subject properties are zoned B-3, Highway Commercial.

Environmentally Sensitive Areas

There are no known environmentally sensitive areas on the subject site.

Public Utilities

Public utilities are available to serve the development.

City Code

Mankato City Code Chapter 10, Article V, Division 9, related to the Highway Gateway Overlay District standards and the Certificate of Design Compliance standards can be found at this link: https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=PTIICOOR_CH10LAUSDE_ARTVCOI_DIV9GTGAOVDI_SDIVHGHGAOVDI

Mankato City Code related to subdivisions can be found in Chapter 10, Article XII at this

link: https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=PTIICOOR_CH10LAUSDE_ARTXIISUDEREPL

Mankato City Charter, Chapter 9, Sec. 10.04b, related to Vacation of Easements on private property can be found at this

link: https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=PTICH_CH10MIPR_S10.04.BVAEAPRPR

Review

HTG Architects, on behalf Blaze Credit Union, with permission of the property owner, has requested a conditional use permit to allow a drive-through with driving lanes between the building and the property frontage in the Highway Gateway Overlay District; a certificate of design compliance for the construction of a new, approximately 6,830 square foot structure in the Highway Gateway Overlay District; a preliminary and final plat review of Blaze Mankato Addition; and the vacation of a portion of a 10' utility easement located between Lots 1 and 2, Block 1, as per the recorded plat of Mills Addition to Mankato.

The property has an address of 1831 Premier Drive and is legally described as Lot 2, Block 1 and the north 132.20 feet of Lot 1, Block 1, Mills Addition to Mankato. Blue Earth County parcel identification numbers for the parcels are R010909227005 and R010909227003.

Conditional Use Permit/Certificate of Design Compliance

The project narrative outlines that Blaze Credit Union is proposing the construction of a new branch office and contact center to provide access to financial services for existing and potential new members in the City of Mankato and surrounding communities.

Site plans depict a new 5,050 square foot credit union building and an attached 1,780 square foot contact center located centrally on the two existing parcels. Two access points from Premier Drive are shown. A bio-filtration stormwater pond is shown on the northern side of the development. Fifty-seven parking stalls are provided on the site, and three proposed drive-through lanes are shown, along with a bypass lane. A sidewalk connection is provided from the existing paved trail along Highway 22 to the building.

Floor plans for the proposed structure show a lobby, teller spaces, offices, and other accessory spaces typical of a financial institution.

Exterior elevations show a mixture of face brick, stone, exterior insulation finish systems (EIFS), glass/glazing systems, standing seam and asphalt roofing materials.

Preliminary and Final Plat

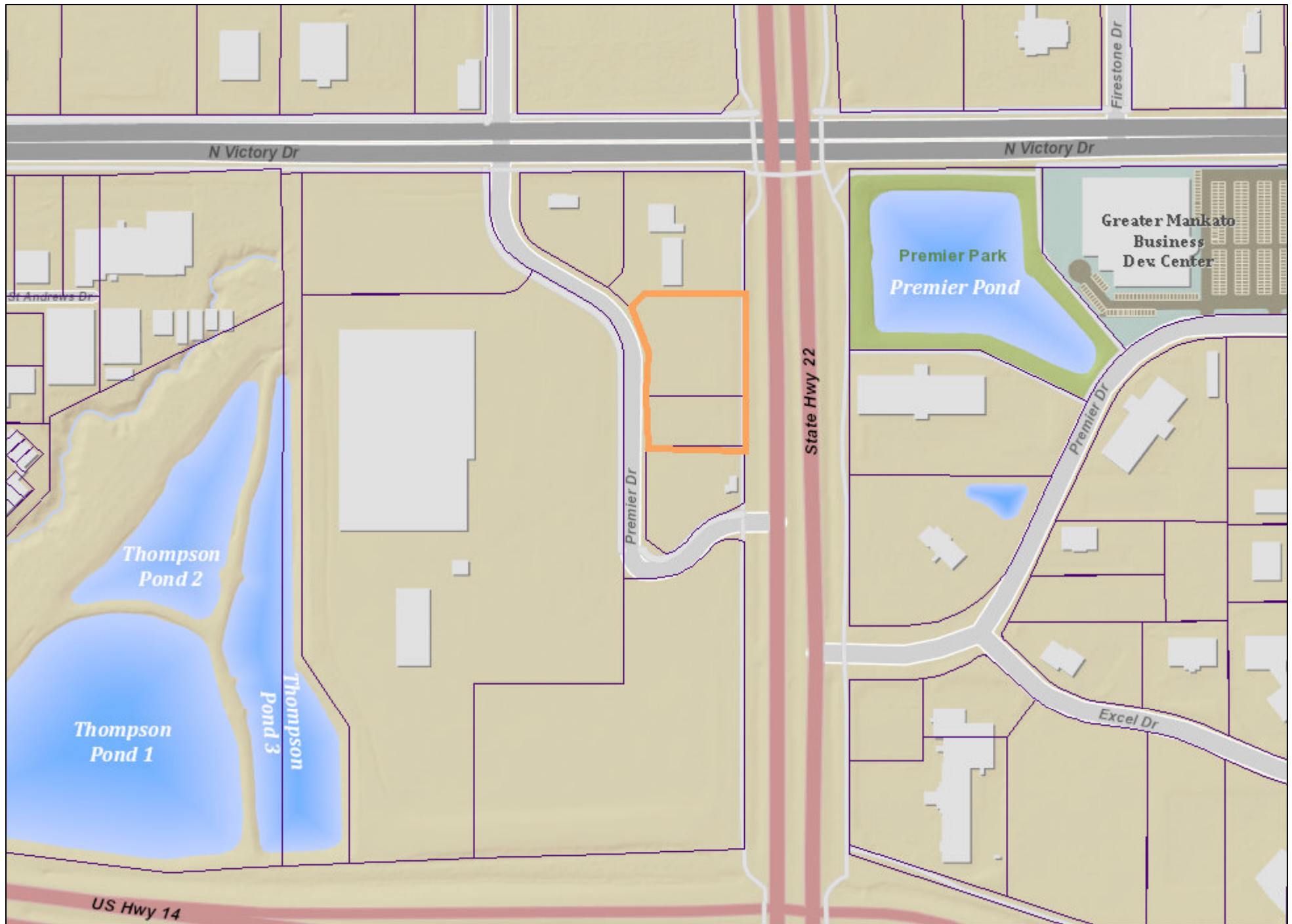
The applicant is requesting a re-plat of the existing two parcels into one new parcel. The proposed Blaze Mankato Addition plat is a one-lot, one-block subdivision that encompasses 2.44 acres.

Vacation

The request includes the vacation of an existing private utility easement located between the underlying lots. The request seeks to vacate the existing 10' easement in order to allow the construction of the new building over this area.

General Location Map
Aerial Plan
Civil Plans
Stormwater Report
Traffic Analysis
ALTA Survey
Architectural Plans
Preliminary Plat
Final Plat
Easement Vacation Exhibit
Project Narrative

General Location Map

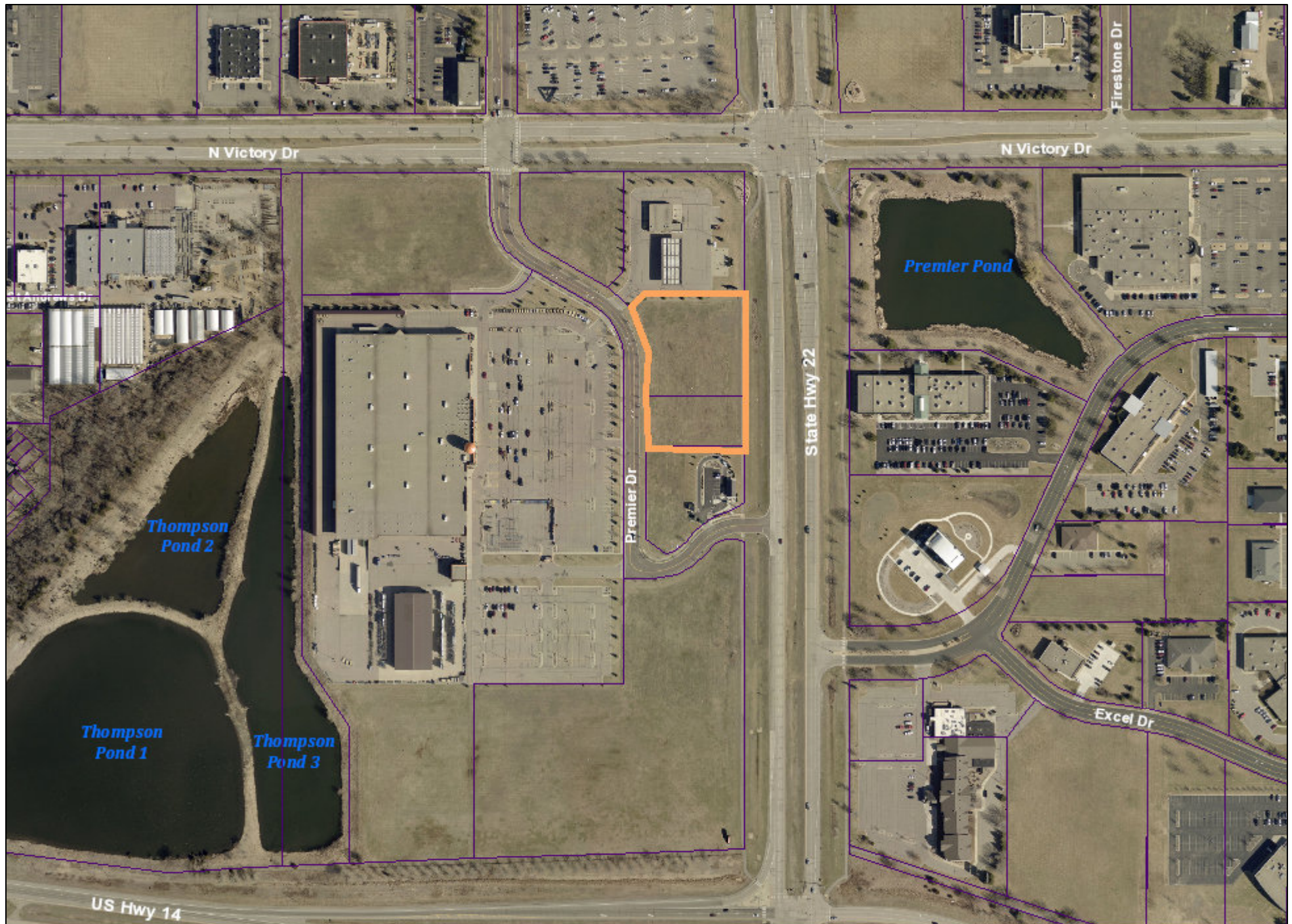


Date: December 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.

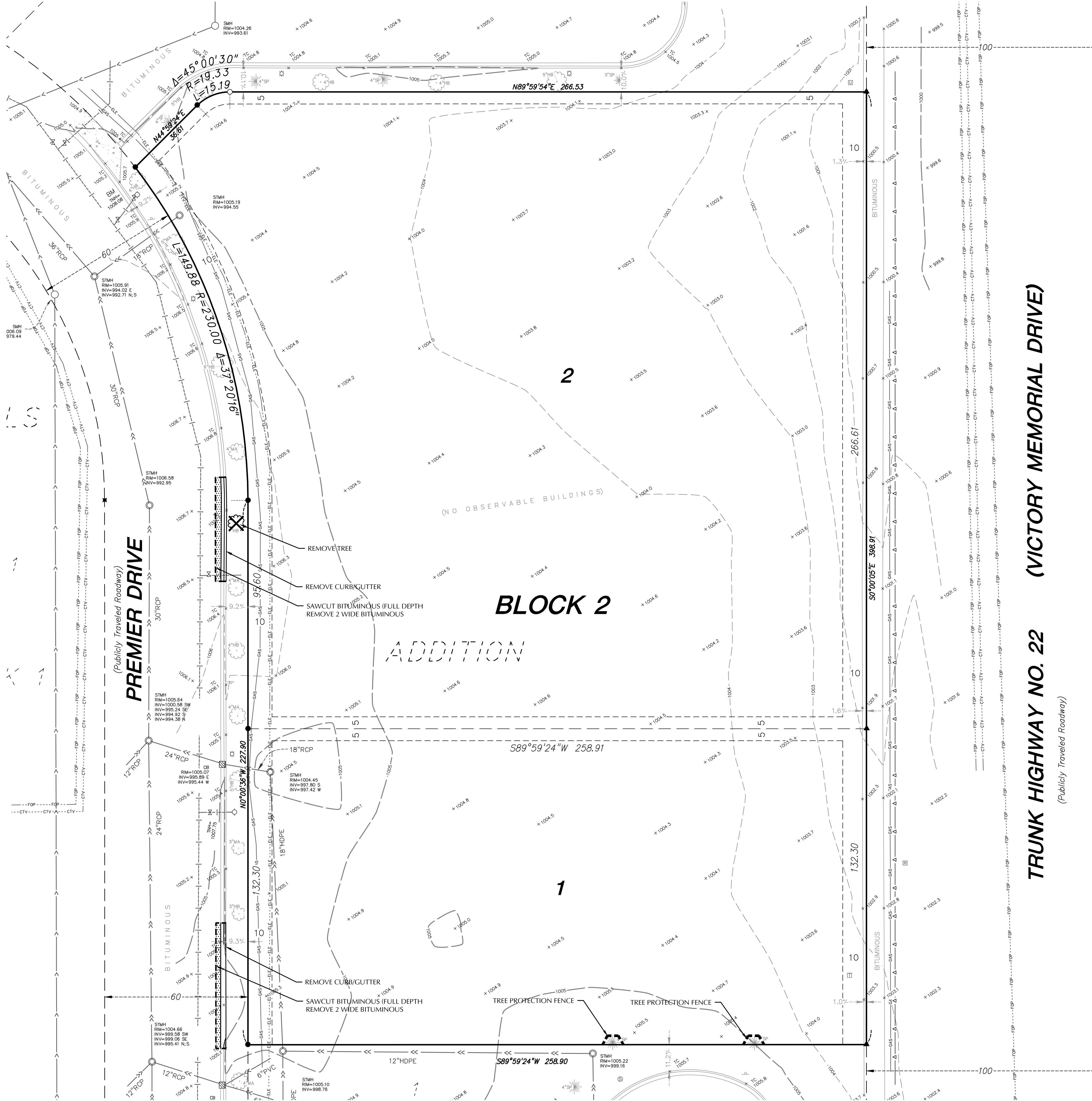
General Location Map



Date: December 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuser misinterpretation.



SITE DEMOLITION NOTES

- CONTRACTOR SHALL REMOVE AND/OR RELOCATE EXISTING PRIVATE UTILITIES AS NECESSARY. CONTRACTOR TO COORDINATE ACTIVITIES WITH UTILITY COMPANIES & OWNER.
- STRIP TOP SOIL AND STOCKPILE ON-SITE. ALL REMOVED MATERIAL SHALL BE HAULED FROM THE SITE DAILY. ALL CLEARING AND GRUBBING AND REMOVALS SHALL BE PERFORMED PER THE CONTRACT SPECIFICATIONS. EROSION CONTROL MEASURES SHALL BE IMMEDIATELY ESTABLISHED UPON REMOVAL. SEE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) / GRADING & EROSION CONTROL PLAN.
- CONTRACTOR SHALL PROTECT SURFACE AND SUBSURFACE FEATURES NOT NOTED FOR REMOVAL. CONTRACTOR TO NOTIFY ENGINEER WITH ANY CONFLICTS OR PLAN DISCREPANCIES.
- CONTRACTOR TO SCHEDULE PRE-CONSTRUCTION MEETING(S) WITH UTILITY OWNER(S) TO DISCUSS DISCONNECTIONS AND/OR RELOCATIONS.
- CONTRACTOR TO VERIFY LOCATION OF SEPTIC FIELD(S) & WELL(S) ON SITE. COORDINATE REMOVALS AND/OR ABANDONMENT WITH THE APPLICABLE GOVERNING AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPLICABLE PERMITS. WELLS ON THE PROPERTY SHALL BE SEALED BY A MINNESOTA DEPARTMENT OF HEALTH (MDH) LICENSED CONTRACTOR.
- BITUMINOUS PAVEMENT REMOVALS ARE TO BE MADE TO A VERTICAL SAW CUT OR TO A NEAT MILLED EDGE.
- CONCRETE PAVEMENT, SIDEWALK, CURB & GUTTER AND OTHER POURED CONCRETE ITEMS ARE TO BE REMOVED TO AN EXISTING EXPANSION OR CONTRACTION JOINT. SAW CUT AS NECESSARY FOR A NEAT EDGE OF REMOVAL.
- ANY DAMAGE TO ITEMS NOT NOTED TO BE REMOVED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION WITH NO ADDITIONAL COMPENSATION.
- CONTRACTOR SHALL COORDINATE ALL WORK WITHIN THE PUBLIC RIGHT OF WAY WITH THE APPLICABLE GOVERNING AGENCIES. ALL WORK SHALL BE PERFORMED PER THE REQUIREMENTS OF THE APPLICABLE GOVERNING AGENCIES.
- CONTRACTOR TO COORDINATE ALL WORK WITHIN THE ADJACENT PROPERTIES WITH THE OWNER AND ADJACENT PROPERTY OWNER.
- CONTRACTOR TO COORDINATE DEMOLITION PHASING WITH ALL DISCIPLINES INCLUDING BUT NOT LIMITED TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL, MECHANICAL, & OWNER.
- REFER TO THE GEOTECHNICAL REPORT PREPARED FOR INFORMATION INCLUDING BUT NOT LIMITED TO GROUNDWATER CONDITIONS AND RECOMMENDATIONS FOR EXCAVATION DEWATERING.
- THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR ANY REPAIRS TO THE IRRIGATION SYSTEM THAT IS AFFECTED DURING CONSTRUCTION.

DEMOLITION LEGEND

- REMOVE EXISTING BITUMINOUS PAVING
- REMOVE EXISTING CONCRETE PAVING, SIDEWALKS, ETC.
- REMOVE EXISTING TREES
- TREE PROTECTION FENCE



CALL BEFORE YOU DIG!

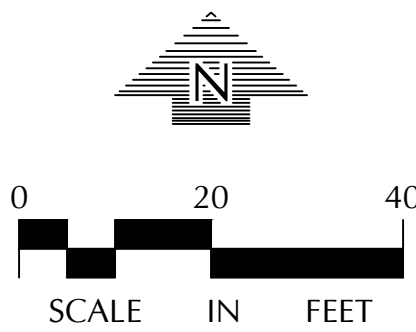
Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



BLAZE
CREDIT UNION

Mankato, MN



2025 Larpenteur Ave. W.
Falcon Heights, MN 55113

LOUCKS

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksa.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval of the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

12/23/25 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Engineer under the laws of the State of Minnesota.

License No. PJ Dish - PE 49933
Date -

QUALITY CONTROL

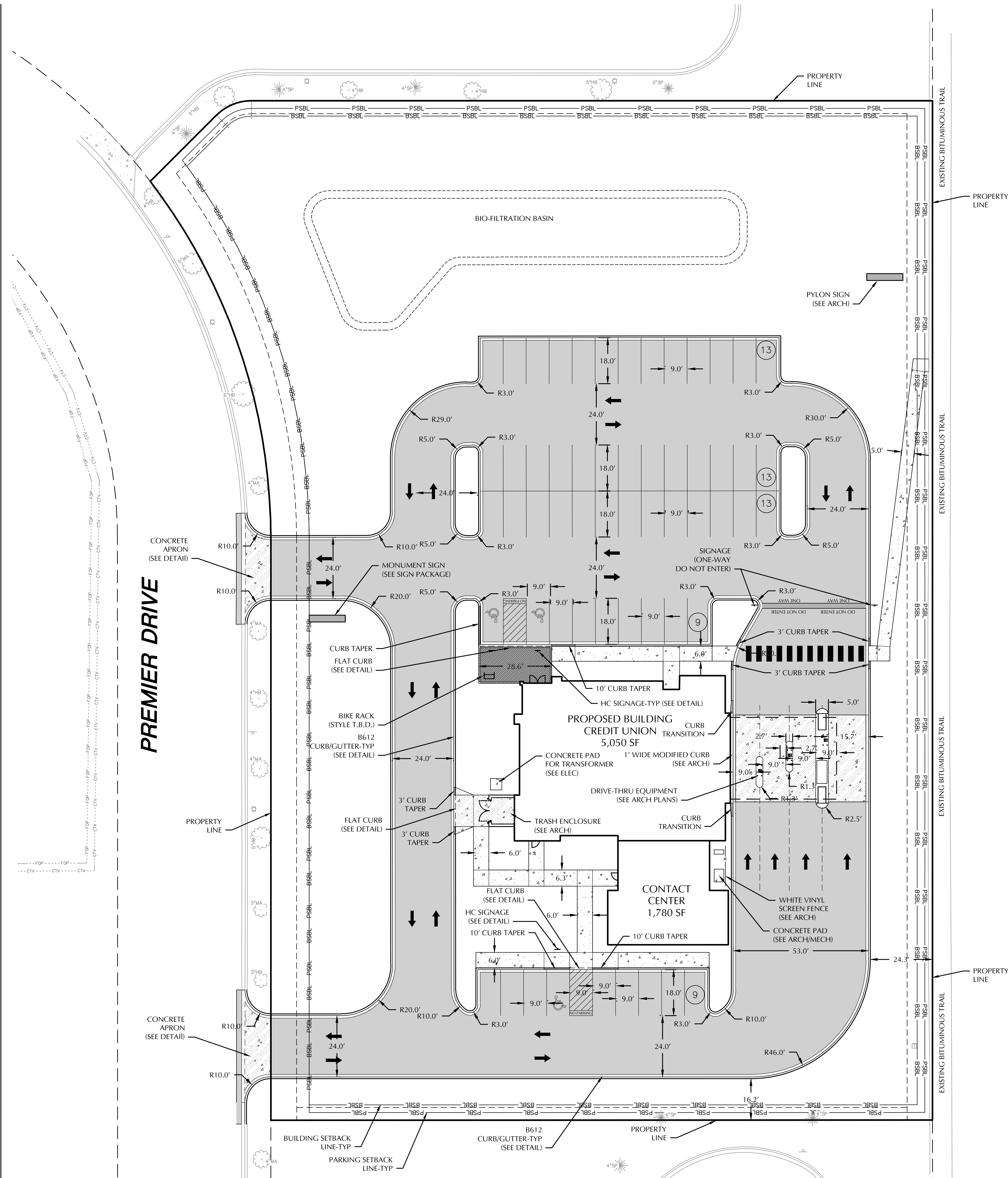
Loucks Project No. 250603.00
Project Lead DDL
Drawn By DDL
Checked By PJD
Review Date 12/23/25

SHEET INDEX

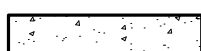
C1-1 DEMOLITION PLAN
C2-1 SITE PLAN
C3-1 GRADING PLAN
C3-2 SWPPP NOTES
C4-1 SANITARY/WATERMAIN PLAN
C4-2 STORM SEWER PLAN
C8-1 CIVIL DETAILS
C8-2 CIVIL DETAILS
L1-1 LANDSCAPE PLAN
L2-1 LANDSCAPE DETAILS

DEMOLITION
PLAN

C1-1



MEMORIAL DRIVE)

PAVEMENT LEGEND	EXISTING
	DENOTES LIGHT DUTY BITUMINOUS PAVEMENT
	DENOTES HEAVY DUTY BITUMINOUS PAVEMENT
	DENOTES LIGHT DUTY BITUMINOUS PAVEMENT DRIVE AISLES TO BE HEAVY DUTY BITUMINOUS
	DENOTES PARKING STALLS TO BE STANDARD BITUMINOUS
	DENOTES HEAVY DUTY CONCRETE PAVEMENT

EXISTING	PROPOSED
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	

**BLAZE
CREDIT UNION**

Mankato, MN



2025 Larpenteur Ave. W.
 Falcon Heights, MN 55113

 **LOUCKS**
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksync.com

CADD QUALIFICATION

12/23/25 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Engineer under the laws of the State of Minnesota.

PJ Disch - PE

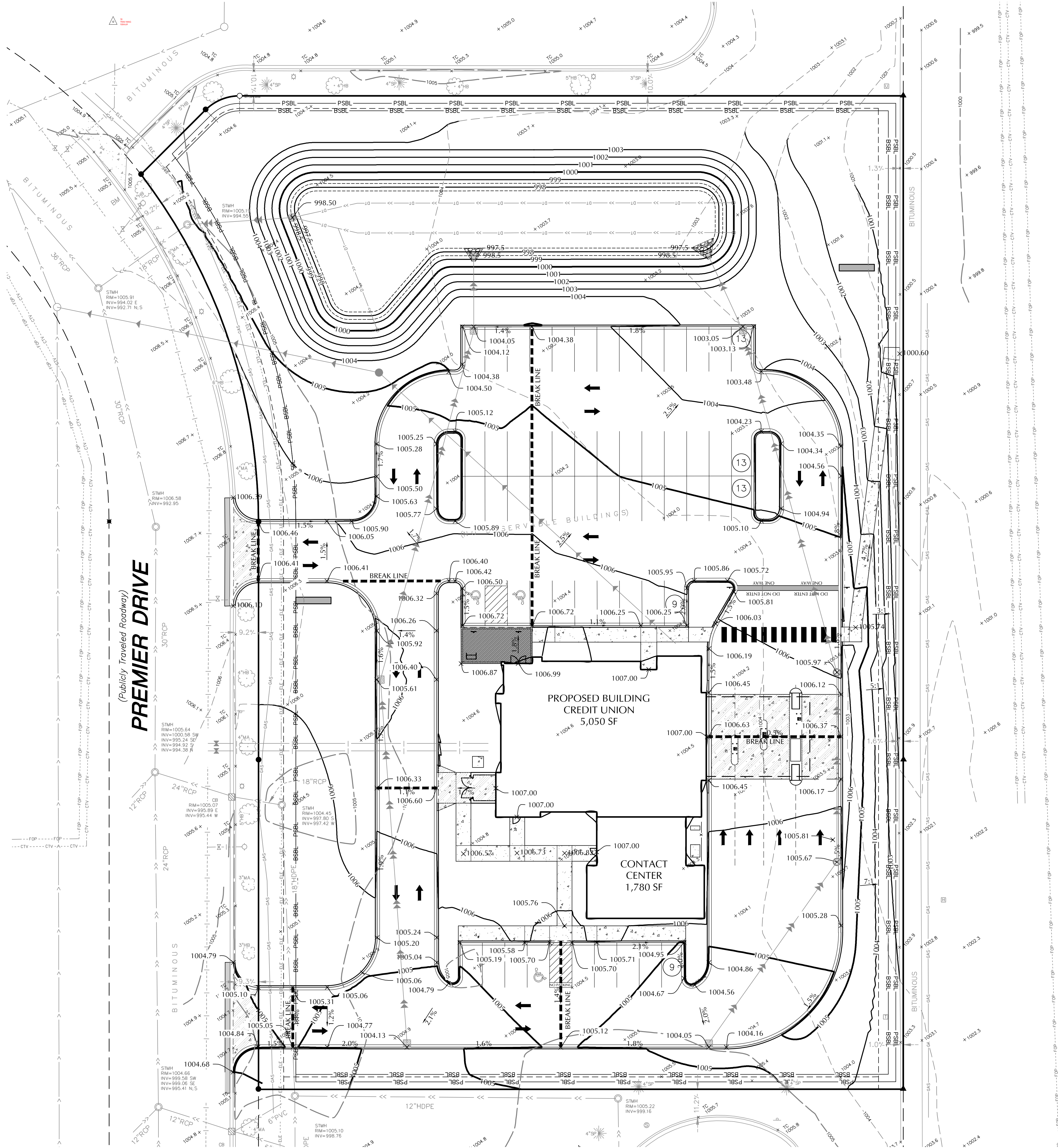
License No.	49933
Date	

QUALITY CONTROL	
Loucks Project No.	250603.00
Project Lead	DDL
Drawn By	DDL
Checked By	PJD
Review Date	12/23/25

SHEET INDEX	
C1-1	DEMOLITION PLAN
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2	SWPPP
C3-2	SWPPP NOTES
C4-1	SANITARY/WATERMAIN PLAN
C4-2	STORM SEWER PLAN
C8-1	CIVIL DETAILS
C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-1	LANDSCAPE DETAILS

SITE PLAN

C2-1



TRUNK HIGHWAY NO. 22 (VICTORY MEMORIAL DRIVE)

(Publicly Traveled Roadway)

LEGEND	
EXISTING	PROPOSED
	CATCH BASIN
	STORM MANHOLE
	FLARED END SECTION
	SANITARY MANHOLE
	HYDRANT
	GATE VALVE
	POST INDICATOR VALVE
	WATER MANHOLE / WELL
	LIGHT POLE
	POWER POLE
	ELECTRIC METER
	GAS METER
	TELEPHONE PEDESTAL
	SIGN
	BENCHMARK
	SOIL BORING
	PARKING STALL COUNT
	ACCESSIBLE PARKING STALL
	STORM SEWER
	DRAIN TILE
	SANITARY SEWER
	FORCE MAIN
	WATERMAIN
	SANITARY SEWER SERVICE
	WATER SERVICE
	UNDERGROUND ELECTRIC
	UNDERGROUND FIBER OPTIC
	UNDERGROUND GAS
	UNDERGROUND TELEPHONE
	OVERHEAD UTILITY
	FENCE
	CHAIN LINK FENCE
	CONCRETE CURB
	RETAINING WALL
	CONCRETE
	NO PARKING
	BUILDING CONTOUR
	SPOT ELEVATION
	DIRECTION OF FLOW
	TREE LINE
	PARKING SETBACK LINE
	BUILDING SETBACK LINE

GRADING, DRAINAGE NOTES

- SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, GUTTER/FLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- ALL ACCESSIBLE ROUTES SHALL BE CONSTRUCTED WITH A CROSS SLOPE NOT EXCEEDING 2% AND A RUNNING SLOPE NOT EXCEEDING 5%.
- AT TURNING POINTS ALONG THE ACCESSIBLE ROUTE THE PAVEMENT SHALL NOT EXCEED 2% IN ANY DIRECTION FOR AN AREA 60" IN DIAMETER.
- CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.16 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SUMPED ELEVATIONS.
- REFER TO GEOTECHNICAL EVALUATION REPORT FOR AN EXISTING SURFSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS INCLUDING BUT NOT LIMITED TO:
 - REUSE OF ON-SITE SOILS
 - GROUNDWATER AND RECOMMENDATIONS FOR EXCAVATION DEWATERING.
 - SITE GRADING AND SUBGRADE PREPARATION.
 - PAVEMENTS AND EXTERIOR SLABS.
 - TRENCH EXCAVATION AND BACKFILL.
 - EXTERIOR UTILITY SUPPORTS.
 - FROST PROTECTION.
- EXISTING SOILS ARE ASSUMED TO BE COARSE-GRAINED SOILS (GW, GP, GM, GC, SW, SP, SM, SC) PER THE UNIFIED SOIL CLASSIFICATION. CONTRACTOR TO NOTIFY ENGINEER IF EXISTING CONDITIONS DIFFER FROM ASSUMED SOIL CONDITIONS.
- GRADING, INCLUDING BUT NOT LIMITED TO EXCAVATION AND BACKFILL, OF THE INFILTRATION AREA(S) SHALL BE ACCOMPLISHED USING LOW-IMPACT DIRT-MOVING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. SMALL TRACKED DOZERS AND BOBCATS WITH RUNNER TRACKS ARE RECOMMENDED. NO WHEELED MACHINES SHALL BE USED.
- CITY SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO CONSTRUCTION OF STORMWATER BMPs.
- ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF TOP SOIL AND SEED/MULCH OR SOD. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED. REFER TO THE LANDSCAPE PLANS, DETAILS AND SPECIFICATIONS FOR FINAL SITE STABILIZATION.
- STREETS MUST BE CLEANED AND SWEEPED WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
- DUST MUST BE ADEQUATELY CONTROLLED.
- SEE SWPPP FOR ADDITIONAL EROSION CONTROL NOTES AND REQUIREMENTS.
- SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS.
- THE CONTRACTOR ALONG WITH THE OWNER SHALL OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM GOVERNING AUTHORITIES, INCLUDING ANY CITY PERMITS AND THE NPDES PERMIT.
- INSTALL EROSION CONTROL AND TREE PROTECTION MEASURES BEFORE BEGINNING SITE GRADING ACTIVITIES. SOME EROSION CONTROLS SUCH AS BALE CHECKS AND TEMPORARY SILT PONDS MAY BE INSTALLED AS GRADING OCCURS IN SPECIFIC AREAS. MAINTAIN EROSION CONTROLS THROUGHOUT THE GRADING PROCESS AND REMOVE WHEN TURF HAS BEEN ESTABLISHED.
- CONTRACTOR SHALL PROVIDE AS-BUILT INFORMATION OF GRADING ACTIVITIES AS NEEDED PER APPLICABLE PERMIT REQUIREMENTS AND/OR DEVELOPMENT AGREEMENTS.



CALL BEFORE YOU DIG!

Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



BLAZE
CREDIT UNION

Mankato, MN

Blaze
CREDIT UNION

2025 Larpenteur Ave. W.
Falcon Heights, MN 55113

Loucks

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksa.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibility, claims, and liabilities.

SUBMITTAL/REVISIONS

12/23/25 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Engineer under the laws of the State of Minnesota.

License No. PJ Diach - PE 49933
Date

QUALITY CONTROL

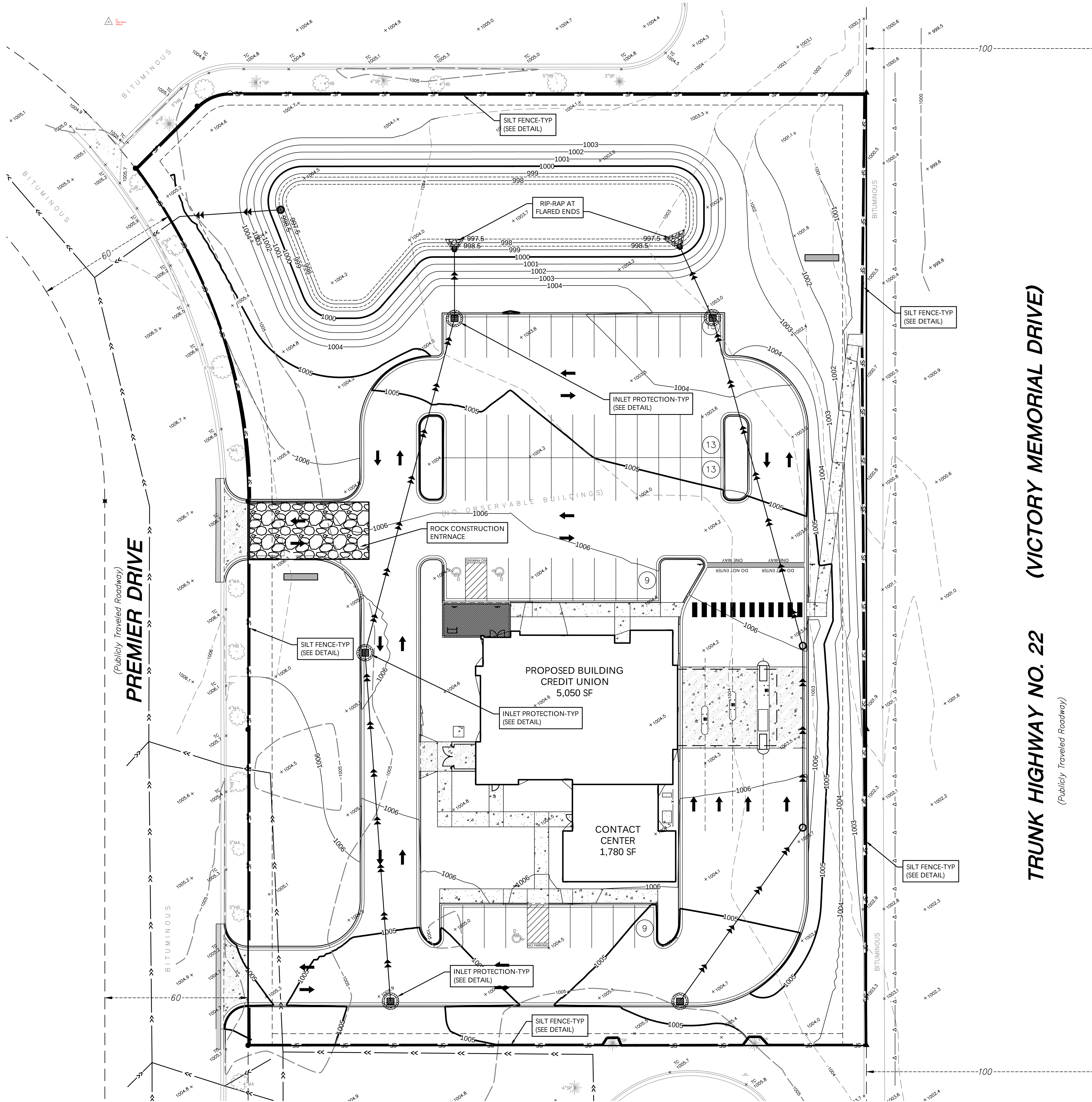
Loucks Project No. 250603.00
Project Lead DDL
Drawn By DDL
Checked By PJD
Review Date 12/23/25

SHEET INDEX

C1-1	DEMOLITION PLAN
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2	SWPPP NOTES
C4-1	SANITARY/WATERMAIN PLAN
C4-2	STORM SEWER PLAN
C8-1	CIVIL DETAILS
C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-1	LANDSCAPE DETAILS

GRADING
PLAN

C3-1



LEGEND

EXISTING	PROPOSED

SWPPP LEGEND

	SILT FENCE
	INLET PROTECTION
	ROCK CONSTRUCTION ENTRANCE

GENERAL NOTES

SEE SHEET C3-3 FOR SWPPP NOTES AND SWPPP DETAILS.



CALL BEFORE YOU DIG!

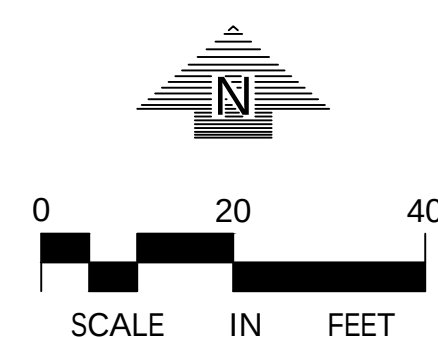
Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



BLAZE
CREDIT UNION

Mankato, MN

Blaze
CREDIT UNION

2025 Larpenteur Ave. W.
Falcon Heights, MN 55113

Loucks

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksincc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

12/23/25 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Engineer under the laws of the State of Minnesota.

License No. PJ Dish - PE 49933
Date

QUALITY CONTROL

Loucks Project No. 250603.00
Project Lead DDL
Drawn By DDL
Checked By PJD
Review Date 12/23/25

SHEET INDEX

C1-1	DEMOLITION PLAN
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2	SWPPP
C3-2	SWPPP NOTES
C4-1	SANITARY/WATERMAIN PLAN
C4-2	STORM SEWER PLAN
C8-1	CIVIL DETAILS
C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-1	LANDSCAPE DETAILS

SWPP PLAN

C3-2

SWPPP NOTES

1. THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING A PROPOSED CREDIT UNION, SURFACE PAVEMENTS, UTILITIES, AND UNDERGROUND STORMWATER MANAGEMENT SYSTEMS.

2. THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:

A. INSTALL VEHICLE TRACKING BMP

B. INSTALL INLET PROTECTION

C. INSTALL SILT FENCE AROUND SITE

D. CLEAR AND GRUB SITE

E. STRIP AND STOCKPILE TOPSOIL

F. REMOVE PAVEMENTS AND UTILITIES

G. ROUGH GRADE SITE

H. IMPORT CLEAN FILL FOR REPLACEMENT AND BALANCE

I. INSTALL UTILITIES

J. INSTALL BUILDING FOUNDATIONS

K. INSTALL CURB AND GUTTER

L. INSTALL PAVEMENTS AND WALKS

M. FINAL GRADE SITE

N. REMOVE ACCUMULATED SEDIMENT FROM STORMWATER SYSTEMS

O. SEED AND MULCH

P. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE, INLET PROTECTION, AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

3. SITE DATA:

DISTURBED AREA:2.558 AC

PRE-CONSTRUCTION IMPERVIOUS AREA:0.013 AC

POST-CONSTRUCTION IMPERVIOUS AREA:1.151 AC

GENERAL SOIL TYPE:SEE GEOTECHNICAL EVALUATION REPORT BY BRAUN

HYDROLOGY INFORMATION:SEE HYDROLOGY REPORT PREPARED BY LOUCKS

4. EROSION AND SEDIMENT CONTROLS WERE DESIGNED TO EFFECTIVELY CONTROL STORMWATER RUNOFF WITHIN THE PROJECT AREAS. EROSION AND SEDIMENT CONTROL HAVE BEEN PROPOSED TO MINIMIZE CHANNEL EROSION AND SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS. FACTORS THAT WERE CONSIDERED INCLUDE PROPOSED IMPERVIOUS AREAS, SLOPE OF IMPERVIOUS SURFACES, STORMWATER INFRASTRUCTURE DISCHARGE POINTS, AND ANNUAL AVERAGE PRECIPITATION DATA FOR THE PROJECT AREA.

5. BLUE EARTH COUNTY RECEIVES AN AVERAGE OF 34.5 INCHES OF PRECIPITATION PER YEAR. THE FOLLOWING BLUE EARTH COUNTY 24-HOUR STORM EVENTS ARE BASED ON ATLAS 14 RAINFALL DATA:

2-YR2.92 INCHES

10-YR4.38 INCHES

100-YR7.41 INCHES

6. SEE "EXHIBIT: PROPOSED DRAINAGE AREAS" FOR SITE MAP WITH DRAINAGE AREA BOUNDARIES.

7. THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC. BEFORE CONSTRUCTION BEGINS.

8. CONTRACTOR SHALL INSTALL RAIN GAUGE ON SITE.

9. GROUNDWATER & DEWATERING

A. REFER TO THE GEOTECHNICAL REPORT PREPARED BY BRAUN FOR INFORMATION INCLUDING BUT NOT LIMITED TO GROUNDWATER CONDITIONS AND RECOMMENDATIONS FOR EXCAVATION DEWATERING.

B. FOLLOW LOCAL, STATE, AND FEDERAL REGULATIONS FOR GROUNDWATER PUMPING AND OBTAIN ALL NECESSARY PERMITS. A WATER USE PERMIT FROM THE DNR IS REQUIRED WHEN WITHDRAWING MORE THAN 10,000 GALLONS OF WATER PER DAY OR 1 MILLION GALLONS PER YEAR.

C. DISPERSE DISCHARGE USING APPROPRIATE ENERGY DISSIPATION MEASURES.

D. BMPs SHALL BE USED TO PREVENT TURBID OR SEDIMENT LADEN WATERS FROM LEAVING SITE.

E. DEWATERING SHALL NOT CAUSE NUISANCE CONDITIONS INCLUDING BUT NOT LIMITED TO EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INUNDATION OF WETLANDS THAT CAUSES SIGNIFICANT ADVERSE IMPACTS TO THE WETLAND.

10. REFER TO THE GEOTECHNICAL REPORT PREPARED BY BRAUN FOR INFORMATION AND RECOMMENDATIONS RELATED TO SOIL CONTAMINATION.

11. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN (7) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING (ONLY AVAILABLE PRIOR TO SEPTEMBER 15) OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE.

12. ON SLOPES 3:1 OR GREATER MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES, SLOPE LENGTHS CAN NOT BE GREATER THAN 75 FEET.

13. ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.

14. SOIL COMPACTION SHALL BE MINIMIZED DURING CONSTRUCTION.

15. TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEMPT EX: CLEAN AGGREGATE STOCK PILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES.

16. SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED ON ALL DOWNGRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER ZONES.

17. SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.

18. SOLID WASTE MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

19. NO VEHICLE WASHING ALLOWED ON SITE.

20. NO ENGINE DEGREASING IS ALLOWED ON SITE.

21. THE OWNER IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR IS RESPONSIBLE FOR COMPLIANCE WITH SECTIONS 3, 4, 6-22, 24 AND APPLICABLE REQUIREMENTS FOR CONSTRUCTION ACTIVITY IN SECTION 23.

22. TERMINATION OF COVERAGE-PERMITTEE(S) WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION (NOT) TO THE MPCA. ALL PERMITTEE(S) MUST SUBMIT A NOT WITHIN 30 DAYS AFTER THE FOLLOWING CONDITIONS HAVE BEEN MET:

A. PERMIT TERMINATION CONDITIONS, PER NPDES PERMIT SECTION 13.1 HAVE BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE.

A.A. PERMANENT UNIFORM PERENNIAL VEGETATIVE COVER MUST BE ESTABLISHED AT 70% DENSITY OF ITS EXPECTED FINAL GROWTH.

A.B. THE PERMANENT STORMWATER TREATMENT SYSTEM IS CONSTRUCTED, MEETS ALL REQUIREMENTS, AND IS OPERATING AS DESIGNED.

A.C. ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs MUST BE REMOVED.

A.D. CLEAN OUT SEDIMENT FROM CONVEYANCE SYSTEMS AND PERMANENT STORMWATER TREATMENT SYSTEMS (RETURN TO DESIGN CAPACITY).

23. INSPECTIONS

A. INITIAL INSPECTION FOLLOWING SILT FENCE INSTALLATION BY CITY REPRESENTATIVE IS REQUIRED.

B. EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A 0.5" OVER 24 HOUR RAIN EVENT.

C. STABILIZED AREAS: ONCE EVERY 30 DAYS

D. FROZEN GROUND: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING CONSTRUCTION.

E. INSPECTION AND MAINTENANCE RECORDS MUST BE RETAINED FOR 3 YEARS AFTER FILING OF THE NOTICE OF TERMINATION AND MUST INCLUDE: DATE AND TIME OF ACTION, NAME OF PERSON(S) CONDUCTING WORK, FINDING OF INSPECTIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION, DATE AND AMOUNT OF RAINFALL EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD.

F. OBSERVE ANY DISCHARGE OCCURRING ONSITE AND DOCUMENT CORRECTIVE ACTIONS TAKEN. DISCHARGE SHOULD BE DESCRIBED AND PHOTOGRAPHED.

24. MINIMUM MAINTENANCE

A. ALL NONFUNCTIONAL BMPs MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPs BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY OR AS SOON AS FIELD CONDITIONS ALLOW.

B. REPAIR, REPLACE, OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES $\frac{1}{2}$ THE HEIGHT OF THE DEVICE.

C. SEDIMENT BASINS DRAINED AND SEDIMENT REMOVED WHEN REACHES 1/2 STORAGE VOLUME.

D. SEDIMENT REMOVED FROM SURFACE WATERS WITHIN (7)SEVEN CALENDAR DAYS OF DISCOVERY.

E. CONSTRUCTION SITE EXITS INSPECTED, TRACKED SEDIMENT REMOVED WITHIN (1)ONE CALENDAR DAY.

F. PROVIDE COPIES OF EROSION INSPECTION RESULTS TO CITY ENGINEER FOR ALL EVENTS GREATER THAN $\frac{1}{2}$ " IN 24 HOURS.

25. THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION ACTIVITY BY THE PERMITTEE(S) WHO HAVE OPERATIONAL CONTROL OF THE SITE.

26. OWNER MUST KEEP RECORDS OF ALL PERMITS REQUIRED FOR THE PROJECT, THE SWPPP, ALL INSPECTIONS AND MAINTENANCE, PERMANENT OPERATION AND MAINTENANCE AGREEMENTS, AND REQUIRED CALCULATIONS FOR TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS. THESE RECORDS MUST BE RETAINED FOR THREE YEARS AFTER FILING NPDES NOTICE OF TERMINATION.

27. SWPPP MUST BE AMENDED WHEN:

A. THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE

B. INSPECTIONS INDICATE THAT THE SWPPP IS NOT EFFECTIVE AND DISCHARGE IS EXCEEDING WATER QUALITY STANDARDS.

C. THE BMP'S IN THE SWPPP ARE NOT CONTROLLING POLLUTANTS IN DISCHARGES OR IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.

28. CONCRETE WASHOUT AREA

A. THE WASHOUT AND CLEANOUT OF STUCCO, PAINT, CONCRETE, FORM RELEASE OILS, CURING COMPOUNDS, AND OTHER CONSTRUCTION MATERIALS SHALL BE PROPERLY CONTAINED AND DISPOSED OF. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND USING APPROVED METHODS OF CONTAINMENT SUCH AS PRE-FABRICATED WASHOUT CONTAINERS, CONCRETE WASHOUT TOTE, READY MIX TRUCKS WITH SELF-CONTAINED CHUTE CLEANOUT, ETC.

B. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY.

29. IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.

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

31. FINAL STABILIZATION

FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% OF THE EXPECTED FINAL DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMP'S SHALL BE REMOVED, DITCHES STABILIZED, AND SEDIMENT SHALL BE REMOVED FROM PERMANENT CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND TO DESIGN CAPACITY.

32. RESPONSIBILITIES

A. THE OWNER MUST IDENTIFY A PERSON WHO WILL OVERSEE THE SWPPP IMPLEMENTATION AND THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE:

CONTACT: XXX

COMPANY: XXX

PHONE: XXX

B. THE OWNER MUST IDENTIFY THE A PERSON WHO WILL BE RESPONSIBLE FOR LONG TERM OPERATIONS AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM:

CONTACT: XXX

COMPANY: XXX

PHONE: XXX

33. THE WATERSHED DISTRICT OR THE CITY MAY HAVE REQUIREMENTS FOR INSPECTIONS OR AS-BUILT DRAWINGS VERIFYING PROPER CONSTRUCTION OF THE BMPs.

34. EROSION CONTROL DEVICES CANNOT BE REMOVED UNTIL THE WATERSHED DISTRICT HAS DETERMINED THE SITE HAS BEEN PERMANENTLY RESTABILIZED AND SHALL BE REMOVED WITHIN 30 DAYS THEREAFTER.

CONSTRUCTION STORMWATER SPECIAL WATERS SEARCH MAP

PROJECT SITE

1-MILE RADIUS

BLAZE
CREDIT UNION

Mankato, MN

2025 Larpenteur Ave. W.
Falcon Heights, MN 55113

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

12/23/25 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Engineer under the laws of the State of Minnesota.

License No. 49933
Date -

QUALITY CONTROL

Loucks Project No. 250603.00
Project Lead DDL
Drawn By DDL
Checked By PJD
Review Date 12/23/25

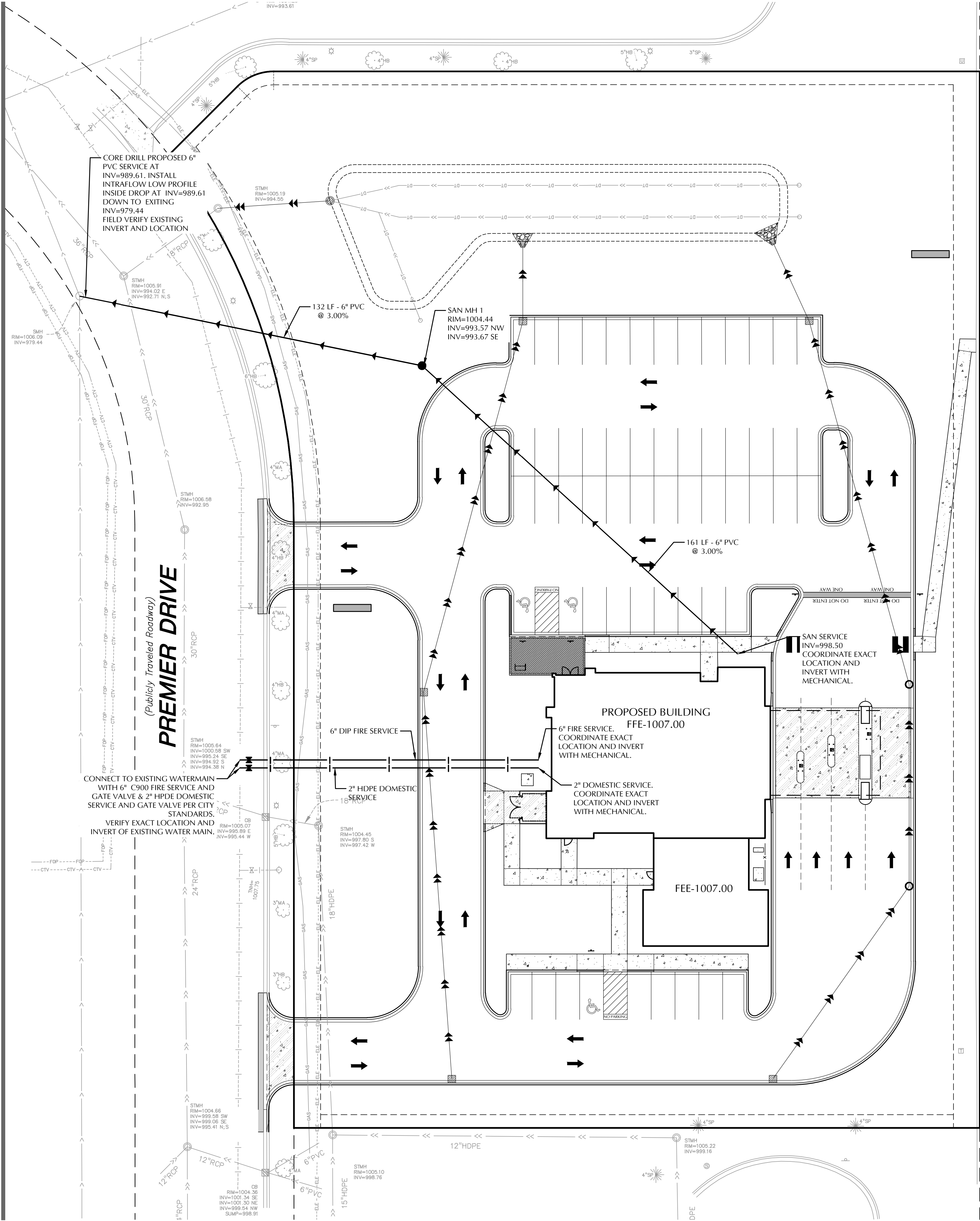
SHEET INDEX

C1-1 DEMOLITION PLAN
C2-1 SITE PLAN
C3-1 GRADING PLAN
C3-2 SWPPP
C4-1 SANITARY/WATERMAIN PLAN
C4-2 STORM SEWER PLAN
C8-1 CIVIL DETAILS
C8-2 CIVIL DETAILS
L1-1 LANDSCAPE PLAN
L2-1 LANDSCAPE DETAILS

SWPPP
DETAILS

C3-3

Plotted: 12/22/2025 4:29 PM W:\2025\250603\CADD DATA\CIVIL.dwg Sheet File:C3-3 SWPPP-DETAILS



CALL BEFORE YOU DIG!

Gopher State One Call

TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

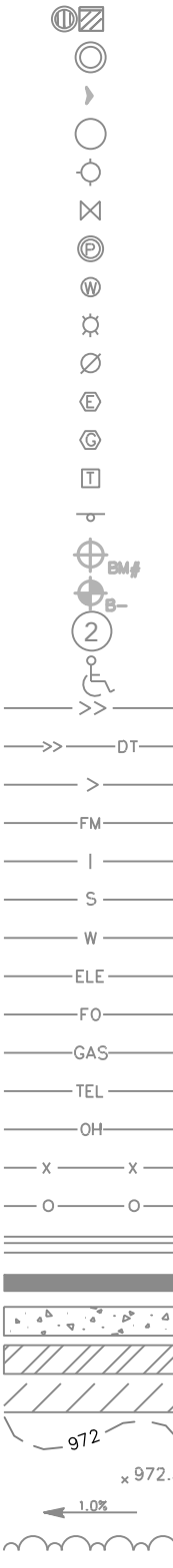
WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

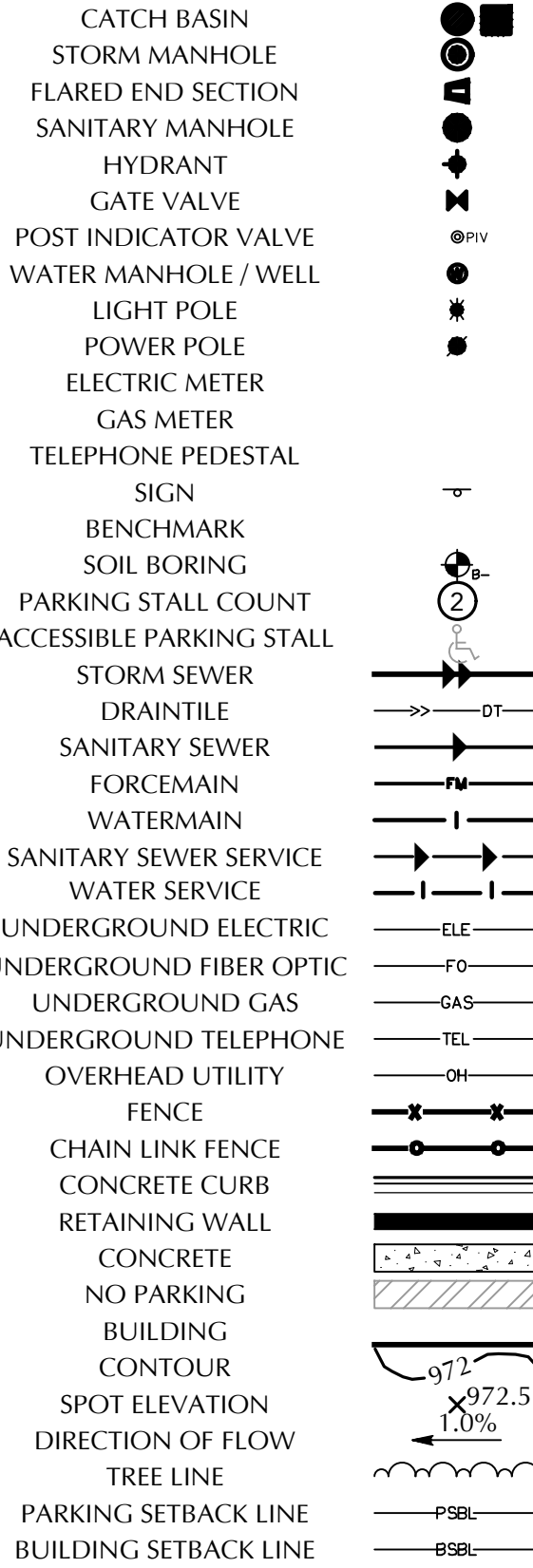
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

LEGEND

EXISTING



PROPOSED



SANITARY SEWER & WATERMAIN NOTES

- ALL SANITARY SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE MINNESOTA PLUMBING CODE, THE LOCAL GOVERNING UNIT, AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), CURRENT EDITION.
- ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION AND THE GEOTECHNICAL REPORT.
- ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTIONS. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.
- ALL SITE UTILITY SERVICES SHALL TERMINATE 5' FROM THE EXTERIOR BUILDING WALL UNLESS OTHERWISE NOTED. THE SITE UTILITY CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR, MECHANICAL CONTRACTOR AND MECHANICAL ENGINEER TO DETERMINE THE RESPONSIBILITY OF BRINGING THE SERVICE(S) INTO THE BUILDING, INSPECTIONS AND TESTING PER APPLICABLE GOVERNING AGENCIES.
- ALL NEW WATERMAIN AND SERVICES MUST HAVE A MINIMUM OF 8.0 FEET OF COVER. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED. INSULATION OF WATERMAIN AND SANITARY SEWER LINES SHALL BE PROVIDED WHERE 8.0 FEET MINIMUM DEPTH CAN NOT BE ATTAINED.
- PER MINNESOTA DEPARTMENT OF LABOR & INDUSTRY REQUIREMENTS, A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FROM WATERMAIN TO ANY MANHOLE, SEPTIC SYSTEM, CATCH BASIN, SEWER PIPE, OR OTHER SOURCE OF CONTAMINATION, MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE UNLESS OTHERWISE SHOWN.
- CONTRACTOR TO SUBMIT SHOP DRAWINGS OF SANITARY STRUCTURE(S) AND UNDERGROUND SYSTEM(S) FOR ENGINEER'S REVIEW.
- ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- HYDRANT USE: CONTRACTOR IS RESPONSIBLE TO NOTIFY PUBLIC UTILITIES DEPARTMENT WHEN THEY NEED TO USE A HYDRANT; ONLY PRE-AUTHORIZED HYDRANTS WILL BE USED. HYDRANTS TO BE OPERATED ONLY WITH PROPER EQUIPMENT SUCH AS A HYDRANT NUT WRENCH, NOT A PIPE WRENCH, HYDRANT METER IS AVAILABLE FROM PUBLIC UTILITIES DEPARTMENT. ANY TRUCK, ETC. FILLED FROM A HYDRANT MUST BE METERED, MUST HAVE PHYSICAL BREAK OR BACK-FLOW PREVENTER APPROVED BY PUBLIC UTILITIES DEPARTMENT. ALSO APPLIES TO SUBCONTRACTORS.
- OPERATING VALVES FOR TURNING WATER MAIN ON/OFF: PUBLIC UTILITIES DEPARTMENT WILL OPERATE ALL VALVES AND FILL ALL WATER MAINS (PUBLIC AND PRIVATE). CONTRACTOR SHALL GIVE AT LEAST 24 HOURS NOTICE TO HAVE WATER SHUT OFF AND SHALL NOTIFY IN WRITING, ALL AFFECTED CUSTOMERS AT LEAST 24 HOURS IN ADVANCE BEFORE SHUT OFF; ATTACH TO DOOR, ETC., NOT IN MAILBOXES.
- TEMPORARY SERVICE: THE CONTRACTOR SHALL PROVIDE TEMPORARY SERVICE IF SERVICE CANNOT BE RESTORED SAME DAY. IF USING HYDRANT FOR TEMPORARY SERVICE, NOTIFY PUBLIC UTILITIES DEPARTMENT AND USE ONLY PRE-APPROVED HYDRANT AND SUPPLIED HYDRO METER WITH BACK FLOW. THE CONTRACTOR'S TEMPORARY MAIN SHALL BE DISINFECTED, FLUSHED AND BACTERIOLOGICAL ANALYSIS SHOWN NEGATIVE PRIOR TO PUTTING THE TEMPORARY SYSTEM IN SERVICE. THE TEMPORARY WATER SYSTEM SHALL BE IN PLACE PRIOR TO THE PUBLIC UTILITIES DEPARTMENT SHUTTING OFF ANY WATER MAINS.
- REFER TO GEOTECHNICAL EVALUATION REPORT, FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS INCLUDING BUT NOT LIMITED TO:
 - A. REUSE OF ON-SITE SOILS
 - B. GROUNDWATER AND RECOMMENDATIONS FOR EXCAVATION DEWATERING.
 - C. SITE GRADING AND SUBGRADE PREPARATION.
 - D. PAVEMENTS AND EXTERIOR SLABS.
 - E. TRENCH EXCAVATION AND BACKFILL.
 - F. EXTERIOR UTILITY SUPPORTS.
 - G. FROST PROTECTION.
- CONTRACTOR SHALL PROVIDE AS-BUILT INFORMATION OF CONSTRUCTED UTILITIES (RECOMMENDED PRIOR TO BACKFILLING) PER APPLICABLE PERMIT REQUIREMENTS AND/OR DEVELOPMENT AGREEMENTS.
- ALL UNUSED UTILITY SERVICES SHALL BE ABANDONED PER THE REQUIREMENTS OF THE APPLICABLE GOVERNING AGENCIES.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED UTILITY PERMITS FROM THE APPLICABLE GOVERNING AGENCIES.

BLAZE
CREDIT UNION

Mankato, MN

Blaze
CREDIT UNION

2025 Larpenteur Ave. W.
Falcon Heights, MN 55113

Loucks

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksa.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

12/23/25 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Engineer under the laws of the State of Minnesota.

License No. PJ Diach - PE 49933
Date

QUALITY CONTROL

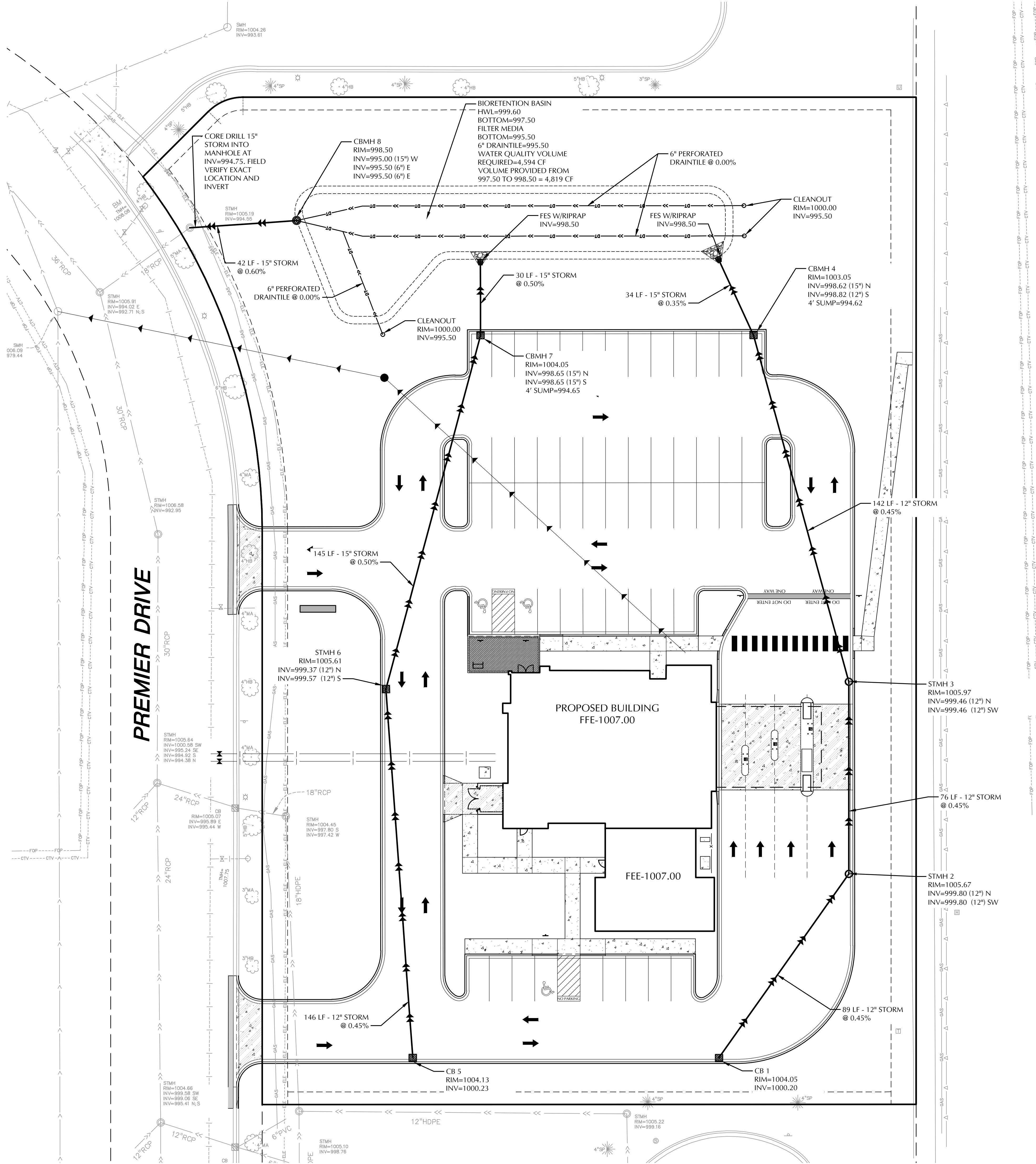
Loucks Project No. 250603.00
Project Lead DDL
Drawn By DDL
Checked By PJD
Review Date 12/23/25

SHEET INDEX

C1-1 DEMOLITION PLAN
C2-1 SITE PLAN
C3-1 GRADING PLAN
C3-2 SWPPP
C3-2 SWPPP NOTES
C4-1 SANITARY/WATERMAIN PLAN
C4-2 STORM SEWER PLAN
C8-1 CIVIL DETAILS
C8-2 CIVIL DETAILS
L1-1 LANDSCAPE PLAN
L2-1 LANDSCAPE DETAILS

SANITARY
SEWER AND
WATERMAIN
PLAN

C4-1



TRUNK HIGHWAY NO. 22 (VICTORY MEMORIAL DRIVE)

STORM SEWER SCHEDULE		
STRUCTURE NO.	CASTING	MANHOLE SIZE
CB 1	R-3067	48" PRECAST
STMH 3	R-1642	48" PRECAST
STMH 4	R-1642	48" PRECAST
CBMH 4	R-3067	48" PRECAST
CB 5	R-3067	48" PRECAST
CBMH 6	R-3067	48" PRECAST
CBMH 7	R-3067	48" PRECAST
CBMH 8	R-2560-EA	48" PRECAST

LEGEND
EXISTING
PROPOSED

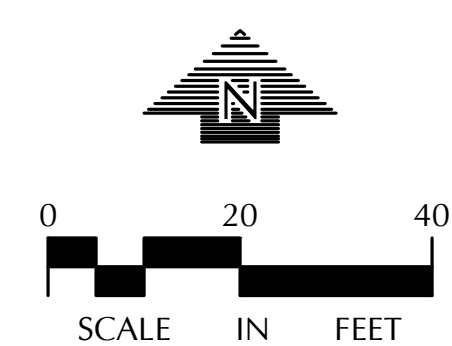
CATCH BASIN
STORM MANHOLE
FLARED END SECTION
SANITARY MANHOLE
HYDRANT
GATE VALVE
POST INDICATOR VALVE
WATER MANHOLE / WELL
LIGHT POLE
POWER POLE
ELECTRIC METER
GAS METER
TELEPHONE PEDESTAL
SIGN
BENCHMARK
SOIL BORING
PARKING STALL COUNT
ACCESSIBLE PARKING STALL
STORM SEWER
DRAINTILE
SANITARY SEWER
FORCEMAIN
WATERMAIN
SANITARY SEWER SERVICE
WATER SERVICE
UNDERGROUND ELECTRIC
UNDERGROUND FIBER OPTIC
UNDERGROUND GAS
UNDERGROUND TELEPHONE
OVERHEAD UTILITY
FENCE
CHAIN LINK FENCE
CONCRETE CURB
RETAINING WALL
CONCRETE
NO PARKING
BUILDING
CONTOUR
SPOT ELEVATION
DIRECTION OF FLOW
TREE LINE
PARKING SETBACK LINE
BUILDING SETBACK LINE

- STORM SEWER NOTES**
- ALL STORM SEWER SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE MINNESOTA PLUMBING CODE, THE LOCAL GOVERNING UNIT, AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), CURRENT EDITION.
 - ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL. ALL COMPACTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CEAM SPECIFICATION AND THE GEOTECHNICAL REPORT.
 - ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE STATE AND LOCAL JURISDICTIONS. THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.
 - ALL SITE UTILITY SERVICES SHALL TERMINATE 5' FROM THE EXTERIOR BUILDING WALL UNLESS OTHERWISE NOTED. THE SITE UTILITY CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR, MECHANICAL CONTRACTOR AND MECHANICAL ENGINEER TO DETERMINE THE RESPONSIBILITY OF BRINGING THE SERVICE(S) INTO THE BUILDING, INSPECTIONS AND TESTING PER APPLICABLE GOVERNING AGENCIES.
 - PER MINNESOTA DEPARTMENT OF LABOR & INDUSTRY REQUIREMENTS, A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FROM WATERMAIN TO ANY MANHOLE, SEPTIC SYSTEM, CATCH BASIN, SEWER PIPE, OR OTHER SOURCE OF CONTAMINATION, MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE UNLESS OTHERWISE SHOWN.
 - ALL STORM SEWER DOWNSPOUT COLLECTION PIPES AND WYES SHALL BE PVC (SCHEDULE 40).
 - CONTRACTOR TO SUBMIT SHOP DRAWINGS OF STORM STRUCTURE(S) AND UNDERGROUND SYSTEM(S) FOR ENGINEER'S REVIEW.
 - CONTRACTOR TO VERIFY UNDERLYING SOILS BENEATH ALL STORMWATER FACILITIES, AND PROVIDE DOCUMENTATION TO THE ENGINEER, PRIOR TO CONSTRUCTION OF THE FACILITIES.
 - ALL PORTIONS OF THE STORM SEWER SYSTEM, INCLUDING CATCH BASINS, LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED ACCORDANCE WITH MINNESOTA RULES, PART 4714.
 - REFER TO GEOTECHNICAL EVALUATION REPORT, FOR AN EXISTING SUBSURFACE SITE CONDITION ANALYSIS AND CONSTRUCTION RECOMMENDATIONS INCLUDING BUT NOT LIMITED TO:
 - REUSE OF ON-SITE SOILS
 - GROUNDWATER AND RECOMMENDATIONS FOR EXCAVATION DEWATERING.
 - SITE GRADING AND SUBGRADE PREPARATION.
 - PAVEMENTS AND EXTERIOR SLABS.
 - TRENCH EXCAVATION AND BACKFILL.
 - EXTERIOR UTILITY SUPPORTS.
 - FROST PROTECTION.
 - CONTRACTOR SHALL PROVIDE AS-BUILT INFORMATION OF CONSTRUCTED STORMWATER MANAGEMENT SYSTEMS & ASSOCIATED INFRASTRUCTURE (RECOMMENDED PRIOR TO BACKFILLING) PER APPLICABLE PERMIT REQUIREMENTS AND/OR DEVELOPMENT AGREEMENTS.
 - ALL UNUSED UTILITY SERVICES SHALL BE ABANDONED PER THE REQUIREMENTS OF THE APPLICABLE GOVERNING AGENCIES.
 - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED UTILITY PERMITS FROM THE APPLICABLE GOVERNING AGENCIES.

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

WARNING:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.

THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



2025 Larpenture Ave. W.
Falcon Heights, MN 55113

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksininc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

12/23/25	CITY SUBMITTAL
----------	----------------

PROFESSIONAL SIGNATURE

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 Engineer under the laws of the State of Minnesota.

PJ Diach - PE 49933

QUALITY CONTROL

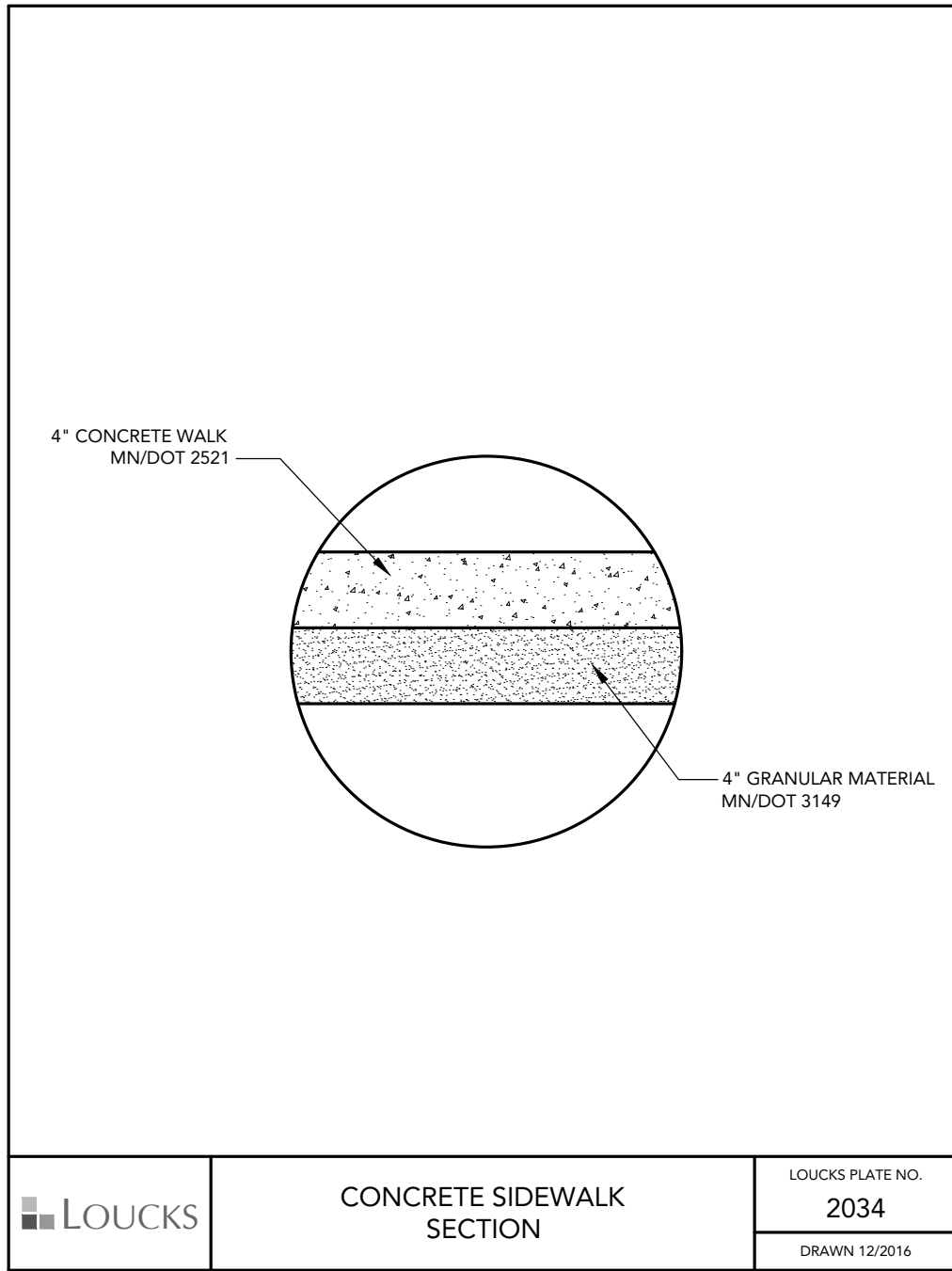
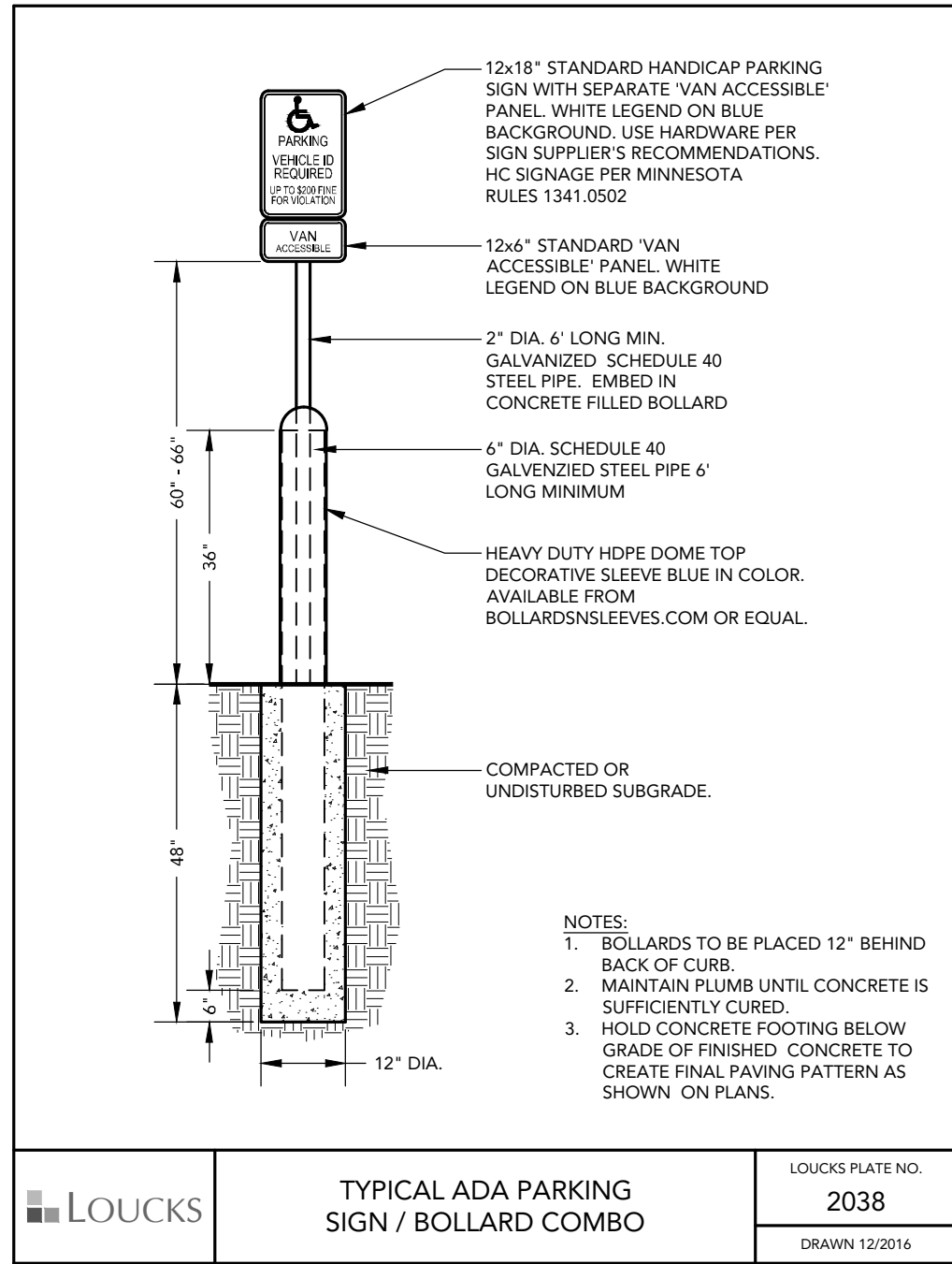
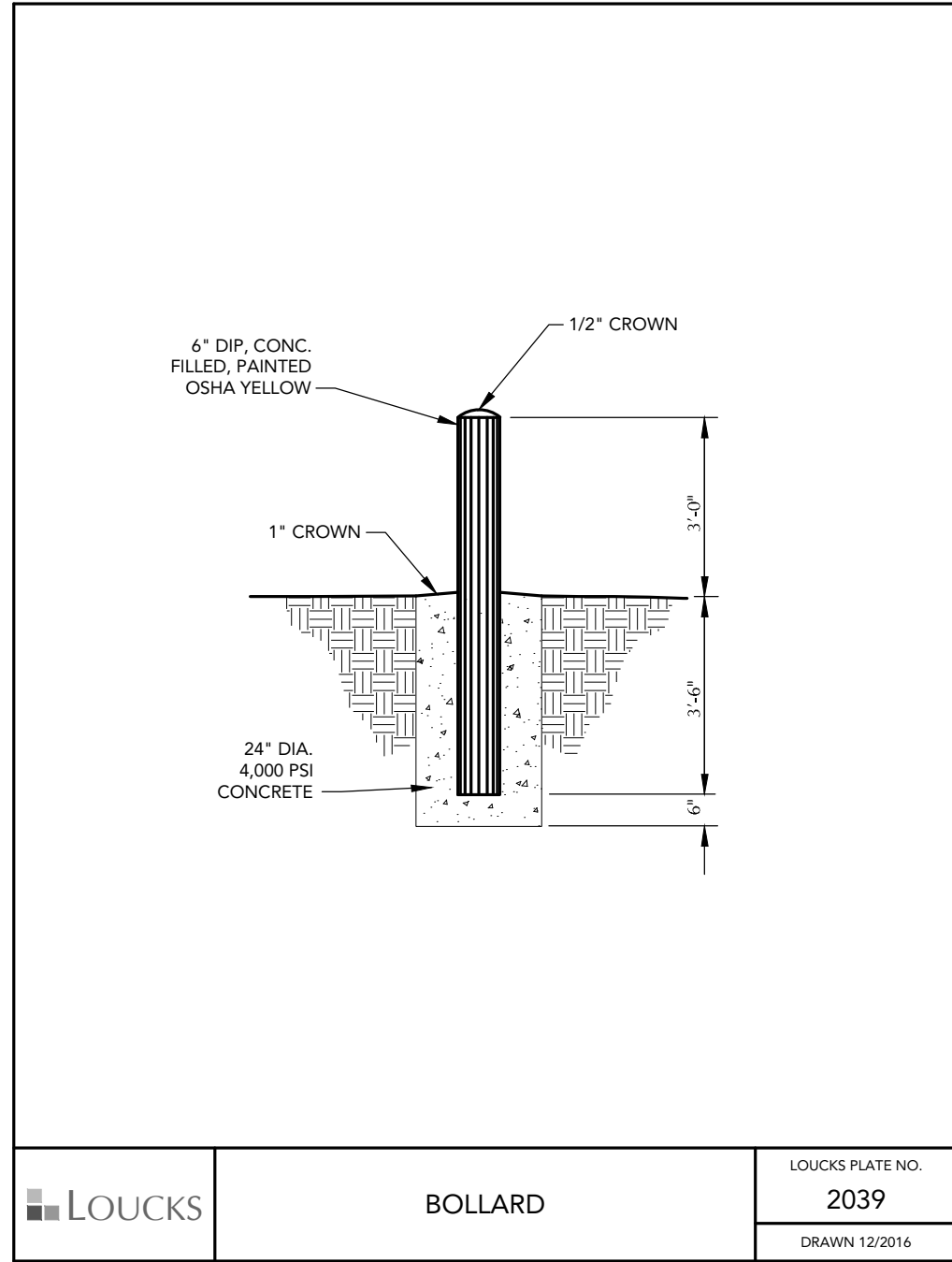
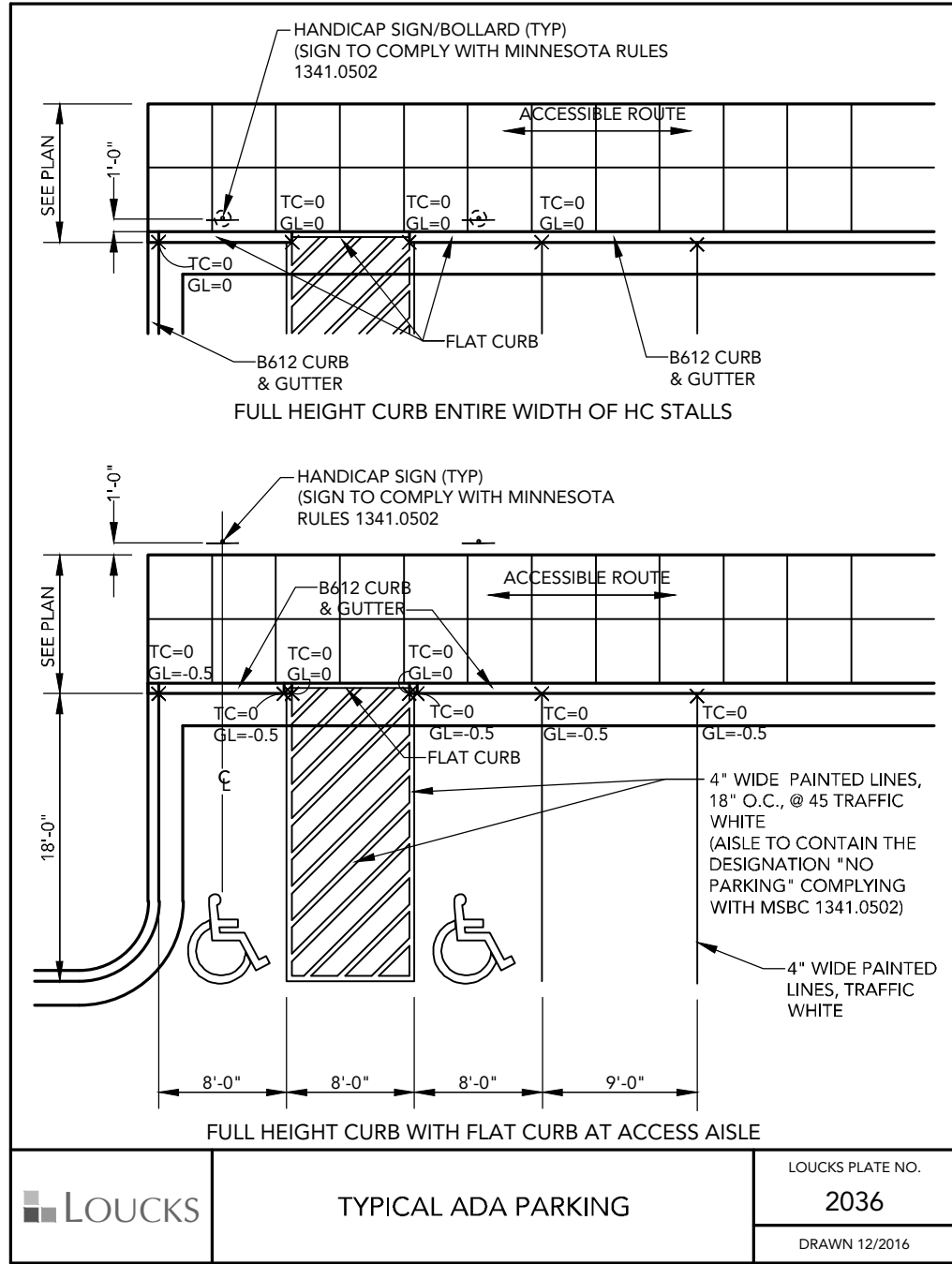
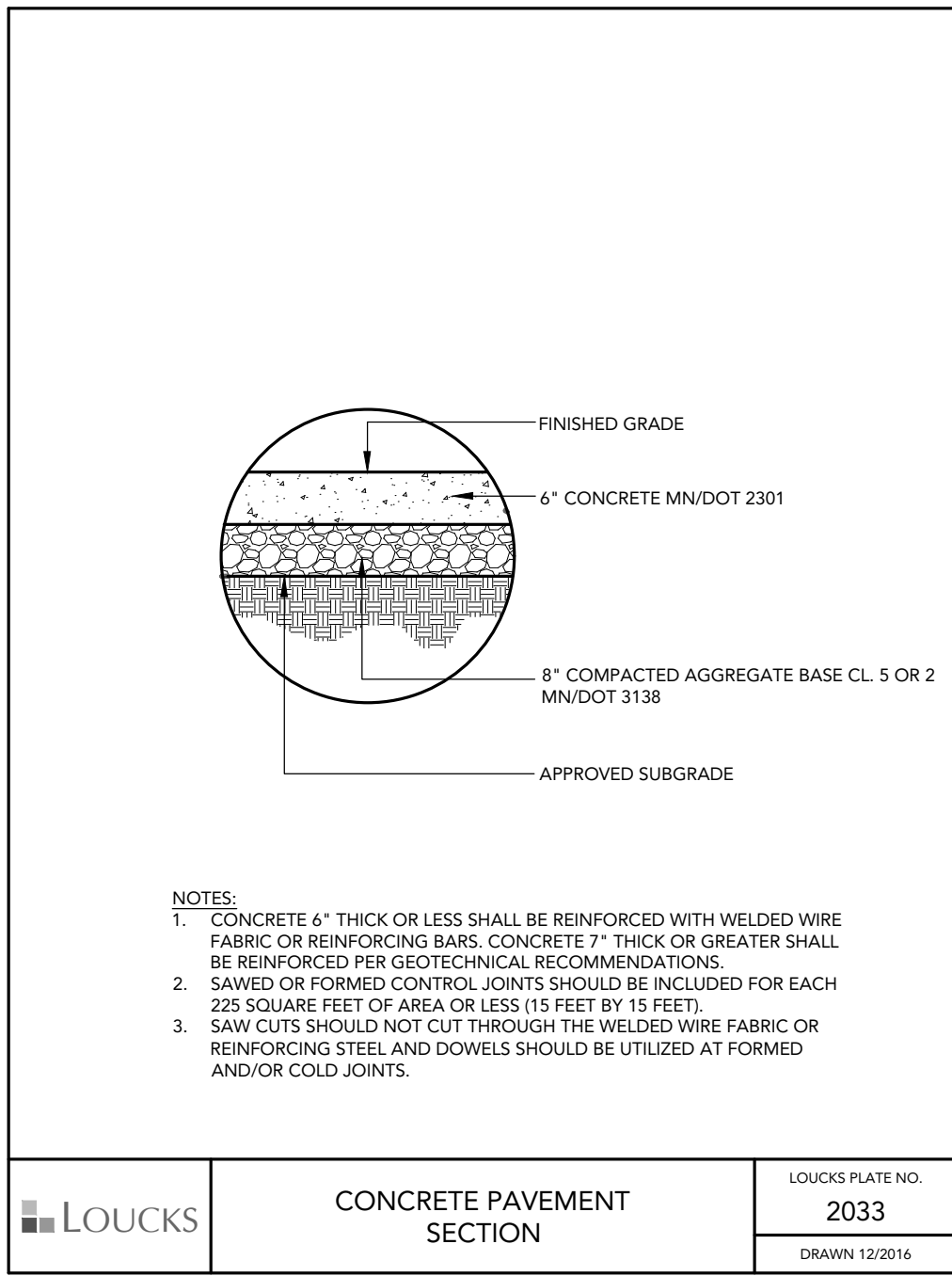
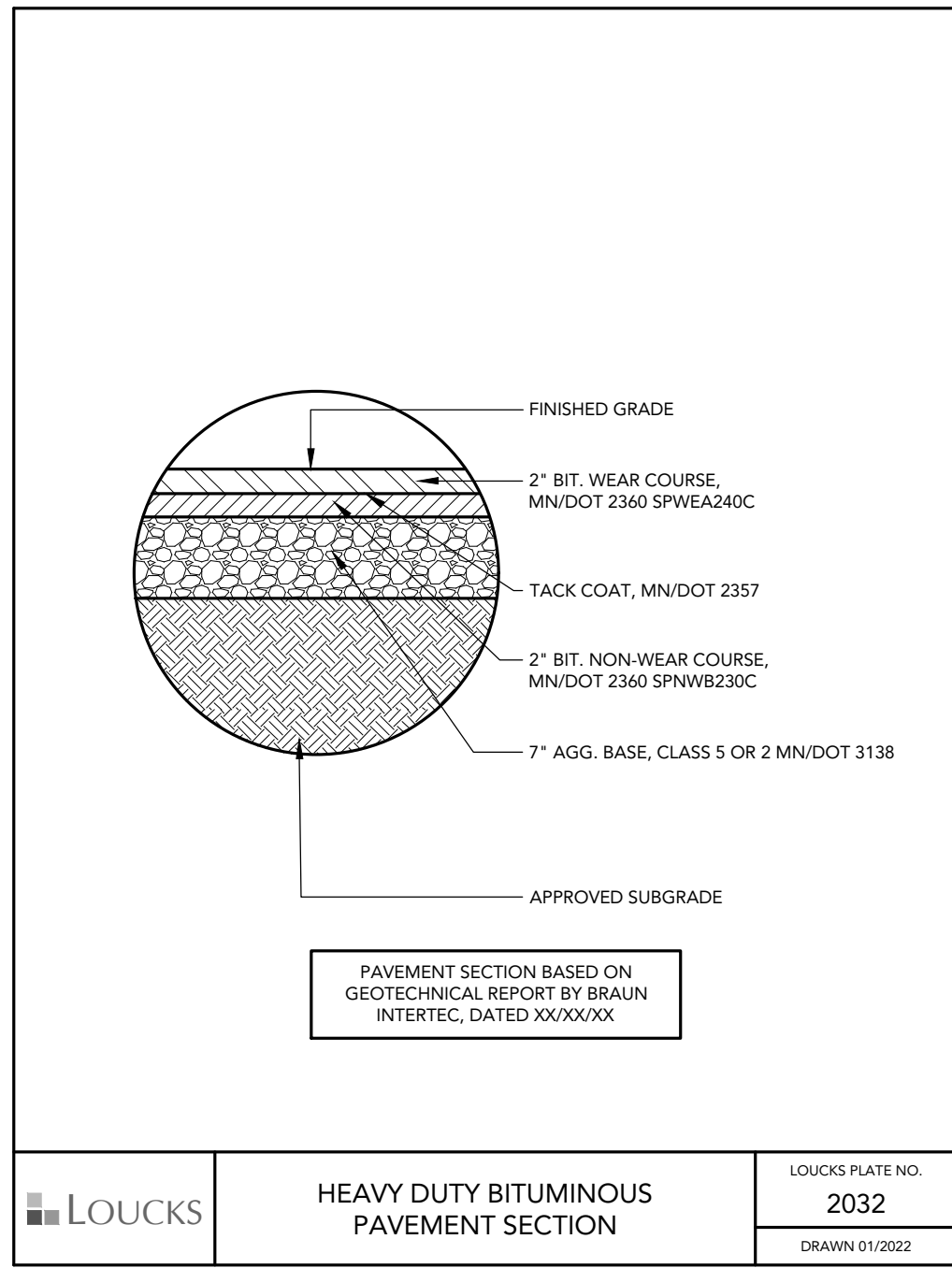
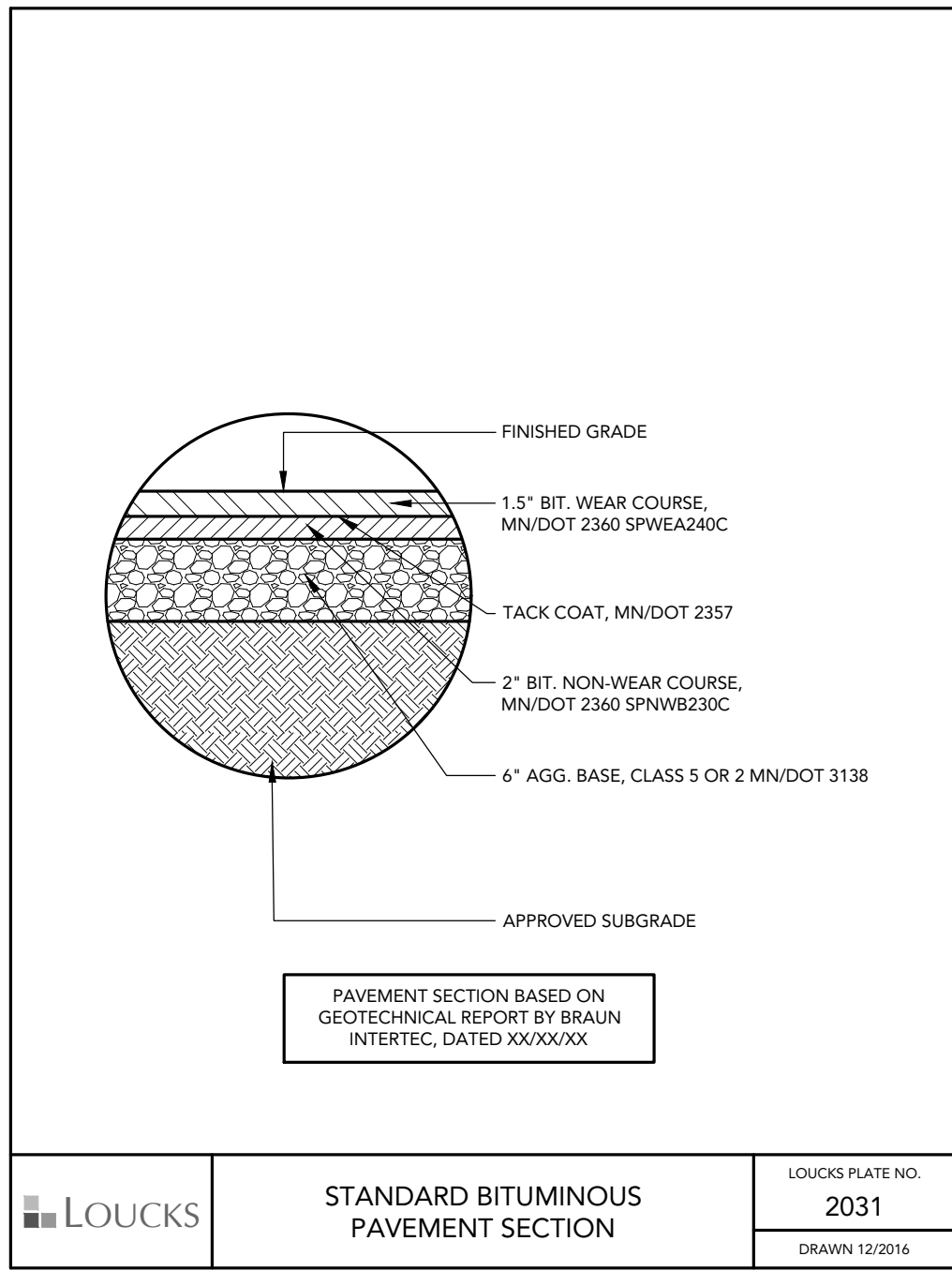
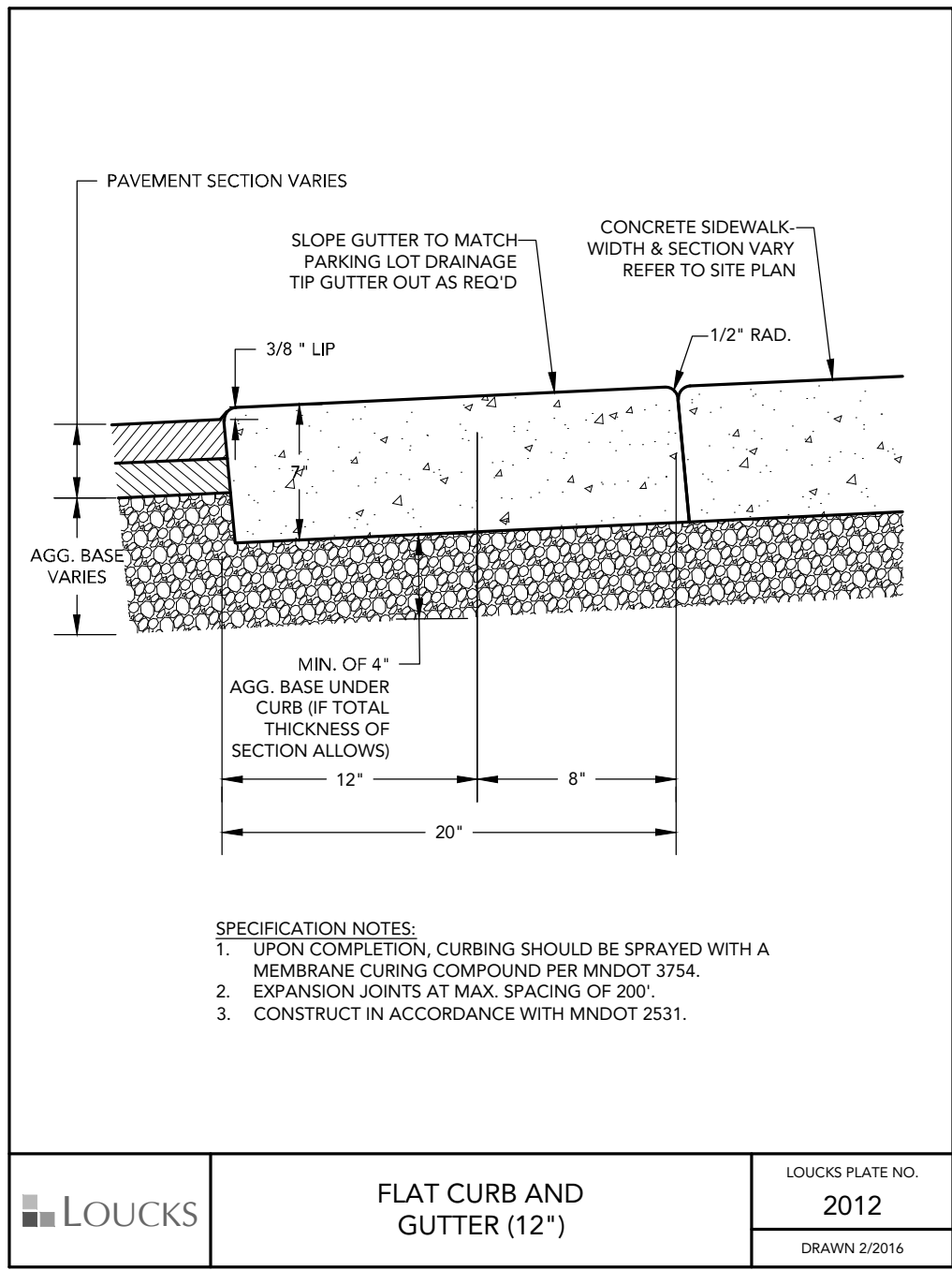
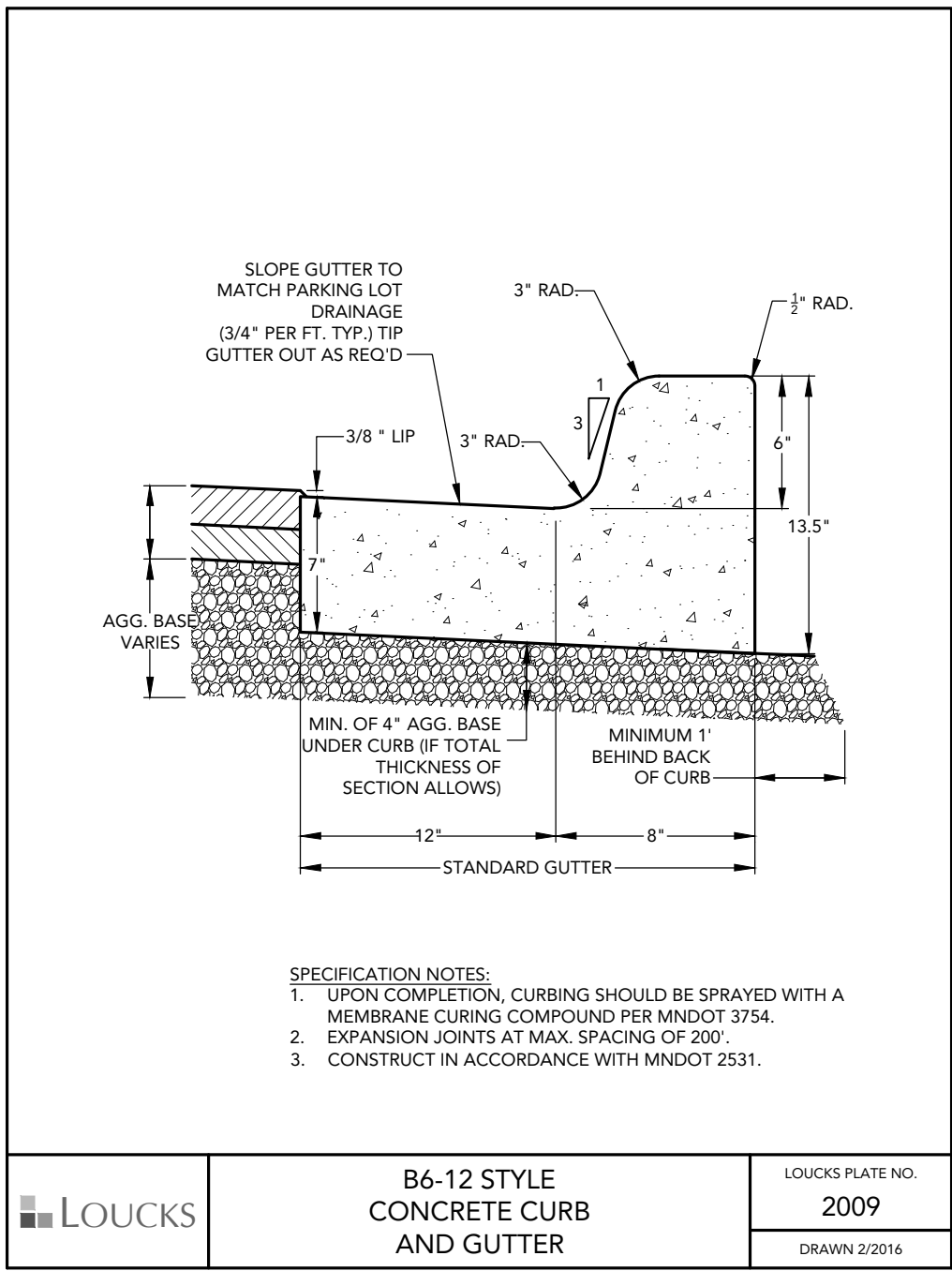
Loucks Project No.	250603.00
Project Lead	DDL
Drawn By	DDL
Checked By	PJD
Review Date	12/23/25

SHEET INDEX

C1-1	DEMOLITION PLAN
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2	SWPPP
C3-2	SWPPP NOTES
C4-1	SANITARY/WATERMAIN PLAN
C4-2	STORM SEWER PLAN
C8-1	CIVIL DETAILS
C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-1	LANDSCAPE DETAILS

STORM SEWER PLAN

C4-2



CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

12/23/25 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

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 Engineer under the laws of the State of Minnesota.

PJ Diach - PE
License No. 49933
Date -

QUALITY CONTROL

Loucks Project No. 250603.00
Project Lead DDL
Drawn By DDL
Checked By PJD
Review Date 12/23/25

SHEET INDEX

C1-1	DEMOLITION PLAN
C2-1	SITE PLAN
C3-1	GRADING PLAN
C3-2	SWPPP NOTES
C4-1	SANITARY/WATERMAIN PLAN
C4-2	STORM SEWER PLAN
C8-1	CIVIL DETAILS
C8-2	CIVIL DETAILS
L1-1	LANDSCAPE PLAN
L2-1	LANDSCAPE DETAILS



Plotted: 12 / 22 / 2025 4:34 PM W:\2025\250603\CADD DATA\LANDSCAPE\dwg Sheet Files\L1-1 LANDSCAPE PLAN



Stormwater Management Plan

Blaze Credit Union
Mankato, MN

Prepared by Loucks
December 22, 2025

Loucks Project No. 250603.00

Blaze Credit Union
Mankato, Minnesota

Stormwater Management Plan

Table of Contents

	Page Number
Introduction	1
Methodology	1
Existing Conditions	1
Proposed Conditions	1
Best Management Practices	3
Conclusion	3

Appendices

HydroCAD Report - Existing	Appendix A
HydroCAD Report - Proposed	Appendix B

Figures

Existing Drainage Exhibit	Figure 1
Proposed Drainage Exhibit	Figure 2
MIDS Existing Data	Figure 3
MIDS Proposed Data	Figure 4

Blaze Credit Union
Mankato, Minnesota

Stormwater Management Plan

Introduction

This stormwater management plan was created for the Blaze Credit Union project located at 1831 Premier Drive in Mankato, MN. The project site encompasses roughly 2.442 acres.

The project generally consists of constructing a new credit union, parking lot, and associated utilities.

Included in this plan are calculations for the existing and proposed discharge of storm water from the site.

Methodology

City of Mankato Requirements:

The City of Mankato is the permitting authority.

1. Rate Control – Runoff rates for the proposed activity shall not exceed runoff rates for the 2, 10, & 100-year critical storm events.
2. There is to be no increase in TSS, phosphorus from the existing conditions

Methodology

The stormwater calculations were made utilizing the stormwater-modeling program HydroCAD 10.00. Calculations were performed for Atlas-14 1-year, 2-year, 10-year, and 100-year rainfall events of 2.52 inches, 2.92 inches, 4.38 inches, and 7.41 inches respectively.

Existing Conditions

The existing site is currently a vacant site. The existing site is broken up into one drainage area, Drainage area DA-1E. The existing site currently drains to the east off-site.

Proposed Conditions

The proposed site consists of constructing a Blaze Credit Union building, parking lot, entrance drives, utilities, and stormwater management practices. To meet stormwater requirements for the site, a biofiltration basin will be used. The site will be broken up into two drainage areas.

Drainage area DA-1P will drain offsite to the east. Drainage area DA-2P will drain to the biofiltration basin.

Rate Control

The rate control requirements are that peak rates shall not exceed existing rates for the 1, 2, 10, and 100-year events.

Tables 1.1 below lists the existing areas and runoff rates

Tables 1.2 below lists the proposed areas and runoff rates

Table 1.1 – Existing Peak Runoff Rates

Existing Conditions						
			2-YR Event	2-YR Event	10-YR Event	100-YR Event
Subcatch	Area (SF)	Impervious (SF)	Rate (cfs)	Rate (cfs)	Rate (cfs)	Rate (cfs)
DA-1E	106,367	567	3.53	4.57	8.49	16.88
TOTAL EXISTING	106,367	567	3.53	4.57	8.49	16.88

Table 1.2 – Proposed Peak Runoff Rates

Proposed Conditions						
			2-YR Event	2-YR Event	10-YR Event	100-YR Event
Subcatch	Area (SF)	Impervious (SF)	Rate (cfs)	Rate (cfs)	Rate (cfs)	Rate (cfs)
DA-1P	14,867	567	0.56	0.74	1.44	2.97
DA-2P to Basin	91,500	49,549	0.26	0.51	5.56	11.78
TOTAL PROPOSED	106,367	50,116	0.80	0.99	6.24	14.46

Volume Control

A water quality volume of 1.1" of runoff from the new impervious surfaces created by the project is treated. Required volume calculations are shown below:

Volume Required: 50,116 SF x 1.1" x 1'/12" = 4,594 CF

Volume Provided: Biofiltration Basin (907.50 - 908.50) = 4,819 CF

Total Volume Provided: = 4,819 CF

The proposed water quality volume for the basin is 4,819 CF which exceeds the required volume of 4,594 CF.

Water Quality

For projects that have met the volume control requirements above, the pollutant removal requirements are considered to be met. The city requires that there is no net increase in total suspended solids (TSS) or phosphorus (TP) leaving the site from the existing site to the

proposed site. The existing site TSS is 211.5 lbs & the proposed TSS is 176.0 lbs. The existing site TP is 1.164 lbs & the proposed TP is 1.106 lbs. Both meet the city requirement of proposed being less than existing.

Best Management Practices

Best management practices (BMP's) will be implemented during construction per the project Stormwater Pollution Prevention Plan (C3-2 & C3-3). During construction, erosion control measures will include dust control, silt fencing, bio logs, inlet protection, and a temporary rock construction entrance. Permanent BMP's will include stormwater management systems, surface pavements, and turf establishment (vegetation) of disturbed areas.

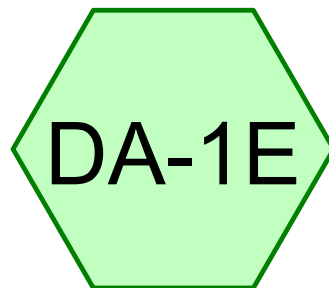
Conclusion

The proposed Stormwater Management Plan for the project provides a solution for the conveyance of stormwater from the site. The biofiltration basin captures the runoff and outlets to city storm sewer. They will provide rate control for the development and meet water quality requirements through the proposed filtration.

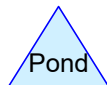
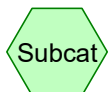
Appendix A

Existing HydroCAD Report

EXISTING SITE



Existing Site



Routing Diagram for Blaze Mankato

Prepared by {enter your company name here}, Printed 12/19/2025
HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Blaze Mankato

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Printed 12/19/2025

Page 2

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	MSE 24-hr	3	Default	24.00	1	2.51	2
2	2-Year	MSE 24-hr	3	Default	24.00	1	2.92	2
3	10-Year	MSE 24-hr	3	Default	24.00	1	4.38	2
4	100-Year	MSE 24-hr	3	Default	24.00	1	7.41	2

Blaze Mankato

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Printed 12/19/2025

Page 3

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.429	84	50-75% Grass cover, Fair, HSG D (DA-1E)
0.013	98	Paved parking, HSG D (DA-1E)
2.442	84	TOTAL AREA

Blaze Mankato*MSE 24-hr 3 1-Year Rainfall=2.51"*

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 4

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA-1E: Existing Site

Runoff Area=106,367 sf 0.53% Impervious Runoff Depth=1.12"

Tc=15.0 min CN=84 Runoff=3.53 cfs 0.229 af

Total Runoff Area = 2.442 ac Runoff Volume = 0.229 af Average Runoff Depth = 1.12"**99.47% Pervious = 2.429 ac 0.53% Impervious = 0.013 ac**

Summary for Subcatchment DA-1E: Existing Site

Runoff = 3.53 cfs @ 12.24 hrs, Volume= 0.229 af, Depth= 1.12"

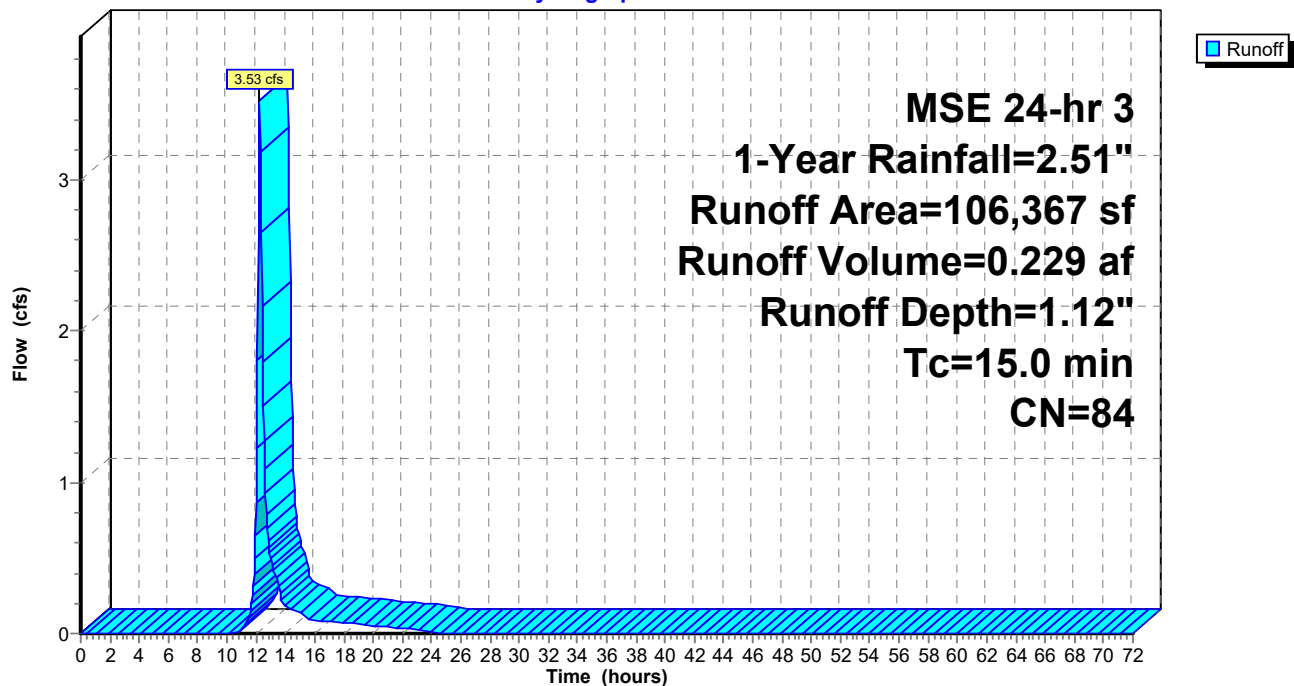
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 1-Year Rainfall=2.51"

Area (sf)	CN	Description
105,800	84	50-75% Grass cover, Fair, HSG D
567	98	Paved parking, HSG D
106,367	84	Weighted Average
105,800		99.47% Pervious Area
567		0.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

Subcatchment DA-1E: Existing Site

Hydrograph



Blaze Mankato*MSE 24-hr 3 2-Year Rainfall=2.92"*

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 6

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA-1E: Existing Site

Runoff Area=106,367 sf 0.53% Impervious Runoff Depth=1.45"

Tc=15.0 min CN=84 Runoff=4.57 cfs 0.295 af

Total Runoff Area = 2.442 ac Runoff Volume = 0.295 af Average Runoff Depth = 1.45"**99.47% Pervious = 2.429 ac 0.53% Impervious = 0.013 ac**

Summary for Subcatchment DA-1E: Existing Site

Runoff = 4.57 cfs @ 12.24 hrs, Volume= 0.295 af, Depth= 1.45"

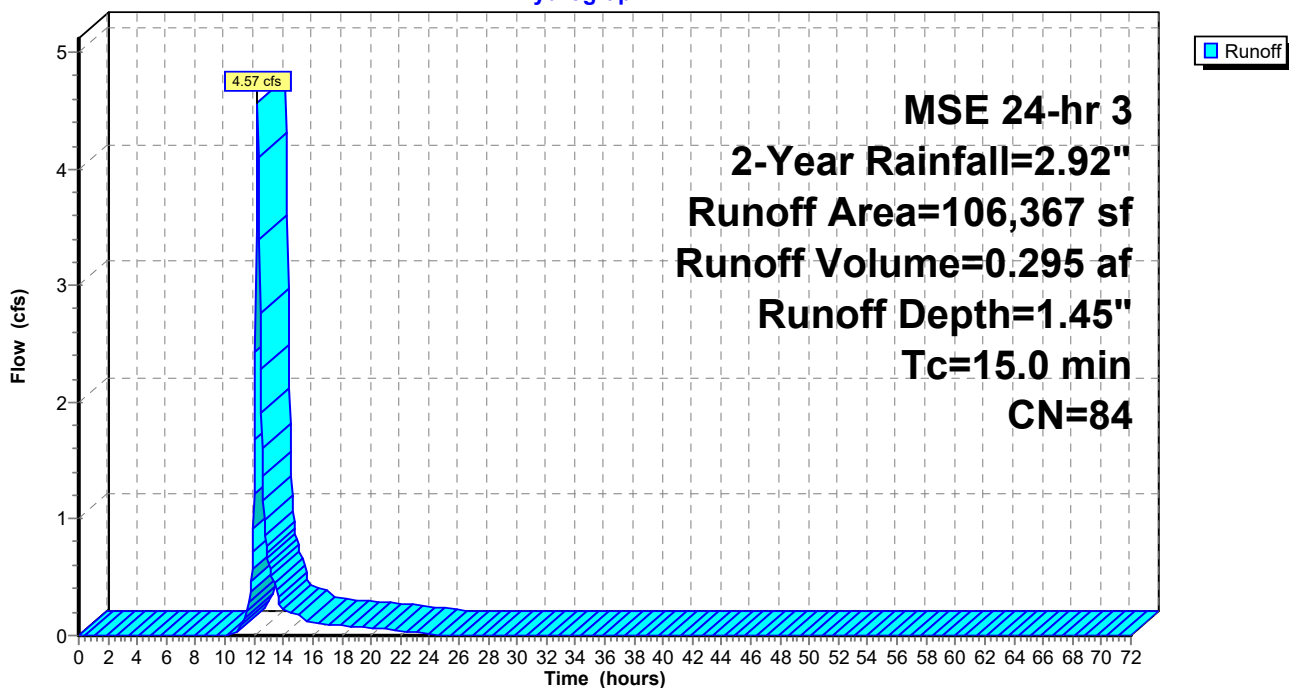
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2-Year Rainfall=2.92"

Area (sf)	CN	Description
105,800	84	50-75% Grass cover, Fair, HSG D
567	98	Paved parking, HSG D
106,367	84	Weighted Average
105,800		99.47% Pervious Area
567		0.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

Subcatchment DA-1E: Existing Site

Hydrograph



Blaze Mankato*MSE 24-hr 3 10-Year Rainfall=4.38"*

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 8

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA-1E: Existing Site

Runoff Area=106,367 sf 0.53% Impervious Runoff Depth=2.71"

Tc=15.0 min CN=84 Runoff=8.49 cfs 0.551 af

Total Runoff Area = 2.442 ac Runoff Volume = 0.551 af Average Runoff Depth = 2.71"**99.47% Pervious = 2.429 ac 0.53% Impervious = 0.013 ac**

Summary for Subcatchment DA-1E: Existing Site

Runoff = 8.49 cfs @ 12.23 hrs, Volume= 0.551 af, Depth= 2.71"

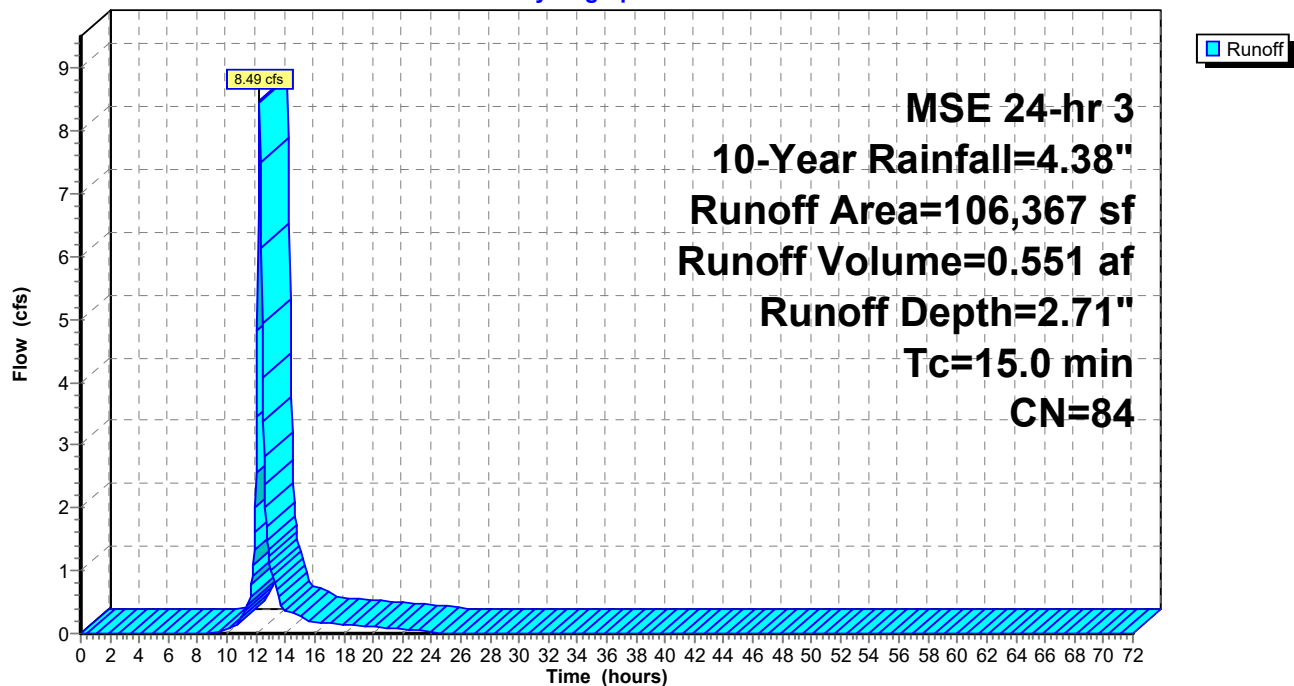
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10-Year Rainfall=4.38"

Area (sf)	CN	Description
105,800	84	50-75% Grass cover, Fair, HSG D
567	98	Paved parking, HSG D
106,367	84	Weighted Average
105,800		99.47% Pervious Area
567		0.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

Subcatchment DA-1E: Existing Site

Hydrograph



Blaze Mankato*MSE 24-hr 3 100-Year Rainfall=7.41"*

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 10

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA-1E: Existing Site

Runoff Area=106,367 sf 0.53% Impervious Runoff Depth=5.53"

Tc=15.0 min CN=84 Runoff=16.88 cfs 1.125 af

Total Runoff Area = 2.442 ac Runoff Volume = 1.125 af Average Runoff Depth = 5.53"**99.47% Pervious = 2.429 ac 0.53% Impervious = 0.013 ac**

Summary for Subcatchment DA-1E: Existing Site

Runoff = 16.88 cfs @ 12.23 hrs, Volume= 1.125 af, Depth= 5.53"

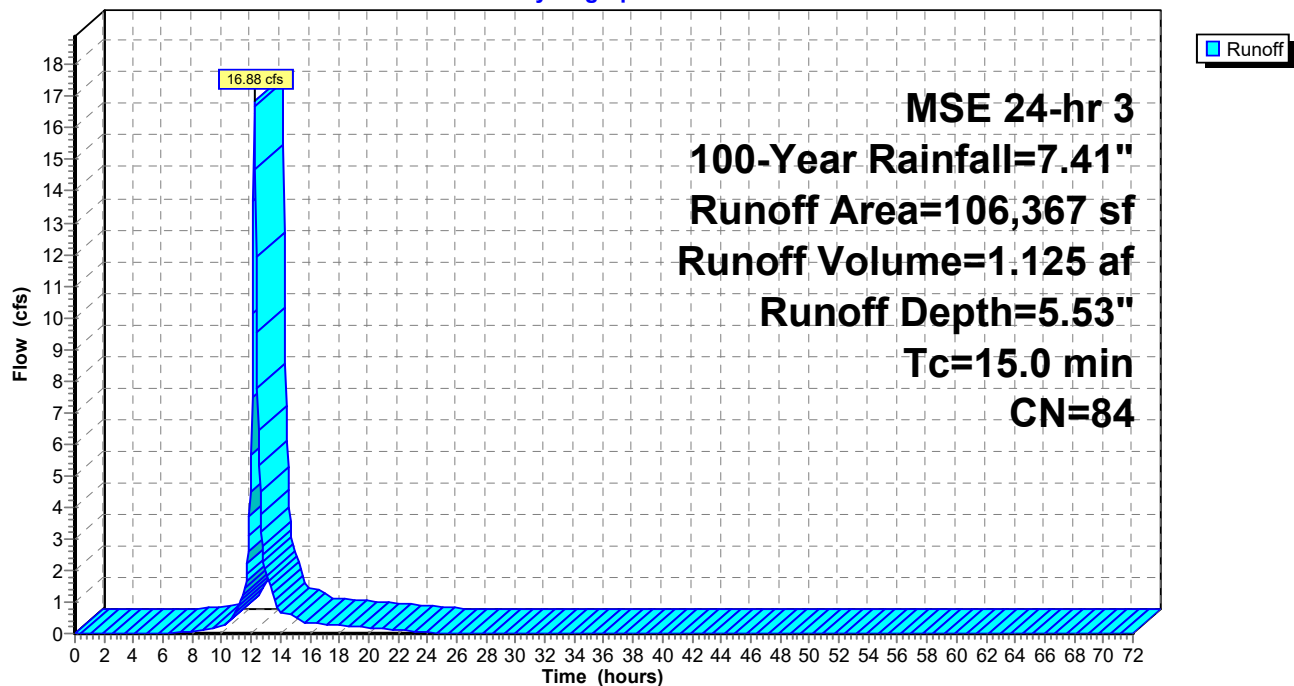
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100-Year Rainfall=7.41"

Area (sf)	CN	Description
105,800	84	50-75% Grass cover, Fair, HSG D
567	98	Paved parking, HSG D
106,367	84	Weighted Average
105,800		99.47% Pervious Area
567		0.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

Subcatchment DA-1E: Existing Site

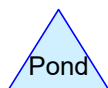
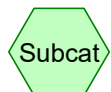
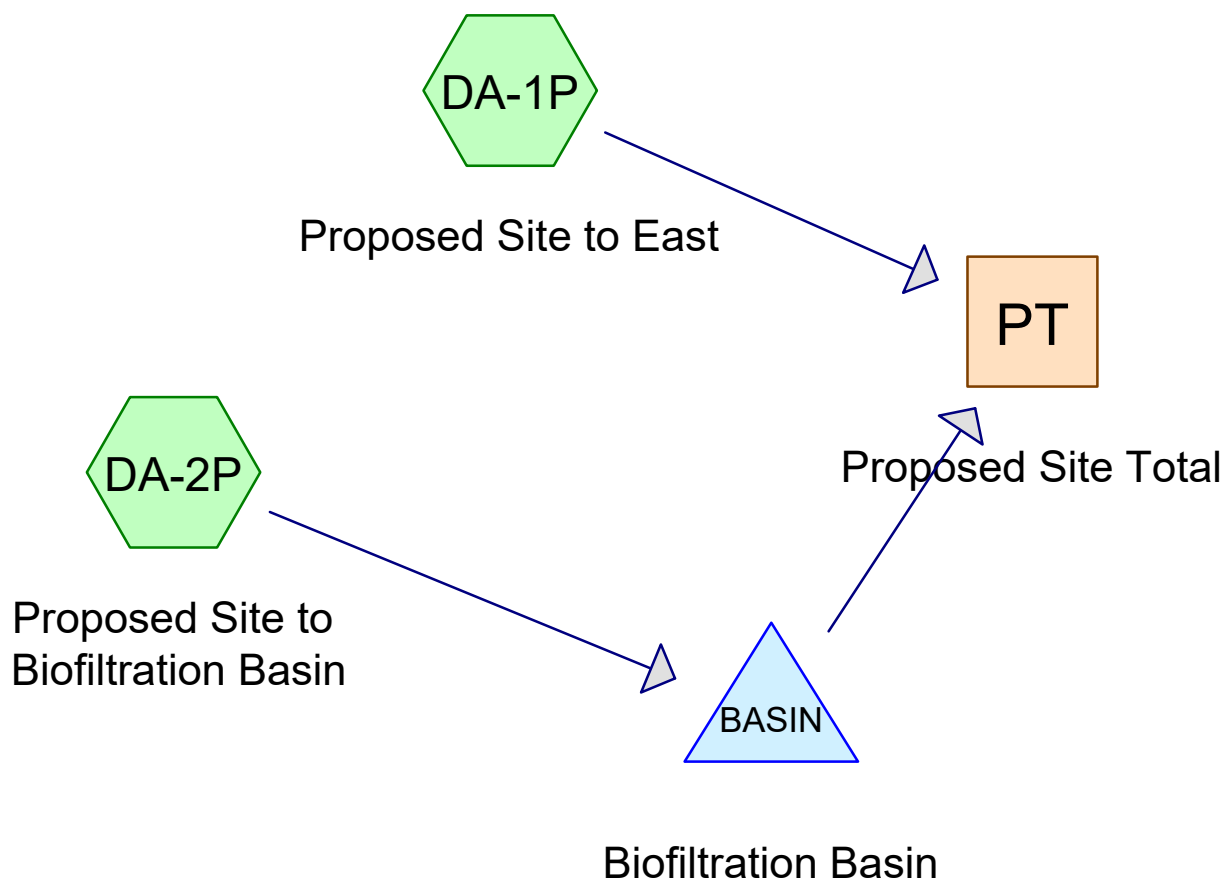
Hydrograph



Appendix B

Proposed HydroCAD Report

PROPOSED SITE



Routing Diagram for Blaze Mankato

Prepared by {enter your company name here}, Printed 12/19/2025
HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Blaze Mankato

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Printed 12/19/2025

Page 2

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	MSE 24-hr	3	Default	24.00	1	2.51	2
2	2-Year	MSE 24-hr	3	Default	24.00	1	2.92	2
3	10-Year	MSE 24-hr	3	Default	24.00	1	4.38	2
4	100-Year	MSE 24-hr	3	Default	24.00	1	7.41	2

Blaze Mankato

Prepared by {enter your company name here}

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Printed 12/19/2025

Page 3

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.291	80	>75% Grass cover, Good, HSG D (DA-1P, DA-2P)
1.151	98	Paved parking, HSG D (DA-1P, DA-2P)
2.442	88	TOTAL AREA

Blaze Mankato*MSE 24-hr 3 1-Year Rainfall=2.51"*

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 4

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA-1P: Proposed Site to East Runoff Area=14,867 sf 3.81% Impervious Runoff Depth=0.95"
Tc=7.0 min CN=81 Runoff=0.56 cfs 0.027 af

SubcatchmentDA-2P: Proposed Site to Runoff Area=91,500 sf 54.15% Impervious Runoff Depth=1.54"
Tc=7.0 min CN=90 Runoff=5.55 cfs 0.270 af

Reach PT: Proposed Site Total Inflow=0.80 cfs 0.297 af
Outflow=0.80 cfs 0.297 af

Pond BASIN: Biofiltration Basin Peak Elev=998.25' Storage=7,104 cf Inflow=5.55 cfs 0.270 af
Outflow=0.26 cfs 0.270 af

Total Runoff Area = 2.442 ac Runoff Volume = 0.297 af Average Runoff Depth = 1.46"
52.88% Pervious = 1.291 ac 47.12% Impervious = 1.151 ac

Summary for Subcatchment DA-1P: Proposed Site to East

Runoff = 0.56 cfs @ 12.15 hrs, Volume= 0.027 af, Depth= 0.95"
 Routed to Reach PT : Proposed Site Total

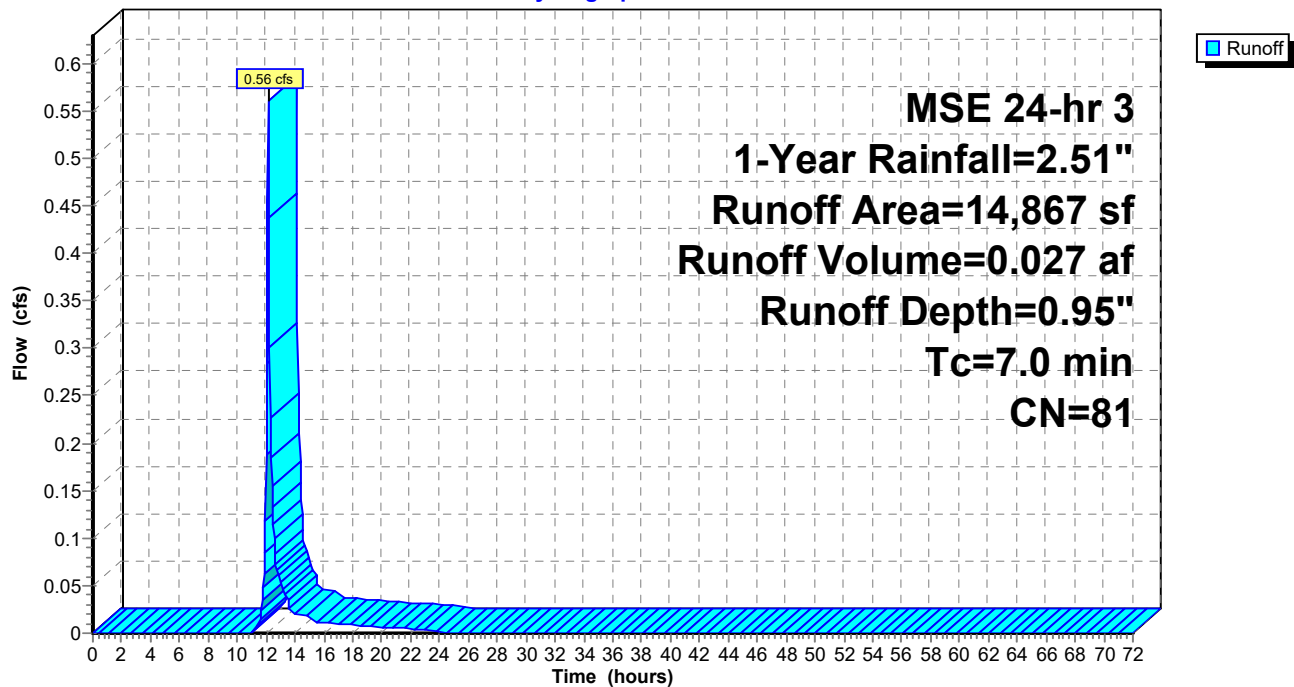
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 1-Year Rainfall=2.51"

Area (sf)	CN	Description
14,300	80	>75% Grass cover, Good, HSG D
567	98	Paved parking, HSG D
14,867	81	Weighted Average
14,300		96.19% Pervious Area
567		3.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0					Direct Entry,

Subcatchment DA-1P: Proposed Site to East

Hydrograph



Summary for Subcatchment DA-2P: Proposed Site to Biofiltration Basin

Runoff = 5.55 cfs @ 12.14 hrs, Volume= 0.270 af, Depth= 1.54"
 Routed to Pond BASIN : Biofiltration Basin

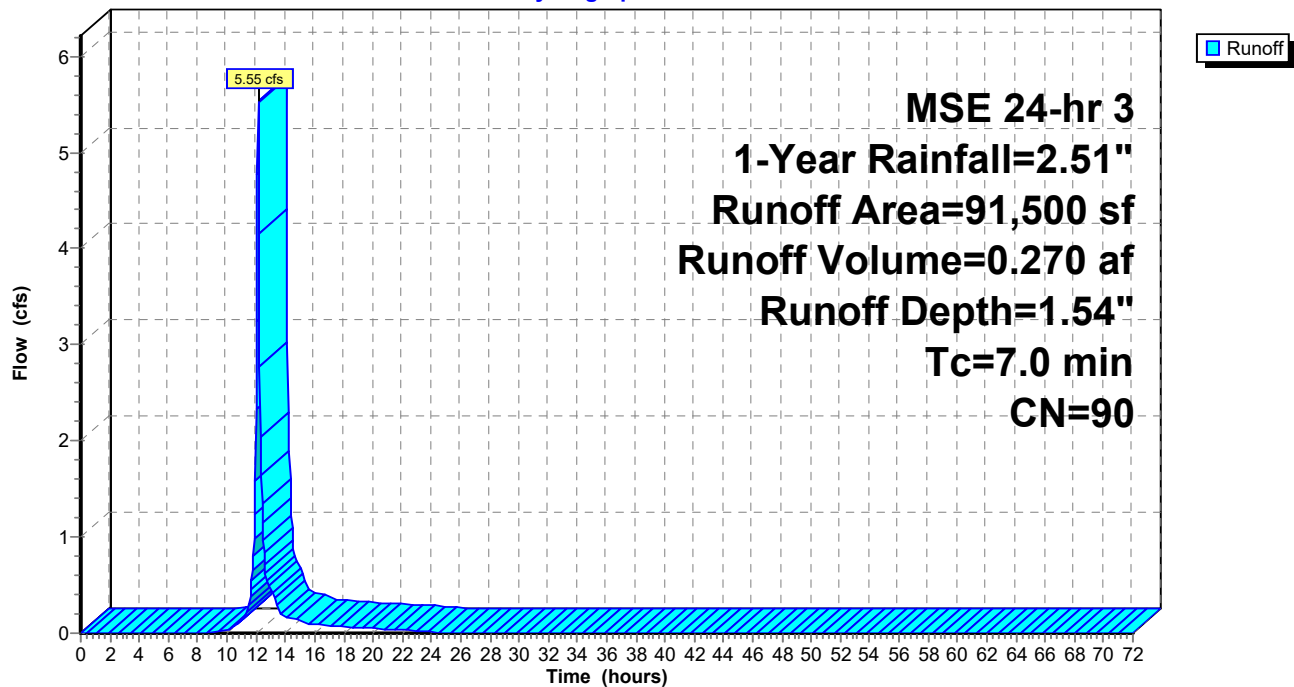
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 1-Year Rainfall=2.51"

Area (sf)	CN	Description
41,951	80	>75% Grass cover, Good, HSG D
49,549	98	Paved parking, HSG D
91,500	90	Weighted Average
41,951		45.85% Pervious Area
49,549		54.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0					Direct Entry,

Subcatchment DA-2P: Proposed Site to Biofiltration Basin

Hydrograph



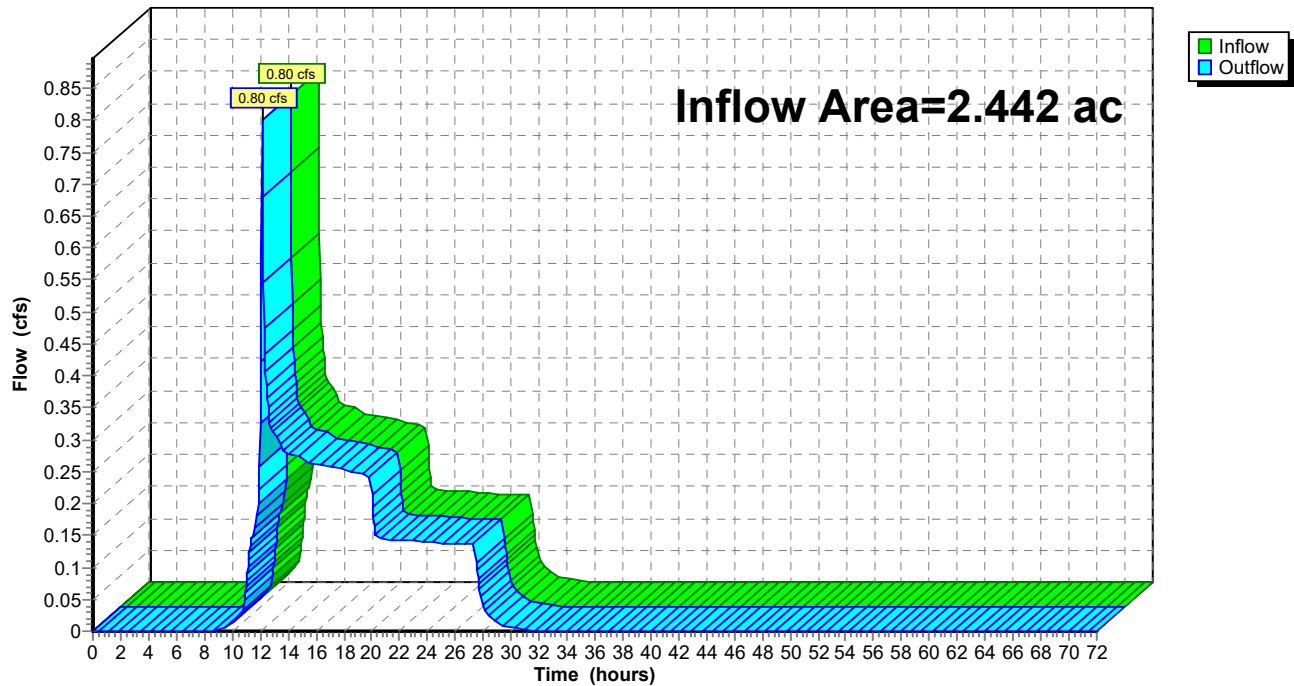
Summary for Reach PT: Proposed Site Total

Inflow Area = 2.442 ac, 47.12% Impervious, Inflow Depth = 1.46" for 1-Year event
Inflow = 0.80 cfs @ 12.16 hrs, Volume= 0.297 af
Outflow = 0.80 cfs @ 12.16 hrs, Volume= 0.297 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach PT: Proposed Site Total

Hydrograph



Blaze Mankato

MSE 24-hr 3 1-Year Rainfall=2.51"

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 8

Summary for Pond BASIN: Biofiltration Basin

Inflow Area = 2.101 ac, 54.15% Impervious, Inflow Depth = 1.54" for 1-Year event
 Inflow = 5.55 cfs @ 12.14 hrs, Volume= 0.270 af
 Outflow = 0.26 cfs @ 13.55 hrs, Volume= 0.270 af, Atten= 95%, Lag= 84.5 min
 Primary = 0.26 cfs @ 13.55 hrs, Volume= 0.270 af
 Routed to Reach PT : Proposed Site Total

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 998.25' @ 13.55 hrs Surf.Area= 11,093 sf Storage= 7,104 cf

Plug-Flow detention time= 313.4 min calculated for 0.269 af (100% of inflow)
 Center-of-Mass det. time= 313.5 min (1,110.4 - 796.8)

Volume	Invert	Avail.Storage	Storage Description
#1	997.50'	50,180 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 32.30'W x 185.00'L x 2.00'H Prismatoid 11,951 cf Overall x 30.0% Voids
#2	995.50'	3,585 cf	
53,765 cf			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.50	4,232	0	0
998.00	4,815	2,262	2,262
998.50	5,413	2,557	4,819
999.00	6,027	2,860	7,679
1,000.00	7,740	6,884	14,562
1,001.00	9,092	8,416	22,978
1,002.00	10,501	9,797	32,775
1,003.00	11,967	11,234	44,009
1,003.50	12,718	6,171	50,180

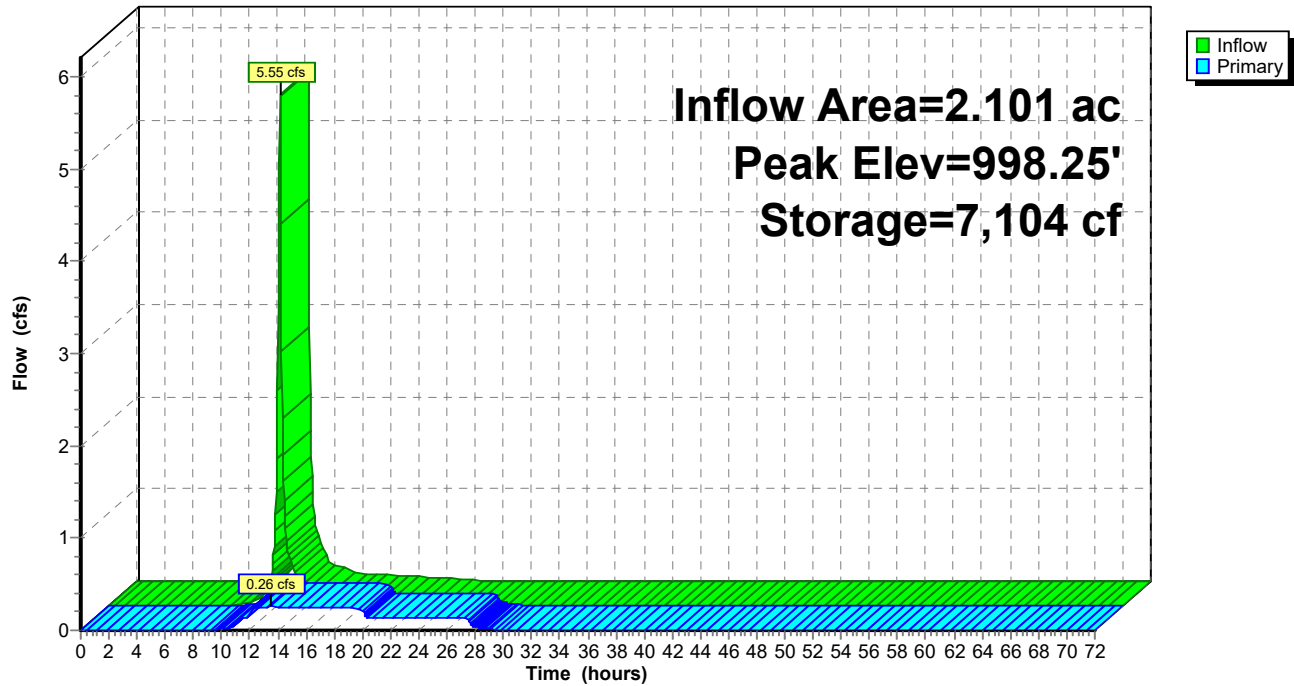
Device	Routing	Invert	Outlet Devices
#1	Primary	995.00'	15.0" Round Culvert L= 42.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 995.00' / 994.75' S= 0.0060 ' S= 0.0060 ' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.23 sf
#2	Device 1	998.50'	24.0" Horiz. Orifice/Grate C= 0.600 in 24.0" Grate (100% open area) Limited to weir flow at low heads
#3	Device 1	995.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 3	995.50'	1.000 in/hr Exfiltration over Surface area

Primary OutFlow Max=0.26 cfs @ 13.55 hrs HW=998.25' (Free Discharge)

- ↑ **1=Culvert** (Passes 0.26 cfs of 9.39 cfs potential flow)
- ↑ **2=Orifice/Grate** (Controls 0.00 cfs)
- ↑ **3=Orifice/Grate** (Passes 0.26 cfs of 2.99 cfs potential flow)
- ↑ **4=Exfiltration** (Exfiltration Controls 0.26 cfs)

Pond BASIN: Biofiltration Basin

Hydrograph



Blaze Mankato*MSE 24-hr 3 2-Year Rainfall=2.92"*

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 10

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA-1P: Proposed Site to East Runoff Area=14,867 sf 3.81% Impervious Runoff Depth=1.25"
Tc=7.0 min CN=81 Runoff=0.74 cfs 0.036 af

SubcatchmentDA-2P: Proposed Site to Runoff Area=91,500 sf 54.15% Impervious Runoff Depth=1.91"
Tc=7.0 min CN=90 Runoff=6.82 cfs 0.334 af

Reach PT: Proposed Site Total Inflow=0.99 cfs 0.370 af
Outflow=0.99 cfs 0.370 af

Pond BASIN: Biofiltration Basin Peak Elev=998.55' Storage=8,673 cf Inflow=6.82 cfs 0.334 af
Outflow=0.51 cfs 0.334 af

Total Runoff Area = 2.442 ac Runoff Volume = 0.370 af Average Runoff Depth = 1.82"
52.88% Pervious = 1.291 ac 47.12% Impervious = 1.151 ac

Summary for Subcatchment DA-1P: Proposed Site to East

Runoff = 0.74 cfs @ 12.15 hrs, Volume= 0.036 af, Depth= 1.25"
 Routed to Reach PT : Proposed Site Total

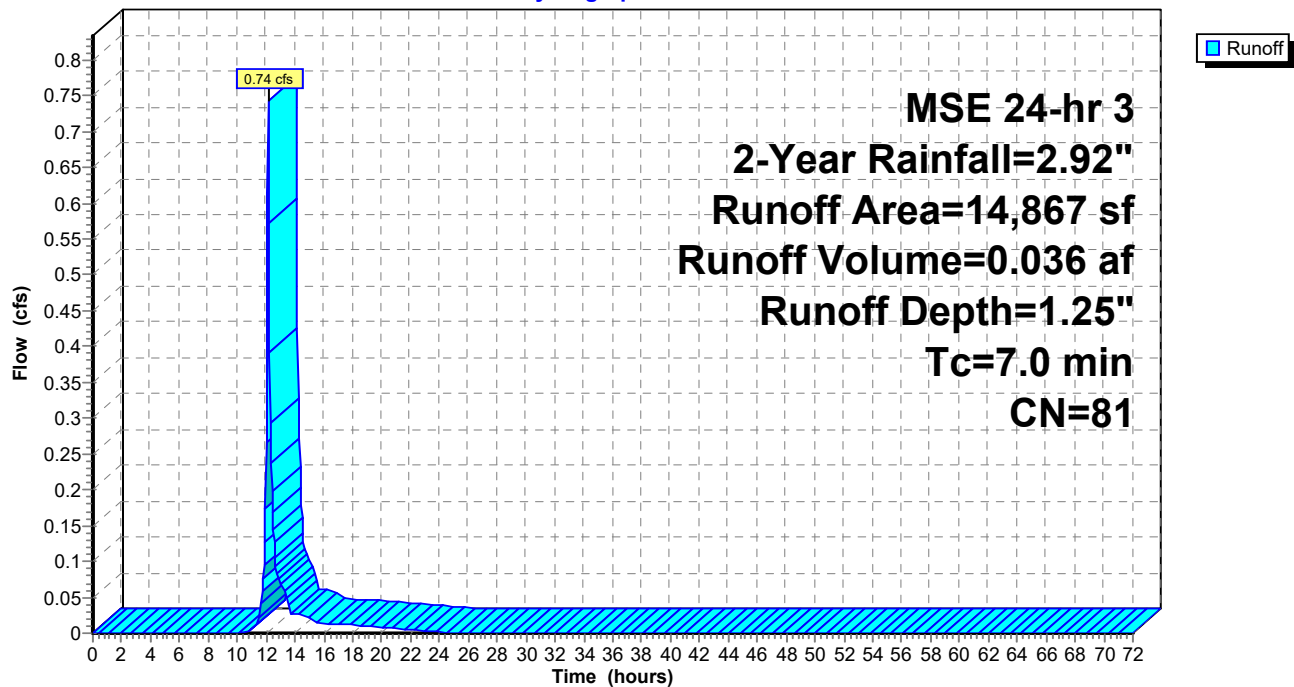
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 2-Year Rainfall=2.92"

Area (sf)	CN	Description
14,300	80	>75% Grass cover, Good, HSG D
567	98	Paved parking, HSG D
14,867	81	Weighted Average
14,300		96.19% Pervious Area
567		3.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0					Direct Entry,

Subcatchment DA-1P: Proposed Site to East

Hydrograph



Summary for Subcatchment DA-2P: Proposed Site to Biofiltration Basin

Runoff = 6.82 cfs @ 12.14 hrs, Volume= 0.334 af, Depth= 1.91"
 Routed to Pond BASIN : Biofiltration Basin

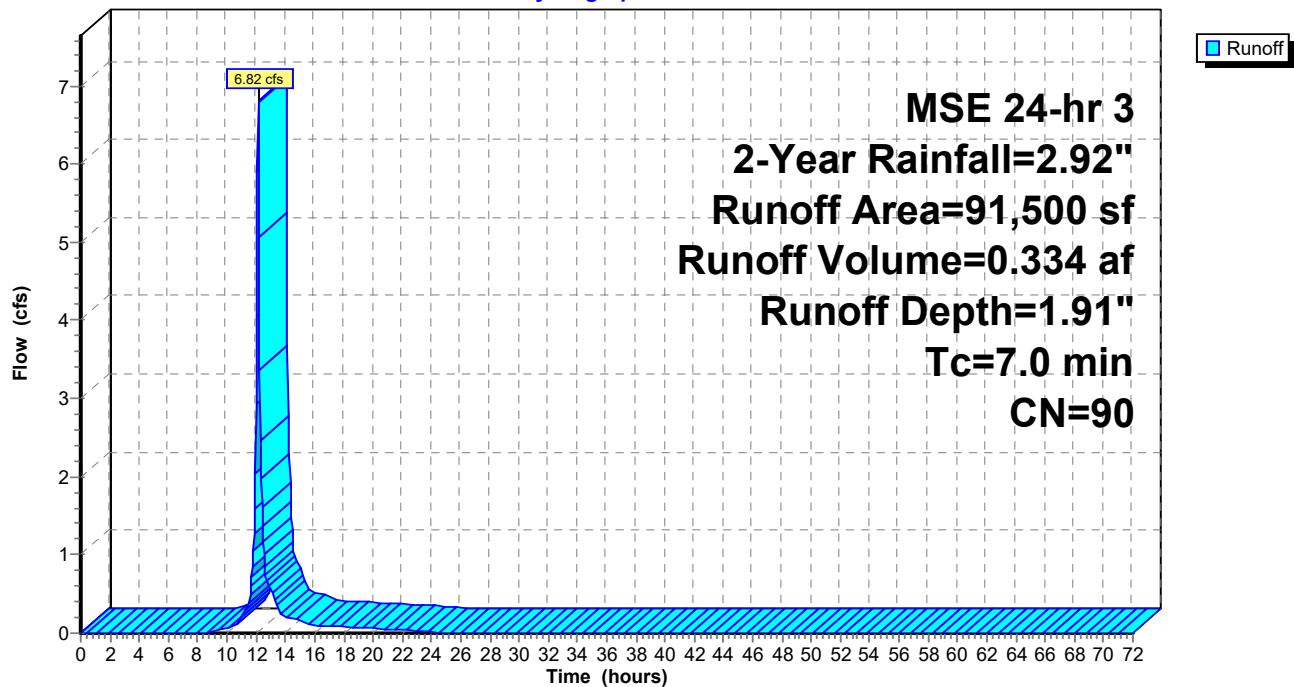
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 2-Year Rainfall=2.92"

Area (sf)	CN	Description
41,951	80	>75% Grass cover, Good, HSG D
49,549	98	Paved parking, HSG D
91,500	90	Weighted Average
41,951		45.85% Pervious Area
49,549		54.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0					Direct Entry,

Subcatchment DA-2P: Proposed Site to Biofiltration Basin

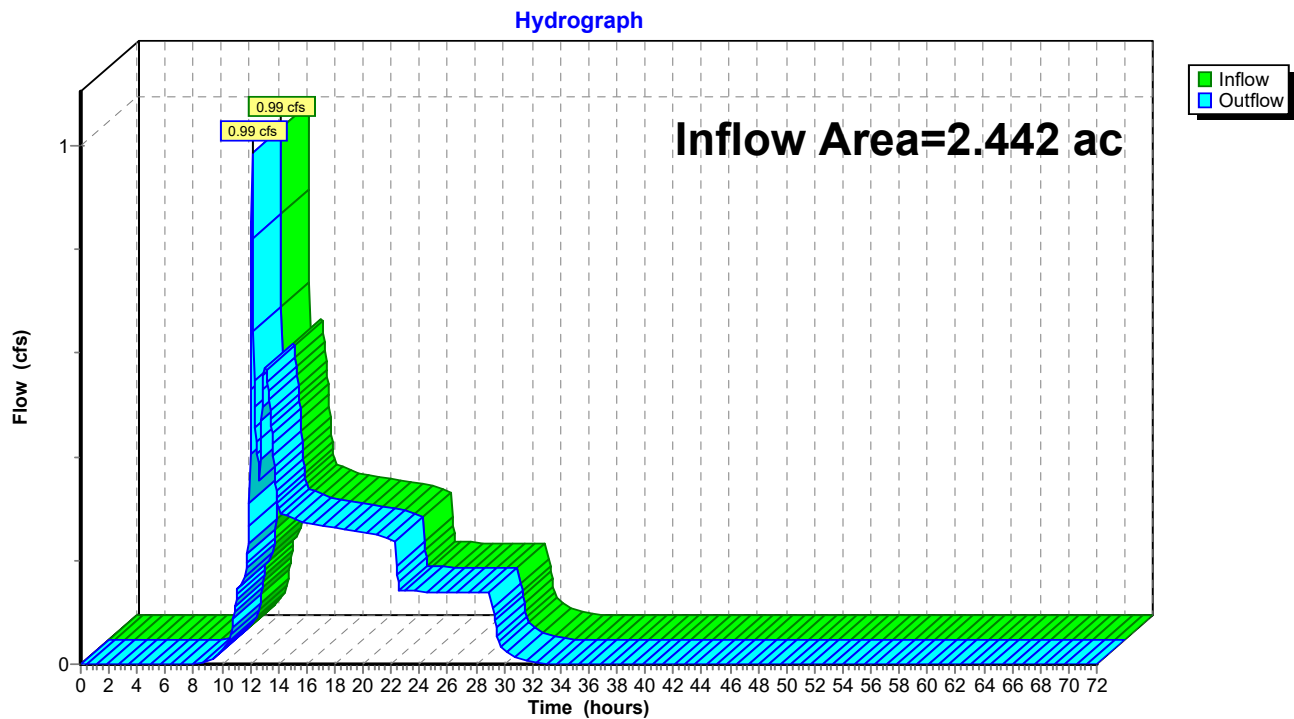
Hydrograph



Summary for Reach PT: Proposed Site Total

Inflow Area = 2.442 ac, 47.12% Impervious, Inflow Depth = 1.82" for 2-Year event
Inflow = 0.99 cfs @ 12.15 hrs, Volume= 0.370 af
Outflow = 0.99 cfs @ 12.15 hrs, Volume= 0.370 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach PT: Proposed Site Total

Blaze Mankato

MSE 24-hr 3 2-Year Rainfall=2.92"

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 14

Summary for Pond BASIN: Biofiltration Basin

Inflow Area = 2.101 ac, 54.15% Impervious, Inflow Depth = 1.91" for 2-Year event
 Inflow = 6.82 cfs @ 12.14 hrs, Volume= 0.334 af
 Outflow = 0.51 cfs @ 13.08 hrs, Volume= 0.334 af, Atten= 93%, Lag= 56.5 min
 Primary = 0.51 cfs @ 13.08 hrs, Volume= 0.334 af
 Routed to Reach PT : Proposed Site Total

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 998.55' @ 13.08 hrs Surf.Area= 11,449 sf Storage= 8,673 cf

Plug-Flow detention time= 339.7 min calculated for 0.334 af (100% of inflow)
 Center-of-Mass det. time= 339.9 min (1,132.4 - 792.5)

Volume	Invert	Avail.Storage	Storage Description
#1	997.50'	50,180 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
#2	995.50'	3,585 cf	32.30'W x 185.00'L x 2.00'H Prismatoid
			11,951 cf Overall x 30.0% Voids
		53,765 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.50	4,232	0	0
998.00	4,815	2,262	2,262
998.50	5,413	2,557	4,819
999.00	6,027	2,860	7,679
1,000.00	7,740	6,884	14,562
1,001.00	9,092	8,416	22,978
1,002.00	10,501	9,797	32,775
1,003.00	11,967	11,234	44,009
1,003.50	12,718	6,171	50,180

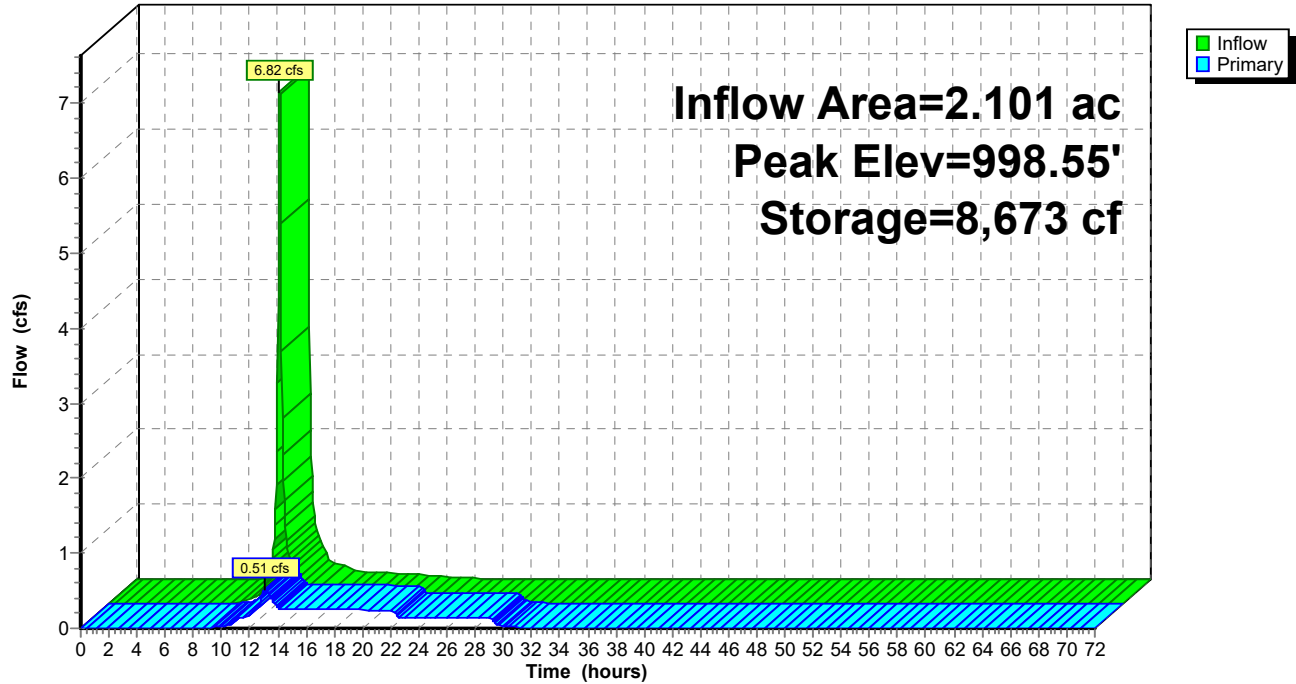
Device	Routing	Invert	Outlet Devices
#1	Primary	995.00'	15.0" Round Culvert L= 42.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 995.00' / 994.75' S= 0.0060 ' S= 0.0060 ' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.23 sf
#2	Device 1	998.50'	24.0" Horiz. Orifice/Grate C= 0.600 in 24.0" Grate (100% open area) Limited to weir flow at low heads
#3	Device 1	995.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 3	995.50'	1.000 in/hr Exfiltration over Surface area

Primary OutFlow Max=0.49 cfs @ 13.08 hrs HW=998.55' (Free Discharge)

- ↑ **1=Culvert** (Passes 0.49 cfs of 9.99 cfs potential flow)
- ↑ **2=Orifice/Grate** (Weir Controls 0.23 cfs @ 0.73 fps)
- ↑ **3=Orifice/Grate** (Passes 0.27 cfs of 3.16 cfs potential flow)
- ↑ **4=Exfiltration** (Exfiltration Controls 0.27 cfs)

Pond BASIN: Biofiltration Basin

Hydrograph



Blaze Mankato*MSE 24-hr 3 10-Year Rainfall=4.38"*

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 16

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA-1P: Proposed Site to East Runoff Area=14,867 sf 3.81% Impervious Runoff Depth=2.44"
Tc=7.0 min CN=81 Runoff=1.44 cfs 0.070 af

SubcatchmentDA-2P: Proposed Site to Runoff Area=91,500 sf 54.15% Impervious Runoff Depth=3.28"
Tc=7.0 min CN=90 Runoff=11.38 cfs 0.574 af

Reach PT: Proposed Site Total Inflow=6.24 cfs 0.644 af
Outflow=6.24 cfs 0.644 af

Pond BASIN: Biofiltration Basin Peak Elev=998.90' Storage=10,690 cf Inflow=11.38 cfs 0.574 af
Outflow=5.56 cfs 0.574 af

Total Runoff Area = 2.442 ac Runoff Volume = 0.644 af Average Runoff Depth = 3.16"
52.88% Pervious = 1.291 ac 47.12% Impervious = 1.151 ac

Summary for Subcatchment DA-1P: Proposed Site to East

Runoff = 1.44 cfs @ 12.14 hrs, Volume= 0.070 af, Depth= 2.44"
 Routed to Reach PT : Proposed Site Total

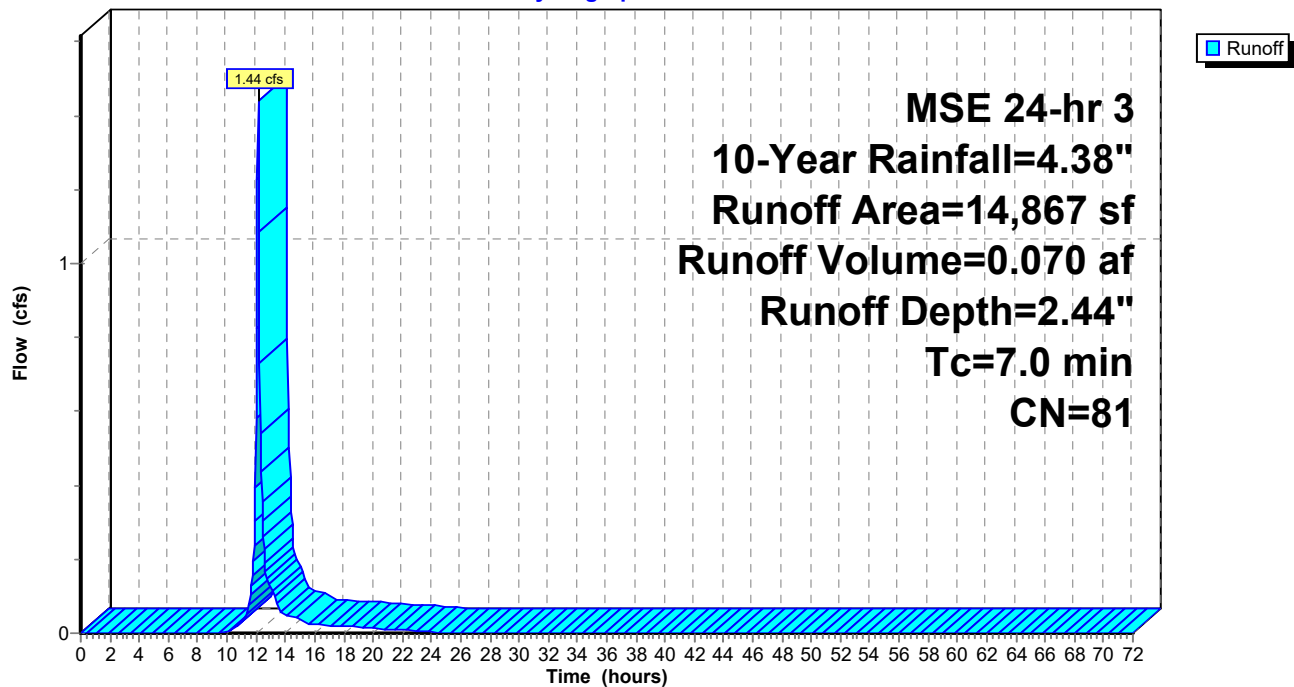
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 10-Year Rainfall=4.38"

Area (sf)	CN	Description
14,300	80	>75% Grass cover, Good, HSG D
567	98	Paved parking, HSG D
14,867	81	Weighted Average
14,300		96.19% Pervious Area
567		3.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0					Direct Entry,

Subcatchment DA-1P: Proposed Site to East

Hydrograph



Summary for Subcatchment DA-2P: Proposed Site to Biofiltration Basin

Runoff = 11.38 cfs @ 12.14 hrs, Volume= 0.574 af, Depth= 3.28"
 Routed to Pond BASIN : Biofiltration Basin

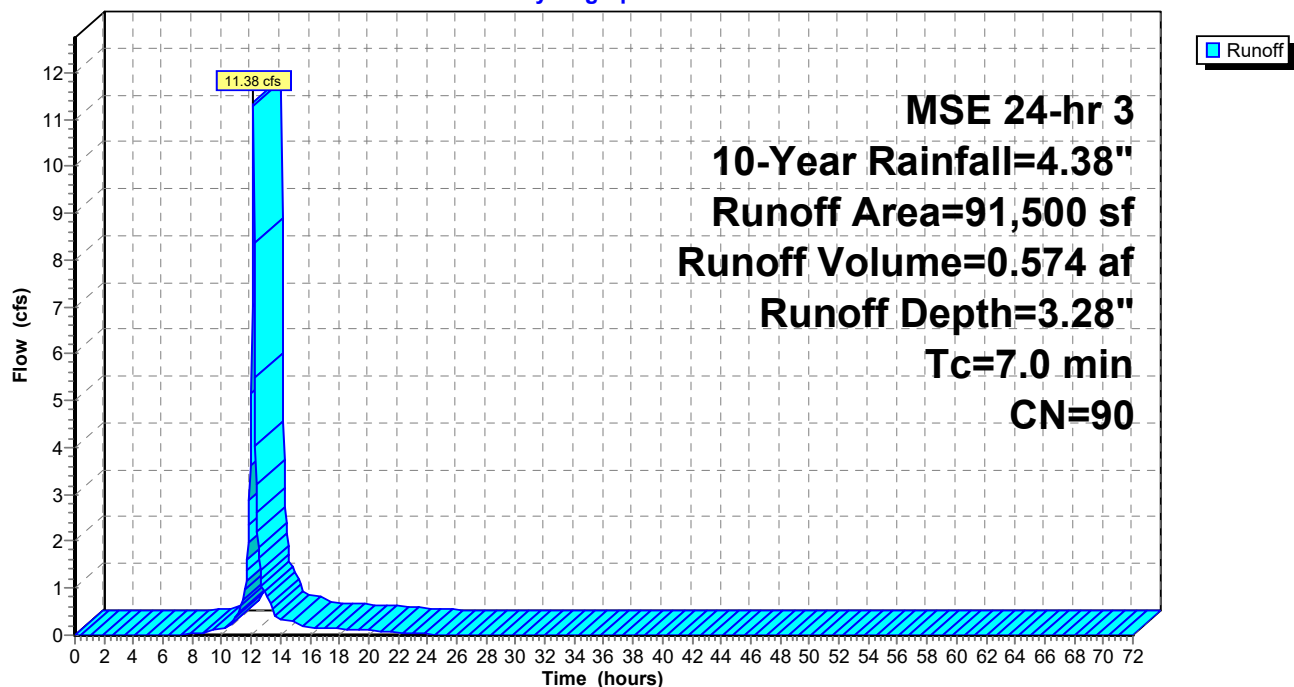
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 10-Year Rainfall=4.38"

Area (sf)	CN	Description
41,951	80	>75% Grass cover, Good, HSG D
49,549	98	Paved parking, HSG D
91,500	90	Weighted Average
41,951		45.85% Pervious Area
49,549		54.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0					Direct Entry,

Subcatchment DA-2P: Proposed Site to Biofiltration Basin

Hydrograph



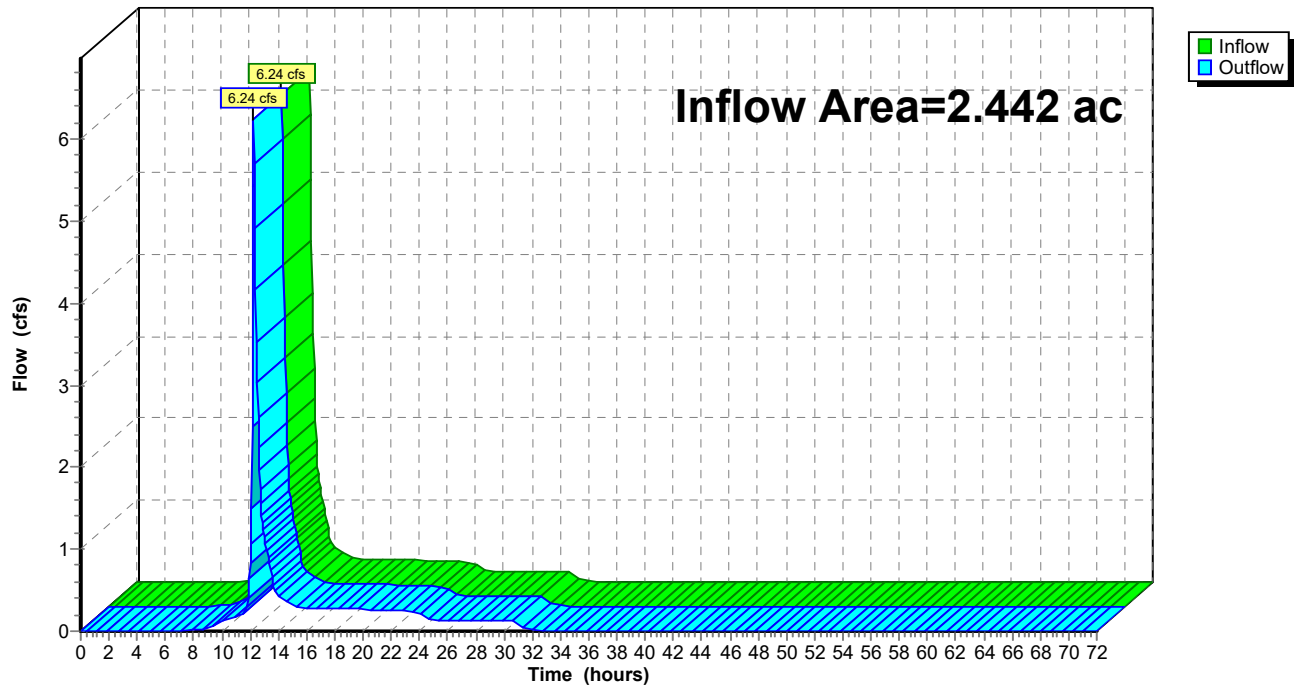
Summary for Reach PT: Proposed Site Total

Inflow Area = 2.442 ac, 47.12% Impervious, Inflow Depth = 3.16" for 10-Year event
Inflow = 6.24 cfs @ 12.26 hrs, Volume= 0.644 af
Outflow = 6.24 cfs @ 12.26 hrs, Volume= 0.644 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach PT: Proposed Site Total

Hydrograph



Blaze Mankato

MSE 24-hr 3 10-Year Rainfall=4.38"

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 20

Summary for Pond BASIN: Biofiltration Basin

Inflow Area = 2.101 ac, 54.15% Impervious, Inflow Depth = 3.28" for 10-Year event
 Inflow = 11.38 cfs @ 12.14 hrs, Volume= 0.574 af
 Outflow = 5.56 cfs @ 12.26 hrs, Volume= 0.574 af, Atten= 51%, Lag= 7.4 min
 Primary = 5.56 cfs @ 12.26 hrs, Volume= 0.574 af
 Routed to Reach PT : Proposed Site Total

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 998.90' @ 12.26 hrs Surf.Area= 11,884 sf Storage= 10,690 cf

Plug-Flow detention time= 238.4 min calculated for 0.574 af (100% of inflow)
 Center-of-Mass det. time= 238.7 min (1,020.4 - 781.8)

Volume	Invert	Avail.Storage	Storage Description
#1	997.50'	50,180 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
#2	995.50'	3,585 cf	32.30'W x 185.00'L x 2.00'H Prismatoid
			11,951 cf Overall x 30.0% Voids
		53,765 cf	Total Available Storage

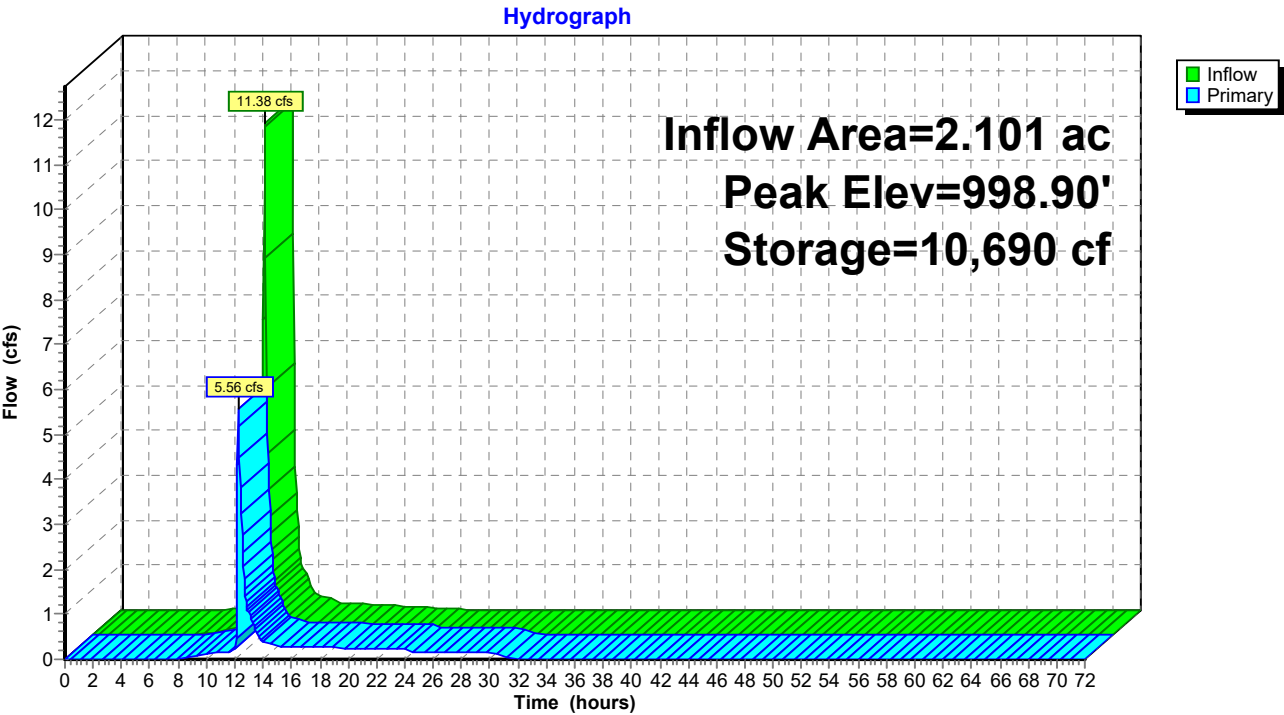
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.50	4,232	0	0
998.00	4,815	2,262	2,262
998.50	5,413	2,557	4,819
999.00	6,027	2,860	7,679
1,000.00	7,740	6,884	14,562
1,001.00	9,092	8,416	22,978
1,002.00	10,501	9,797	32,775
1,003.00	11,967	11,234	44,009
1,003.50	12,718	6,171	50,180

Device	Routing	Invert	Outlet Devices
#1	Primary	995.00'	15.0" Round Culvert L= 42.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 995.00' / 994.75' S= 0.0060 ' S= 0.0060 ' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.23 sf
#2	Device 1	998.50'	24.0" Horiz. Orifice/Grate C= 0.600 in 24.0" Grate (100% open area) Limited to weir flow at low heads
#3	Device 1	995.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 3	995.50'	1.000 in/hr Exfiltration over Surface area

Primary OutFlow Max=5.39 cfs @ 12.26 hrs HW=998.90' (Free Discharge)

- ↑ **1=Culvert** (Passes 5.39 cfs of 10.64 cfs potential flow)
- ↑ **2=Orifice/Grate** (Weir Controls 5.12 cfs @ 2.06 fps)
- ↑ **3=Orifice/Grate** (Passes 0.27 cfs of 3.35 cfs potential flow)
- ↑ **4=Exfiltration** (Exfiltration Controls 0.27 cfs)

Pond BASIN: Biofiltration Basin



Blaze Mankato*MSE 24-hr 3 100-Year Rainfall=7.41"*

Prepared by {enter your company name here}

Printed 12/19/2025

HydroCAD® 10.10-6a s/n 02676 © 2020 HydroCAD Software Solutions LLC

Page 22

Time span=0.00-72.00 hrs, dt=0.05 hrs, 1441 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

SubcatchmentDA-1P: Proposed Site to East Runoff Area=14,867 sf 3.81% Impervious Runoff Depth=5.19"
Tc=7.0 min CN=81 Runoff=2.97 cfs 0.148 af

SubcatchmentDA-2P: Proposed Site to Runoff Area=91,500 sf 54.15% Impervious Runoff Depth=6.23"
Tc=7.0 min CN=90 Runoff=20.73 cfs 1.090 af

Reach PT: Proposed Site Total Inflow=14.46 cfs 1.237 af
Outflow=14.46 cfs 1.237 af

Pond BASIN: Biofiltration Basin Peak Elev=999.60' Storage=15,179 cf Inflow=20.73 cfs 1.090 af
Outflow=11.78 cfs 1.090 af

Total Runoff Area = 2.442 ac Runoff Volume = 1.237 af Average Runoff Depth = 6.08"
52.88% Pervious = 1.291 ac 47.12% Impervious = 1.151 ac

Summary for Subcatchment DA-1P: Proposed Site to East

Runoff = 2.97 cfs @ 12.14 hrs, Volume= 0.148 af, Depth= 5.19"
 Routed to Reach PT : Proposed Site Total

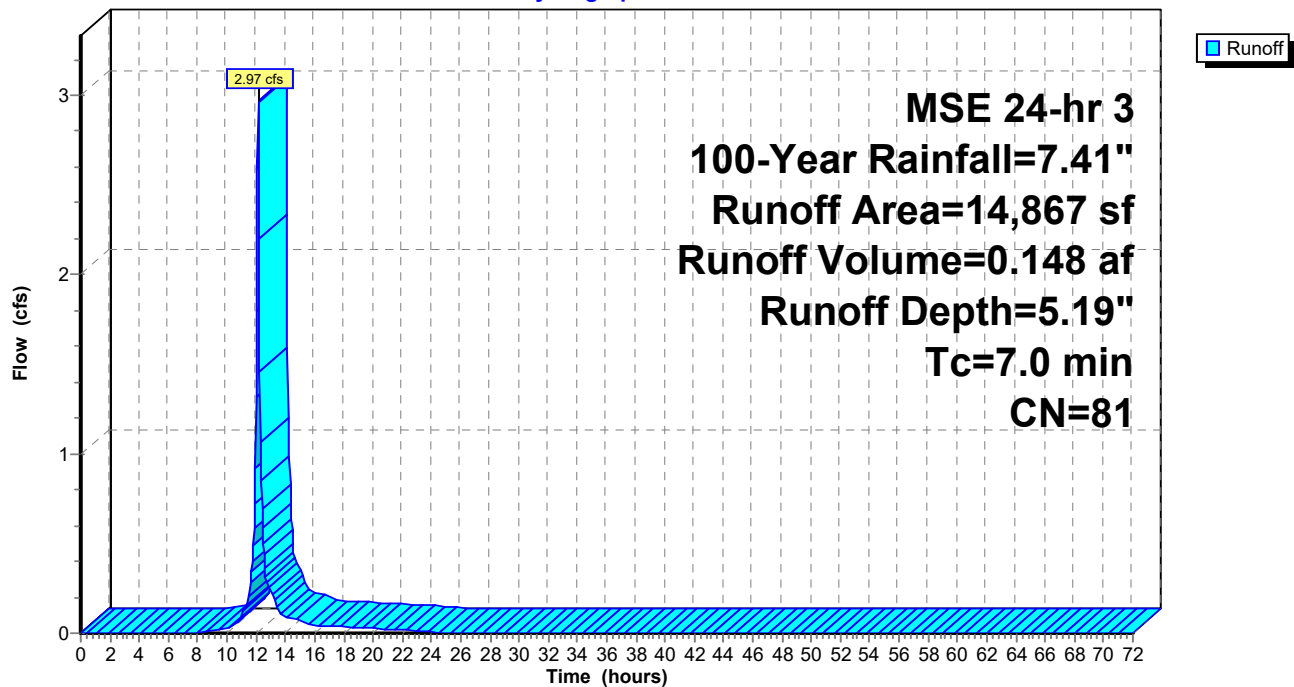
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 100-Year Rainfall=7.41"

Area (sf)	CN	Description
14,300	80	>75% Grass cover, Good, HSG D
567	98	Paved parking, HSG D
14,867	81	Weighted Average
14,300		96.19% Pervious Area
567		3.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0					Direct Entry,

Subcatchment DA-1P: Proposed Site to East

Hydrograph



Summary for Subcatchment DA-2P: Proposed Site to Biofiltration Basin

Runoff = 20.73 cfs @ 12.14 hrs, Volume= 1.090 af, Depth= 6.23"
 Routed to Pond BASIN : Biofiltration Basin

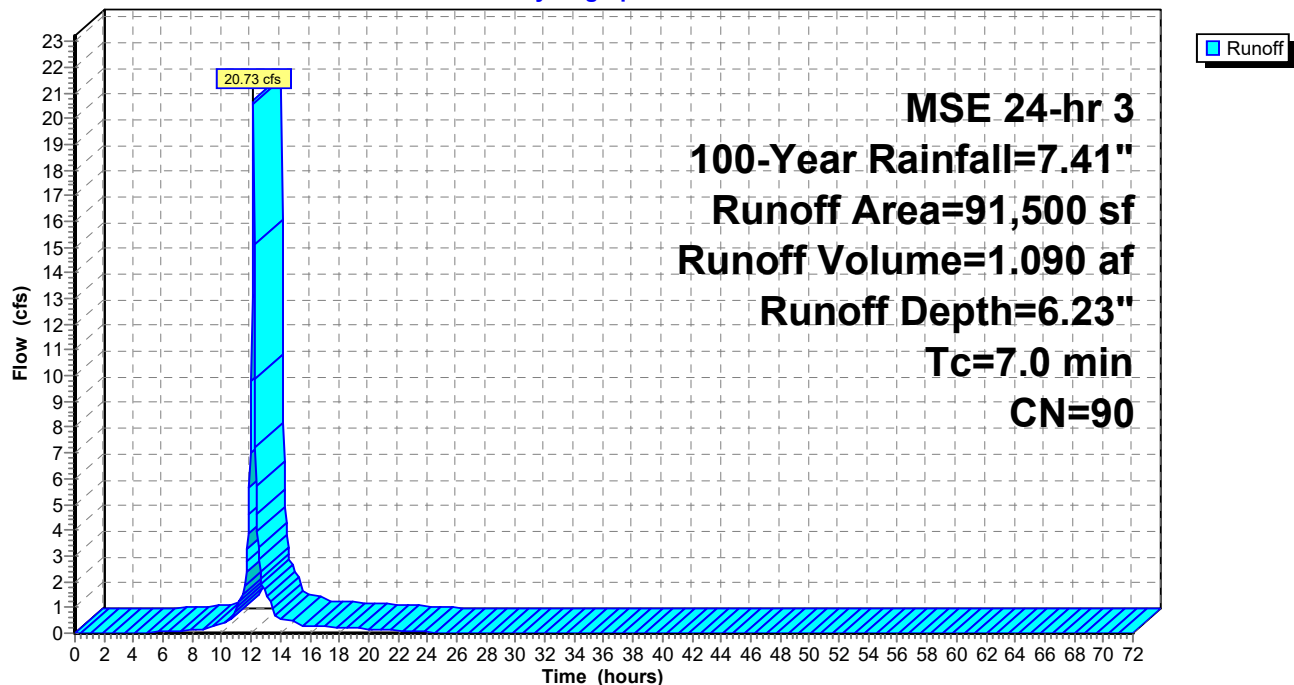
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 100-Year Rainfall=7.41"

Area (sf)	CN	Description
41,951	80	>75% Grass cover, Good, HSG D
49,549	98	Paved parking, HSG D
91,500	90	Weighted Average
41,951		45.85% Pervious Area
49,549		54.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0					Direct Entry,

Subcatchment DA-2P: Proposed Site to Biofiltration Basin

Hydrograph



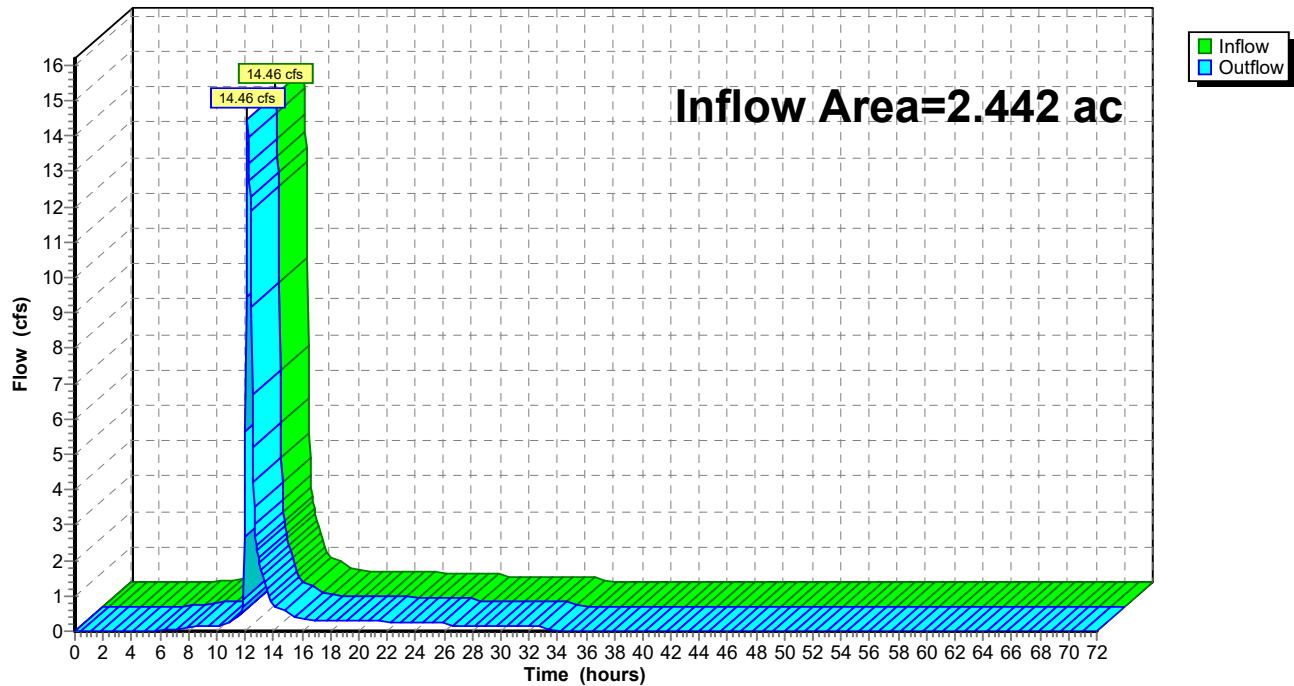
Summary for Reach PT: Proposed Site Total

Inflow Area = 2.442 ac, 47.12% Impervious, Inflow Depth = 6.08" for 100-Year event
Inflow = 14.46 cfs @ 12.15 hrs, Volume= 1.237 af
Outflow = 14.46 cfs @ 12.15 hrs, Volume= 1.237 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Reach PT: Proposed Site Total

Hydrograph



Summary for Pond BASIN: Biofiltration Basin

Inflow Area = 2.101 ac, 54.15% Impervious, Inflow Depth = 6.23" for 100-Year event
 Inflow = 20.73 cfs @ 12.14 hrs, Volume= 1.090 af
 Outflow = 11.78 cfs @ 12.23 hrs, Volume= 1.090 af, Atten= 43%, Lag= 5.7 min
 Primary = 11.78 cfs @ 12.23 hrs, Volume= 1.090 af
 Routed to Reach PT : Proposed Site Total

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs
 Peak Elev= 999.60' @ 12.23 hrs Surf.Area= 13,028 sf Storage= 15,179 cf

Plug-Flow detention time= 163.7 min calculated for 1.089 af (100% of inflow)
 Center-of-Mass det. time= 164.1 min (933.4 - 769.3)

Volume	Invert	Avail.Storage	Storage Description
#1	997.50'	50,180 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
#2	995.50'	3,585 cf	32.30'W x 185.00'L x 2.00'H Prismatoid
			11,951 cf Overall x 30.0% Voids
		53,765 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
997.50	4,232	0	0
998.00	4,815	2,262	2,262
998.50	5,413	2,557	4,819
999.00	6,027	2,860	7,679
1,000.00	7,740	6,884	14,562
1,001.00	9,092	8,416	22,978
1,002.00	10,501	9,797	32,775
1,003.00	11,967	11,234	44,009
1,003.50	12,718	6,171	50,180

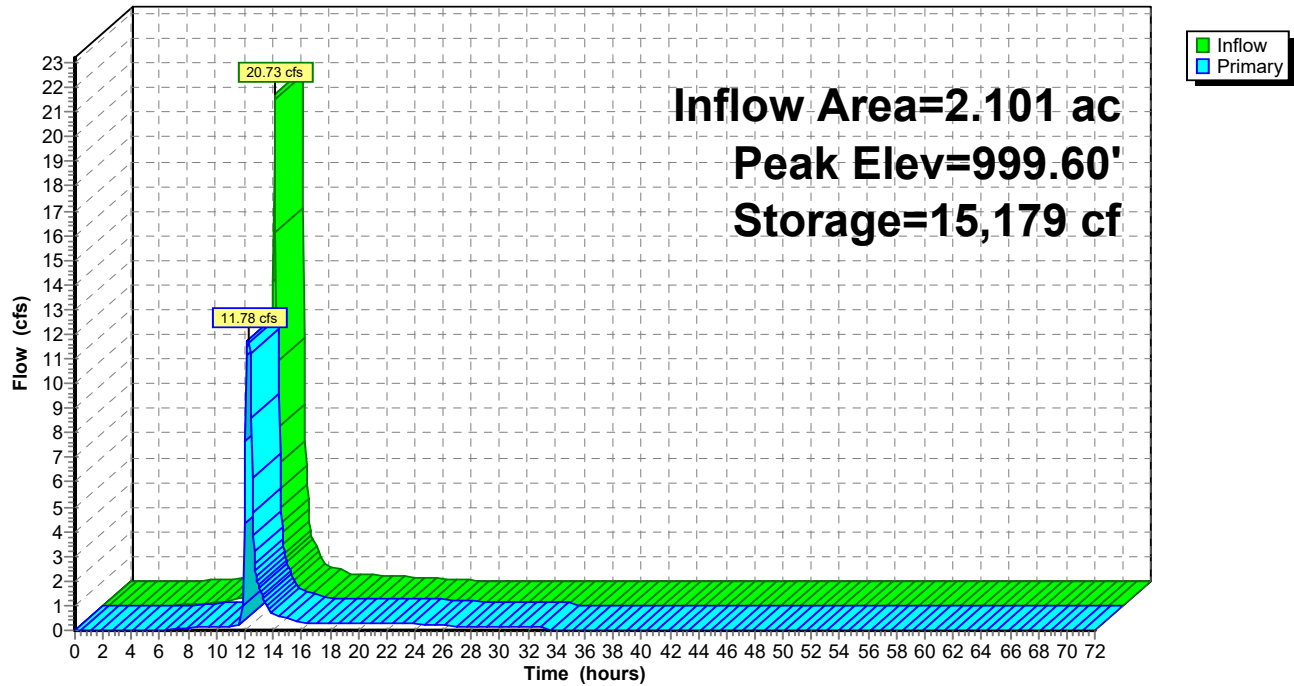
Device	Routing	Invert	Outlet Devices
#1	Primary	995.00'	15.0" Round Culvert L= 42.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 995.00' / 994.75' S= 0.0060 ' S= 0.0060 ' Cc= 0.900 n= 0.013 Concrete pipe, straight & clean, Flow Area= 1.23 sf
#2	Device 1	998.50'	24.0" Horiz. Orifice/Grate C= 0.600 in 24.0" Grate (100% open area) Limited to weir flow at low heads
#3	Device 1	995.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 3	995.50'	1.000 in/hr Exfiltration over Surface area

Primary OutFlow Max=11.76 cfs @ 12.23 hrs HW=999.59' (Free Discharge)

- ↑ **1=Culvert** (Inlet Controls 11.76 cfs @ 9.59 fps)
- ↑ **2=Orifice/Grate** (Passes < 15.78 cfs potential flow)
- ↑ **3=Orifice/Grate** (Passes < 3.70 cfs potential flow)
- ↑ **4=Exfiltration** (Passes < 0.30 cfs potential flow)

Pond BASIN: Biofiltration Basin

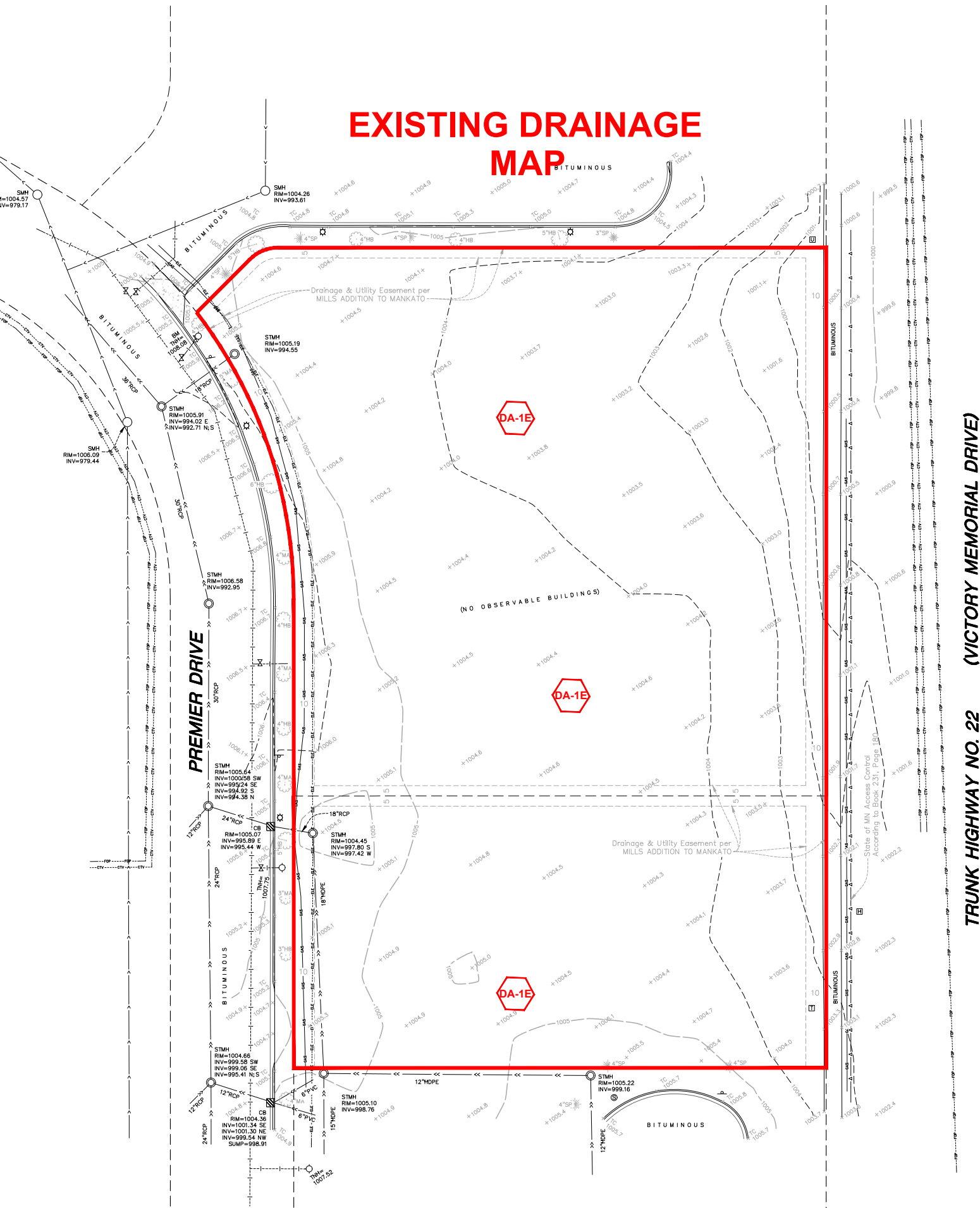
Hydrograph



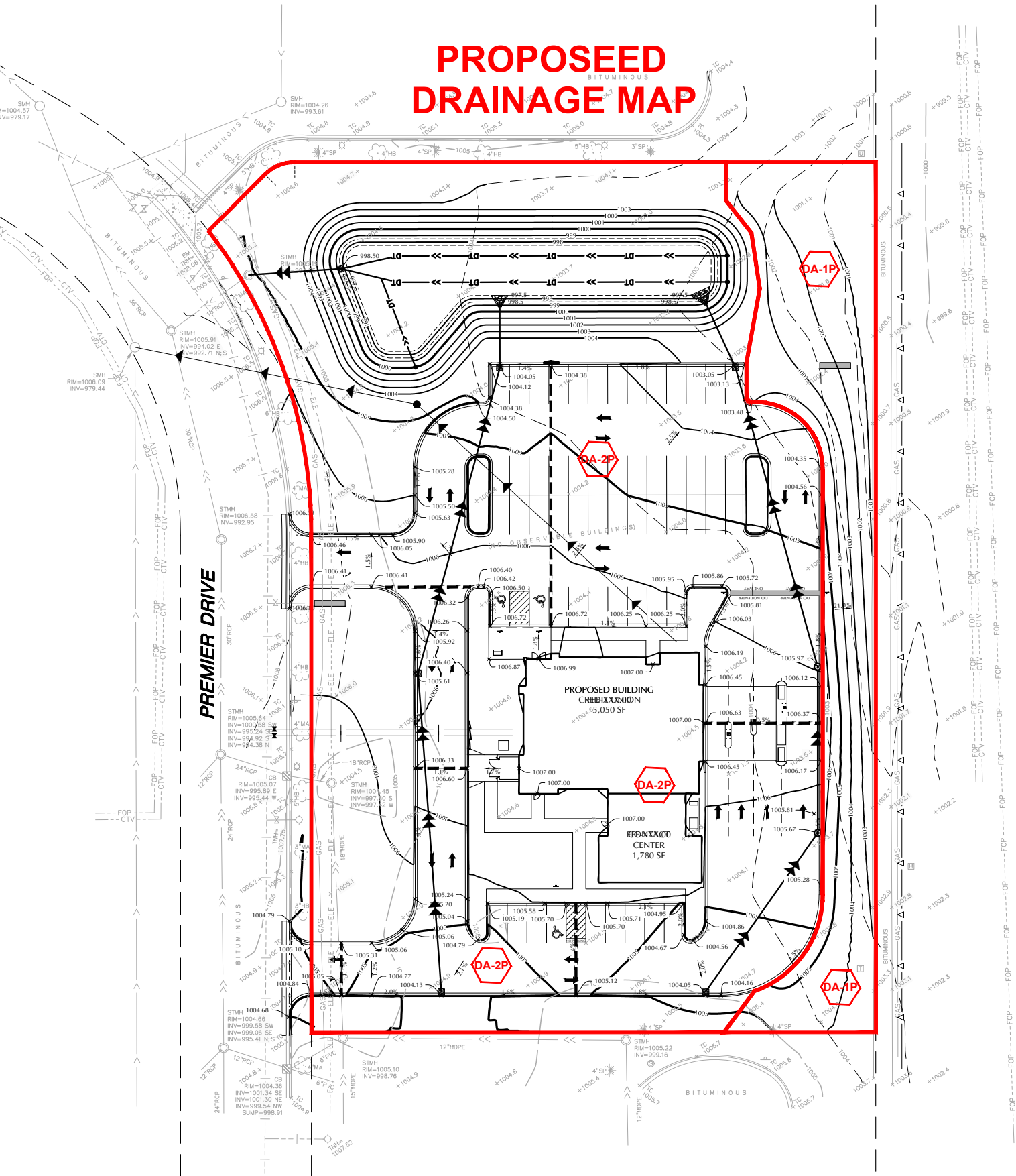
Figures

Existing Drainage Exhibit
Proposed Drainage Exhibit
Mids Existing
Mids Proposed

EXISTING DRAINAGE MAP



PROPOSED DRAINAGE MAP



VICTORY MEMORIAL DRIVE

TRUNK HIGHWAY NO. 22

Project Information

Calculator Version:	Version 3: January 2017
Project Name:	Blaze Mankato Existing
User Name / Company Name:	Loucks
Date:	12/19/25
Project Description:	
Construction Permit?:	Yes

Site Information

Retention Requirement (inches):	1.1
Site's Zip Code:	56001
Annual Rainfall (inches):	30.7
Phosphorus EMC (mg/l):	0.3
TSS EMC (mg/l):	54.5

Total Site Area

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed				2.429	2.429
			Impervious Area (acres)		0.013
			Total Area (acres)		2.442

Site Areas Routed to BMPs

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed					0
			Impervious Area (acres)		
			Total Area (acres)		0

Summary Information

Performance Goal Requirement

Performance goal volume retention requirement: 52 ft³
Volume removed by BMPs towards performance goal: ft³
Percent volume removed towards performance goal %

Annual Volume and Pollutant Load Reductions

Post development annual runoff volume 1.4266 acre-ft
Annual runoff volume removed by BMPs: acre-ft
Percent annual runoff volume removed: %

Post development annual particulate P load: 0.64 lbs
Annual particulate P removed by BMPs: lbs
Post development annual dissolved P load: 0.524 lbs
Annual dissolved P removed by BMPs: lbs
Percent annual total phosphorus removed: %

Post development annual TSS load: 211.5 lbs
Annual TSS removed by BMPs: lbs
Percent annual TSS removed: %

BMP Summary

Performance Goal Summary

BMP Name	BMP Volume Capacity (ft ³)	Volume Recieved (ft ³)	Volume Retained (ft ³)	Volume Outflow (ft ³)	Percent Retained (%)

Annual Volume Summary

BMP Name	Volume From Direct Watershed (acre-ft)	Volume From Upstream BMPs (acre-ft)	Volume Retained (acre-ft)	Volume outflow (acre-ft)	Percent Retained (%)

Particulate Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)

Dissolved Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
----------	---	--	---------------------------	--------------------------	-------------------------

TSS Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
----------	---	--	---------------------------	--------------------------	-------------------------

BMP Schematic

Project Information

Calculator Version:	Version 3: January 2017
Project Name:	Blaze Mankato Proposed
User Name / Company Name:	Loucks
Date:	12/19/25
Project Description:	
Construction Permit?:	Yes

Site Information

Retention Requirement (inches):	1.1
Site's Zip Code:	56001
Annual Rainfall (inches):	30.7
Phosphorus EMC (mg/l):	0.3
TSS EMC (mg/l):	54.5

Total Site Area

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed				1.291	1.291
			Impervious Area (acres)		1.151
			Total Area (acres)		2.442

Site Areas Routed to BMPs

Land Cover	A Soils (acres)	B Soils (acres)	C Soils (acres)	D Soils (acres)	Total (acres)
Forest/Open Space - Undisturbed, protected forest/open space or reforested land					0
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed				0.963	0.963
			Impervious Area (acres)		1.137
			Total Area (acres)		2.1

Summary Information

Performance Goal Requirement

Performance goal volume retention requirement:	4596	ft ³
Volume removed by BMPs towards performance goal:	1366	ft ³
Percent volume removed towards performance goal	30	%

Annual Volume and Pollutant Load Reductions

Post development annual runoff volume	3.2608	acre-ft
Annual runoff volume removed by BMPs:	0.6212	acre-ft
Percent annual runoff volume removed:	19	%

Post development annual particulate P load:	1.463	lbs
Annual particulate P removed by BMPs:	1.148	lbs
Post development annual dissolved P load:	1.197	lbs
Annual dissolved P removed by BMPs:	0.406	lbs
Percent annual total phosphorus removed:	58	%

Post development annual TSS load:	483.4	lbs
Annual TSS removed by BMPs:	307.4	lbs
Percent annual TSS removed:	64	%

BMP Summary

Performance Goal Summary

BMP Name	BMP Volume Capacity (ft ³)	Volume Recieved (ft ³)	Volume Retained (ft ³)	Volume Outflow (ft ³)	Percent Retained (%)
1 - Bioretention basin (with underdrain)	1366	4540	1366	3174	30

Annual Volume Summary

BMP Name	Volume From Direct Watershed (acre-ft)	Volume From Upstream BMPs (acre-ft)	Volume Retained (acre-ft)	Volume outflow (acre-ft)	Percent Retained (%)
1 - Bioretention basin (with underdrain)	3.0414	0	0.6212	2.4202	20

Particulate Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
1 - Bioretention basin (with underdrain)	1.365	0	1.1478	0.2172	84

Dissolved Phosphorus Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
1 - Bioretention basin (with underdrain)	1.1168	0	0.4059	0.7109	36

TSS Summary

BMP Name	Load From Direct Watershed (lbs)	Load From Upstream BMPs (lbs)	Load Retained (lbs)	Outflow Load (lbs)	Percent Retained (%)
1 - Bioretention basin (with underdrain)	450.85	0	307.35	143.5	68

BMP Schematic



To: Pat McCann, AVP Facilities
Blaze Credit Union

From: Matt Pacyna, PE, Principal
Transportation Collaborative & Consultants, LLC

Date: December 22, 2025

Subject: Blaze Credit Union Traffic Review, Mankato, MN

INTRODUCTION

TC2 conducted a traffic review of the proposed Blaze Credit Union in the City of Mankato. The subject site is generally bound by Highway 22 to the east, Premier Drive to the west / south, and Victory Drive / CR 3 to the north. The proposed development is a 6,830 square foot credit union located on two vacant parcels within the overall Fleet Farm development area. The purpose of the traffic review is to document the site changes with respect to trip generation, site operations, and overall traffic impact to the area, as well as identify any improvements or considerations to ensure safe and efficient operations for all users. The following provides an overview of the traffic review.

PROJECT DETAILS

The proposed development is a 6,830 square foot credit union building, of which a portion (~1,780 square feet) would be an operations call center. There are three (3) drive-thru lanes and a 16'-wide bypass lane that could also accommodate a future ATM. A total of 20 employees are anticipated at the site. Hours of operation are Monday-Thursday from 9 a.m. to 5 p.m., Friday from 9 a.m. to 6 p.m., and Saturday from 9 a.m. to 12 p.m.

Two full-access driveways are planned along Premier Drive. The north access is about 175 feet south of the Fleet Farm gas station driveway and the south access is about 180 feet from the north access and almost across from the central Fleet Farm driveway; the south driveway cannot be directly aligned with Fleet Farm given the current parcel boundary. The credit union would be open for business in 2027.



TRIP GENERATION

To quantify the expected trip generation of the proposed development, an estimate was developed using the *ITE Trip Generation Manual, 12th Edition*, which includes trips for typical weekday a.m. and p.m. peak hours, as well as daily. Given that trip generation of banks / credit unions can vary, three variables (i.e., building size, drive-thru lanes, and employees) were utilized to better define the potential range of trip generation. The trip generation summary, shown in [Table 1](#), indicates that the proposed development is expected to generate on average 51 a.m. peak hour (30 in / 21 out), 113 p.m. peak hour (55 in / 58 out), and 610 daily site trips (305 in / 305 out). Given the credit union hours of operation, the a.m. and p.m. peak hours of the proposed development are anticipated to be 8:30 to 9:30 a.m. and 4 to 5 p.m., which are relatively similar to the peak hours of the adjacent roadways.

Table 1 Trip Generation Summary

Land Use Type (ITE Code)	Variable	AM Peak Hour		PM Peak Hour		Daily
		In	Out	In	Out	
Drive-In Bank (912) - Building Size	6,830 SF	39	29	72	72	676
Drive-In Bank (912) - Drive-Thru Lanes	4 Lanes*	21	14	53	55	494
Drive-In Bank (912) - Employees	20 employees	31	19	41	46	656
Average Site Trips		30	21	55	58	610

* Trip Generation is based on the potential future conversion of the planned bypass lane

Note that trips to banks / credit unions are often completed as part of other trips, such as going to the coffee shop, gas station, or Fleet Farm (in this instance) and are already traveling along the adjacent roadways; these trips are referred to as “pass-by” trips. ITE indicates that “pass-by” trips for “drive-in bank” type uses can range from 25 to 35% of the overall site trips. If these reductions were applied to the trip generation estimate, the resultant impact to the adjacent roadways could be 65 to 75% of the site trips shown in [Table 1](#). However, to provide a more conservative assessment, no “pass-by” reductions were applied as part of this review.

TRAFFIC IMPACTS

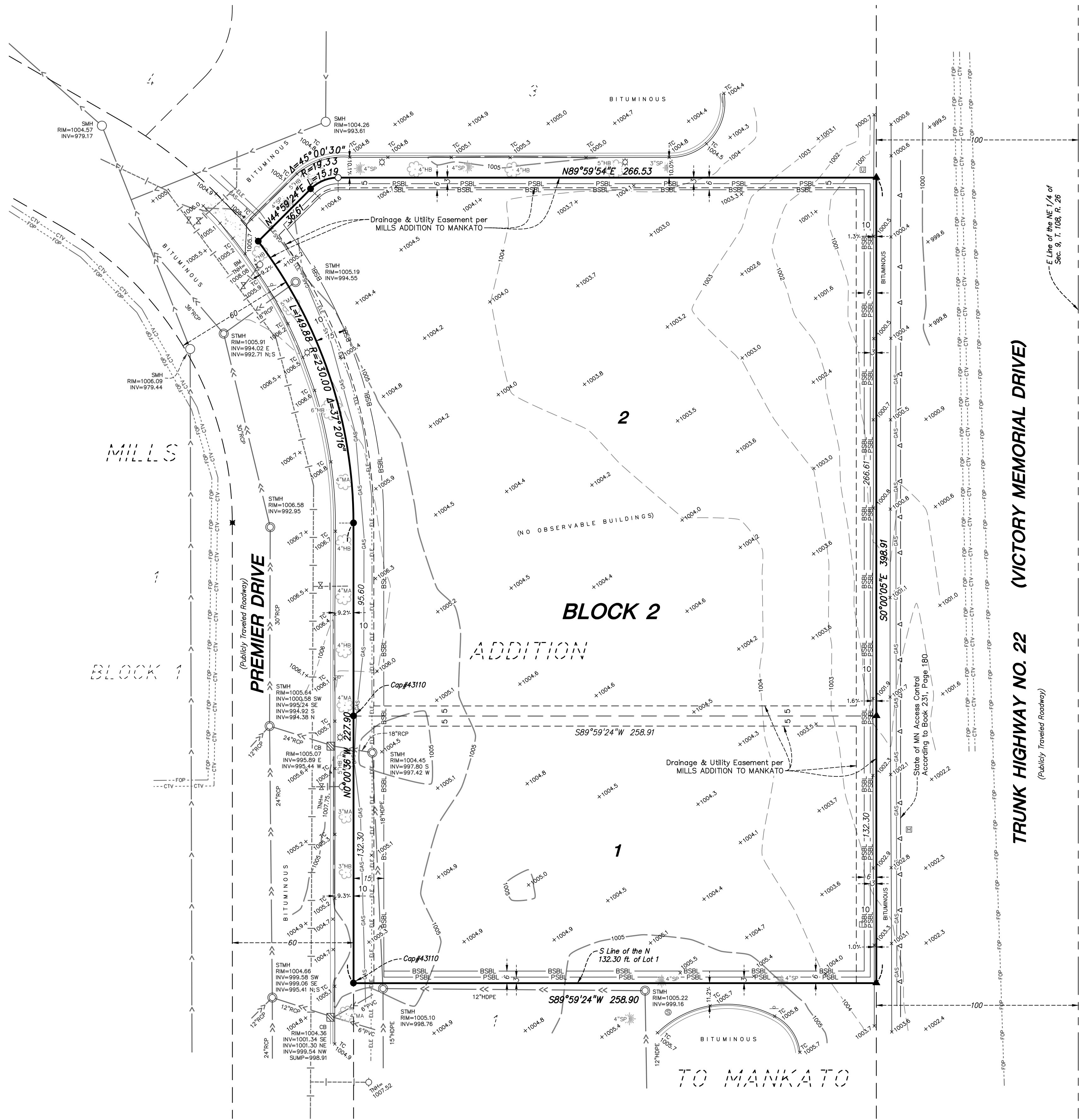
Premier Drive is a 3-lane roadway with one (1) lane in each direction and a center two-way left-turn lane. This facility type has a planning level roadway capacity of nearly 15,000 vehicles per day (vpd). Existing average daily traffic (ADT) volumes along Premier Drive are estimated to range from 2,600 to 4,000 vpd. Victory Drive and Hwy 22 are both 4-lane divided roadways, which have a planning level capacity of over 28,000 vpd. Existing ADT volumes along Victory Drive and Hwy 22 are 9,100 vpd and 17,200 vpd, respectively. This information indicates that area roadways are currently operating well under capacity.

The proposed development is estimated to generate between 500 and 700 daily trips to / from the site. These trips would be distributed along Premier Drive to the north / south and eventually utilize Victory Drive and / or Hwy 22. Future ADT volumes along adjacent roadways within the study area, with the additional traffic from the proposed development, are expected to continue to be well under capacity. In addition, the peak hour site trip generation represents one (1) or two (2) additional vehicles per minute along Premier Drive; this level of peak hour trip generation is not expected to impact corridor / intersection operations or result in any significant change in area queuing. Thus, no infrastructure improvements are needed to support the proposed development from a capacity perspective.

SITE PLAN REVIEW

A preliminary review of the proposed site plan does not indicate any significant issues with respect to drive-thru stacking, circulation, or parking. Thus, the following site plan items are offered for consideration or further discussion:

- 1) There is a total of 300 feet of drive-thru stacking distance (i.e., 3-lanes at 100 feet), which can accommodate approximately 12 to 15 vehicles before queues would begin to impact site circulation. At this amount of drive-thru storage, no queuing impacts to circulation are anticipated.
- 2) Review proposed signage and landscaping to avoid creating any sight distance issues.
- 3) Confirm truck (i.e., garbage / recycling, delivery, and emergency services) maneuverability to ensure adequate circulation is provided.



LEGEND

● FOUND 1/2 INCH IRON MONUMENT MARKED '41643' UNLESS SHOWN OTHERWISE	⊙ GAS METER	===== CONCRETE CURB	--->--- STORM SEWER
○ SET 1/2 INCH X 14 INCH IRON MONUMENT, MARKED 'LS 48988'	— GUY WIRE	===== CONCRETE	--->--- SANITARY SEWER
▲ FOUND NAIL	⊠ HAND HOLE	--- 972 --- CONTOUR	--- --- WATERMAIN
✱ CHISELED X	⊗ LIGHT POLE	• 972.5 • SPOT ELEVATION	----- MAPPED WATERMAIN
⊠ CATCH BASIN	⊗ POWER POLE	☀ CONIFEROUS TREE	---ELE--- UNDERGROUND ELECTRIC
⊙ STORM MANHOLE	⊗ ROOF DRAIN	SP SPRUCE	-----ELE----- MAPPED UNDERGROUND ELECTRIC
○ SANITARY MANHOLE	⊠ TELEPHONE PEDESTAL	☀ DECIDUOUS TREE	---GAS--- UNDERGROUND GAS
○ HYDRANT	⊠ UTILITY PEDESTAL	AS ASH	-----CTV----- MAPPED UNDERGROUND CABLE TV
⊠ GATE VALVE	⊠ SIGN	HB HACKBERRY	-----FOP----- MAPPED UNDERGROUND FIBER OPTIC
⊠ ELECTRIC TRANSFORMER	⊠ DISABLED PARKING STALL	MA MAPLE	---BSBL--- BUILDING SETBACK LINE
⊙ ELECTRIC METER	1 SCHEDULE B II ITEM	TR TREE (GEN)	---PSBL--- PARKING SETBACK LINE
			---Δ--- RESTRICTED ACCESS

DESCRIPTION OF PROPERTY SURVEYED

(Per Schedule A of the herein referenced Title Commitment)

Lot 2, Block 1, Mills Addition to Mankato, Blue Earth County, Minnesota.

The North 132.30 feet of Lot 1, Block 1, Mills Addition to Mankato, Blue Earth County, Minnesota.

TITLE COMMITMENT EXCEPTIONS

(Per Schedule B, Part II of the herein referenced Title Commitment)

The property depicted on this survey and the easements of record shown hereon are the same as the property and the easements described in the Commitment for Title Insurance issued by _____ Title Insurance Company, File No. _____ issued on _____, 202_, effective date _____, 202_. The numbers below correspond to those in the title commitment.

do not require comment.

#. Title Exception. Summary of easement location. Shown hereon. Not shown hereon.

Reasons for not being shown:

As shown and labeled per plat hereon.

As shown hereon along the perimeter of the property.

As shown hereon near the _____ part of the property.

The easements are blanketed in nature and is not shown hereon.

The location cannot be determined from the record document and is not shown hereon.

The easement is not on or adjacent to the surveyed property and is not shown hereon.

The easement limits access to an otherwise abutting right of way and is shown hereon.

The documents are illegible and is not shown hereon.

The easement was terminated per Doc. No. _____ (Title exception No. X).

The surveyor has information indicating that it may have been released or otherwise terminated.

The easement shown hereon is per a graphic depiction on an exhibit within this document.

There was no observed evidence at the time of the fieldwork.

The agreement is blanket in nature. The _____ is shown hereon.

Survey not provided to us. Existing features shown hereon.

ALTA/NSPS OPTIONAL TABLE A NOTES

(The following items refer to Table A optional survey responsibilities and specifications)

- Monuments placed (or a reference monument or witness to the corner) at all major corners of the boundary of the property, unless already marked or referenced by existing monuments or witnesses to the corner are shown hereon.
- The address, as disclosed in documents provided to the surveyor, obtained by the surveyor, or observed while conducting the fieldwork is 1831 Premier Drive, Mankato, Minnesota 56001.
- This property is contained in Zone X (areas determined to be outside the 0.2% annual chance floodplain) per Flood Insurance Rate Map No. 27013C0115F, Community Panel No. 2752420115F, effective date of February 22, 2024.
- The Gross land area is 106,367 +/- square feet or 2.44 +/- acres.
- (a) Any zoning classification, setback requirements, height and floor space area restrictions, and parking requirements, shown hereon, was researched to the best of our ability and is open to interpretation. Per the City of Mankato Zoning Map and City Code, on December 8, 2025, information for the subject property is as follows:

Zone B-3 Highway Business District
Building Setbacks: Front 15 feet, Side 6 feet, Rear 6 feet;
Parking Setbacks: Front 15 feet, Side 3 feet, Rear 3 feet;
Maximum Floor Area Ratio: 1.0;
- (a) Exterior dimensions of all buildings are shown at ground level.
- Substantial features observed in the process of conducting fieldwork, are shown hereon.
- There are no striped parking stalls on this site.
- (a) We have shown underground utilities on and/or serving the surveyed property per Gopher State One-Call Ticket Nos. 253222774 & 253222784. The following utilities and municipalities were notified:

CHARTER COMMUNICATIONS (800)811-7981 CITY OF MANKATO (507)387-8600
JAGUAR COMMUNICATIONS (507)219-8081 METRO FIBERNET, LLC (507)219-8081
CENTER POINT ENERGY (608)223-2014 MNDOT (651)366-5750
XCEL ENERGY (800)848-7558 ZAYO BANDWIDTH (800)961-6500
CONSOLIDATED COMMUNICATIONS (800)778-9140

- Utility operators do not consistently respond to locate requests through the Gopher State One Call service for surveying purposes such as this. Those utility operators that do respond, often will not locate utilities from their main line to the customer's structure or facility. They consider those utilities "private" installations that are outside their jurisdiction. These "private" utilities on the surveyed property or adjoining properties, may not be located since most operators will not mark such "private" utilities. A private utility locator may be contacted to investigate these utilities further, if requested by the client.
- Maps provided by those notified above, either along with a field location or in lieu of such a location, are very often inaccurate or inconclusive. EXTREME CAUTION MUST BE EXERCISED BEFORE AN EXCAVATION TAKES PLACE ON OR NEAR THIS SITE. BEFORE DIGGING, YOU ARE REQUIRED BY LAW TO NOTIFY GOPHER STATE ONE CALL AT LEAST 48 HOURS IN ADVANCE AT 811 or (651) 454-0002.

SURVEY REPORT

- The Surveyor was not provided utility easement documents for the subject property except for those shown on the Survey.
- The bearings for this survey are based on the Blue Earth County Coordinate System NAD 83 (1996 Adjust).
- Originating Benchmark: MnDOT Survey Disk #0714 J, in Mankato, 165.0 feet north of an entrance ramp from Trunk Highway 22 to Trunk Highway 14 & Trunk Highway 60 westbound, at the junction of Trunk Highway 22 and Trunk Highway 14 & Trunk Highway 60 in Mankato, at Trunk Highway 22 milepoint 52.9, 97.0 feet west of southbound Trunk Highway 22, 3.0 feet east of the fence corner at the right-of-way, 0.6 foot east of a witness post.
Elevation = 1006.68 feet (NGVD29)

Site Benchmark: Top nut of hydrant near the northwest corner of the site.
Elevation = 1008.08 feet (NGVD29)
- Tree diameters shown hereon are measured at breast height in inches.

CERTIFICATION

To Insured; Lender; and Title Insurance Company:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1 - 4, 6(a), 7(a), 8, 9 and 11(a) of Table A thereof. The field work was completed on 11/21/25.

Date of Plat or Map: 12/11/25

Max L. Stanislaw
mstanislaw@sinc.com
Minnesota License No. 48988



0 30 60
SCALE IN FEET

BLAZE
MANKATO

1831 PREMIER DRIVE
MANKATO, MN 56001

BLAZE CREDIT UNION

2025 LARPENUE AVENUE W
FALCON HEIGHTS, MN 55113

LOUCKS

PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksync.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

12/11/25 SURVEY ISSUED

PROFESSIONAL SIGNATURE

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

Licen- Stanislaw, PLS 48988
Date 12/11/25

QUALITY CONTROL

Loucks Project No. 250603
Project Lead MLS
Drawn By SLS
Checked By MLS
Field Crew SKS, JSS

VICINITY MAP



ALTA/NSPS
LAND TITLE
SURVEY

1 OF 1

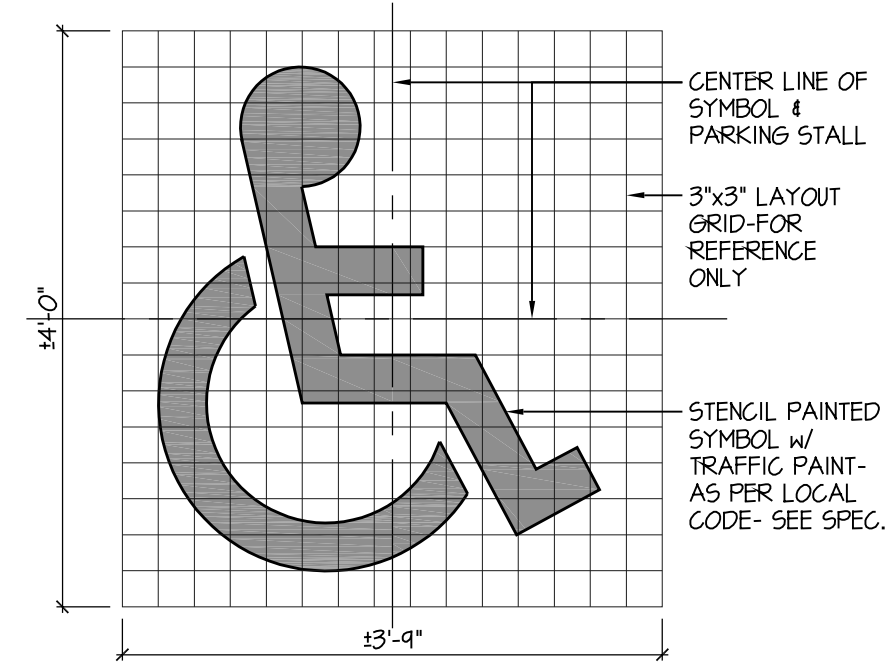
GENERAL NOTES:

1. ALL SITE GRADING TO BE DONE PER CIVIL DRAWINGS.
2. VERIFY & LOCATE ALL UNDERGROUND PHONE & UTILITY LINES PRIOR TO ANY EXCAVATION.
3. SEE CIVIL & MECH/ELEC. DRAWINGS FOR ADDITIONAL INFORMATION REGARDING SITE UTILITIES.
4. BARRICADE OFF CONSTRUCTION AREA AS REQUIRED. KEEP CONSTRUCTION AREA TO A MINIMUM.
5. SLOPE SIDEWALKS & GRADE AWAY FROM BUILDING - TYPICAL 1:20 MAX. SLOPE. SIDEWALK RAMP SLOPE IS 1:12 MAX. ACCESSIBLE PKG. & ACCESS AISLES ARE 1:40 MAX. SLOPE IN ANY DIRECTION.
6. MATCH NEW CONSTRUCTION WITH EXISTING WHEREVER NECESSARY (IE CONC. CURBS, CONC. WALKS, PAVING, ETC.)
7. MATCH/NEW GRADING INTO EXISTING GRADING.
8. CUT & PATCH EXISTING BITUMINOUS PAVING, CONC. CURBS & SIDEWALKS TO MATCH EXISTING.
9. ALL MECHANICAL & ELECTRICAL EXPOSED PIPING, GRILLES, CONDUITS, ETC. TO BE PAINTED.
10. SEE CIVIL DRAWINGS AND EXHIBITS FOR ADDITIONAL/ SPECIFIC INFORMATION ON SITE PLAN.

KEYED SITE PLAN NOTES:

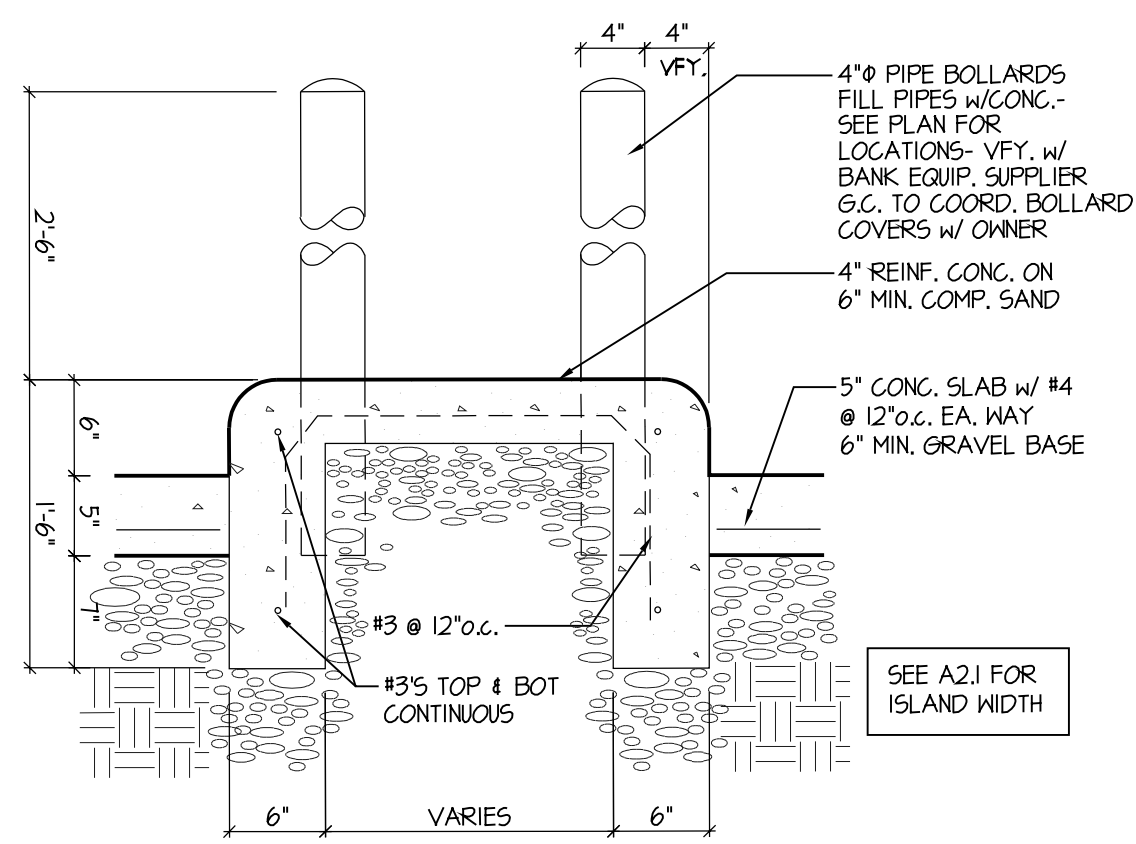
FOLLOW HANDICAP REGULATIONS PER CHAPTER 1341 FOR THE MINNESOTA ACCESSIBILITY CODE

- ① FURNISH & INSTALL POSTED HANDICAP SIGNS AS REQ'D. BY STATE CODE
- ② 18" WIDE PAINTED SOLID STRIPING - VFY.
- ③ PROPOSED BIKE RACK
- ④ FIRE DEPARTMENT CONNECTION, SEE MECH.



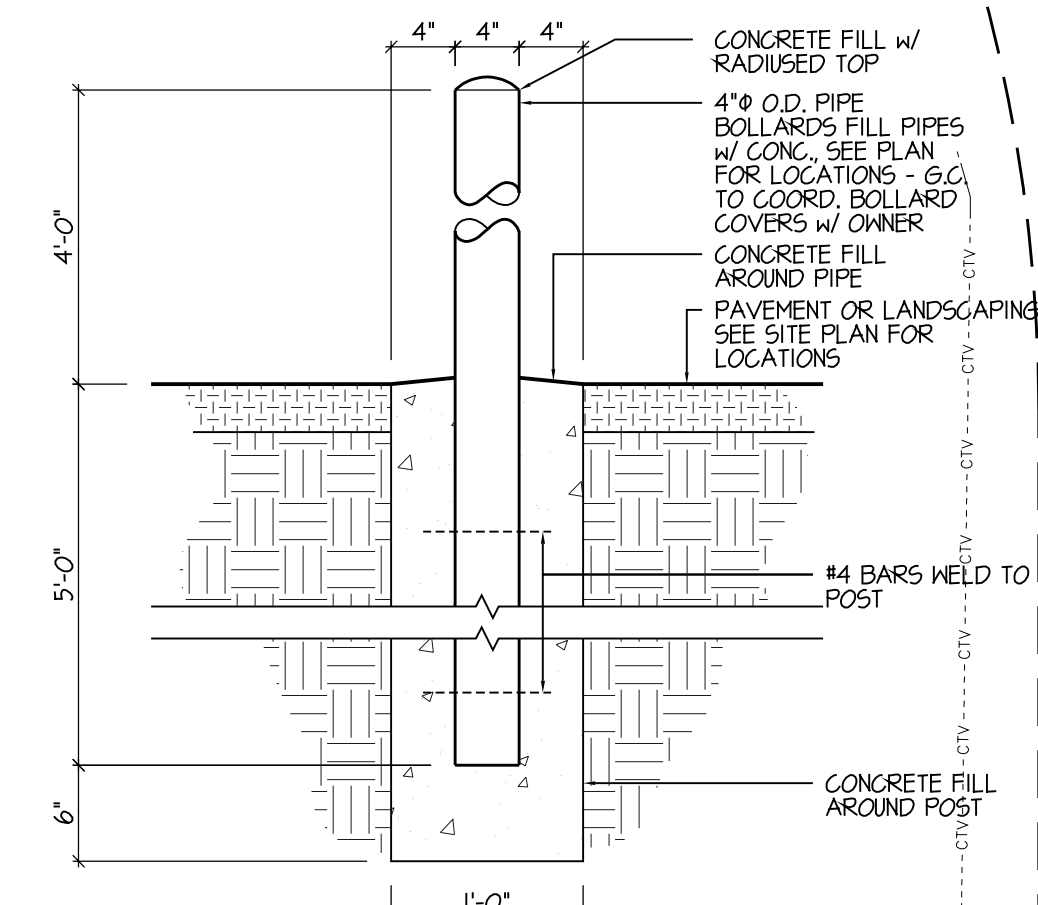
2 TYP. ADA DETAIL

3/4"=1'-0"



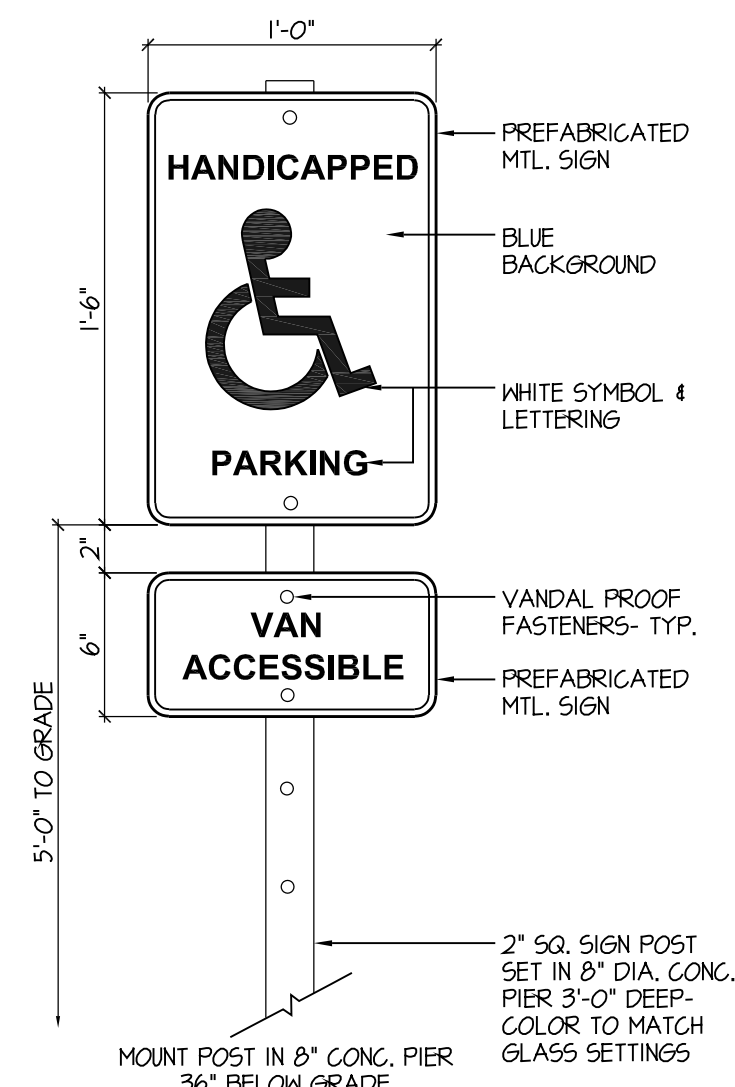
3 TYP. ISLAND DETAIL

1/4"=1'-0"



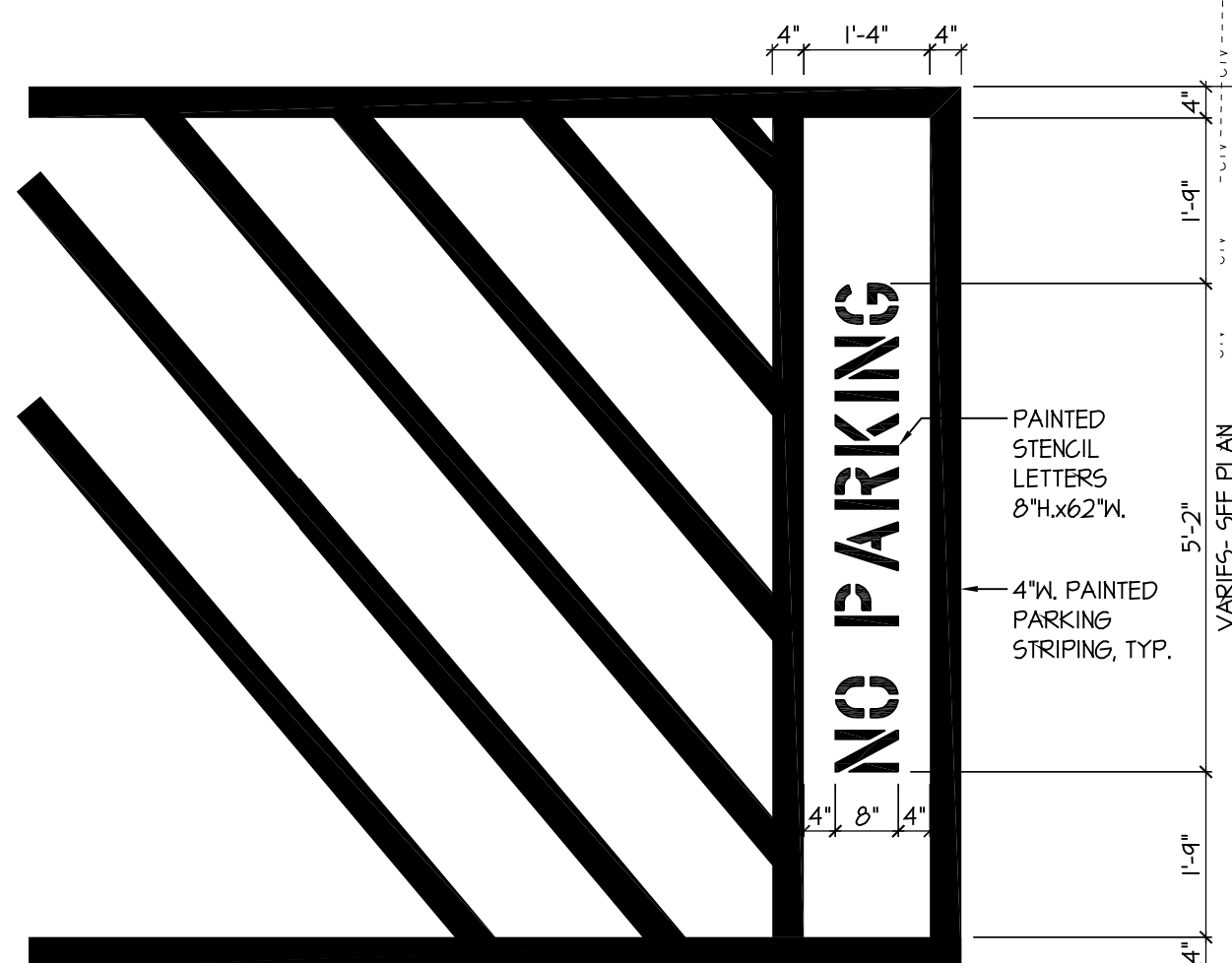
4 TYP. BOLLARD DETAIL

1/4"=1'-0"



5 HCP. SIGN DETAIL

1/4"=1'-0"



6 TYP. STRIPING DETAIL

1/2"=1'-0"

1 SITE PLAN

1"=20'-0"

PREMIER DRIVE

N 00° 36' W 227.90

CREDIT UNION BRANCH 5,050 SF

CONTACT CENTER MAIN ENTRANCE

CONTACT CENTER 1,780 SF

CONC. PAD FOR MECH. EQUIP. CONC. OVER 4" CLASS 5 BASE

SCREEN WALL FOR MECH. EQUIP. COORD. POSTS W/ DRAIN TILES.

TRASH ENCLOSURE SEE: X/A3.1

6" PIPE BOLLARDS, TYP.

ELEC. TRANSFORMER SEE ELEC.

DASHED LINE INDICATES CANOPY ABOVE

DASHED LINE INDICATES CANOPY ABOVE

MEMBER PARKING

TAPER CURB TO MATCH PED. RAMP

10'-6"

4" W. PAINTED STRIPES- TYP.

13 STALLS @ 9'-0" EA.

BITUM. ON 8" CLASS-5 BASE- SEE CIVIL

4" W. PAINTED STRIPES- TYP.

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

10'-0"

PROJECT

Blaze CREDIT UNION

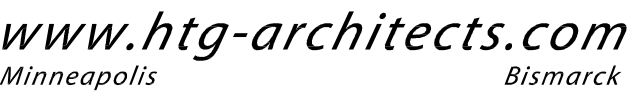
NEW BUILDING

1831 PREMIER DR
MANKATO, MN 56001

ISSUED SET

REVISIONS

DATE NO.



1010 Mainstreet, Suite 100
Hopkins, MN. 55343
Tel: 952.278.8880

Blaze
CREDIT UNION

1831 PREMIER DR
MANKATO, MN 56001

[illegible]

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF

REG. NO. _____ DATE _____

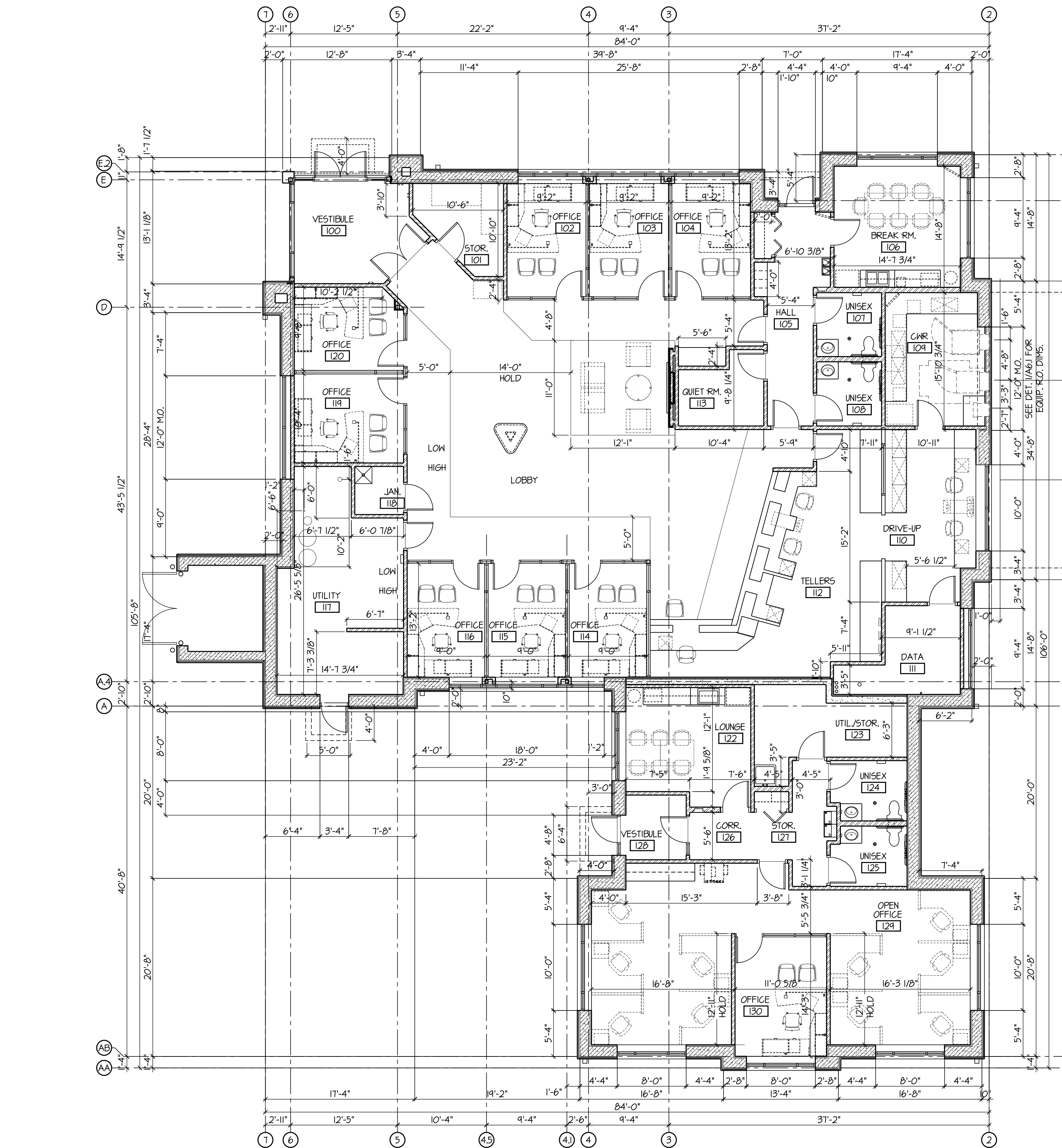
DIMENSIONED FLOOR PLAN
(1/8" SCALE FOR PERMIT)

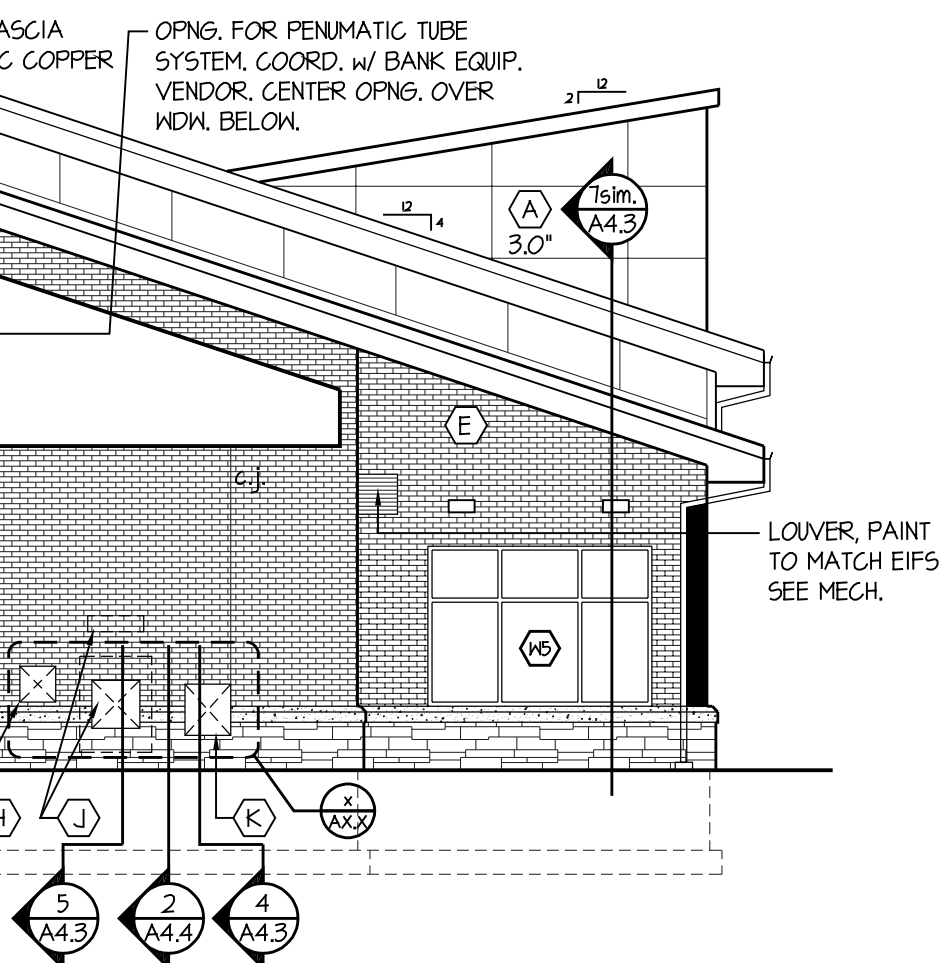
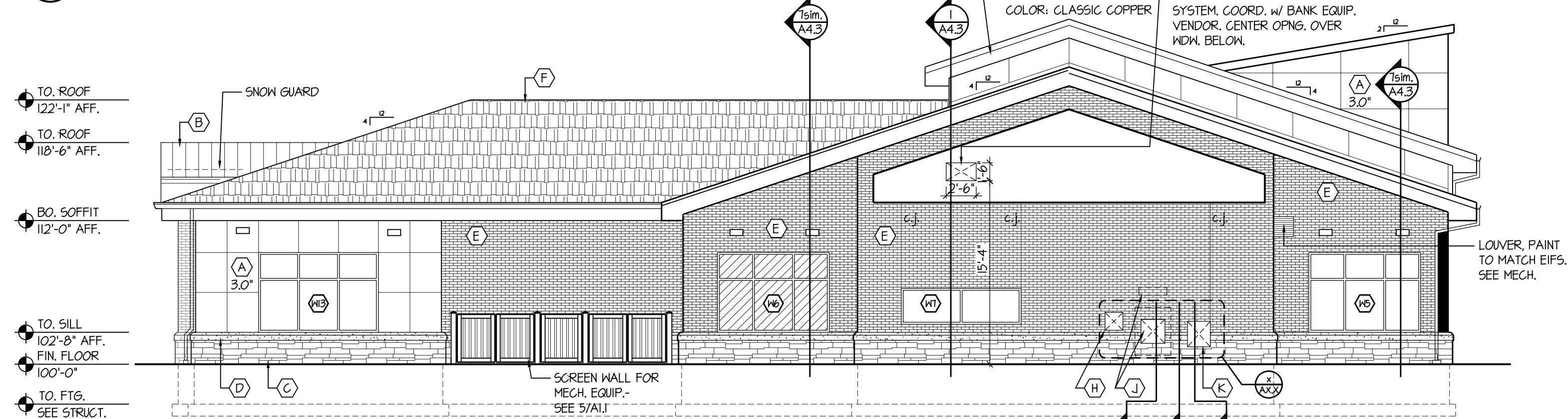
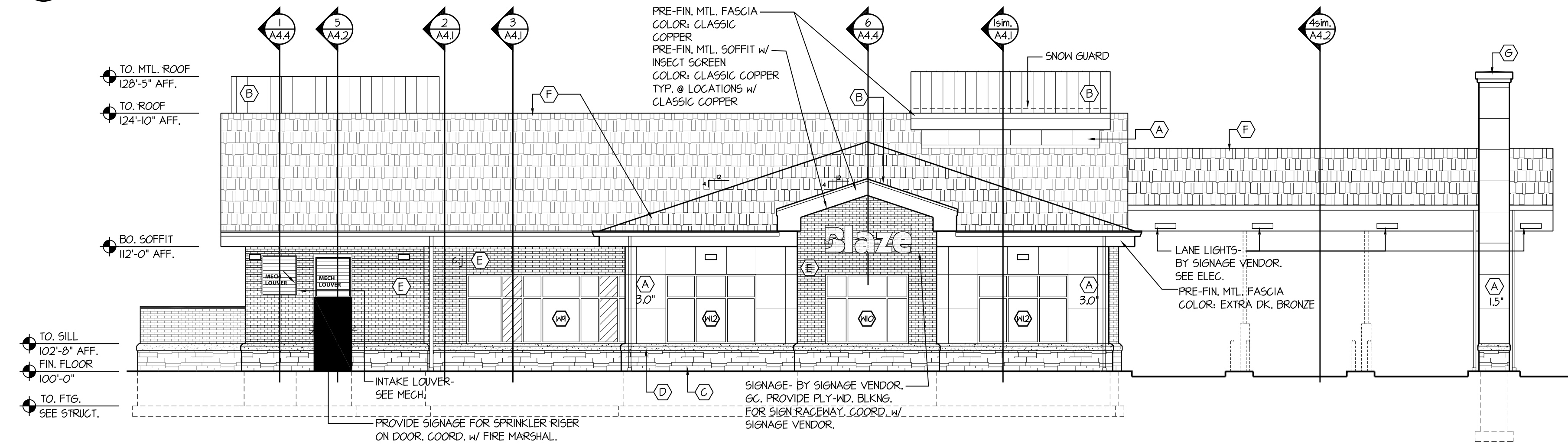
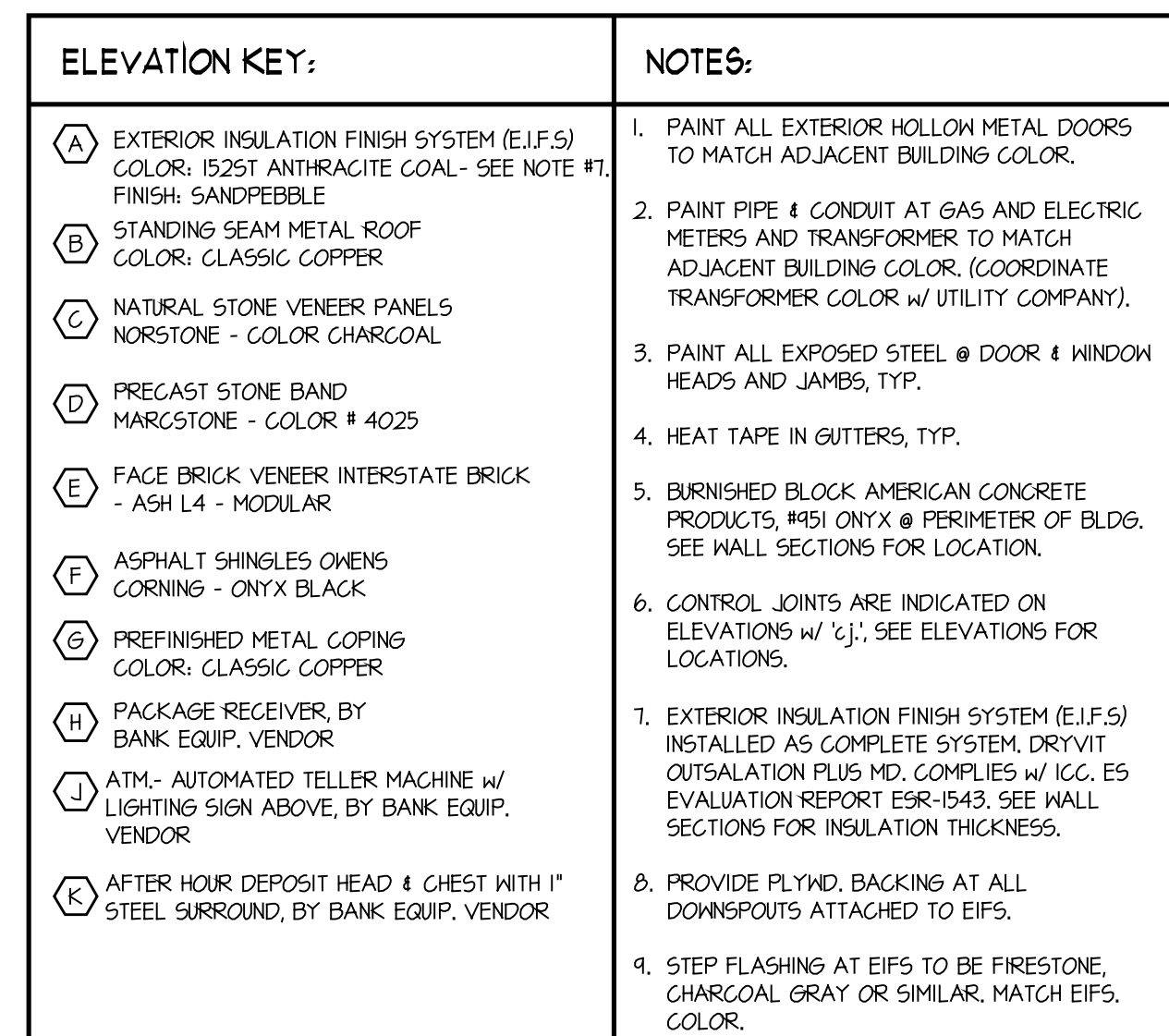
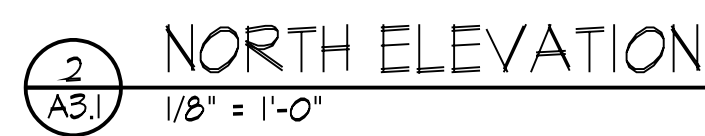
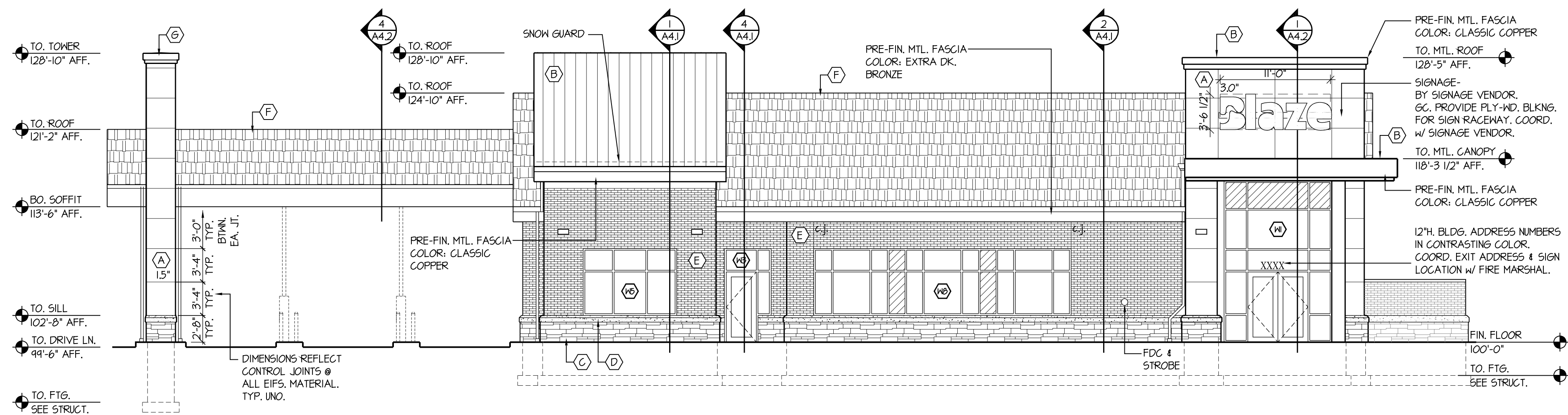
DRAWN BY: KMJ CHECKED BY: KMJ

A2.1a

ML-241145

COPYRIGHT © BY HTG ARCHITECTS





PROJECT



NEW BUILDING

**1831 PREMIER DR
MANKATO, MN 56001**

ISSUED SET

DATE	NO.
------	-----

[illegible]

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF

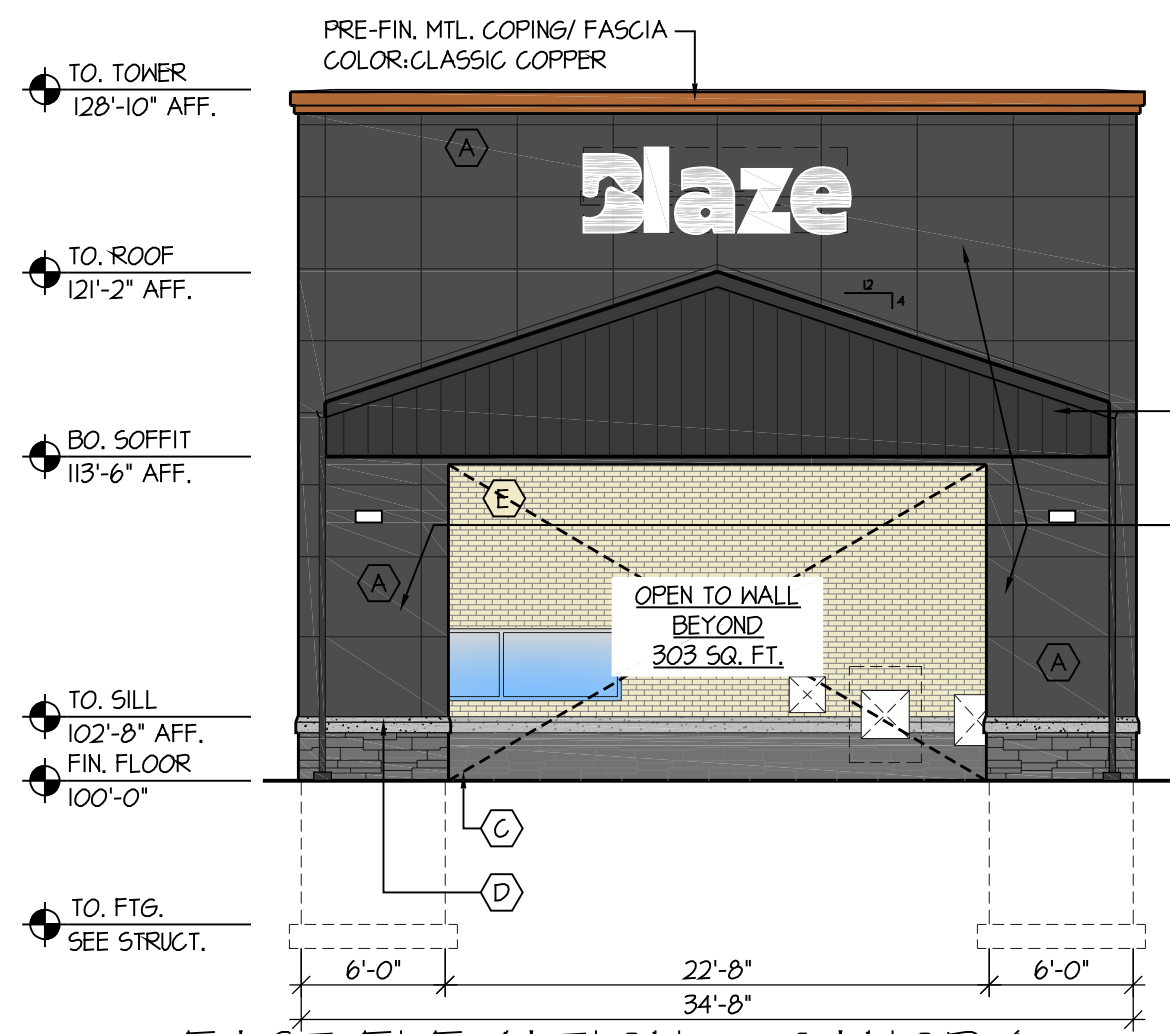
REG. NO. _____ DATE _____

EXTERIOR ELEVATIONS
BUILDING SECTION

DRAWN BY: KMJ CHECKED BY: JAM

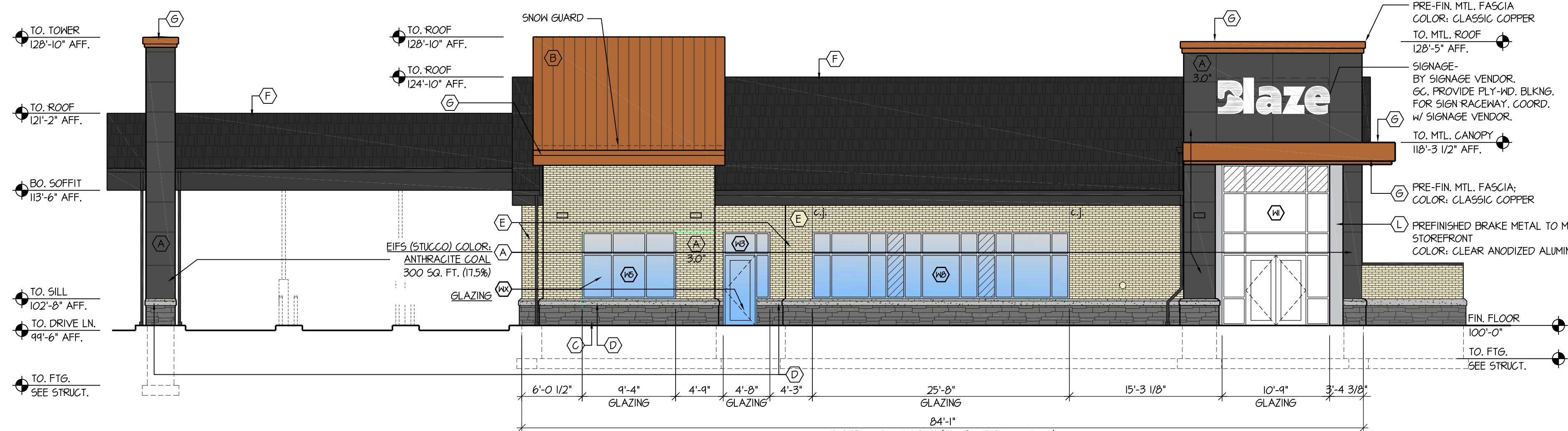
A3.1

EE-251145
COPYRIGHT © BY HTG ARCHITECTS



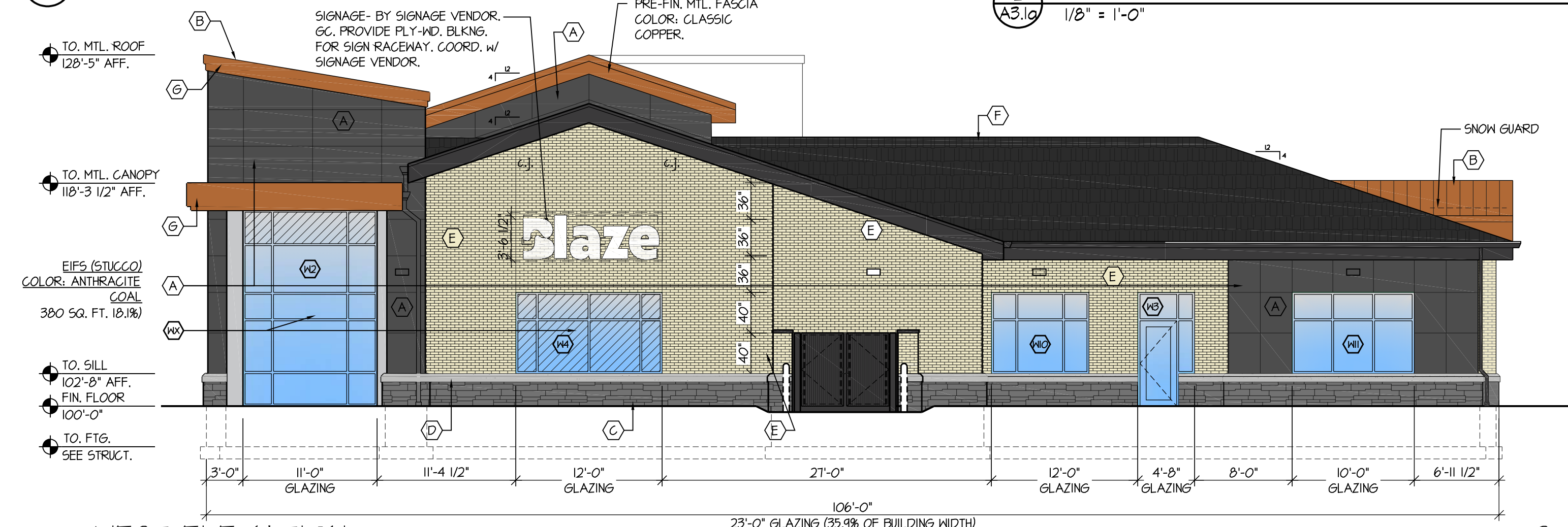
1 EAST ELEVATION @ CANOPY

A3.1a 1/8" = 1'-0"



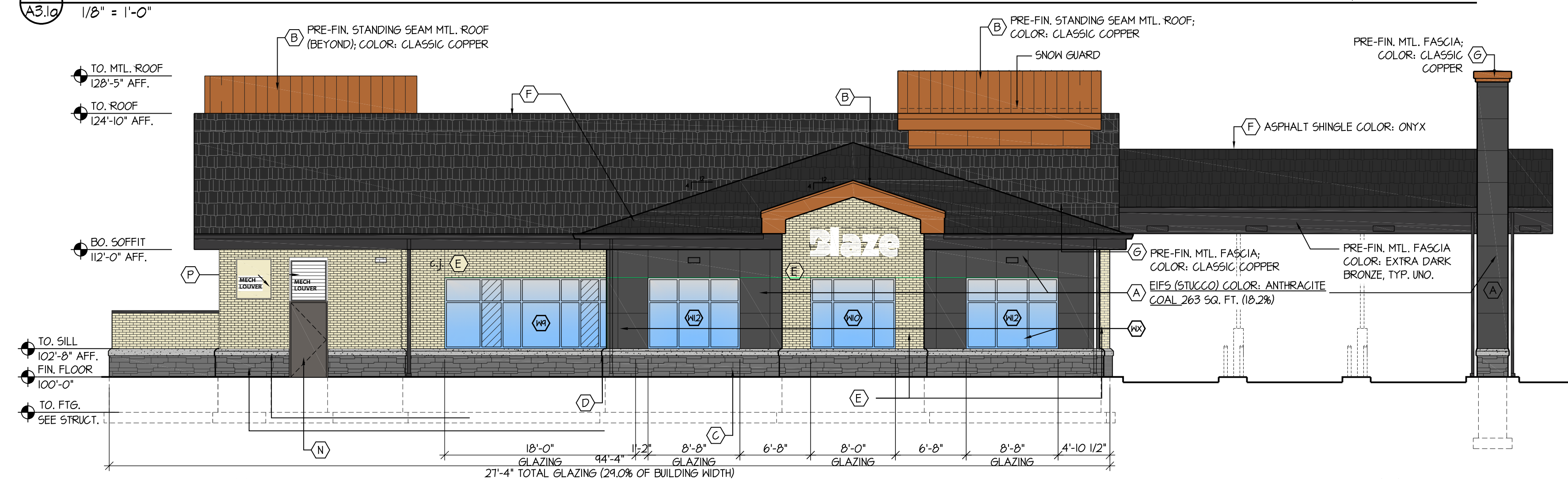
2 NORTH ELEVATION

A3.1a 1/8" = 1'-0"



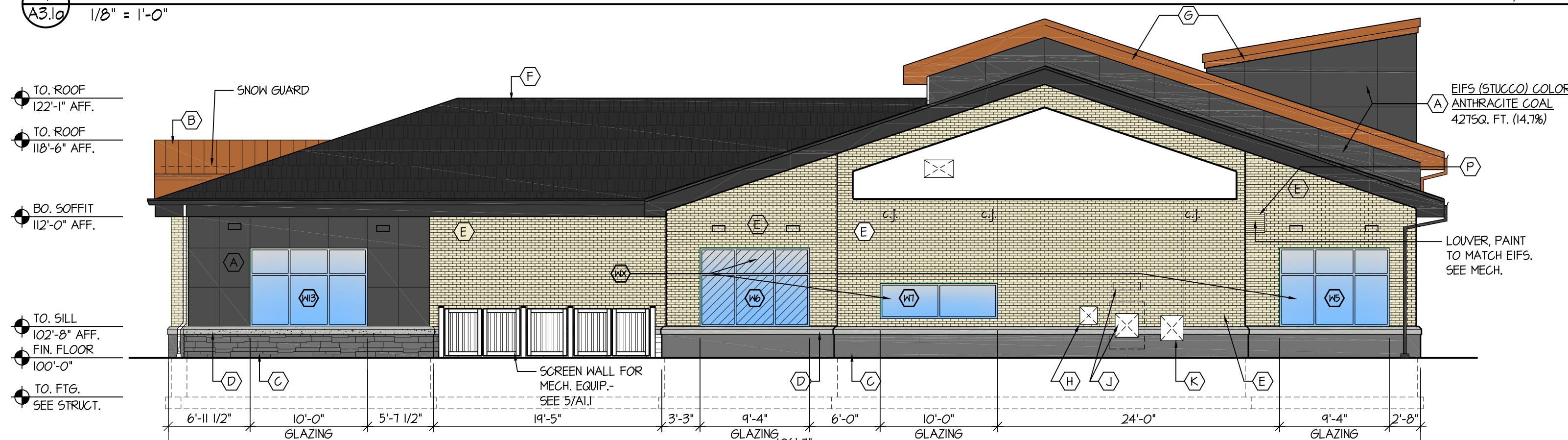
3 WEST ELEVATION

A3.1a 1/8" = 1'-0"



4 SOUTH ELEVATION

A3.1a 1/8" = 1'-0"



5 EAST ELEVATION/CANOPY SECTION

A3.1a 1/8" = 1'-0"

1,712 SF.

2,099 SF.

1,445 SF.

2,114 SF.

ELEVATION KEY:	NOTES:
(A) EXTERIOR INSULATION FINISH SYSTEM (EIFS) COLOR TO MATCH SPIRE BLUE - SEE NOTE #1.	1. PAINT ALL EXTERIOR HOLLOW METAL DOORS TO MATCH ADJACENT BUILDING COLOR.
(B) STANDING SEAM METAL ROOF COLOR TO MATCH SPIRE GOLD	2. PAINT PIPE & CONDUIT AT GAS AND ELECTRIC METERS AND TRANSFORMER TO MATCH ADJACENT BUILDING COLOR. (COORDINATE TRANSFORMER COLOR W/ UTILITY COMPANY).
(C) NATURAL STONE VENEER PANELS NORSTONE - COLOR CHARCOAL	3. PAINT ALL EXPOSED STEEL @ DOOR & WINDOW HEADS AND JAMBES, TYP.
(D) PRECAST STONE BAND MARCSTONE - COLOR # 4025	4. HEAT TAPE IN GUTTERS, TYP.
(E) FACE BRICK VENEER INTERSTATE BRICK - ASH L4 - MODULAR	5. BURNISHED BLOCK AMERICAN CONCRETE PRODUCTS, #151 ONYX @ PERIMETER OF BLDG. SEE WALL SECTIONS FOR LOCATION.
(F) ASPHALT SHINGLES OWENS CORNING - ONYX BLACK	6. CONTROL JOINTS ARE INDICATED ON ELEVATIONS W/ 'CJ'; SEE ELEVATIONS FOR LOCATIONS.
(G) PREFINISHED METAL COPING COLOR: SPIRE GOLD	7. EXTERIOR INSULATION FINISH SYSTEM (EIFS) INSTALLED AS COMPLETE SYSTEM, DRYVIT OUTSALATION PLUS MD, COMPLIES W/ ICC-ES EVALUATION REPORT ESR-1543. SEE WALL SECTIONS FOR INSULATION THICKNESS.
(H) PACKAGE RECEIVER, BY BANK EQUIP. VENDOR	8. PROVIDE PLYWD. BACKING AT ALL DOWNSPOUTS ATTACHED TO EIFS.
(J) ATM - AUTOMATED TELLER MACHINE W/ LIGHTING SIGN ABOVE, BY BANK EQUIP. VENDOR	
(K) AFTER HOUR DEPOSIT HEAD & CHEST WITH 1" STEEL SURROUND, BY BANK EQUIP. VENDOR	



www.htg-architects.com
Minneapolis Bismarck

1010 Mainstreet, Suite 100
Hopkins, MN. 55343
Tel: 952.278.8880

PROJECT

Blaze
CREDIT UNION

NEW BUILDING

1831 PREMIER DR
MANKATO, MN 56001

ISSUED SET	REVISIONS
DATE	NO.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED ARCHITECT UNDER THE LAWS OF THE STATE OF

REG. NO. DATE

EXTERIOR ELEVATIONS
BUILDING SECTION

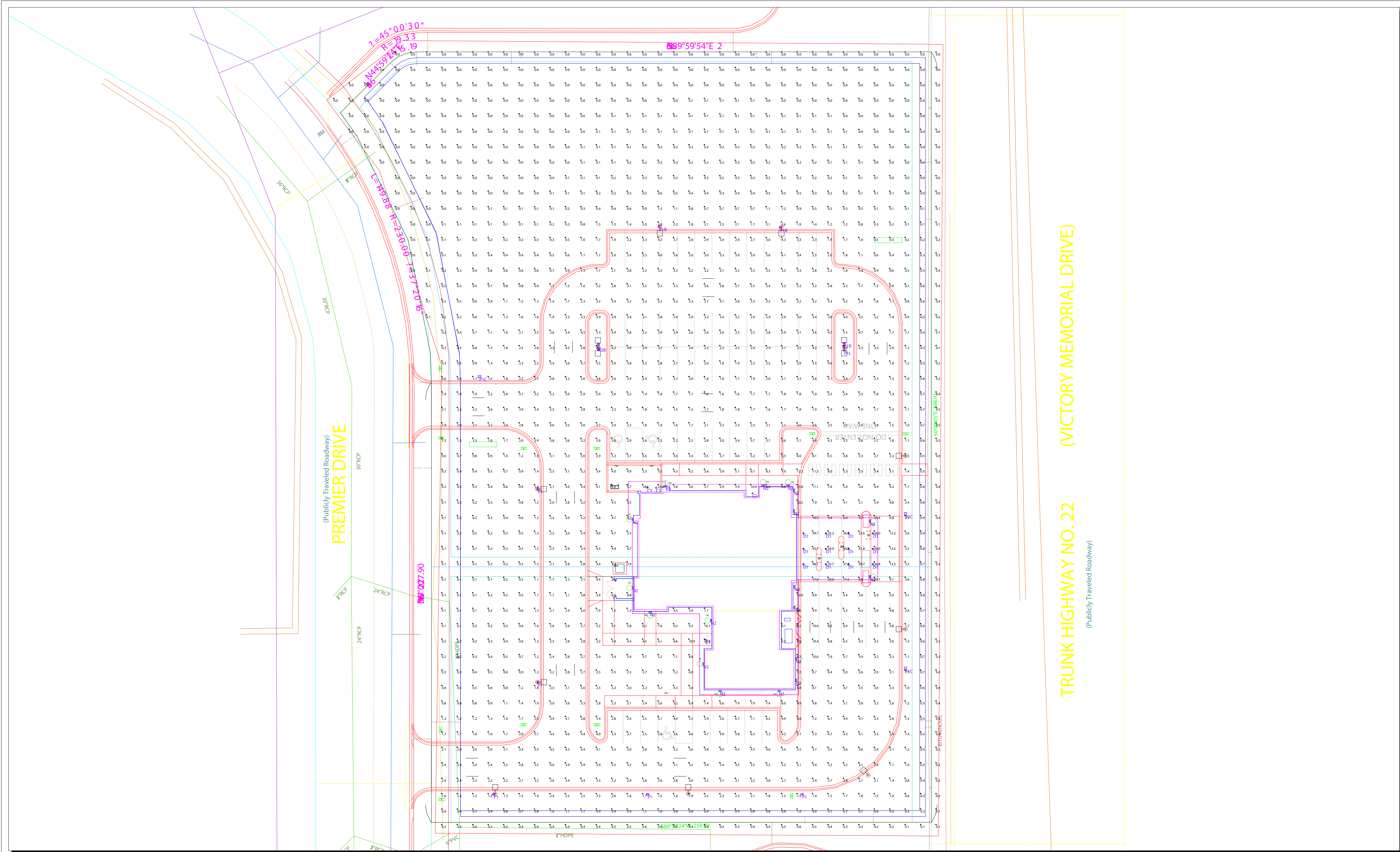
DRAWN BY: KMJ CHECKED BY: JAL

A3.1a

EE-251145
COPYRIGHT © BY HTG ARCHITECTS

SITE PHOTOMETRIC PLAN
NOT TO SCALE

BLAZE CREDIT UNION
MANKATO, MN
12/22/25



Calculation Summary						
Label	CalcType	Units	Avg	Max	Min	Avg/Min
SITE_Planar	Illuminance	Fc	2.36	53.4	0.0	N.A.

P TYPES 23FT (20FT POLES ON 3FT BASES)

1. Lighting Reflectance of 80/50/20 used unless noted otherwise
2. Interior calc points shown at 30" A.F.F. unless noted otherwise
3. Exterior calc points shown at grade unless noted otherwise
4. Emergency egress calc points shown at 0" A.F.F.
5. Photometric drawings are for Design purposes only, not for Construction documents

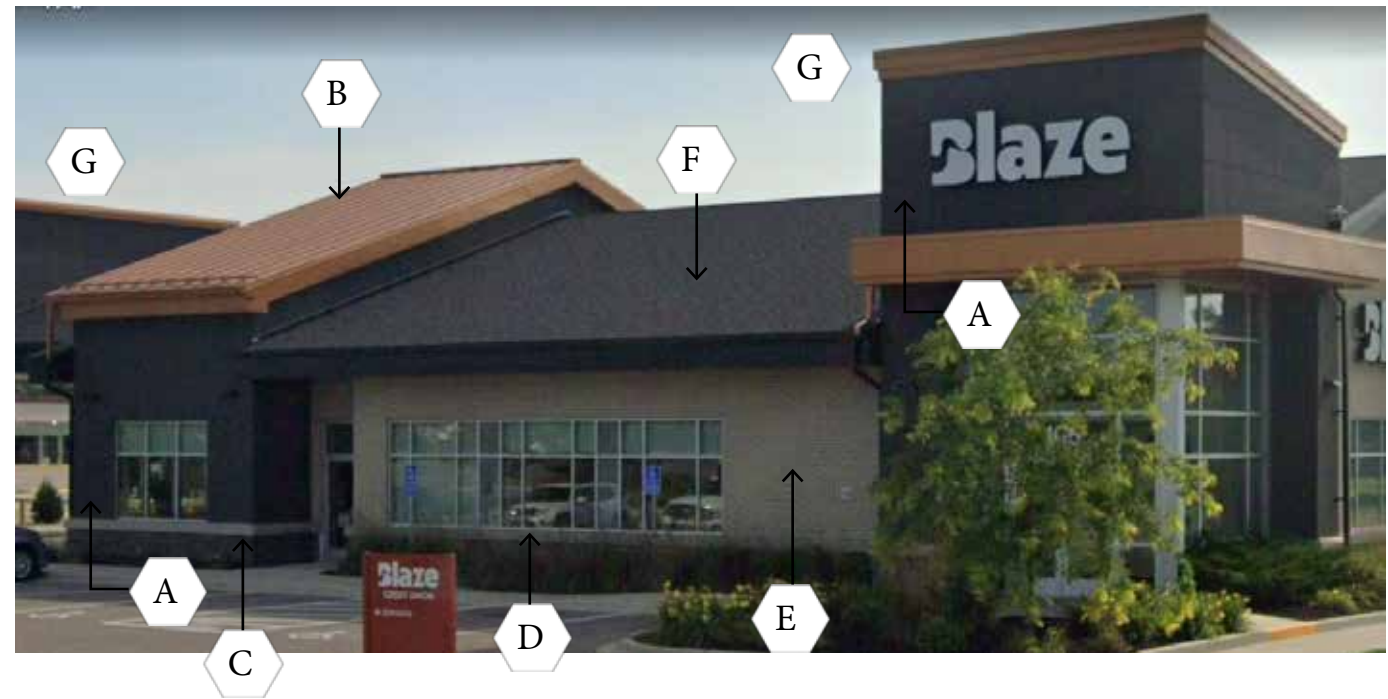
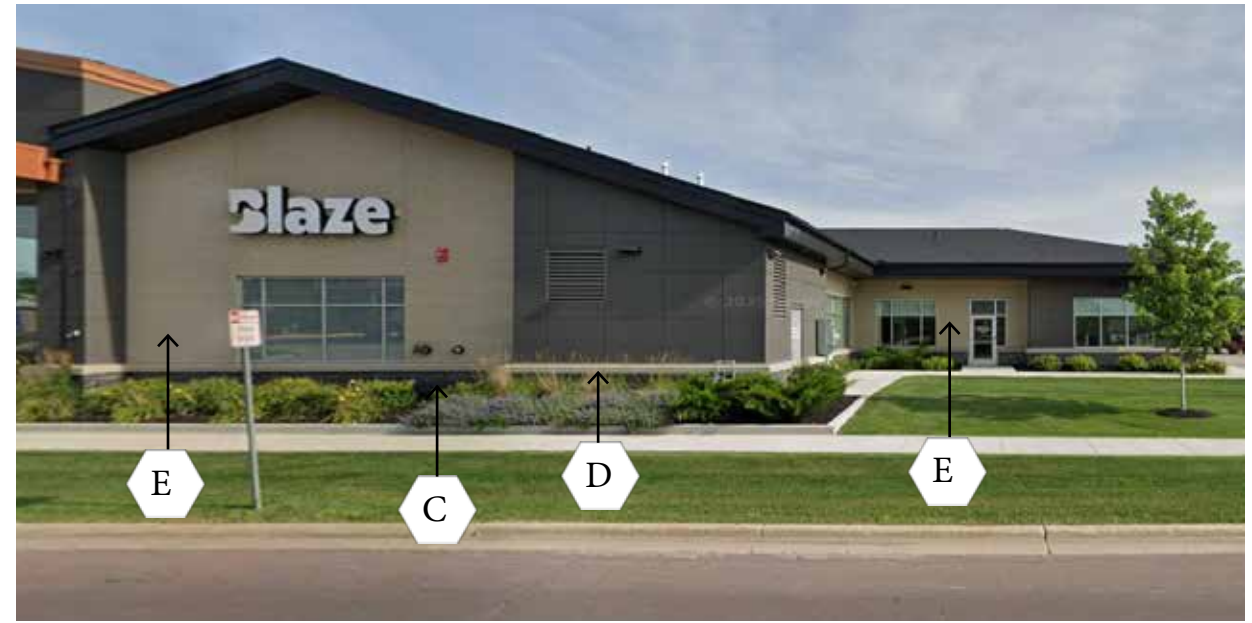
Luminaire Schedule								
Symbol	Qty	Label	Manufacturer	Description	Arrangement	Lum. Lumens	Lum. Watts	LLF
⬜	3	P1C	BEACON	VP-1-160L-100-3K7-4-BC	Single	6665	92	0.900
⬜	1	P1R	BEACON	VP-1-160L-100-3K7-3-HSS-90-SL	Single	9756	92	0.900
⬜	1	P2B	BEACON	VP-1-160L-100-3K7-3-UNV-ASQU-DBT 2 X B2B	Back-Back	12021	92	0.900
⬜	2	P1B	BEACON	VP-1-160L-100-3K7-4F-UNV-ASQU-DBT	Single	11701	92	0.900
⬜	5	P1	BEACON	VP-1-160L-100-3K7-4W-UNV-ASQU-DBT	Single	11946	92	0.900
⬜	2	N1	BEACON	VPW2-18L-30-3K7-3-UNV-DBT	Single	3996	31.3	0.900
⬜	16	N2	BEACON	VPW2-18L-50-3K7-4W-UNV-DBT	Single	6138	52.6	0.900
⬜	12	D1	PRESCOLITE	LFR-6RD-M-40L30K8-XW-DM1 WITH LFR-6RD-T-S-CL	Single	4062	32.6	0.900
⬜	5	C1	PRESCOLITE	LFR-6RD-M-20L30K8-WD-DM1 WITH LFR-6RD-T-S-CL-EMR	Single	1854	14.555	0.900

BLAZE CREDIT UNION MANKATO

Calculated light levels shown are estimates based on information available at time of layout request. Due to unknown site conditions JTH Lighting assumes no responsibility for installed light levels.

Project #:
Date:12/17/2025
Paper Size: ARCH E1 - 30x42

MINNESOTA
JTH LIGHTING ALLIANCE
888 148TH ST W
APPLE VALLEY, MN 55124
(612) 223-5300
www.jthlighting.com



KEYNOTES REFERENCE SHEET A3.1a

BLAZE
MANKATO
ADDITION

1831 PREMIER DRIVE
MANKATO, MN 56001

BLAZE CREDIT UNION

2025 LARPENTEUR AVENUE W
FALCON HEIGHTS, MN 55113



PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL

12755 Highway 55, Suite R100
Plymouth 55441
763.424.5505
www.loucksinc.com

CADD QUALIFICATION

CADD files prepared by the Consultant for this project are instruments of the Consultant's professional services for use solely with respect to this project. These CADD files shall not be used on other projects, for additions to this project, or for completion of this project by others without written approval by the Consultant. With the Consultant's approval, others may be permitted to obtain copies of the CADD drawing files for information and reference only. All intentional or unintentional revisions, additions, or deletions to these CADD files shall be made at the full risk of that party making such revisions, additions or deletions and that party shall hold harmless and indemnify the Consultant from any & all responsibilities, claims, and liabilities.

SUBMITTAL/REVISIONS

12/19/25 PPLAT ISSUED

PROFESSIONAL SIGNATURE

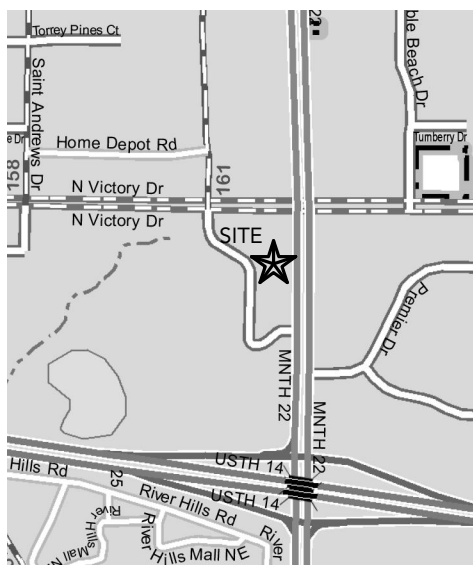
I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota.

Max L. Stanislawski - PLS
License No. 48988
Date 12/19/25

QUALITY CONTROL

Loucks Project No. 250603
Project Lead MLS
Drawn By SLS
Checked By JLS
Field Crew SKS, JSS

VICINITY MAP



PRELIMINARY
PLAT

1 OF 1

LEGAL DESCRIPTION

Lot 2, Block 1, Mills Addition to Mankato, Blue Earth County, Minnesota.
And
The North 132.30 feet of Lot 1, Block 1, Mills Addition to Mankato, Blue Earth County, Minnesota.

GENERAL NOTES

SURVEYOR:
Loucks
12755 Highway 55, Suite R100
Plymouth, MN 55441
763-424-5505

OWNER/DEVELOPER:
Blaze Credit Union
2025 Larpenteur Avenue W
Falcon Heights, MN 55113
651-641-2106

- Prepared December Day, 2025.
- The address, if disclosed in documents provided to or obtained by the surveyor, or observed while conducting the fieldwork is 1831 Premier Drive, Mankato, Minnesota 56001.
- The bearings for this survey are based on the Blue Earth County Coordinate System NAD 83 (1996 Adjust).
- Originating Benchmark: MnDOT Survey Disk #0714 J, in Mankato, 165.0 feet north of an entrance ramp from Trunk Highway 22 to Trunk Highway 14 & Trunk Highway 60 westbound, at the junction of Trunk Highway 22 and Trunk Highway 14 & Trunk Highway 60 in Mankato, at Trunk Highway 22 milepoint 52.9, 97.0 feet west of southbound Trunk Highway 22, 3.0 feet east of the fence corner at the right-of-way, 0.6 foot east of a witness post.
Elevation = 1006.68 feet (NGVD29)
Site Benchmark: Top nut of hydrant near the northwest corner of the site.
Elevation = 1008.08 feet (NGVD29)
- This property is contained in Zone X (areas determined to be outside the 0.2% annual chance floodplain) per Flood Insurance Rate Map No. 27013C0115F, Community Panel No. 2752420115F, effective date of February 22, 2024.
- The field work was completed on 11/21/25.

ZONING INFORMATION

Current Zoning: B-3 Highway Business District

Any zoning classification, setback requirements, height and floor space area restrictions, and parking requirements, shown hereon, was researched to the best of our ability and is open to interpretation. Per the City of Mankato Zoning Map and City Code, on December 8, 2025, information for the subject property is as follows:

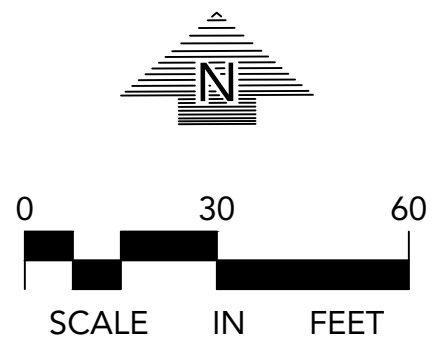
Current Setbacks:
Building: Front 15 feet, Side 6 feet, Rear 6 feet;
Parking: Front 15 feet, Side 3 feet, Rear 3 feet;
Maximum Floor Area Ratio: 1.0;

SITE DATA

Areas:
Total Property Area = 106,367 +/- square feet or 2.44 +/- acres.

LEGEND

● FOUND 1/2 INCH IRON MONUMENT MARKED *41643* UNLESS SHOWN OTHERWISE	⊙ GAS METER	▬ CONCRETE CURB	—>— STORM SEWER
○ SET 1/2 INCH X 14 INCH IRON MONUMENT, MARKED *LS 48988*	— GUY WIRE	▬ CONCRETE	—>— SANITARY SEWER
▲ FOUND NAIL	⊠ HAND HOLE	— CONTOUR	— WATERMAIN
✱ CHISELED X	⊗ LIGHT POLE	972.5 SPOT ELEVATION	- - - MAPPED WATERMAIN
⊠ CATCH BASIN	⊗ POWER POLE	CONIFEROUS TREE	— ELE — UNDERGROUND ELECTRIC
⊙ STORM MANHOLE	⊗ ROOF DRAIN	SP SPRUCE	- - - ELE - - - MAPPED UNDERGROUND ELECTRIC
○ SANITARY MANHOLE	⊗ TELEPHONE PEDESTAL	DECIDUOUS TREE	— GAS — UNDERGROUND GAS
⊙ HYDRANT	⊗ UTILITY PEDESTAL	AS ASH	- - - CTX - - - MAPPED UNDERGROUND CABLE TV
⊗ GATE VALVE	⊗ SIGN	HB HACKBERRY	- - - FOP - - - MAPPED UNDERGROUND FIBER OPTIC
⊗ ELECTRIC TRANSFORMER	⊗ DISABLED PARKING STALL	MA MAPLE	— BSBL — BUILDING SETBACK LINE
⊗ ELECTRIC METER	1 SCHEDULE B II ITEM	TR TREE (GEN)	— Δ — RESTRICTED ACCESS



KNOW ALL PERSONS BY THESE PRESENTS: That Blaze Credit Union, a cooperative association, fee owner of the following described property:

Lot 2, Block 1, Mills Addition to Mankato, Blue Earth County, Minnesota.
And
The North 132.30 feet of Lot 1, Block 1, Mills Addition to Mankato, Blue Earth County, Minnesota.

Has caused the same to be surveyed and platted as BLAZE MANKATO ADDITION and does hereby dedicate to the public for public use the public ways, and does also dedicate the drainage and utility easements as created by this plat.

In witness whereof said Blaze Credit Union, a cooperative association, has caused these presents to be signed by its proper officer this ____ day of _____, 20____.

BLAZE CREDIT UNION

Signature _____ Printed Name, Title _____

STATE OF _____
COUNTY OF _____

This instrument was acknowledged before me this ____ day of _____, 20____, by _____, as _____ of Blaze Credit Union, a cooperative association, on behalf of the association.

Signature _____ Printed Name, Notary _____
Notary Public, _____ County, _____
My Commission Expires _____

SURVEYORS CERTIFICATION

I Max L. Stanislawski do hereby certify that this plat of BLAZE MANKATO ADDITION 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____.

Max L. Stanislawski, Licensed Land Surveyor
Minnesota License No. 48988

STATE OF MINNESOTA
COUNTY OF HENNEPIN

This instrument was acknowledged before me this ____ day of _____, 20____, by Max L. Stanislawski.

Signature _____ Printed Name, Notary _____
Notary Public, _____ County, Minnesota
My Commission Expires January 31, 20____

PLANNING COMMISSION, CITY OF MANKATO, MINNESOTA

Reviewed by the Planning Commission of the City of Mankato, Minnesota, on this ____ day of _____, 20____.

City Council, City of Mankato, Minnesota

By: _____, Chairperson

CITY COUNCIL, CITY OF MANKATO, MINNESOTA

This plat of BLAZE MANKATO ADDITION was approved and accepted by the City Council of the City of Mankato, Minnesota, at a regular meeting thereof held this ____ day of _____, 20____, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subdivision 2.

City Council, City of Mankato, Minnesota

By: _____, Mayor By: _____, Clerk

TITLE OPINION, ATTORNEY

I, _____, licensed attorney, State of Minnesota, do hereby certify that the owners as indicated hereon represents all ownership interest in the land encompassed by this plat.

By: _____, Attorney

TAXPAYER SERVICES, BLUE EARTH COUNTY, MINNESOTA

I hereby certify that taxes payable in 20____ and prior years have been paid and no delinquent taxes are due for the land described on this plat, dated this ____ day of _____, 20____.

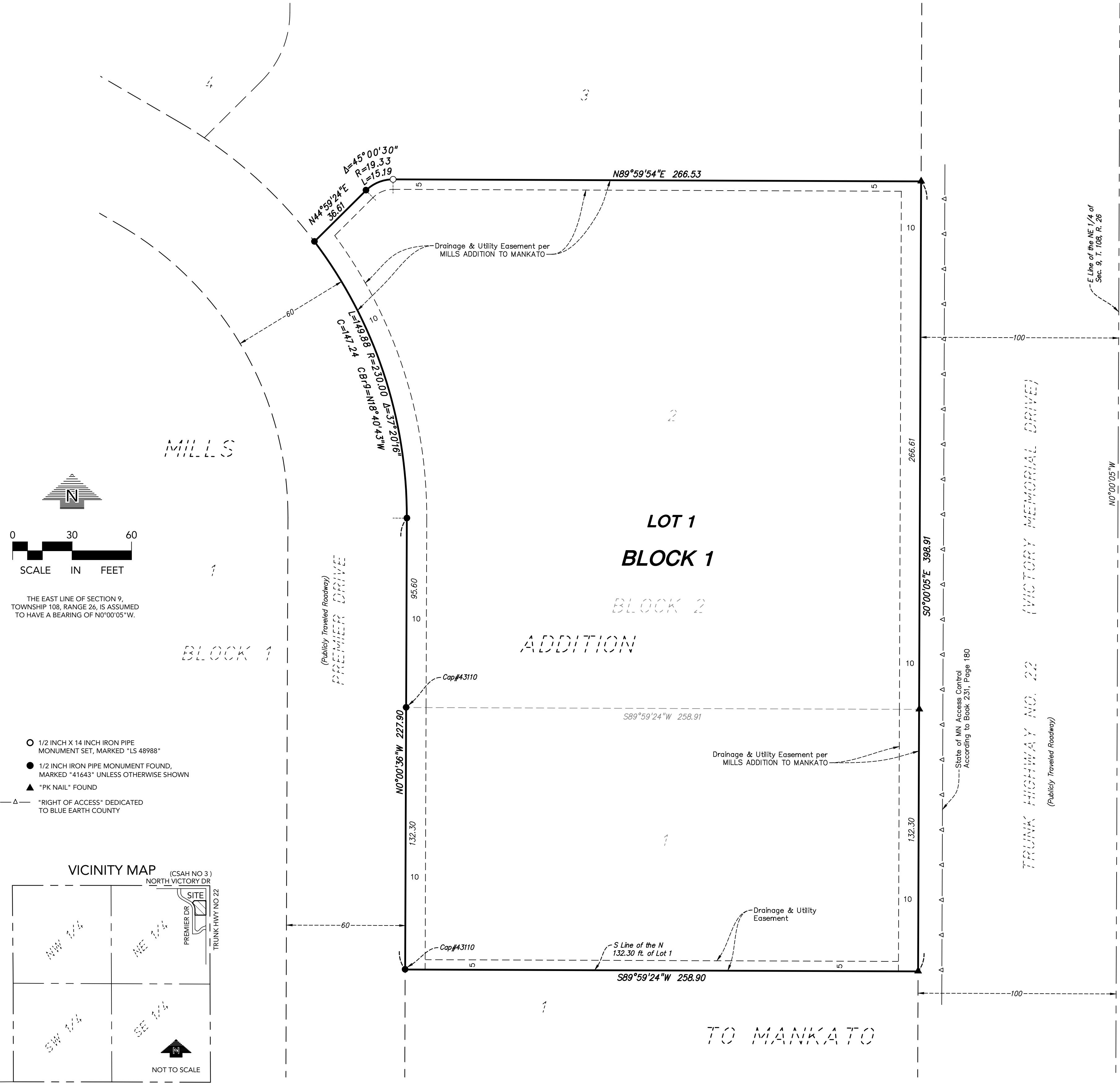
By: _____, Taxpayer Services

COUNTY RECORDER, BLUE EARTH COUNTY, MINNESOTA

I hereby certify that the within plat of BLAZE MANKATO ADDITION was recorded in this office this ____ day of _____, 20____, at ____ o'clock ____ M.

Blue Earth County, County Recorder By: _____, Deputy

BLAZE MANKATO ADDITION
CITY OF MANKATO
BLUE EARTH COUNTY, MINNESOTA



Certificate of Design Compliance

December 22, 2025

To: Blaze Credit Union I Mankato, MN

PROJECT NARRATIVE

Blaze Credit Union is proposing to construction of a new branch office and contact center to provide access to financial services for existing and potential new members in the City of Mankato and surrounding communities. The proposed project will offer ample parking for members and staff, as well as drive-up facilities that have become essential in modern banking. The project represents a significant investment in the City of Mankato, enhancing financial services along the XXXX corridor, which is easily accessible from interstate 35W for nearby neighborhoods and local business. Blaze Credit Union plans to bring their Midwestern Values; community driven, serving through integrity, and lately improving the lives of their members to the Mankato Community which is a pivotal step in continuing to make a positive impact and bettering the lives of countless Minnesotans.

The new branch and contact center will feature a traditional and attractive structure well including high quality finishes. Key aspects of the project include:

- **Alignment with the City Plans:** The project aligns with the City's Comprehensive Plan and the permitted land uses outlined in the Commercial Zoning District
- **Collaborative Design:** The site plan design has been developed with feedback from the City's Community Development team during our pre-application meeting
- **Architectural Excellence:** The proposed building aims to achieve a cozy, local and inviting feeling that will fit well into the local community. Premium exterior and interior finishes will be utilized to create a "hometown business" vibe for a modern, community focused experience. The exterior finishes will feature extensive glazing, stone, brick, metal composite panels, Architectural metal siding with concealed fasteners and Exterior insulation and finish system. In addition to the exceptional materials, the varied roof pitches/ slopes offer character and creates a dynamic silhouette that enhances curb appeal. Colored elevations are included in the submission package to illustrate the proposed design solution.
- **Environmental Considerations:** The project seeks to incorporate all the latest advances in stormwater management well incorporating the Minimum Impact Design Standards (MIDS) and Performance Goals. Other Environmental Considerations include not only complying with the current energy code but exceeding it while utilizing environmentally friendly construction methods where possible.
- **Employment:** Although the day-to-day employment count has not been finalized yet, this branch will create between 10-30 employment opportunities for the local workers/ community. The new employees will be a mixture of part-time and full-time positions.
- **No Negative Impacts:** This project will not have any adverse effects on the community for the following reasons:
 - No Impact on existing surrounding land uses.
 - No increase in noise, odors, smoke, gas, vibration or pests.
 - No detrimental effects on public safety, health and welfare.

- **Traffic Management:** Blaze Credit Union generates most of the traffic to their facility during normal business hours; 8:00am-6:00pm. All traffic will be managed on site with excellent stacking capabilities for the drive-through. Typical drive-through transactions per hour vary greatly by branch location but typically average between 8-14 transactions per hour. Also provided is a bypass lane which is currently being shown along Highway 22 which allows vehicular traffic to continue circulating the site even when multiple vehicles are in each drive-through lane.
- **Operational Information:** While not finalized for this location, Blaze Credit Unions' typical operational hours are Monday through Thursday 9:00a.m. to 5:00 p.m., Fridays 9:00a.m. to 6:00 p.m. and Saturdays 9:00 a.m. to 12:00 p.m. Limited Saturday operational hours along with branch closer on Sundays will greatly reduce traffic counts not impacting other local business Fleet Farm and Caribou Coffee which will see a heightened number of traffic counts on the weekends.

About Blaze Credit Union: Blaze Credit Union is a large Minnesota-based Financial Cooperative, formed from Spire Credit Union and Hiway Credit Union, focused on member well-being with Midwestern values including but not limited to integrity, trust, hard work, equality and community focused. Blaze Credit Union offers a variety of services from checking / savings, mortgages, vehicle loans, investments, digital banking, financial literacy resources. Blaze is more than your typical financial institution; they strive to be your partner in life and are dedicated towards providing exceptional services and products to accomplish any of your financial goals. Let's blaze this trail together!

Site Plan and Traffic Advisory Review Committee

1. 2.

Meeting Date: 01/13/2026

Title

CY02-26

*****FOR INFORMATION ONLY. Request of the Planning Agency to amend Chapter 10 of Mankato City Code related to floodplain ordinances.**

Meeting Date: 01/13/2026

Title

CYV01-26

Request of Bolton and Menk, on behalf of the property owner Ron Goodrich, for a variance from Chapter 10, Article VII, Division 3, Sec.10-1005 of the Mankato City Code to decrease the transitional yard setback from thirty (30) feet to six (6) feet in the M-1, Light Industrial, zoning district. The variance is being requested in order to allow for paving and parking lot expansion and improvement. The property is generally described as east half of Lots 9 and 10, Block 24 except the west 12.75 feet, and including the west half of the adjacent vacated alley; Lots 1-4, Block 24, except the railroad, and including the east half of the vacated alley; and Lot 8, Block 24 and the westerly half of the vacated adjacent alley and except the railroad, Mankato City (120 Pine Street and 1700 3rd Avenue).

Applicant

The applicant is Ron Goodrich.

Request

The applicant is seeking a variance to allow a decrease in the required transitional yard setback from 30' to 6'.

Location

The property is located at 120 Pine Street and 1700 3rd Avenue. It is generally described as east half of Lots 9 and 10, Block 24 except the west 12.75 feet, and including the west half of the adjacent vacated alley; Lots 1-4, Block 24, except the railroad, and including the east half of the vacated alley; and Lot 8, Block 24 and the westerly half of the vacated adjacent alley and except the railroad, Mankato City.

Existing Land Use

The property is currently the location of an industrial property that is used for the Maker's Space, and an associated gravel parking/driving area.

Zoning

The subject property is zoned M-1, Light Industrial.

Environmentally Sensitive Areas

There are no known environmentally sensitive areas on the site.

Public Utilities

Public utilities serve the property.

Review

Bolton and Menk, on behalf of the property owner Ron Goodrich, is requesting a variance from Chapter 10, Article VII, Division 3, Sec.10-1005 of the Mankato City Code to decrease the transitional yard setback from thirty (30) feet to six (6) feet in the M-1, Light Industrial, zoning district. The variance is being requested in order to allow for paving and parking lot expansion and improvement.

The property is generally described as the east half of Lots 9 and 10, Block 24 except the west 12.75 feet, and

including the west half of the adjacent vacated alley; Lots 1-4, Block 24, except the railroad, and including the east half of the vacated alley; and Lot 8, Block 24 and the westerly half of the vacated adjacent alley and except the railroad, Mankato City, which is addressed as 120 Pine Street and 1700 3rd Avenue. The property is the location of an existing building that is occupied by the Maker's Space.

Mankato City Code requires a 30' transitional yard between industrial districts and adjacent districts that are zoned residential. The property associated with this request is zoned M-1, Light Industrial, and the adjacent property located to the west is zoned R-3, Multiple Family Residential. The applicant is seeking a reduction in the required setback from 30' to 6' for purposes of constructing a hardsurface parking lot. The parking lot area is currently gravel.

Attachments

General Location Map

Aerial Plan

Site Plan

Variance Request statements

General Location Map



Date: December 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.

Aerial Map



Date: December 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.







1700 Third Avenue / Mankato, MN 56001

(507) 388-1004 Fax: (507) 388-0739

Contractor License: #BC002156

RE: Variance Questions

December 10, 2025

1. In your opinion, is the variance in harmony with the purposes and intent of the ordinance? Yes, this variance is in harmony with the ordinance's intent because it will improve the aesthetics of the property, allow for more required off-street parking spaces, and have similar setbacks to other commercial properties in the area. By approving this variance, the lot will be paved and have drainage consistent with current code while still allowing reasonable access to and usage of the building and its current tenants businesses.

2. In your opinion, is the variance consistent with the comprehensive plan? Yes, this variance request is consistent with the comprehensive plan by allowing the area to be improved while not hindering the day-to-day business of the building owner and tenants. Our plan is consistent with the improvements that Green Care, on the other side of 3rd Ave, was recently (2017) allowed to do with their parking lot and additional lots located at 1770, 1709, 1703 and 1629 3rd Ave with minimal setback to the neighboring residential properties.

3. In your opinion, does the proposal put property to use in a reasonable manner? Yes, this proposal will allow reasonable use of the property by allowing ample space for parking and delivery/pickup of materials and supplies to the businesses leasing space in the building. With the code required setback, it would be very difficult to get in and out of the overhead door on the North-West corner of the building with larger delivery vehicles, trailers, and other large construction equipment. Lessening this setback will allow the current tenants of the building to continue efficient use of their leased spaces in the building while still being able to park employee vehicles in the lot.

4. In your opinion, are there circumstances unique to the property? Yes, the unique circumstances present at this property include the need for access of the North-West warehouse space with commercial and construction vehicles and equipment. If this variance is not approved, continued operation of Goodrich Construction, would be unnecessarily limited due to access. The parking lot has been in the existing configuration for as long as we are aware. Also, the residential property to the West has been unoccupied and used as a workshop/storage space for decades with the residential home being boarded up and having to have had city intervention to keep it from falling into complete disrepair (Closing off the foundation space under the home, mandating roof repairs, etc.). We feel the neighboring property has been used as more of a storage/commercial space than a residential homestead for as long as we can remember.

5. In your opinion, will the variance maintain the essential character of the locality? Yes, this variance will maintain as well as improve the local character by providing a paved parking area that will help keep streets in the area cleaner as well as adding a 6' green space between the parking lot and the property line. These improvements will allow improved drainage, usage, and appearance of the property and properties in the locality.

Meeting Date: 01/13/2026

Title

CYV02-26

Request of KJ2 Properties for a variance from Chapter 10, Article VIII, Division 1, Sec.10-1059 of the Mankato City Code to increase the number of units in a building from 4 to 5 in the Shoreland District. The property is described as Lots 17-22 Block 5 Groh Farm Subdivision (3120, 3122, 3124, 3126, 3130, 3132, 3134, 3136, 3200, 3202, 3204, 3206, 3210, 3212, 3214, 3216, 3220, 3222, 3224, 3226, 3230, 3232 Bassett Drive and 1120, 1124 Fraser Lane).

Applicant

The applicant is KJ2 Properties.

Request

The request seeks a variance from Chapter 10, Article VIII, Division 1, Sec.10-1059 of the Mankato City Code to increase the number of units in a building from 4 to 5 in the Shoreland District.

Location

The property is described as Lots 17-22 Block 5 Groh Farm Subdivision, and the current addresses associated with the subject development area are 3120, 3122, 3124, 3126, 3130, 3132, 3134, 3136, 3200, 3202, 3204, 3206, 3210, 3212, 3214, 3216, 3220, 3222, 3224, 3226, 3230, 3232 Bassett Drive and 1120, 1124 Fraser Lane.

Existing Land Use

The properties are currently vacant lots.

Zoning

The property is zoned R-3, Limited Multiple Family Dwelling district.

Environmentally Sensitive Areas

The subject property is located in the Shoreland district as a result of its distance from the adjacent public water wetland.

Review

KJ2 Properties is requesting a variance from Chapter 10, Article VIII, Division 1, Sec.10-1059 of the Mankato City Code to increase the number of units in a building from 4 to 5 in the Shoreland District.

The property is described as Lots 17-22 Block 5 Groh Farm Subdivision, and the subject parcels are currently addressed as 3120, 3122, 3124, 3126, 3130, 3132, 3134, 3136, 3200, 3202, 3204, 3206, 3210, 3212, 3214, 3216, 3220, 3222, 3224, 3226, 3230, 3232 Bassett Drive and 1120, 1124 Fraser Lane.

The property is currently platted as Common Interest Community (CIC) Number 121, which places 4 units on each of the subject underlying lots that were platted with the Groh Farms Subdivision. The applicant desires to increase the number of units allowed on these subject lots from 4 to 5 per building, which will involve dissolution of the current CIC plat. Because the subject property is located in the Shoreland District, a variance is necessary to make this change.

Attachments

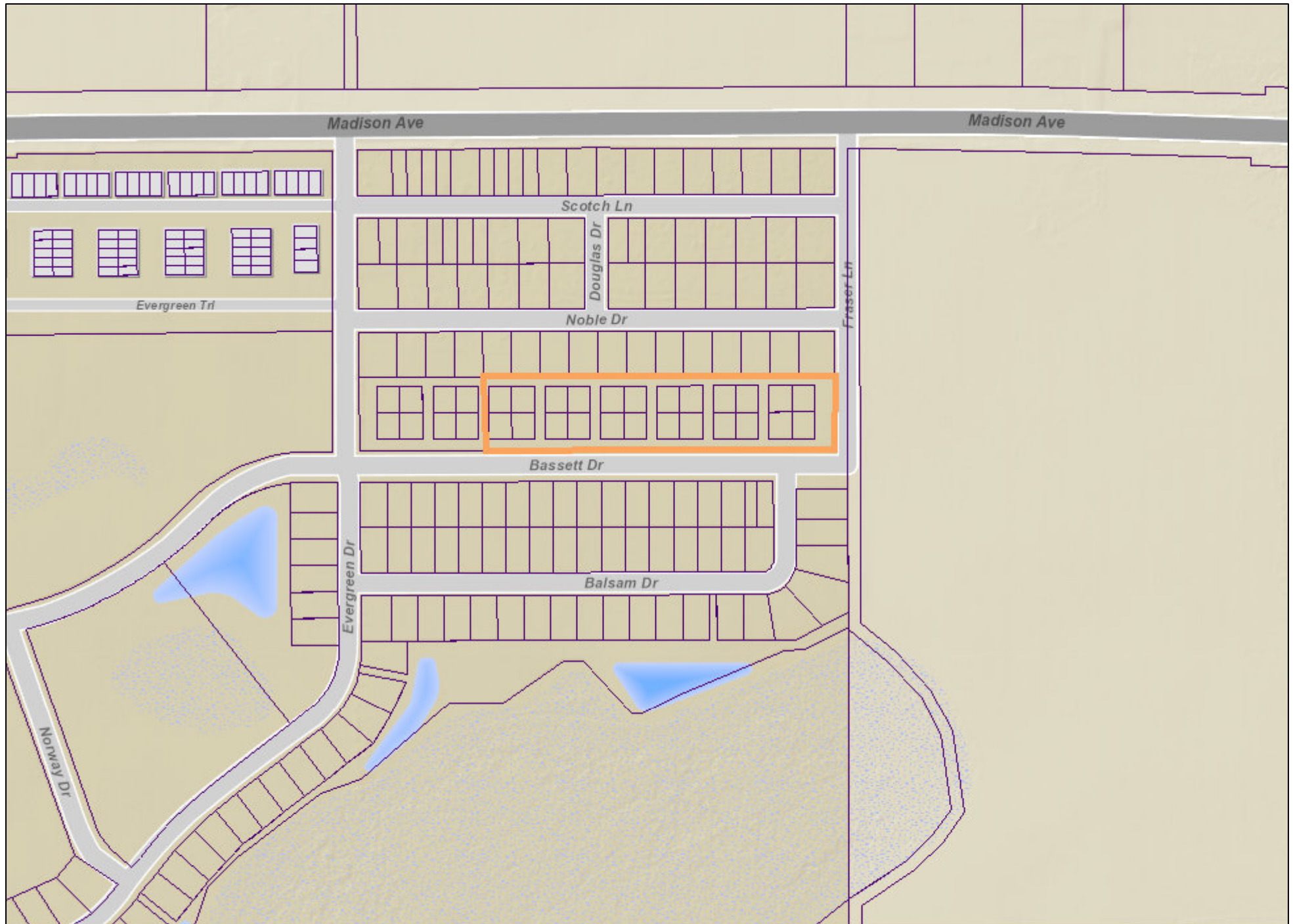
General Location Map

Aerial Plan

Site Plan

Current CIC plat for the parcels

General Location Map



Date: December 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.



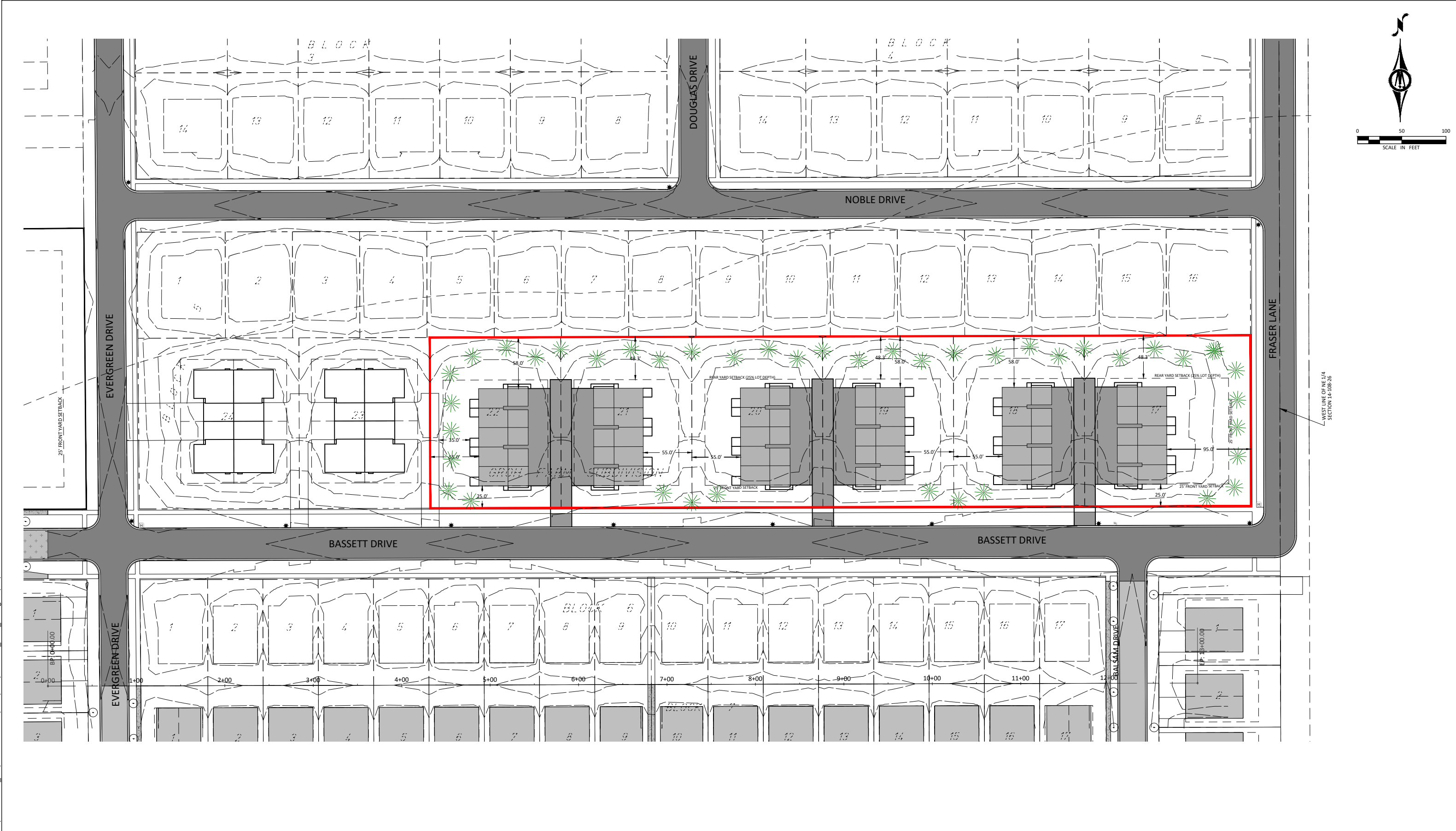
General Location Map



Date: December 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuse or misinterpretation.



COMMON INTEREST COMMUNITY NUMBER 121

A PLANNED COMMUNITY ECHO PINES TOWNHOMES

FIRST AMENDED COMMON INTEREST COMMUNITY PLAT

This Common Interest Community Plat is part of the First Amended

Declaration recorded as Document No. _____

On this ____ day of _____, 2025

County Recorder _____

LEGEND

- 3/4" IRON PIPE MONUMENT SET MARKED BY LIC. NO. 46564
- MONUMENT FOUND

ORIENTATION OF BEARING SYSTEM BASED ON THE PLAT OF GROH FARM SUBDIVISION.

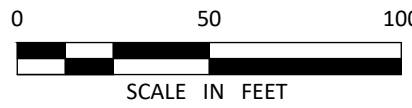
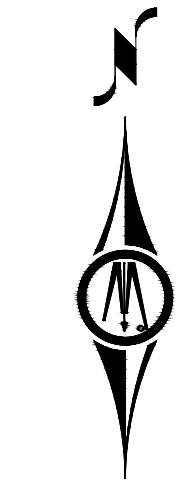
UTILITY EASEMENTS SHOWN AS PER THE PLAT OF GROH FARM SUBDIVISION.

THE LOWER BOUNDARY OF EACH UNIT IS ELEVATION 990.0 (CITY DATUM)

THE UPPER BOUNDARY OF EACH UNIT IS ELEVATION 1050.0 (CITY DATUM)

LEGEND

- PC INDICATES POINT OF CURVATURE
- PT INDICATES POINT OF TANGENCY
- BIT. DR. INDICATES BITUMINOUS DRIVEWAY
- MBB INDICATES LIMITED COMMON ELEMENT
- L.C.E. 100 INDICATES LIMITED COMMON ELEMENT



EVERGREEN DRIVE

EVERGREEN DRIVE

BALSAM DRIVE

FRASER LANE

BASSETT DRIVE

SURVEYORS CERTIFICATE

I, Michael M. Eichers, do hereby certify that the work was undertaken by or reviewed and approved by me for this CIC Plat of Common Interest Community Number 121, a Planned Community, Echo Pines Townhomes, First Amended Common Interest Community Plat, being located upon:

Units 3100, 3102, 3104, 3106, 3110, 3112, 3114, 3116, and part of Common Element A located on the underlying Lots 23, & 24, Block 5, Groh Farm Subdivision, according to the plats thereof on file and of record with the Blue Earth County Recorder.

Containing 1.46 acres.

fully and accurately depicts all information required by Minnesota Statutes, Section 515B.2-1101(c).

Dated this ____ day of _____, 2025.

Michael M. Eichers, Land Surveyor
Minnesota License No. 46564

State of Minnesota
County of Blue Earth

The foregoing instrument was acknowledged before me this ____ day of _____, 2025,
by Michael M. Eichers, a Licensed Land Surveyor.

Nathan P Myhra, Notary Public
Notary Public-Minnesota
My Commission Expires Jan. 31, 2028

BLUE EARTH COUNTY PROPERTY AND ENVIRONMENTAL RESOURCES

I hereby certify that there are no delinquent taxes and/or delinquent special assessments, that the current year's taxes have been paid and that the transfer has been entered on the land described herein on the ____ day of _____, 2025.

Blue Earth County Property and
Environmental Resources Director

Meeting Date: 01/13/2026

Title

CYV03-26

Request of APX Construction for a variance from Chapter 10, Article X, Division 2, Sec.10-1500 Letter e of the Mankato City Code to reduce the required setback from a wetland from 16.5 feet to 5 feet for the purpose of constructing a sidewalk. The property is described as South Victory Drive adjacent Lot 1, Block 1 Evenson Subdivision (905 S. Victory Drive).

Applicant

The applicant is APX Construction Group.

Request

The applicant is seeking a variance to reduce the setback from a wetland from 16.5 feet to 5 feet for the purpose of constructing a sidewalk in the area between Victory Drive and the wetland next to Evenson Subdivision. The proposed sidewalk is 5 feet wide and will provide a connection from the proposed apartment complex to the sidewalks on Stadium Road.

Location

The property is located at 905/909 S. Victory Dr. The proposed sidewalk is planned along the west side of the property along Victory Dr.

Existing Land Use

The property is currently vacant. Development is planned to start in January 2026.

Zoning

The property is zoned B-3, Highway Business District.

Environmentally Sensitive Areas

There are areas on the site that have delineated wetlands.

Public Utilities

Property will be served by public utilities once development begins.

City Code

The Mankato City Code related to Subdivision and Development Regulations (Platting) can be found in Chapter 10, Article XII, as linked here: https://library.municode.com/mn/mankato/codes/code_of_ordinances?nodeId=PTIICOOR_CH10LAUSDE_ARTXIIISUDEREPL.

Review

APX Construction Group is requesting a variance to reduce the setback from a wetland from 16.5 feet to 5 feet for the purpose of constructing a sidewalk in the area between Victory Drive and the wetland next to Evenson Subdivision. The proposed sidewalk is 5 feet wide and will provide a connection from the proposed apartment complex to the sidewalks on Stadium Road.

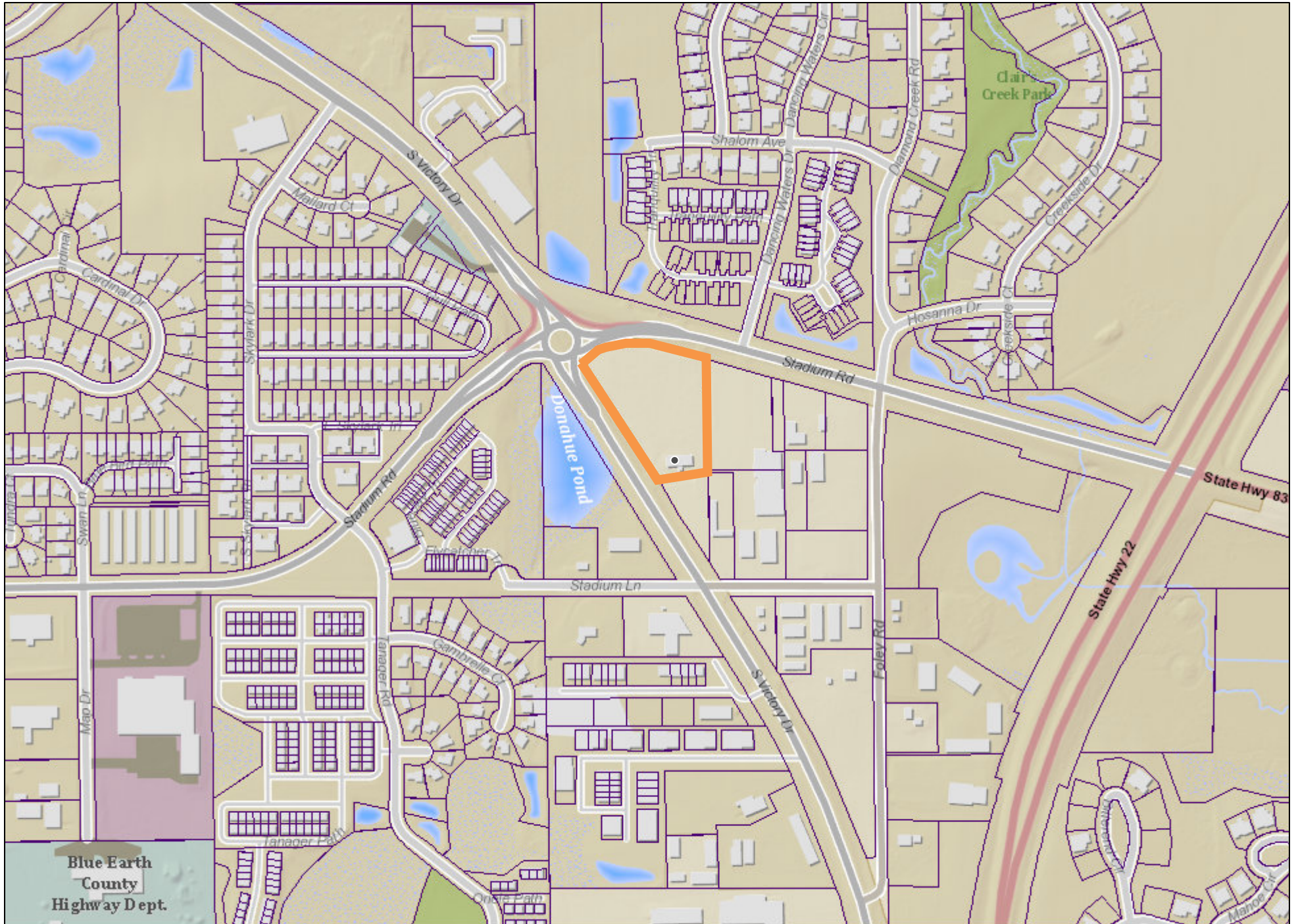
The subject property is located at 905/909 S. Victory Dr. at the roundabout of Victory Dr. and Stadium Rd.

The project was reviewed last year and approved for development by City Council.

Attachments

General Location Map
Aerial Plan
Site Plan
Civil Plans
Variance Responses

General Location Map

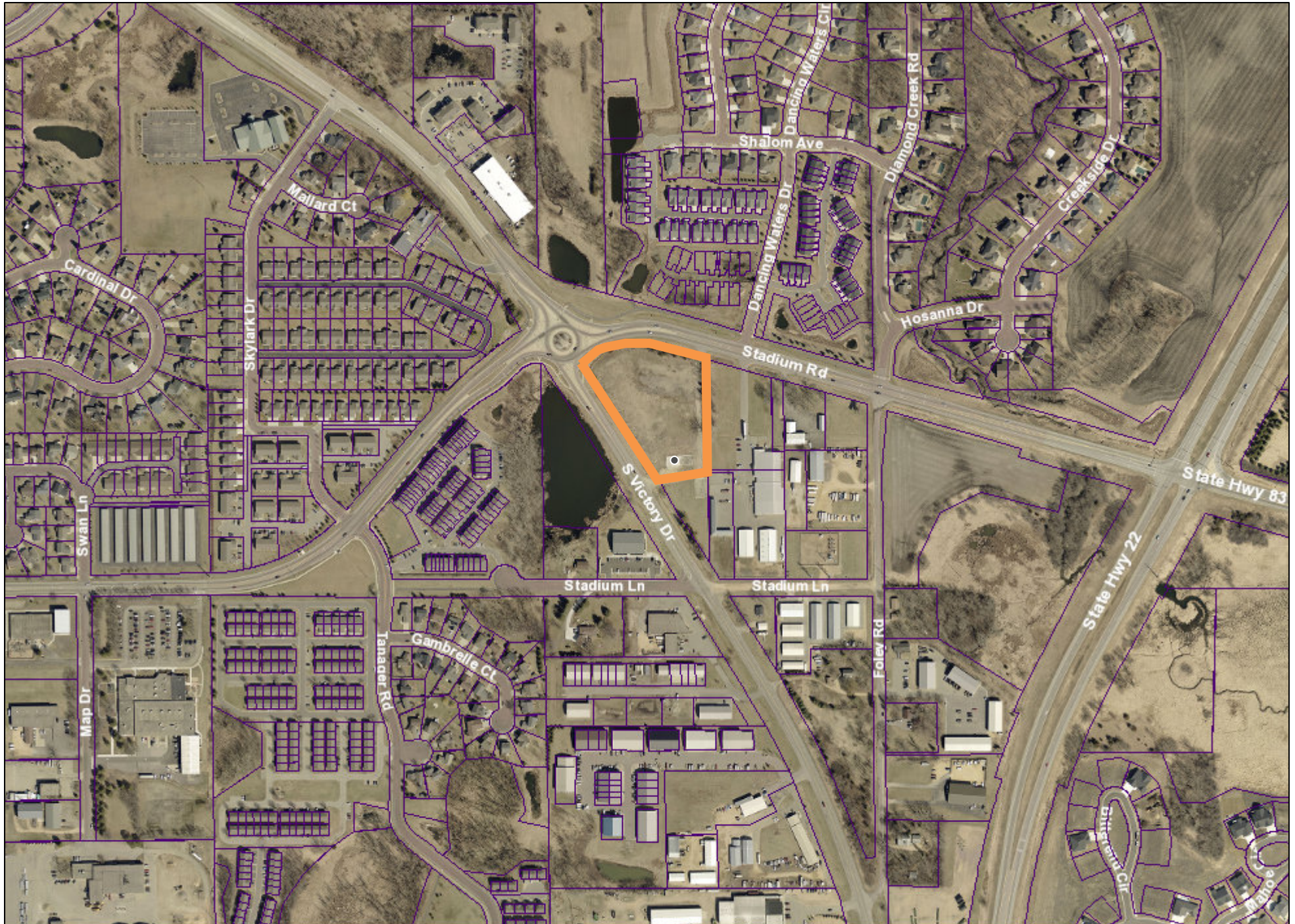


Date: September 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuser misinterpretation.

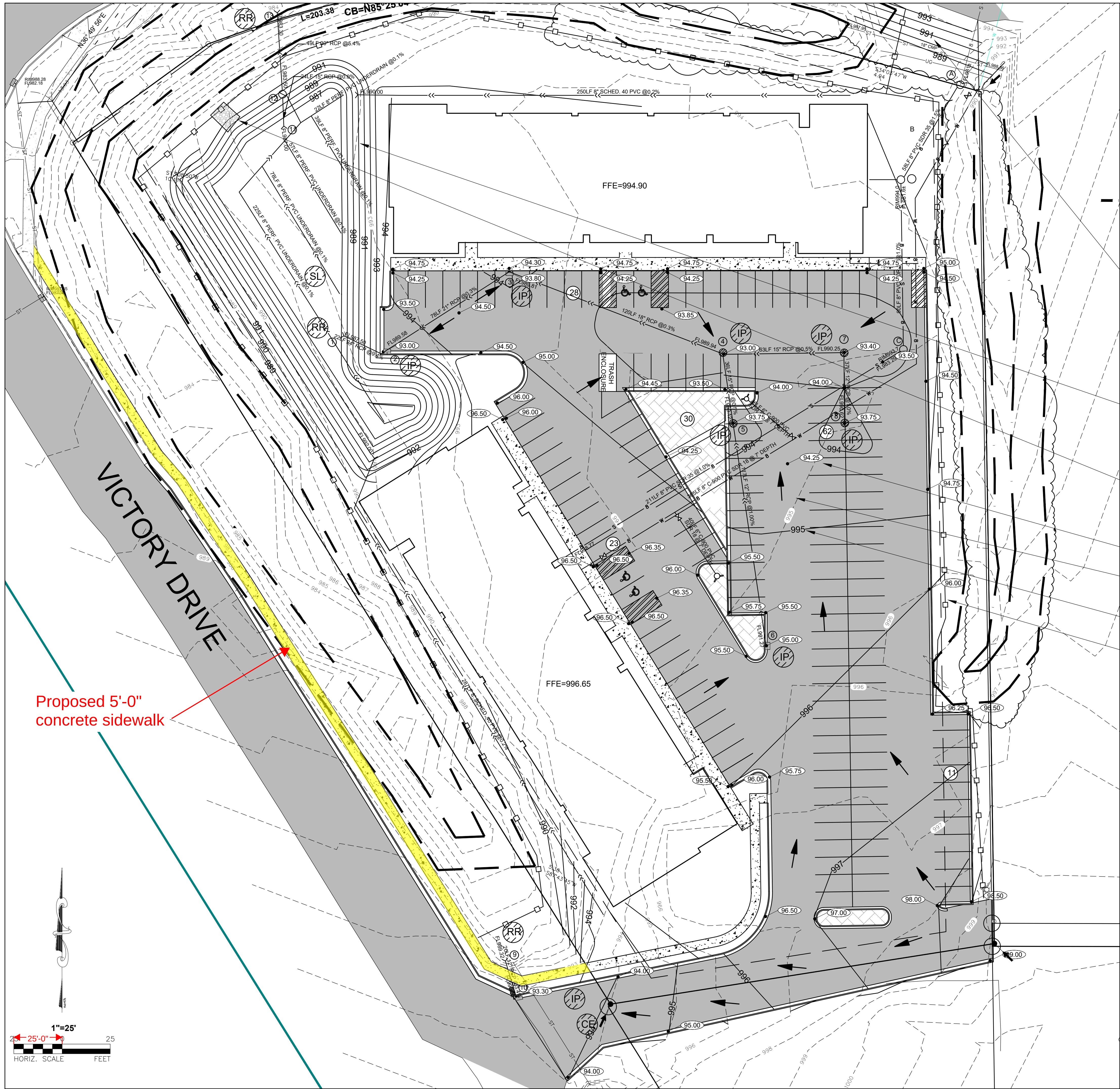
Aerial Map



Date: September 2025

Author:

This information is to be used for reference purposes only. The City of Mankato does not guarantee accuracy of the material contained herein and is not responsible for misuser misinterpretation.



SWPPP LEGEND

- CE = ROCK CONSTRUCTION ENTRANCE
- IP = INLET PROTECTION-TYP. AT ALL DOWNGRAIDENT INLETS
- = SILT FENCE-FOR PERIMETER CONTROL
- = WOOD CHIP BIO-ROLL/SILT SOCK
- = HYDRO-SEED TYPE LAWN OVER 6" MIN. BLACK DIRT TOPSOIL (TYP. TO ALL NON-PAVED DISTURBED AREAS WITHIN SITE)
- CW = DESIGNATED CONCRETE WASHOUT AREA
- RR = CL. III RIPRAP ENERGY DISSIPATION-PLACE WITHIN 24 HOURS
- = RUNOFF FLOW DIRECTION
- = DRAINAGE AREA BOUNDARY
- PG = DESIGNATED POLLUTANT GENERATING AREA
- SL = DESIGNATED STEEP SLOPE AREA (4:1 OR GREATER) F&I CATEGORY 3 BLANKET ON ALL 4:1 OR STEEPER SLOPES
- ONSITE SOILS=SILTY CLAY, KLOSSNER MUCK PER NRCS SOIL SURVEY

QUANTITY

- 1 EA
- 9 EA
- 1400 LF
- 1 ACRE
- 1 EA
- 25 CY
- 1 EA
- 1300 SY

REMOVE EXISTING ACCESS ROAD & CULVERT-GRADE TO MATCH EXISTING ROAD SLOPES

PROPOSED FILTRATION BASIN-SEE BASIN DETAILS FOR SAND MEDIA AND SEEDING REQUIREMENTS

F&I EMERFENCY OVERFLOW (EOF) AT THIS LOCATION AT ELEV. 1192.00 -INSTALL 10'X12'X12" THICK RIPRAP OVERFLOW WITH CL. III RIPRAP OVER GEO-FABRIC

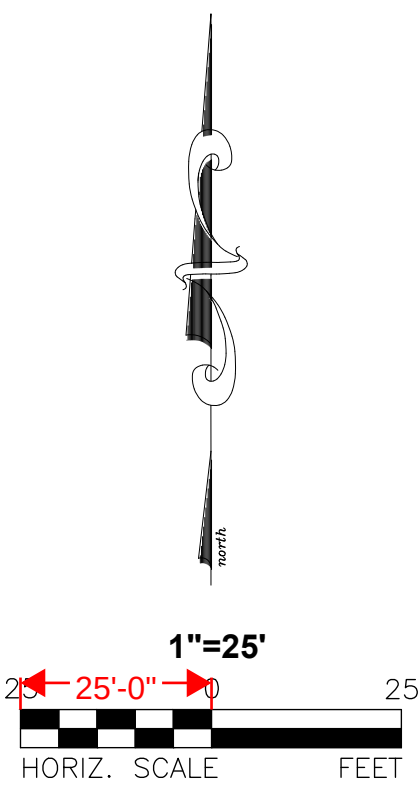
PROPOSED PAVEMENT/GUTTER ELEVATION (NGVD LESS 900) TYP.

EXISTING ELEVATION CONTOUR TYP.

PROPOSED ELEVATION CONTOUR TYP.

PROPOSED SILT FENCE TYP.

Proposed 5'-0" concrete sidewalk



Consultant:

JONES HAUGH SMITH
Engineers + Surveyors
515 South Washington Ave. Albert Lea, MN 56007-3734
Reg. No. 42744 Date: 9/20/25

Project:

MANKATO APARTMENTS

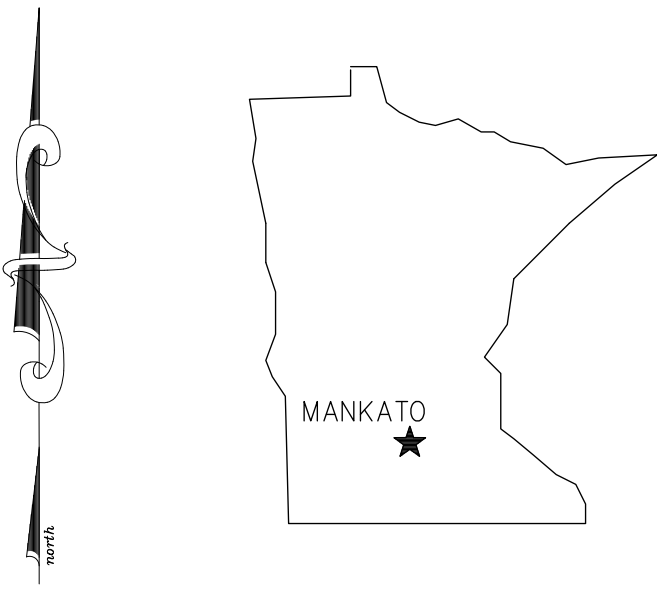
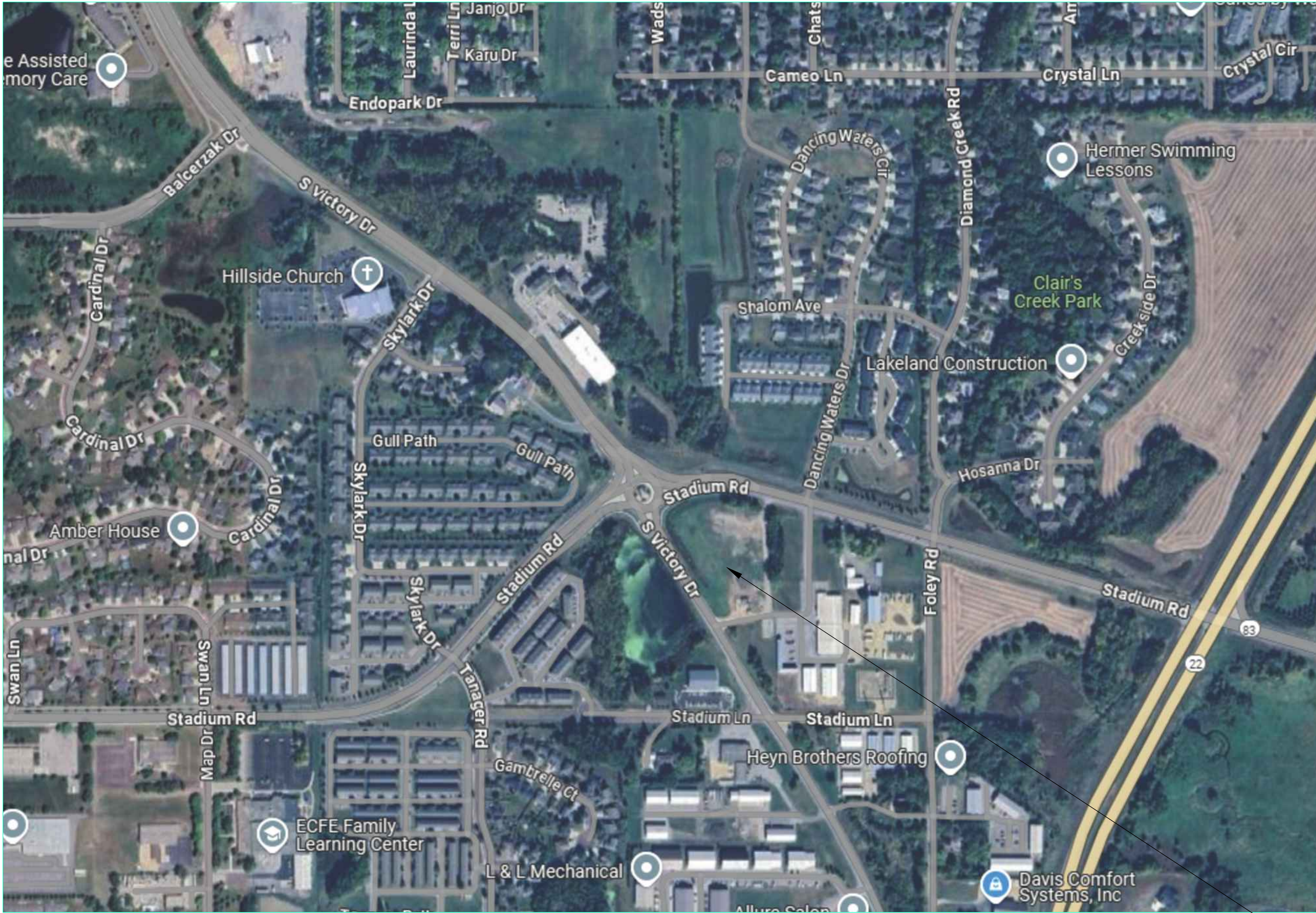
Revision:

No.:	Date:
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	
Sheet Title:	
GRADING PLAN	

Sheet No.:

C5

MANKATO APARTMENTS
MANKATO, MN



PROJECT LOCATION

INDEX TO SHEETS

- C1: TITLE SHEET
- C2: EXISTING CONDITIONS
- C3: HARDSCAPE PLAN
- C4: UTILITY PLAN
- C5: GRADING PLAN
- C5.1: SITE AMENITY PLAN
- C6: LANDSCAPE PLAN
- C7: DETAILS
- C8: SWPPP NARRATIVE& DETAILS
- C9: DETAILS
- C10–C11: SPECIFICATIONS

THIS PLAN CONTAINS 12 SHEETS

LEGEND

- | | | | |
|----------|-----------------------------------|-----------|--|
| ○ | = 5/8"Ø X 16" iron stake monument | ⊞ | = Sign |
| ● | =Iron stake monument-Found | ⊞ | = Sign-Handicap |
| — W — | = Water Main | ⊞ | = Light Pole |
| — S — | = Sanitary Sewer | ⊞ | = Power Pole |
| — ST — | = Storm Sewer | ⊞ | = Guy Anchor |
| — G — | = Gas Main | ⊞ | = Fire hydrant |
| — UT — | = Underground Telephone | ⊞ | = Water Main Valve |
| — OT — | = Overhead Telephone | ⊞ | = Fire Sprinkler |
| — FO — | = Fiber-Optics | ⊞ | = Cleanout |
| — UE — | = Underground Electric | ⊞ | = Culvert |
| — OE — | = Overhead Electric | ⊞ | = Gas Main Valve |
| — X — | = Chain Link Fence | ⊞ | = Catch Basin |
| — | = Control Access | ⊞ | = Manholes |
| ⊞ | = Gate Post | 1271.23 | = Spot Elevation |
| ⊞ | = Bollards | RM1270.89 | = Rim Elevation |
| ⊞ | = Electric Meter | FL1262.34 | = Line Elevation |
| ⊞ | = Gas Meter | | |
| ⊞ | = Fiber-Optics Box | | =Concrete Surface |
| ⊞ | = Telephone Pedestal | | =Bituminous Surface |
| ⊞ | = Light Tower | | =Gravel Surface |
| ⊞ | = Silt Fence | | |
| ⊞ | = Furnish & Install | | |
| — 1272 — | = Existing Elevation Contour Line | 27.00 | =Proposed Pavement Elevation |
| — 1272 — | = Proposed Elevation Contour Line | T28.0 | |
| | | B24.0 | =Proposed Top/Bottom of Retaining Wall Elevation |

APPLICABLE CONSTRUCTION PERMITS

ALL CONSTRUCTION WITHIN ROAD RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PERMIT AS ISSUED BY THE ROAD AUTHORITY.

GENERAL NOTES

DEVELOPER, CONTRACTOR AND ALL SUBCONTRACTORS SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES GOVERNED BY STATE AND LOCAL JURISDICTION. SITE IRRIGATING, LIGHTING, LANDSCAPING, SIGNING ARE NOT A PART OF THIS PLAN. PROVIDE EROSION CONTROL PER NPDES PERMIT REQUIREMENTS AND AS SHOWN. PROVIDE HANDICAP CURB RAMPS & SIGNAGE. COMPLY WITH ALL AMERICAN DISABILITY ACT REQUIREMENTS. ALL CONCRETE OR ASPHALTIC PAVEMENT CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF MN/DOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION. A ROCK CONSTRUCTION ENTRANCE IS REQUIRED AT ALL ENTRANCES FROM BITUMINOUS PAVEMENT. ACCESS FOR LOCAL RESIDENTS/BUSINESSES SHALL ALWAYS BE MAINTAINED. PROVIDE PAVEMENT STRIPING AS SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS FOR CONSTRUCTION. SEE BOUNDARY SURVEY BY OTHERS FOR SITE BOUNDARIES. ANY ALTERATIONS OR REVISIONS TO THE SITE DEVELOPMENT PLAN AS SHOWN SHALL NOT BE THE RESPONSIBILITY OF JONES, HAUGH & SMITH INC. AND SHALL RELEASE JONES, HAUGH & SMITH INC. OF ANY LIABILITY FOR ANY DAMAGES CAUSED THEREFROM UNLESS WRITTEN AUTHORIZATION OR PLAN REVISION HAS BE APPROVED BY JONES, HAUGH & SMITH INC. PRIOR.

BENCHMARK 1

Top head of spike in power pole at southeast corner of property.
Elevation = 1001.49

BASIS OF BEARING SYSTEM

All bearings are based upon the MnDot Blue Earth County Coordinate System Nad 83 (96) Horn Adjustment Grid

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 Engineer in the State of Minnesota.
Brian J. Johnson
Reg. No. 42744 Date: 9/20/25



Consultant:

JONES
HAUGH
&
SMITH
Engineers - Surveyors
515 South Washington Ave. Albert Lea, MN 56007
507-373-4876

MANKATO
APARTMENTS

Project:

Revision:

No. 25-188 Date: 9/20/2025

Drawn: **bjj** Checked:

Project Manager:

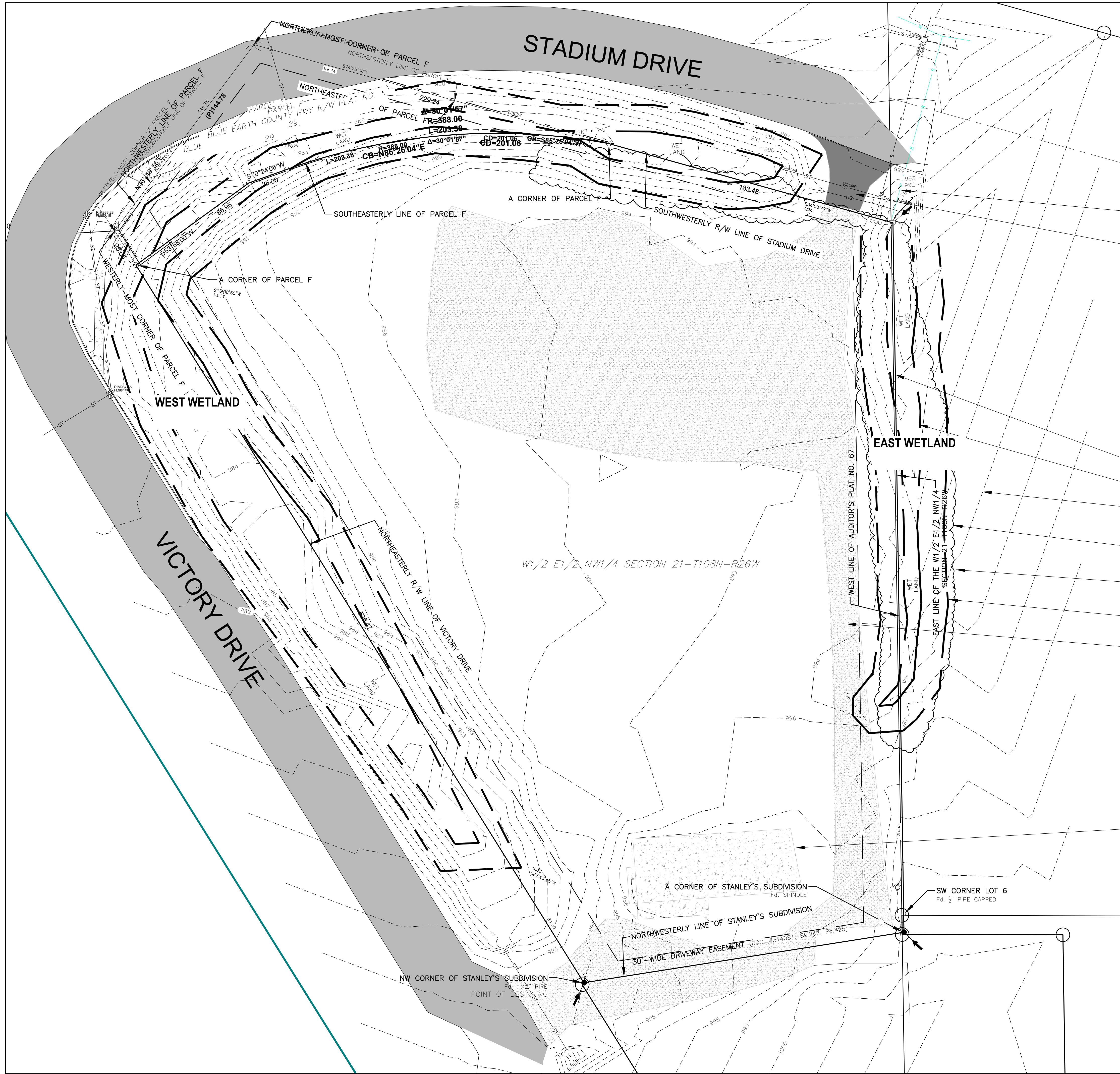
Project Status: **CD**

Sheet Title:

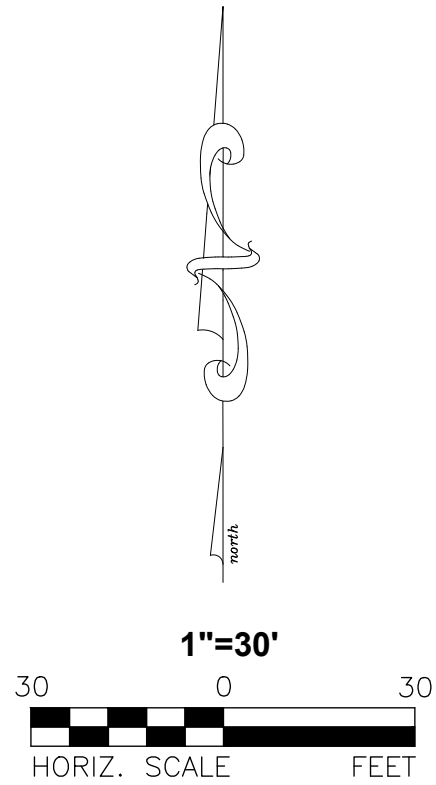
TITLE SHEET

Sheet No.:

C1



- EXISTING SEWER/WATER SERVICES-FIELD VERIFY LOCATION
- REMOVE EXISTING DRIVEWAY APPROACH-GRADE TO MATCH EXISTING DITCH SLOPES
SEE GRADING PLAN-REMOVE EXISTING DRIVEWAY CULVERT
- PROPERTY LINE TYP.
- WETLAND DELINEATION LINE TYP.
- EXISTING ELEVATION CONTOUR TYP.
- EDGE OF TREES TYP.
- EXISTING GROUND SPOT ELEVATION TYP.
- 16.5' WETLAND BUFFER LINE TYP.
- REMOVE OR SALVAGE EXISTING GRAVEL SURFACING
- REMOVE EXISTING CONCRETE SLABS & WALKS AS REQUIRED FOR CONSTRUCTION TYP.



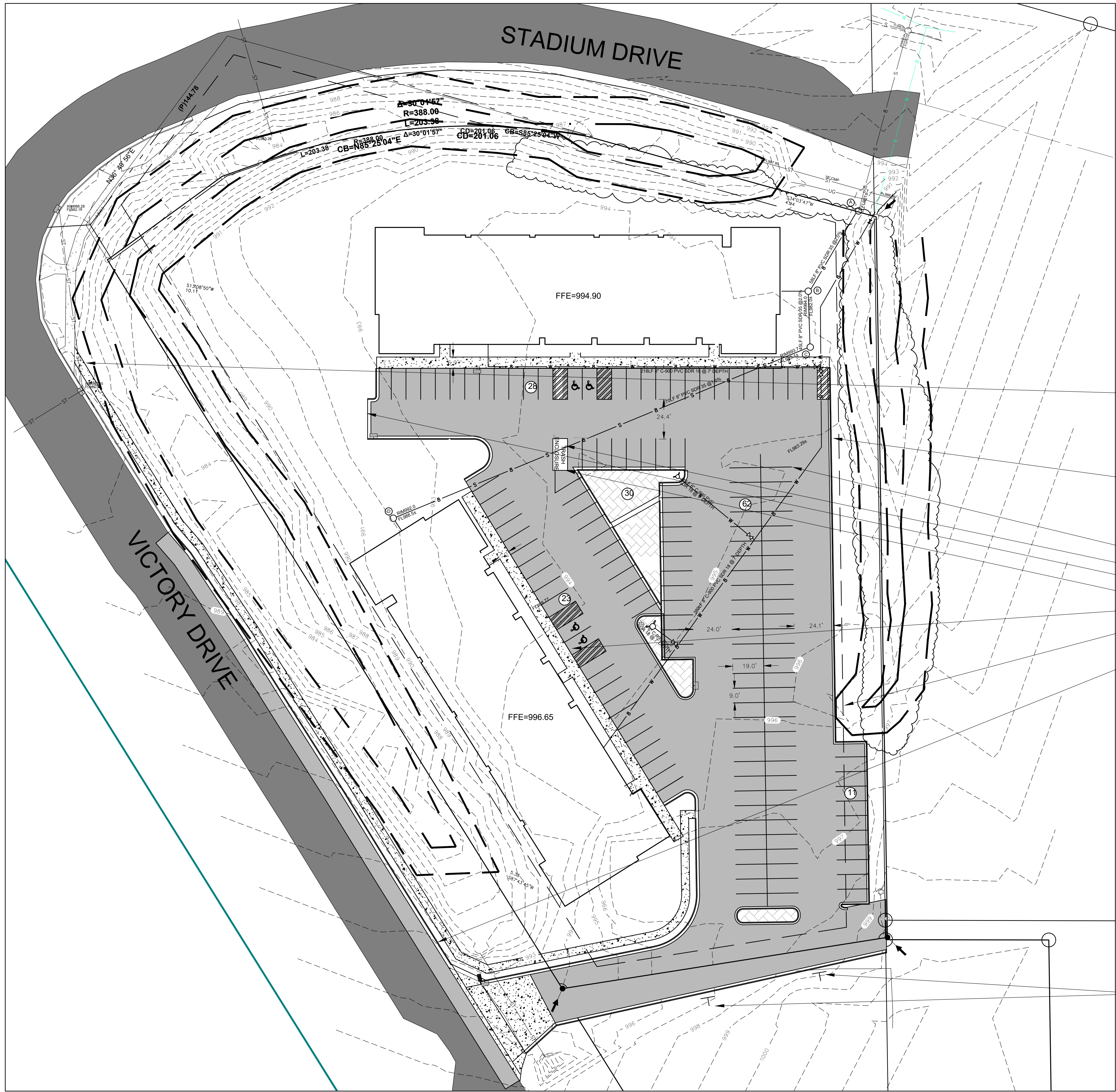
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

Bryan Johnson
Bryan Johnson
Reg. No. 42744 Date: 9/20/25

JONES HAUCH SMITH
Engineers & Surveyors
515 South Washington Ave. Albert Lea, MN 56007-3734 507-373-4876

**MANKATO
APARTMENTS**

No: 25-188	Date: 9/20/2025
Drawn: bij	Checked:
Project Manager:	
Project Status: CD	
Sheet Title:	
EXISTING CONDITIONS	
Sheet No:	
C2	



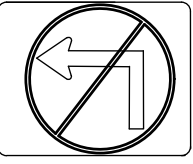
PARKING CALCULATION:
PARKING REQUIRED: 1-1/2 STALLS PER DWELLING UNIT
PARKING REQUIRED: 1-1/2 STALLS* 82 DWELLING UNITS = 123 STALLS
PARKING STALLS PROVIDED: 154

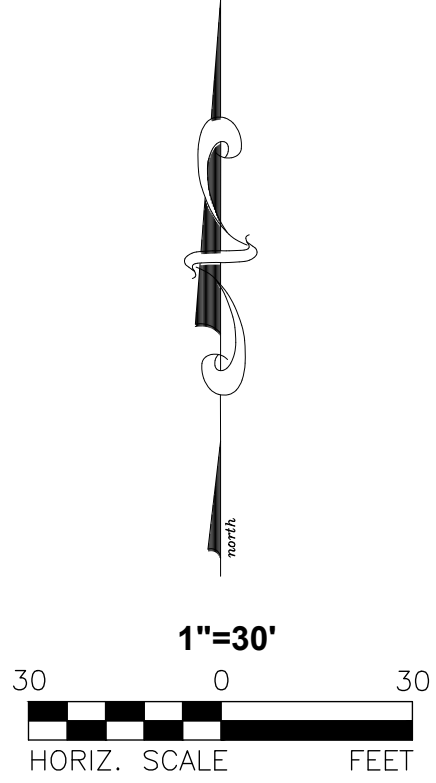
F&I NEW SIDEWALK (2% CROSS SLOPE) ALONG VICTORY DR. WITH 4' BOULEVARD (5% CROSS SLOPE) TYP.
CONNECT NEW SIDEWALK TO EXISTING TYP.

NEW CONCRETE B618 CURB & GUTTER TYP.

F&I LATEX PAVEMENT STRIPING/MESSAGES TYP.
F&I CONCRETE PAVEMENT SECTION WITHIN TRASH ENCLOSURE TYP.
F&I CURB CUT FOR POND MAINTENANCE ACCESS
PROPOSED DUMPSTER ENCLOSURE LOCATION-SEE ARCHITECTURAL
F&I THICKENED EDGE WALK ALONG BUILDING EXCEPT AT ADA STALLS TYP.
SEE THICKENED EDGE WALK DETAIL AND RAISED PAVEMENT DETAIL
BUILDING SETBACK LINE TYP.

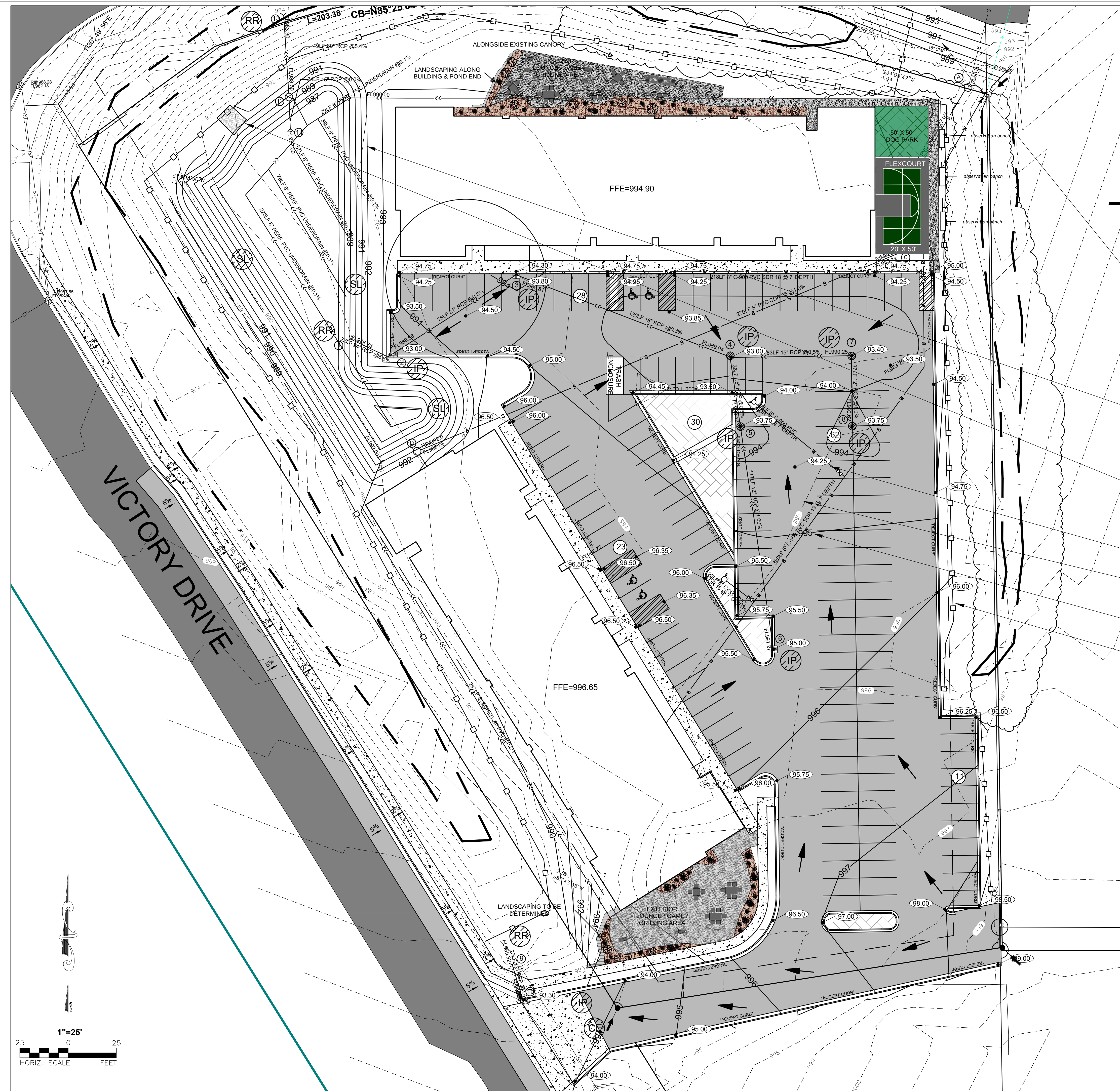
F&I B624 CURB & GUTTER ALONG EDGE OF VICTORY DRIVE ALONG NEW SIDEWALK
SAWCUT & REMOVE EXISTING BITUMINOUS SHOULDER FULL DEPTH AND WIDTH. SAWCUT FULL DEPTH AT
MATCH POINTS AND PATCH SHOULDER WITH SAME EXISTING BITUMINOUS SECTION.
NEW SHOULDER TO HAVE CROSS SLOPE OF 5%. SEE GRADING PLAN AND SIDEWALK DETAIL


F&I (2) R3-2 NO LEFT TURN SIGNS
PER MUTCD MANUAL



**MANKATO
APARTMENTS**

Project:	
Revision:	
No.:	Date: 9/20/2025
Drawn: bjj	Checked:
Project Manager:	
Project Status: CD	
Sheet Title: HARDSCAPE PLAN	



SWPPP LEGEND	QUANTITY
 = ROCK CONSTRUCTION ENTRANCE	1 EA
 = INLET PROTECTION-TYP. AT ALL DOWNGRAIDENT INLETS	9 EA
 = SILT FENCE-FOR PERIMETER CONTROL	1400 LF
 = WOOD CHIP BIO-ROLL/SILT SOCK	
 = HYDRO-SEED TYPE LAWN OVER 6" MIN. BLACK DIRT TOPSOIL (TYP. TO ALL NON-PAVED DISTURBED AREAS WITHIN SITE)	1 ACRE
 = DESIGNATED CONCRETE WASHOUT AREA	1 EA
 = CL. III RIPRAP ENERGY DISSIPATION-PLACE WITHIN 24 HOURS	25 CY
 = RUNOFF FLOW DIRECTION	
 = DRAINAGE AREA BOUNDARY	
 = DESIGNATED POLLUTANT GENERATING AREA	1 EA
 = DESIGNATED STEEP SLOPE AREA (4:1 OR GREATER) F&I CATEGORY 3 BLANKET ON ALL 4:1 OR STEEPER SLOPES	1300 SY
ONSITE SOILS=SILTY CLAY, KLOSSNER MUCK PER NRCS SOIL SURVEY	

REMOVE EXISTING ACCESS ROAD & CULVERT-GRADE TO MATCH EXISTING ROAD SLOPES

- PROPOSED FILTRATION BASIN-SEE BASIN DETAILS FOR SAND MEDIA AND SEEDING REQUIREMENTS

F&I EMERFENCY OVERFLOW (EOF) AT THIS LOCATION AT ELEV. 1192.00 -INSTALL 10'X12'X12" THICK RIPRAP OVERFLOW WITH CL. III RIPRAP OVER GEO-FABRIC

- PROPOSED PAVEMENT/GUTTER ELEVATION (NGVD LESS 900) TYP.

- EXISTING ELEVATION CONTOUR TYP.

— PROPOSED ELEVATION CONTOUR TYP.

- PROPOSED SILT FENCE TYP.



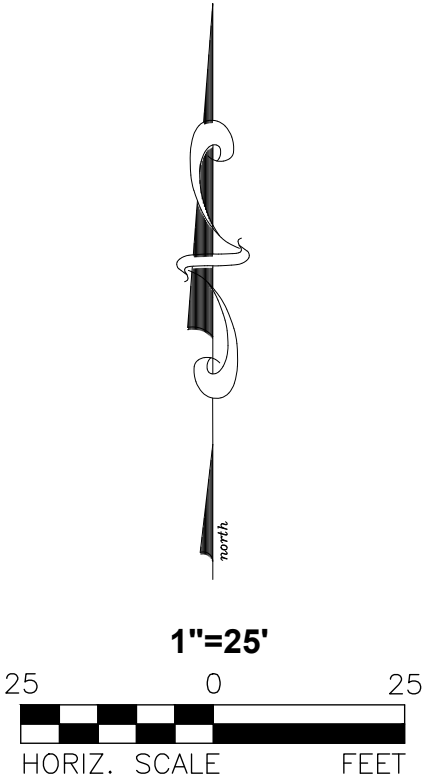
LANDSCAPING NOTES

Sec. 10-1740 PERIMETER OFF STREET PARKING LOT
(1) SHADE TREE/ 50 LF OF FRONTAGE
(1) EVERGREEN TREE/ 25 LF OF FRONTAGE
80% OPAQUE ALONG ALL PARKING FRONTING STREET
PLANTING BEDS SHALL BE MULCHED WITH BARK CHIPS,
ROCK MULCH, FEATHER ROCKS OR SIMILAR MATERIAL.
PERIMETER LANDSCAPING & TRANSITIONAL YARDS SHALL
CONSIST OF A COMBINATION OF GROUND COVER, SHADE
TREES OR EVERGREEN TREES, SHRUBS AND APPROPRIATE
SCREENING DEVICES SUCH AS DECORATIVE WALLS, FENCES OR

Label	Name	Scientific Name	Qty	Size	Root Type	mature size in feet	
TA	Techny Arborvitae	<i>Thuja Occidentalis 'Techny'</i>	35	6'	BB	H: 12-15'	W: 6-8'
ABS	Armstrong Maple	<i>Acer rubrum 'Armstrong'</i>	6	2.5"	BB	H:45'	W:15'
VPC	Velvet Pillar Crabapple	<i>Malus 'Velvetcole'</i>	2	1.5"	BB	H:20'	W:10-12'
RBC	River Birch Clump	<i>Betula nigra</i>	3	6' Clump		H:40-60'	W:30-40'
SGM	Sienna Glen Maple	<i>Acer x freemanii 'Sienna'</i>	2	2"	B&B	H:50'-60'	W:35'-40'
IPL	Ivory Pillar Lilac	<i>Syringa reticulata 'Willamette'</i>	4	1.5"	B&B	H: 20'	W: 12'
MJ	Medora Juniper	<i>Juniperus Scopulorum 'medora'</i>	5	#5	Cont	H:12-15'	W:4'-6'
BHS	Black Hills Spruce	<i>Picea glauca densata</i>	5	6'	B&B	H:30-40'	W: 35'
NAH	Northern Acclaim Honeylocust	<i>Gleditsia triacanthos 'Harve'</i>	1	2.5"	B&B	H: 45'	W: 35'
CH	Common Hackberry	<i>Celtis Occidentalis</i>	2	2.5"	B&B	H:50-75'	W:50'
AFD	Artic Fire Dogwood	<i>Cornus stolonifera 'Farrow'</i>	10	#3	Cont	H:5-6'	W:3-4'
BCB	Black Chokeberry	<i>Aronia Melanocarpa Elata</i>	10	#5	Cont	H:4-6'	W:4'6"
2484 SF Shredded Hardwood Mulch 3" depth over woodfiber weed suppression mat. (Manufacture Profile) bordered by a cut edge							
Building 1							
1650 1.5" Rock Mulch 3" depth over 6 Mil black plastic bordered by Professional Grade Vinyl Edging, 4 stakes per edging							
575 Professional Grade Vinyl Edging, 4 stakes per edging							
Building 2							
1650 1.5" Rock Mulch 3" depth over 6 Mil black plastic bordered by Professional Grade Vinyl Edging, 4 stakes per edging							
575 Professional Grade Vinyl Edging, 4 stakes per edging							



=DENOTES EXISTING TREELINE



MANKATO APARTMENTS

Project:

Revision:

No.: 9/20/2025

Drawn: **bjj**

Checked:

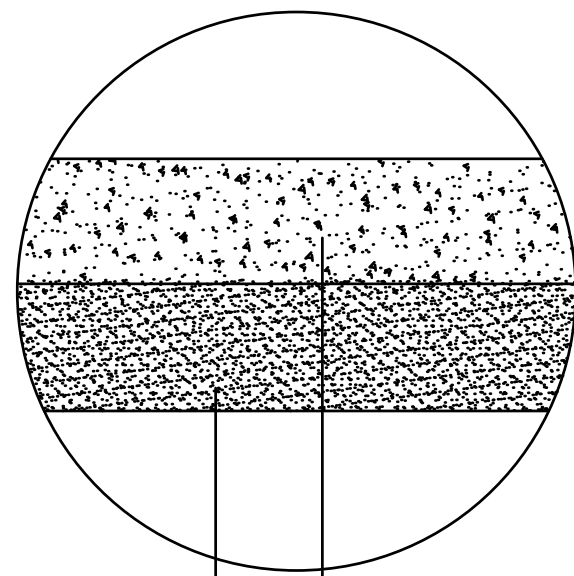
Project Manager:

Project Status: **CD**

Sheet Title:

LANDSCAPE PLAN

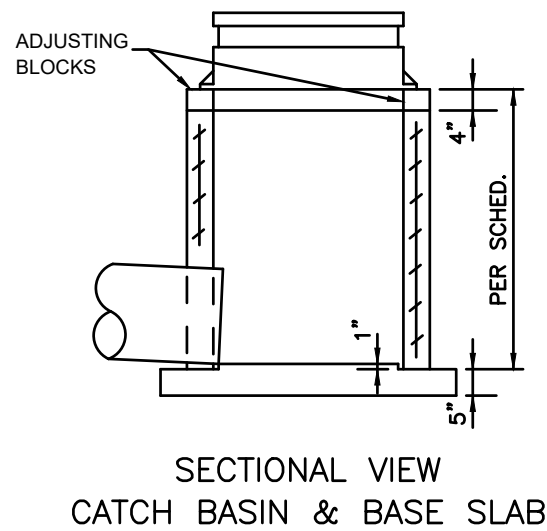
Sheet No.: **C6**



ALL JOINTS SHALL BE SEALED USING AN APPROVED
MN/DOT HOT POUR ELASTIC SEALANT (3723)
(INCIDENTAL)

8" CONCRETE PAVEMENT (MN/DOT 2301)

6" AGGREGATE BASE CLASS V (MN/DOT 2211)



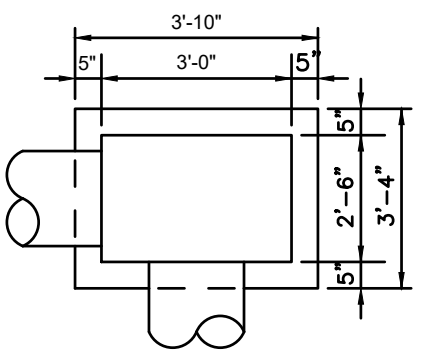
SECTIONAL VIEW
CATCH BASIN & BASE SLAB

NOTES:

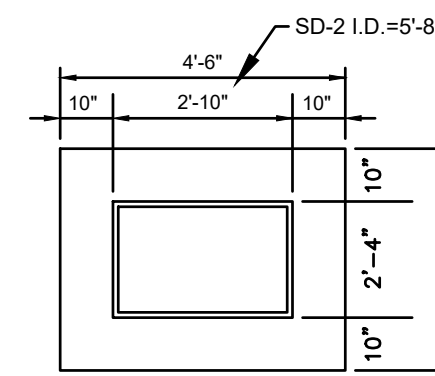
1. TO BE USED WITH NEENAH R3067
FRAMED COVER WITH 3" RAD. CURB
BOX OR APPROVED EQUAL.
2. PIPE CUT-OUTS TO BE LOCATED
WHERE REQUIRED.
3. ALTERNATE CAST-IN-PLACE BASE
CAN BE USED.
4. MINIMUM REINFORCING SHALL BE
WIRE FABRIC HAVING AN AREA OF
NOT LESS THAN 0.12 SQ. IN. PER
FOOT IN BOTH DIRECTIONS.

FOR USE WITH R3067 CASTING

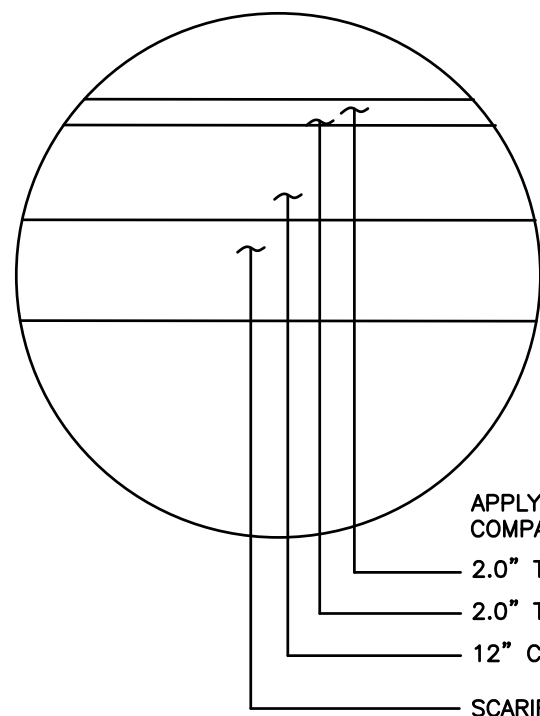
CATCH BASIN 2X3



CATCH BASIN PLAN

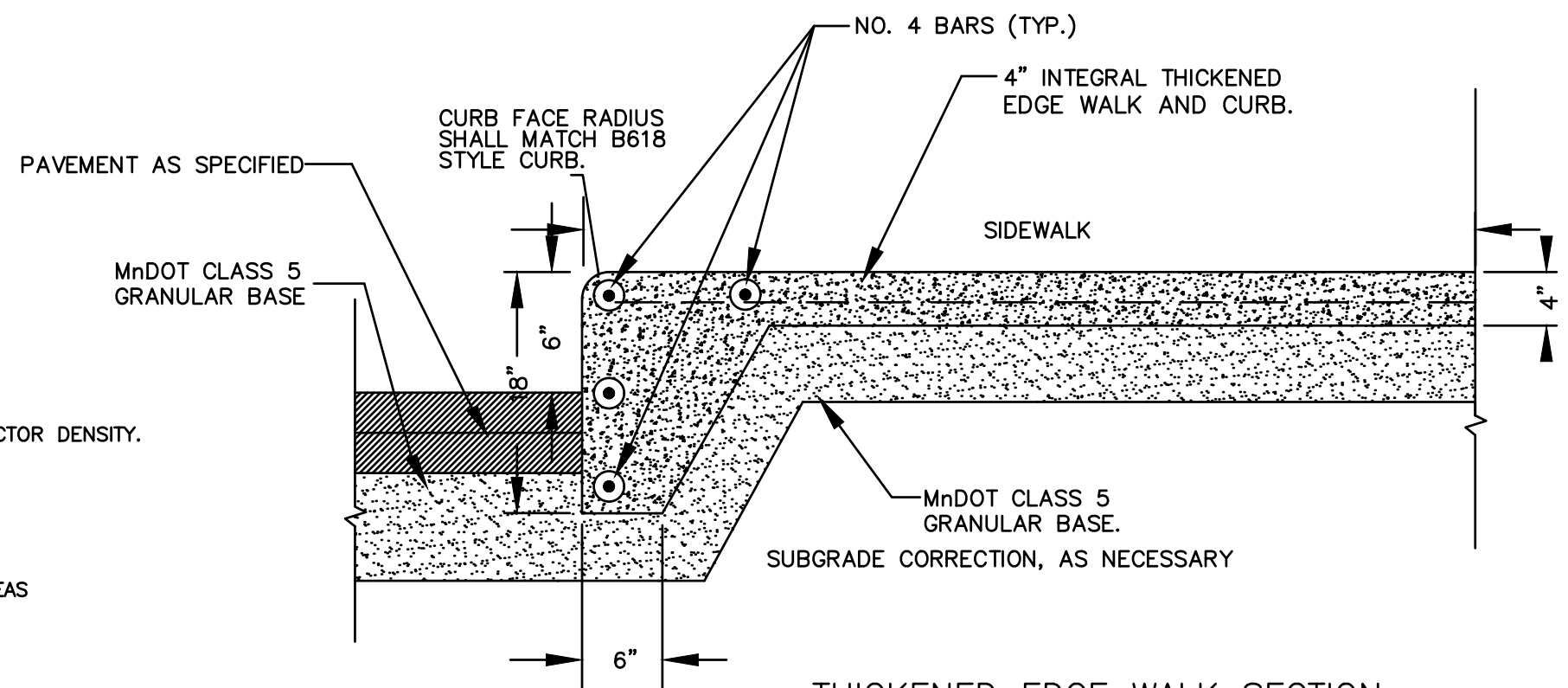


BASE SLAB PLAN



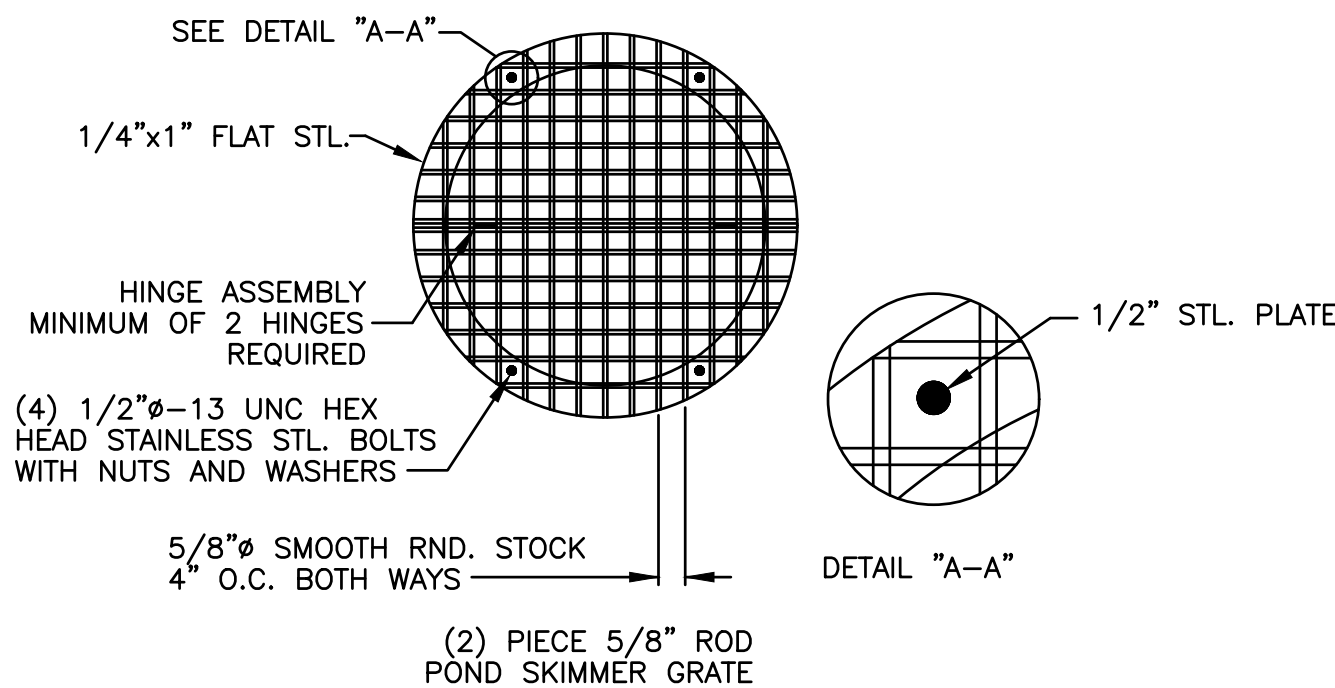
APPLY BITUMINOUS TACK COAT BETWEEN LIFTS
COMPACT ALL GRANULAR MATERIAL TO 100% OF PROCTOR DENSITY.
2.0" TYPE SPWEA240B WEAR COURSE
2.0" TYPE SPNWB230B BASE COURSE
12" CLASS V AGGREGATE BASE (2211)
SCARIFY THE UPPER 12" OF SUBGRADE IN "CUT" AREAS
ALL GRAVEL BASE SHALL EXTEND A MINIMUM OF 1' BEHIND ALL CURB

PARKING LOT PAVEMENT SECTION



THICKENED EDGE WALK SECTION

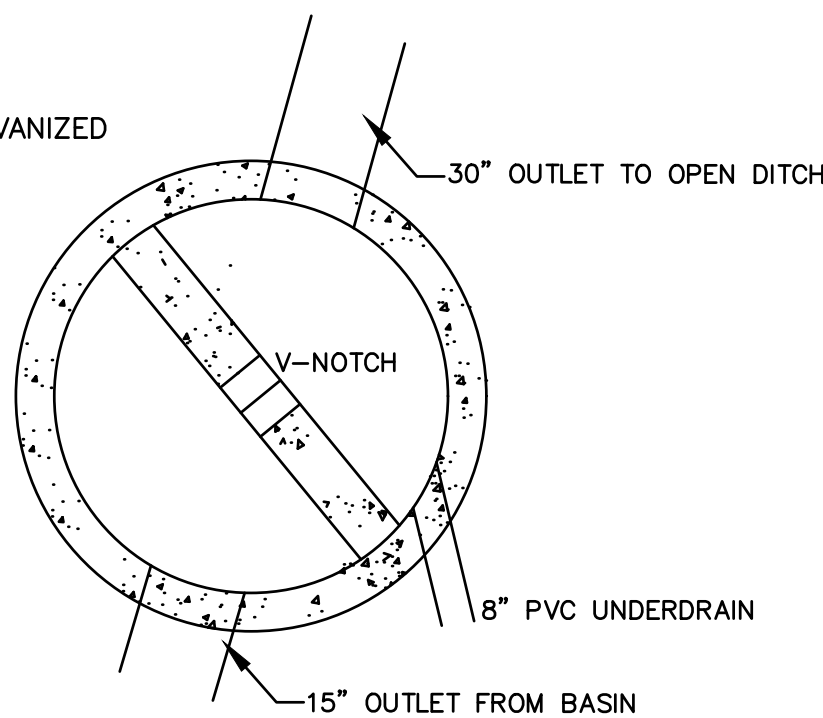
CONCRETE DRIVEWAY PAVEMENT (AT STADIUM ROAD) SECTION



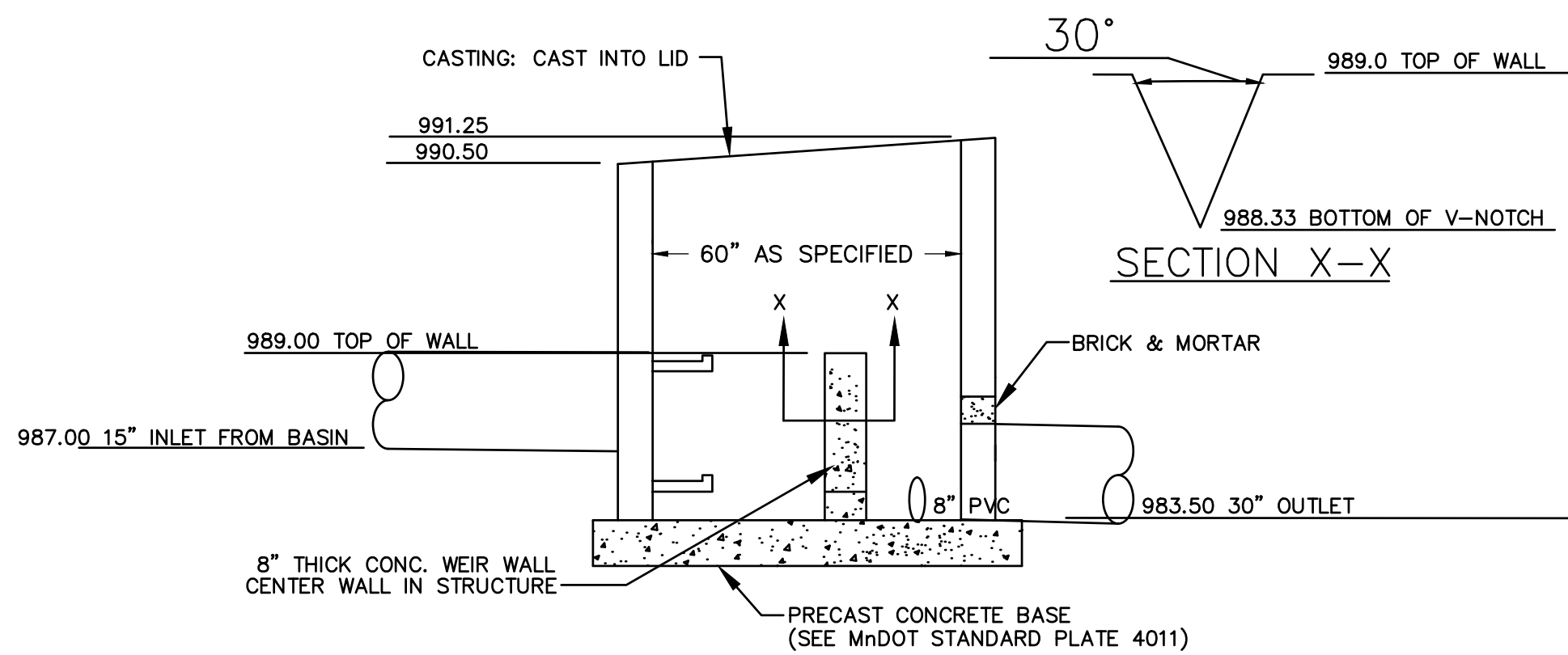
GRATE NOTES:

- 1) GRATE TO BE MADE IN TWO (2) PIECES
- 2) ALL METAL SHALL BE HOT-DIPPED GALVANIZED

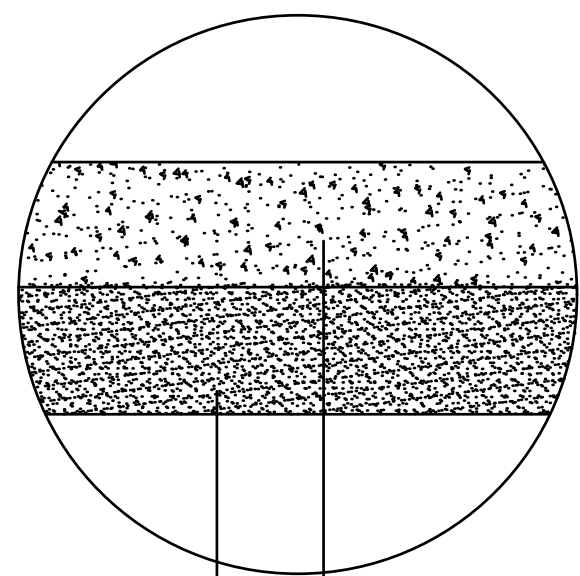
STRUCTURE 12 GRATE PLAN



V-NOTCH WEIR OUTLET STRUCTURE PLAN



V-NOTCH WEIR OUTLET STRUCTURE 12 SECTION



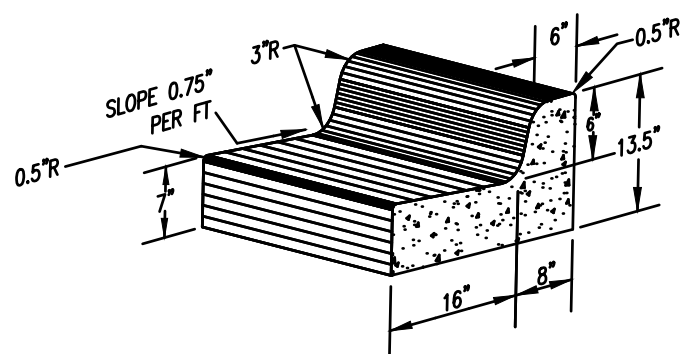
ALL JOINTS SHALL BE SEALED USING AN APPROVED
MN/DOT HOT POUR ELASTIC SEALANT (3723)
(INCIDENTAL)

4" CONCRETE PAVEMENT (MN/DOT 2301)

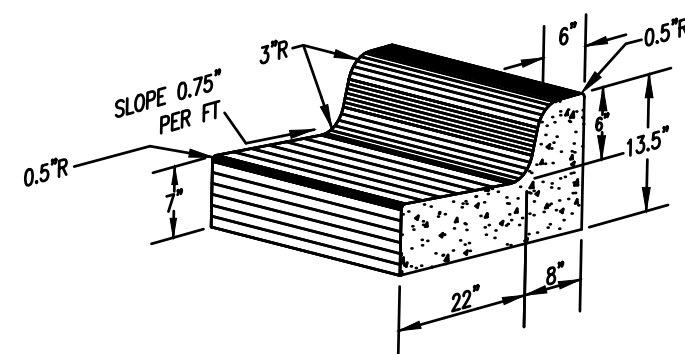
3" AGGREGATE BASE CLASS V (MN/DOT 2211)

ALL CONCRETE SHALL BE PORTLAND CEMENT CONCRETE PAVEMENT
WITH A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS,
A 4" MAXIMUM SLUMP AND 5% - 7% ENTRAINED AIR.

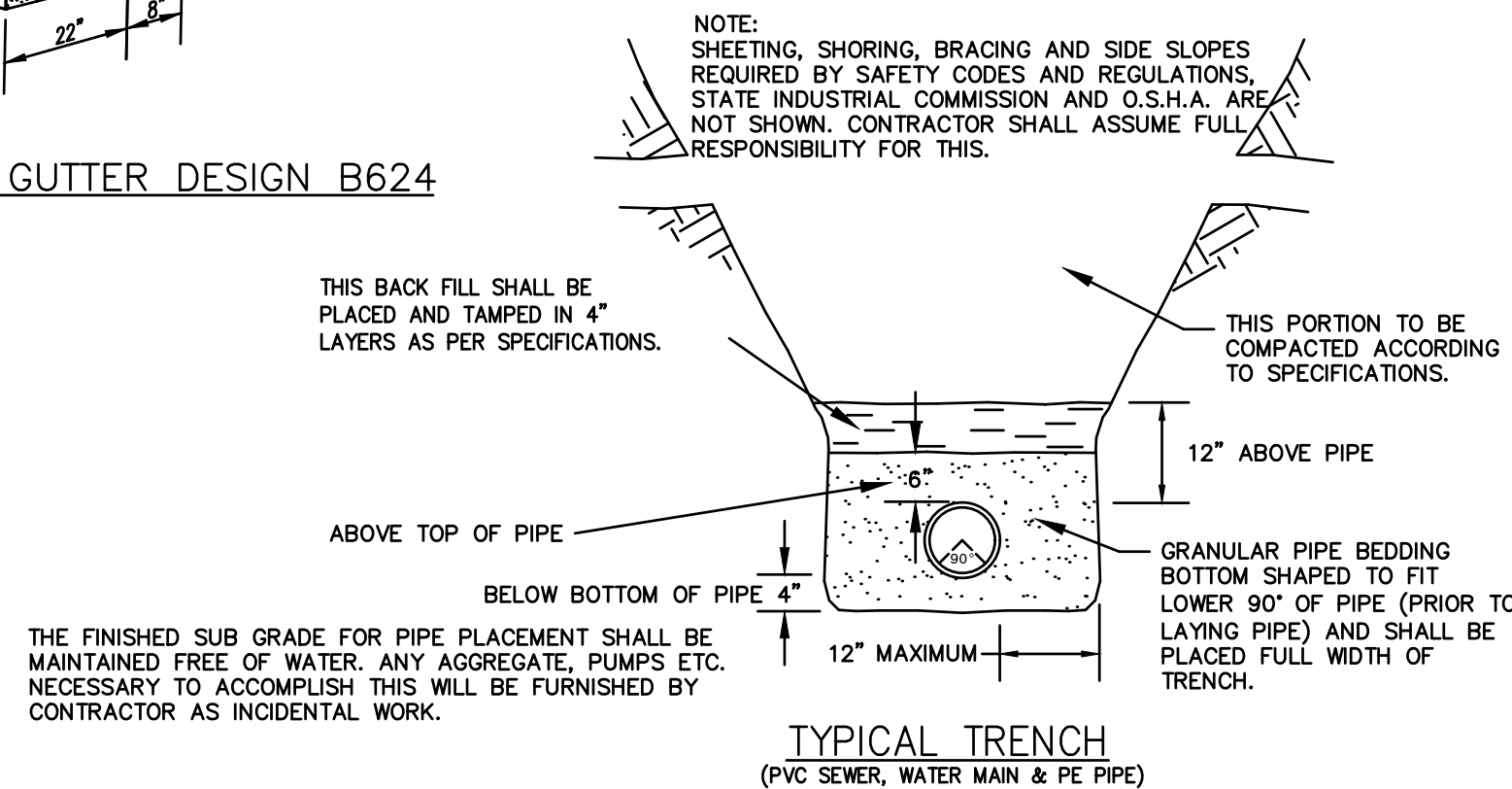
CONCRETE SIDEWALK SECTION



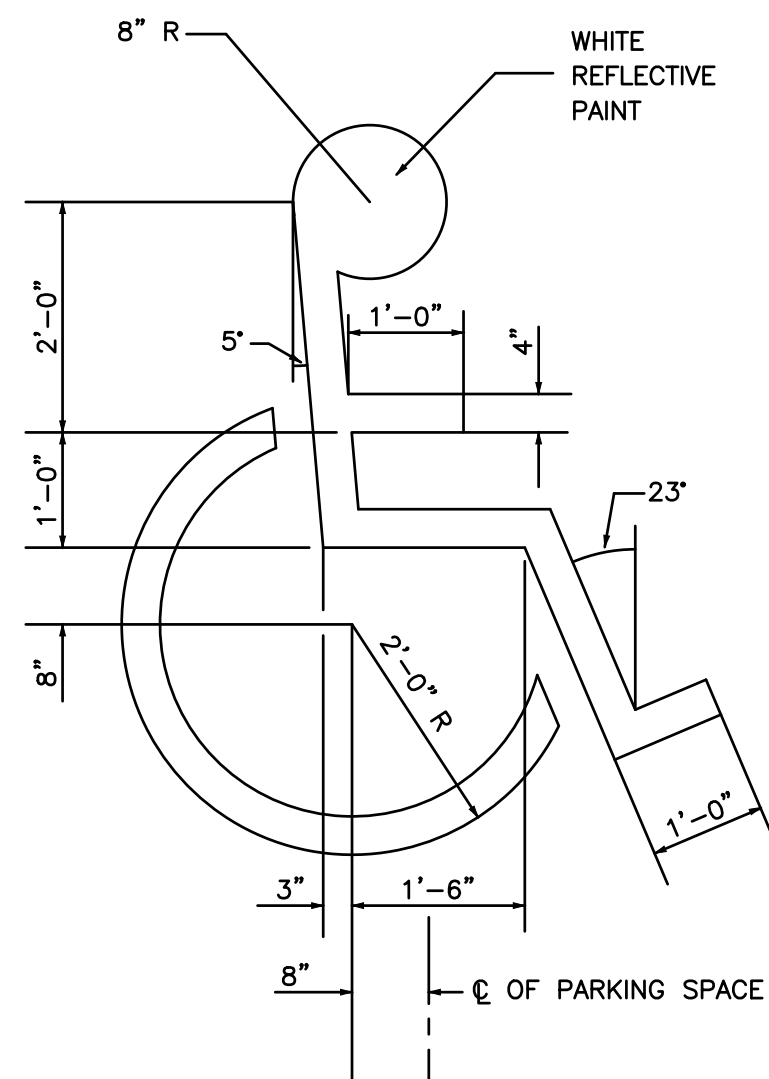
CONCRETE CURB & GUTTER DESIGN B618



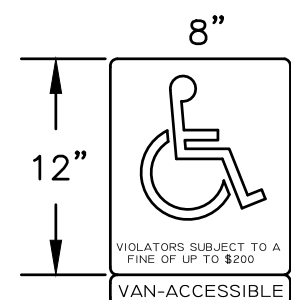
CONCRETE CURB & GUTTER DESIGN B624



TYPICAL TRENCH
(PVC SEWER, WATER MAIN & PE PIPE)



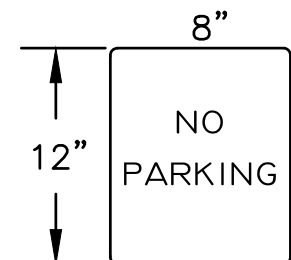
INTERNATIONAL HANDICAP SYMBOL



STEEL POST MOUNTED
(PERMANENT)

INSTALL AT ALL HANDICAP STALLS
60"-66" ABOVE FINISH GRADE
CENTERED AT THE HEAD OF THE STALL

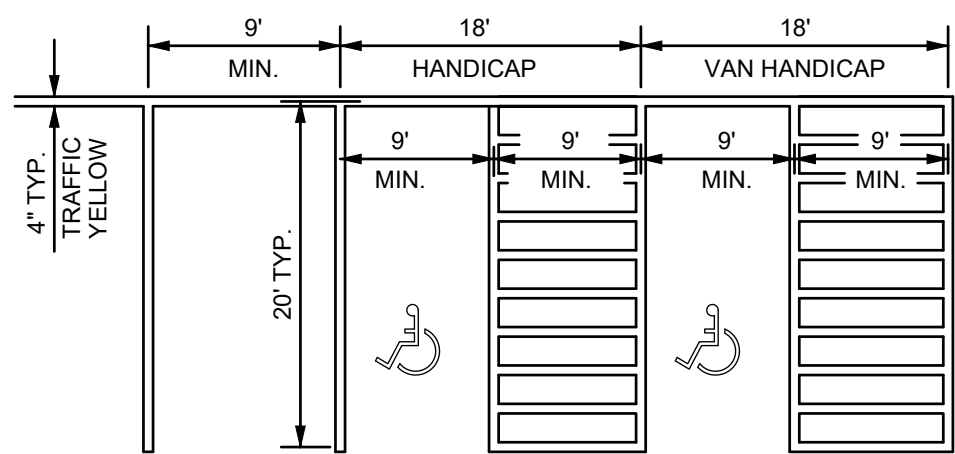
SIGN PANEL DETAIL



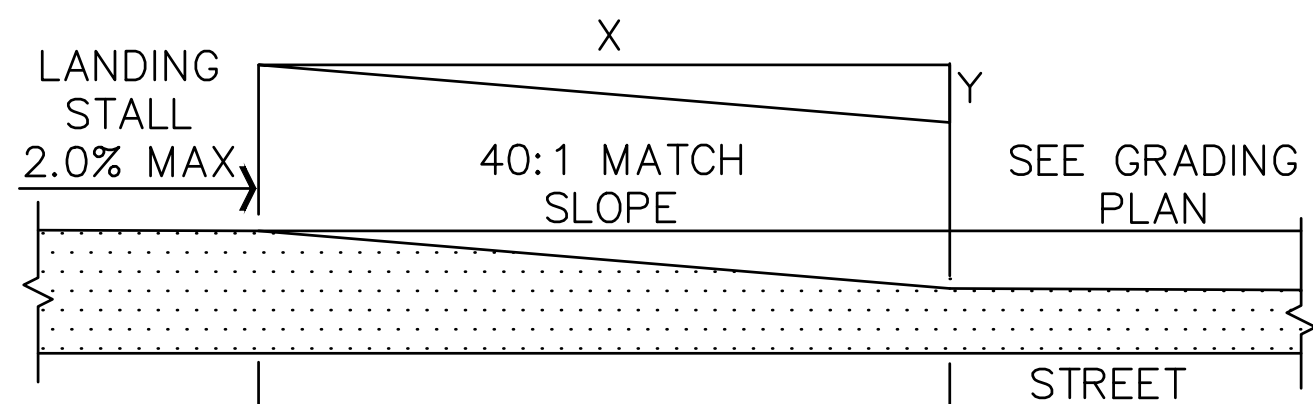
STEEL POST MOUNTED
(PERMANENT)

INSTALL AT ALL HANDICAP ACCESS
AISLES-60"-66" ABOVE FINISH GRADE
CENTERED AT THE HEAD OF THE STALL

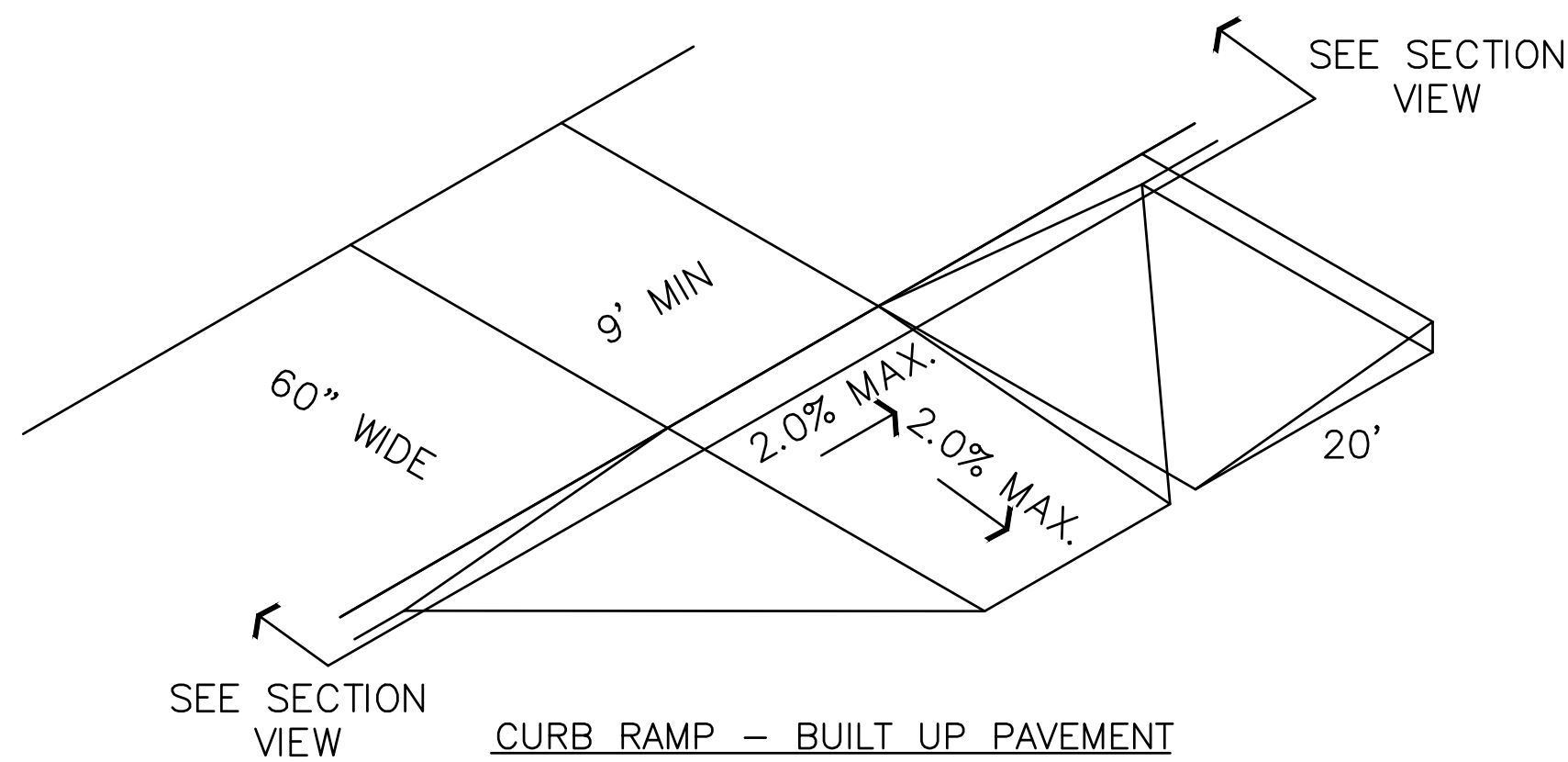
SIGN PANEL DETAIL



90° STALL



CROSS SECTION



CURB RAMP - BUILT UP PAVEMENT

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 Engineer under the laws
of the State of Minnesota.

Brian J. Johnson
Eng. No. 4274

Date: 9/20/25

JONES
HAUGH
SMITH
Engineers & Surveyors
515 South Washington Ave. Albert Lea, MN 55737-4876

Consultant:

MANKATO
APARTMENTS

Project:

Revision:

No.: Date: 9/20/2025

Drawn: bj

Checked:

Project Manager:

Project Status: CD

Sheet Title:

DETAILS

Sheet No.:

C7

SWPPP NARRATIVE

CONSTRUCTION ACTIVITY INFORMATION

PROJECT NAME: MANKATO APARTMENTS
FACILITY IMPROVEMENT PROJECT

PROJECT LOCATION: MANKATO, MN

PROJECT SIZE: PARCEL SIZE: 4.25 DISTURBED ACRES

PROJECT TYPE: RESIDENTIAL BUILDING CONSTRUCTION

MAJOR SOIL TYPE: SILTY LOAM, KLOSSNER MUCK

CUMULATIVE IMPERVIOUS SURFACE:
EXISTING - 1.26 ACRES
POST CONSTRUCTION - 2.5 ACRES

DIRECT DISCHARGE FROM IMPERVIOUS SURFACE: 0.2 ACRES

RECEIVING WATERS:
CITY STORM SEWER

DATES OF CONSTRUCTION: 2025

OWNER: GROWTH HOLDINGS LLC

UNDERGROUND UTILITY/GRADING CONTRACTOR:

TO BE DETERMINED

PARTY RESPONSIBLE FOR LONG TERM O&M:
OWNER: GROWTH HOLDINGS LLC

GENERAL SITE INFORMATION

IMMEDIATELY FOLLOWING GRADING OF SLOPES OF 3:1 OR GREATER, SLOPES MUST BE STABILIZED WITH WOOD FIBER BLANKET (OR OTHER METHOD APPROVED BY THE ENGINEER) OVER APPROVED SEED MIXTURE AND A MINIMUM OF 4" OF TOPSOIL.

ALL EROSION CONTROL MEASURES SHALL REMAIN IN PLACE AND BE MAINTAINED IN GOOD CONDITION UNTIL THE SITE HAS BEEN RE-VEGETATED, AT WHICH TIME THE CONTRACTOR MAY REMOVE NECESSARY SILT FENCING TO CONSTRUCT ROADWAYS WHILE MAINTAINING ADEQUATE EROSION CONTROL IN ADJACENT AREAS. SUFFICIENT TOPSOIL SHALL BE STOCKPILED OR IMPORTED TO ALLOW FOR THE REPLACEMENT OF A MINIMUM OF 4" OF TOPSOIL FOR DISTURBED AREAS TO BE RE-VEGETATED.

CONTRACTOR SHALL SCHEDULE SITE GRADING, UTILITY INSTALLATION, AND ROADWAY CONSTRUCTION SO THAT THE GENERAL SITE CAN BE MULCHED AND RE-SEEDDED SOON AFTER DISTURBANCE. DISTURBED AREAS SHALL BE SEEDDED AND MULCHED OR SODDED WITHIN: 7 DAYS

INSPECT SILT FENCES AND BALE CHECKS AFTER EACH RAIN EVENT AND DAILY DURING A PROLONGED RAINFALL. IMMEDIATELY REPAIR FAILED OR FAILING MEASURES.

REMOVE SEDIMENT DEPOSITS FROM SILT FENCE AND BALE CHECKS WHEN SEDIMENT REACHES APPROXIMATELY 1/3 THE HEIGHT OF THE BARRIER.

BARRIERS WILL BE REPLACED WHEN THEY DECOMPOSE OR BECOME INEFFECTIVE BEFORE THE BARRIERS ARE NO LONGER NECESSARY. ANY SEDIMENT REMAINING IN-PLACE AFTER THE BARRIERS ARE NO LONGER NECESSARY WILL BE DRESSED TO CONFORM TO EXISTING GRADE, AND PREPARED AND SEEDDED WITH THE APPROPRIATE SEED MIX, AS DIRECTED BY THE ENGINEER.

IN THOSE AREAS WHERE WOOD FIBER BLANKET OR OTHER SLOPE STABILIZATION METHODS HAVE FAILED, THE SLOPE SHALL BE RE-ESTABLISHED, SEED AND TOPSOIL REPLACED, AND ADDITIONAL SLOPE TREATMENT INSTALLED.

BARRIERS WILL BE REMOVED WHEN FINAL STABILIZATION OF THE SLOPES HAS BEEN COMPLETED AS DETERMINED BY THE ENGINEER.

NO STORMWATER MITIGATION MEASURES WERE REQUIRED AS A PART OF ENVIRONMENTAL, ARCHAEOLOGICAL OR OTHER REQUIRED LOCAL, STATE, OR FEDERAL REVIEW OF THIS PROJECT.

THIS PROJECT IS NOT LOCATED IN A KARST AREA NECESSITATING MEASURES TO PROTECT DRINKING WATER SUPPLY.

THIS PROJECT DOES DISCHARGE WATER TO AN IMPAIRED WATER.

PROVIDE SILT FENCE AROUND ALL SOIL STOCKPILES

SWPPP IMPLEMENTATION CHAIN OF RESPONSIBILITY

EACH CONTRACTOR ON-SITE WILL DESIGNATE AN EMPLOYEE AS ITS PROJECT SWPPP OFFICER. A LIST OF THESE OFFICERS WITH CONTACT INFORMATION WILL BE AVAILABLE ON-SITE. IT WILL BE SOLELY THE SWPPP OFFICERS' RESPONSIBILITY TO ENSURE THAT ALL ON-SITE ACTIVITIES PERFORMED BY ITS COMPANY COMPLY WITH THE SWPPP. THE GENERAL CONTRACTOR'S SWPPP OFFICER WILL HAVE AUTHORITY OVER ALL SUB-CONTRACTOR'S SWPPP OFFICERS FOR WORK PERTAINING TO COMPLIANCE.

SHOULD A SWPPP OFFICER FAIL TO ENSURE COMPLIANCE, THAT OFFICER'S FOREMAN OR DIRECT SUPERVISOR WILL ASSUME ALL RESPONSIBILITY.

SHOULD A SUB-CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE GENERAL CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

SHOULD THE GENERAL CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE OWNER WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

EROSION PREVENTION PRACTICES

CONTRACTOR SHALL PHASE CONSTRUCTION, MAINTAIN VEGETATIVE BUFFER STRIPS, AND PROVIDE HORIZONTAL SLOPE STAKING IN ORDER TO MINIMIZE EROSION.

SILT FENCE SHALL BE INSTALLED BEFORE WORK BEGINS. SILT FENCE LIMITS SHALL COINCIDE WITH DOWNGRADE GRADING LIMITS UNLESS OTHERWISE NOTED.

THIS PROJECT DOES NOT HAVE EXPOSED POSITIVE SLOPES WITHIN 200' OF SURFACE WATER.

THE WETTED PERIMETER OF DRAINAGE SWALES WILL BE STABILIZED WITH WOOD FIBER BLANKETS AND/OR DITCH CHECKS WITHIN 200' OF THE SITE BOUNDARY LINE OR WETTED PERIMETER OF DITCHES WITHIN 24 HOURS. TEMPORARY OR PERMANENT DITCHES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION MUST BE STABILIZED WITHIN 24 HOURS AFTER NON-USE

PIPE OUTLETS MUST HAVE ENERGY DISSIPATION IN PLACE WITHIN 24 HOURS OF INSTALLATION. MULCH, HYDROMULCH, JACKPILER, POLYACRYLAMIDE EROSION PREVENT PRACTICES CANNOT BE USED WITHIN THE NORMAL WETTED PERIMETER OF DRAINAGE DITCHES OR SWALE SECTIONS WITH A CONTINUOUS SLOPE GREATER THAN 2%

SEDIMENT CONTROL PRACTICES

CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN: SEDIMENT CONTROLS FOR TEMPORARY AND PERMANENT DRAINAGE BASINS AND DRAINAGE DITCHES THAT ARE A PART OF THIS DESIGN

CHECK DAMS AND/OR WOOD FIBER BLANKETS TO ENSURE SHEET FLOW AND PREVENT RILLS FOR SLOPE LENGTHS GREATER THAN 75' WITH A SLOPE OF 3:1 OR GREATER

SILT FENCE AT ALL DOWN GRADIENT PERIMETERS INSTALLED PRIOR TO ALL LAND DISTURBING ACTIVITIES

INLET PROTECTION AT ALL DRAIN INLETS

SILT FENCING AROUND TEMPORARY SOIL STOCKPILES

ROCK CONSTRUCTION SITE ENTRANCES

STREET SWEEPING OF TRACKED SEDIMENT ONTO PAVED SURFACES

SEDIMENT CONTROL PRACTICES MUST BE IN PLACE AT ALL DOWN GRADIENT PERIMETERS AND UPGRADEMENT OF ANY BUFFER ZONES

SEDIMENT CONTROL PRACTICES ARE ESTABLISHED AT THE BASE OF STOCKPILES ON DOWN GRADIENT PERIMETER

STOCKPILES ARE LOCATED OUTSIDE OF NATURAL BUFFERS OR SURFACE WATER, INCLUDING STORM WATER CONVEYANCES UNLESS THERE IS A BYPASS

THIS PROJECT DOES NOT INCLUDE DEWATERING OR BASIN DRAINING

PERMANENT SEDIMENT BASINS WILL BE USED AS TEMPORARY BASINS DURING CONSTRUCTION

ADDITIONAL BMP'S FOR SPECIAL WATERS

THIS PROJECT DOES NOT DISCHARGE TO SPECIAL WATERS OR HAVE SIGNIFICANT IMPACTS TO WETLANDS

INSPECTIONS AND MAINTAINANCE

CONTRACTOR SHALL INSPECT AND MAINTAIN MEASURES AT MINIMUM ONCE EVERY (7) DAYS DURING ACTIVE CONSTRUCTION, AND WITHIN 24 HOURS AFTER A RAINFALL EVENT OF 0.5" IN 24 HOURS.

INSPECTIONS WILL INCLUDE STABILIZED AREAS, EROSION PREVENTION AND SEDIMENT CONTROLS, AND INFILTRATION AREAS.

REFER TO MPCA'S COMPLIANCE GUIDE FOR EROSION AND SEDIMENT CONTROL FOR INSPECTION LOG REQUIREMENTS.

MAINTENANCE RECORDS SHOULD INCLUDE: DATES & TIMES IF INSPECTION, NAME OF PERSON CONDUCTING THE INSPECTION, FINDINGS & LOCATIONS OF CORRECTIVE ACTIONS, PARTY COMPLETING MAINTENANCE ACTIVITIES, DATES & AMOUNTS OF RAINFALL EVENTS GREATER THAN 0.5". RAINFALL AMOUNTS ARE TO BE RECORDED WITH RAIN GAUGE ON SITE OR WEATHER STATION WITHIN 1 MILE OF SITE. ANY DISCHARGES OBSERVED SHOULD BE DESCRIBED & PHOTOGRAPHED.

RECORDS RETENTION

CONTRACTOR SHALL MAINTAIN RECORDS OF THE SEDIMENT RETENTION PROCEDURES ON-SITE. RECORDS WILL INCLUDE:

COPY OF THE SWPPP AND ALL REVISIONS

INSPECTION AND MAINTAINANCE RECORDS

PERMANENT OPERATION AND MAINTAINANCE AGREEMENTS

CALCULATIONS FOR THE DESIGN OF TEMPORARY AND

PERMANENT STORMWATER MANAGEMENT SYSTEMS

COPIES OF THE SWPPP MUST BE RETAINED ON SITE BY THE PERMITTEE

POLLUTION PREVENTION MEASURES

SOLID WASTE: COLLECTED SEDIMENT, ASPHALT AND CONCRETE MILLINGS, FLOATING DEBRIS, PAPER, PLASTIC, FABRIC, CONSTRUCTION AND DEMOLITION DEBRIS AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH MPCA DISPOSAL REQUIREMENTS.

CONCRETE AND OTHER WASHOUTS: PERFORM ALL CONCRETE TRUCK WASHOUTS IN PROPER CONTAINMENT FACILITIES. SOLID AND LIQUID WASHOUT WASTE FROM OTHER MATERIALS (STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS ETC.) WILL BE DISPOSED OF IN A PROPERLY DESIGNATED LANDFILL.

PERFORM ALL WASHOUTS INCLUDING HANDTOOLS IN A LEAKPROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER THAT PREVENTS RUNOFF ONTO ADJACENT SOILS. DEBRIS/SEDIMENT WILL NOT CONTACT THE GROUND SURFACE.

A SIGNE REQUIRING USE OF PROPER WASHOUT FACILITIES WILL BE INSTALLED ADJACENT TO SAID FACILITIES.

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

EXTERNAL WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED OF AND WASTE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE.

SWPPP AMENDMENTS

AMENDMENTS MADE IN THE FIELD TO THE SWPPP SHOULD BE UPDATED ON THE SWPPP. REFER TO PROCEDURES OUTLINED IN SECTION 6.1 OF THE PERMIT.

SWPPP IMPLEMENTATION CHAIN OF RESPONSIBILITY

THE GENERAL CONTRACTOR SHALL PROVIDE A TRAINED, CERTIFIED, KNOWLEDGEABLE PERSON WHO SHALL SERVE AS THE SITE'S EROSION CONTROL INSPECTOR. THIS PERSON SHALL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL BMP'S, AND SHALL MAINTAIN THE INSPECTION LOG AT THE PROJECT SITE.

EACH SUBCONTRACTOR ON-SITE WILL DESIGNATE AN EMPLOYEE AS ITS PROJECT SWPPP OFFICER. A LIST OF THESE OFFICERS WITH CONTACT INFORMATION WILL BE AVAILABLE ON-SITE. IT WILL BE SOLELY THE SWPPP OFFICERS' RESPONSIBILITY TO ENSURE THAT ALL ON-SITE ACTIVITIES PERFORMED BY ITS COMPANY COMPLY WITH THE SWPPP. THE GENERAL CONTRACTOR'S SWPPP INSPECTOR WILL HAVE AUTHORITY OVER ALL SUBCONTRACTOR'S SWPPP OFFICERS FOR WORK PERTAINING TO COMPLIANCE.

SHOULD A SWPPP OFFICER FAIL TO ENSURE COMPLIANCE, THAT OFFICER'S FOREMAN OR DIRECT SUPERVISOR WILL ASSUME ALL RESPONSIBILITY.

SHOULD A SUBCONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE GENERAL CONTRACTOR WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

SHOULD THE GENERAL CONTRACTOR FAIL TO COMPLY WITH THE SWPPP, THE OWNER WILL ASSUME ALL RESPONSIBILITY FOR COMPLIANCE.

CHANGES IN PERMIT AND NOTICE OF TERMINATION

THE CONTRACTOR WILL BE A CO-PERMITTEE DURING THE CONSTRUCTION OF THE PROJECT. AFTER GRAVEL SURFACING OF THE PROJECT HAS BEEN COMPLETED, AND 70% PERMANENT VEGETATIVE COVER HAS BEEN ESTABLISHED OVER THE PVIOUS AREAS OF THE SITE, AND THE WARRANTY PERIOD HAS ELAPSED, THE CONTRACTOR MAY SUBMIT A MPCA (NOT)F ORM TO THE OWNER FOR SIGNATURE AND SUBMITTAL TO THE MPCA.

THE OWNER WILL SUBMIT THE NOTICE OF TERMINATION (NOT) AFTER ONE FINAL ESTABLISHMENT OF ALL PVIOUS SURFACES ACCORDING TO THE MPCA GENERAL PERMIT REQUIREMENTS

NOTIFICATION OF THE MPCA IN CASE OF POLLUTION

IT IS THE DUTY OF THE CONTRACTOR TO NOTIFY THE MPCA IMMEDIATELY OF ANY DISCHARGE, ACCIDENTAL OR OTHERWISE, OF ANY SUBSTANCE OR MATERIAL UNDER HIS CONTROL WHICH, IF NOT RECOVERED, MAY CAUSE POLLUTION OF WATERS OF THE STATE, AND THE CONTRACTOR SHALL RECOVER AS RAPIDLY AND THOROUGHLY AS POSSIBLE SUCH SUBSTANCE OR MATERIAL AND TAKE IMMEDIATELY SUCH OTHER ACTION AS MAY BE REASONABLY POSSIBLE TO MINIMIZE OR ABATE POLLUTION OF WATERS OF THE STATE CAUSED THEREBY.

SEDIMENT LEAVING THE CONSTRUCTION SITE AND ENTERING A PUBLIC WATER IS CAUSE FOR NOTIFICATION.

MPCA DUTY OFFICER: 800-422-0798

QUALIFIED SWPPP PERSONNEL INFORMATION

SWPPP DESIGNER: BRIAN J. JOHNSON, PE
JONES HAUGH & SMITH, INC.
515 SOUTH WASHINGTON AVE
ALBERT LEA, MN 56007
(507) 373-4876

SWPPP INSTALLER:

NAME: _____

FIRM: _____

ADDRESS: _____

PHONE: _____

SWPPP INSPECTOR:

NAME: _____

FIRM: _____

ADDRESS: _____

PHONE: _____

GRADING CONTRACTOR:

NAME: _____

FIRM: BCM CONTRACTING

ADDRESS: _____

PHONE: _____

OTHER LAND DISTURBING CONTRACTOR:

NAME: _____

FIRM: _____

ADDRESS: _____

PHONE: _____

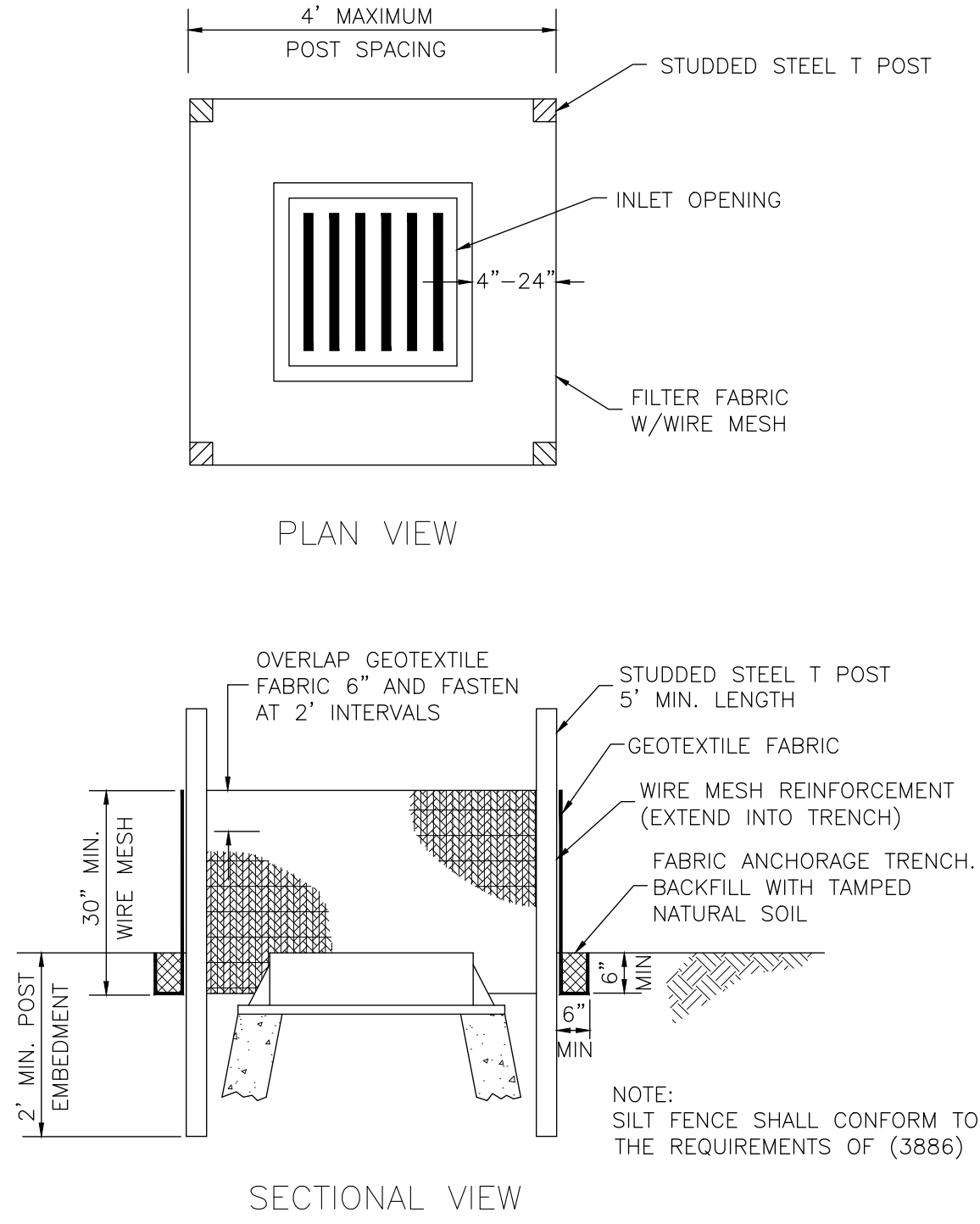
OTHER LAND DISTURBING CONTRACTOR:

NAME: _____

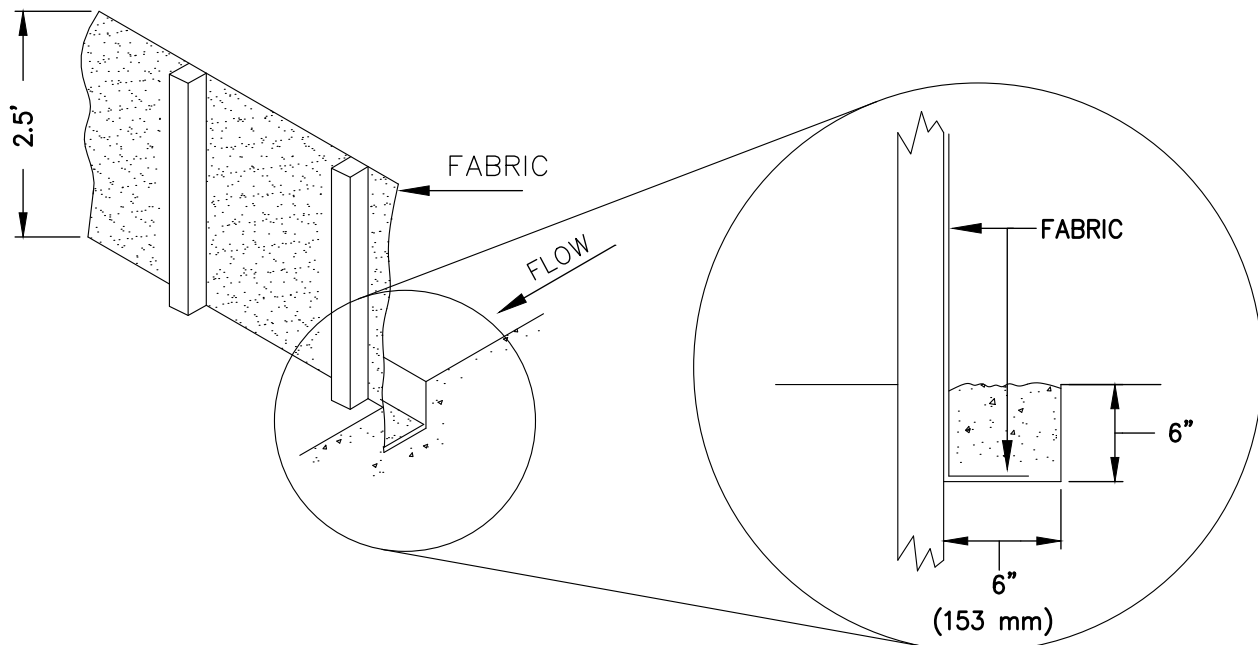
FIRM: _____

ADDRESS: _____

PHONE: _____



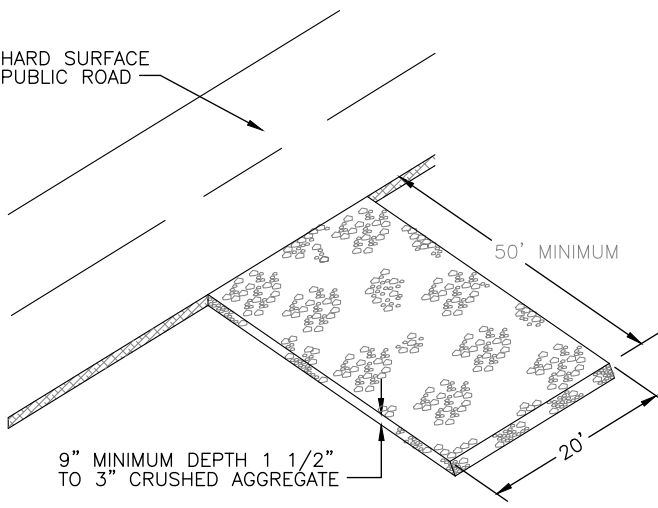
INLET PROTECTION – HEAVY DUTY



- NOTES:
- PLACE BOTTOM EDGE OF FENCE INTO 6" (153 mm) DEEP
 - POSTS SHALL BE:
 - 4" (1.22 m) ON CENTER
 - 2" (50.8 mm) X 2" (50.8 mm) HARDWOOD, PINE OR STANDARD STEEL FENCE POSTS
 - DRIVEN 2' (0.61 m) INTO THE GROUND.

EROSION CONTROL FENCE

(MACHINE SLICED)



EROSION CONTROL PROTECTION AT CONSTRUCTION ACCESS

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 Engineer under the laws of the State of Minnesota.

Brian J. Johnson
PE
Brien J. Johnson
Reg. No. 42744 Date: 9/20/25

JONES HAUGH SMITH
Engineers & Surgeons
515 South Washington Ave. Albert Lea, MN 507-373-4876

MANKATO APARTMENTS

Project:

Revision:

No.: Date: 9/20/2025

Drawn: **bjj** Checked:

Project Manager:

Project Status: **CD**

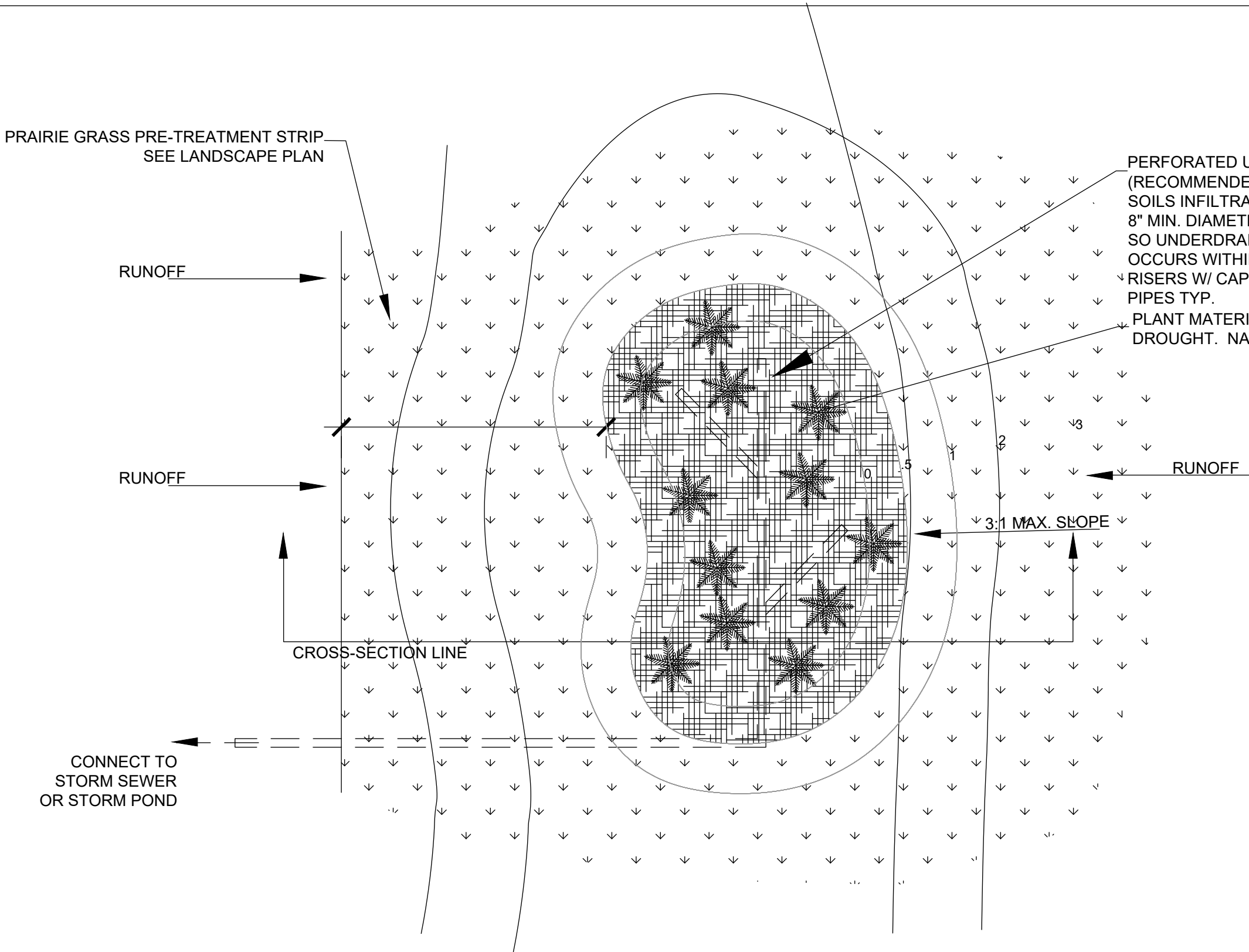
Sheet Title:

SWPPP NARRATIVE & DETAILS

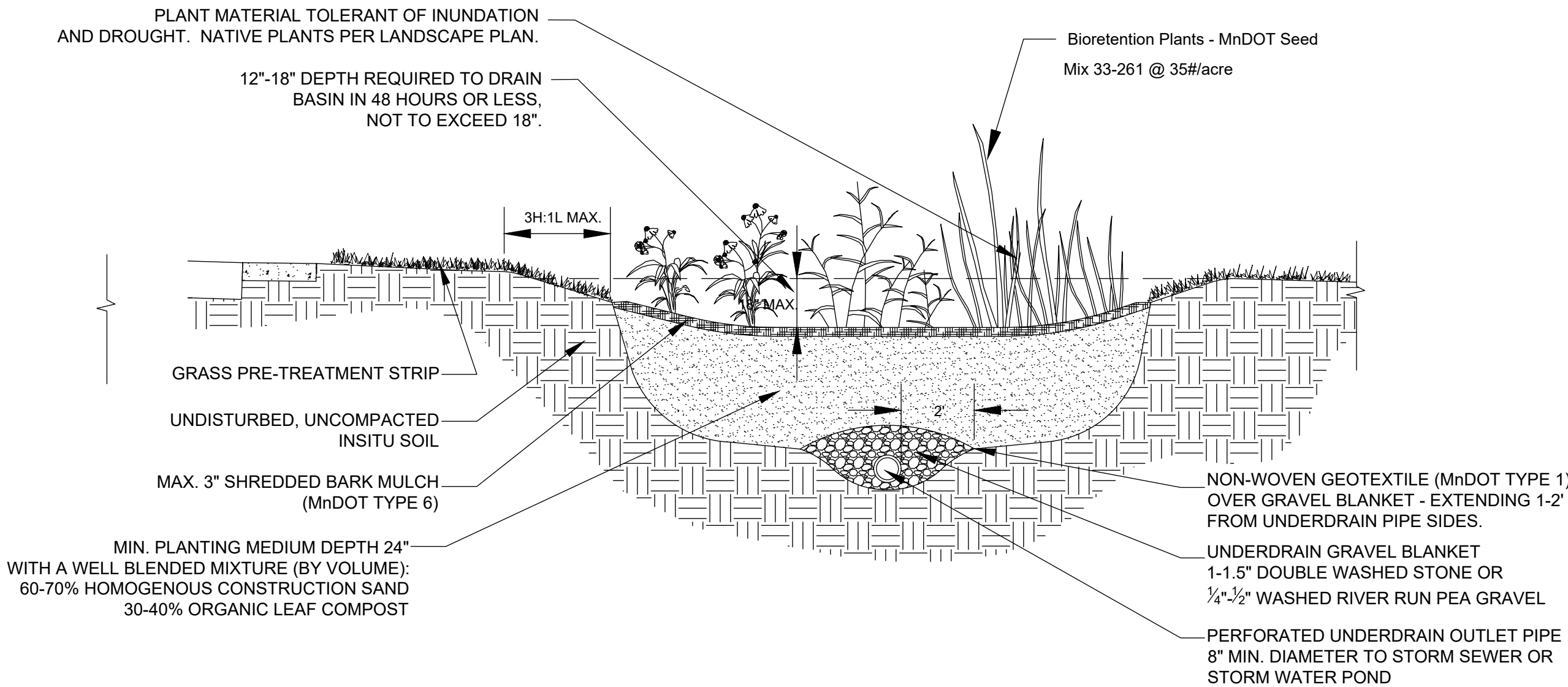
Sheet No.: **C8**



1 MILE WETLAND RADII



PLAN VIEW: BIO-RETENTION/FILTRATION BASIN



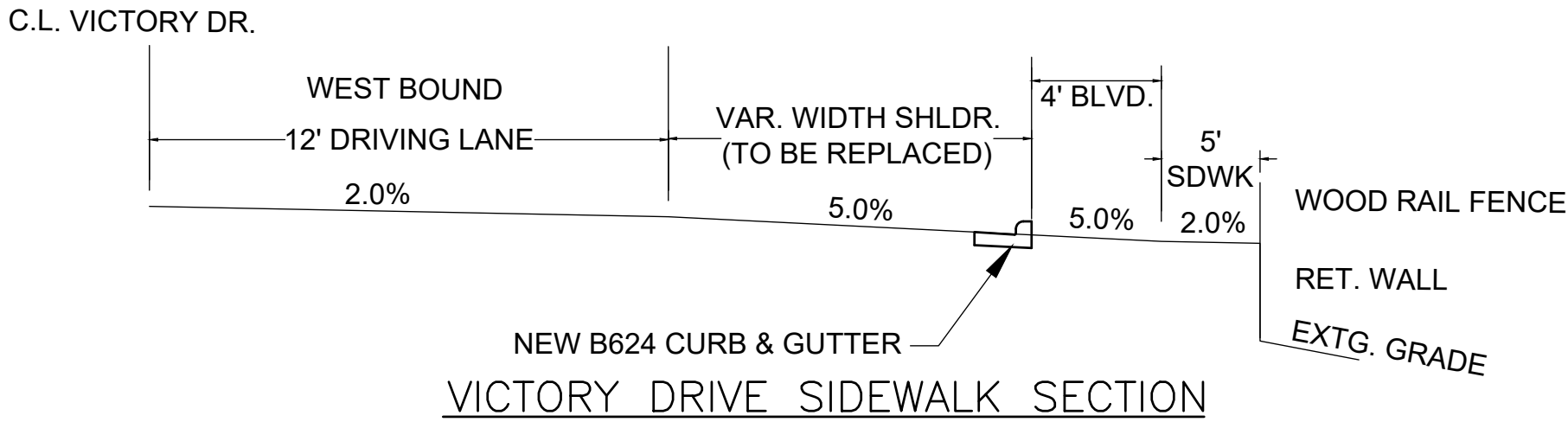
PROFILE VIEW: BIO-RETENTION/FILTRATION BASIN

BIO-RETENTION/FILTRATION BASIN CONSTRUCTION SEQUENCING

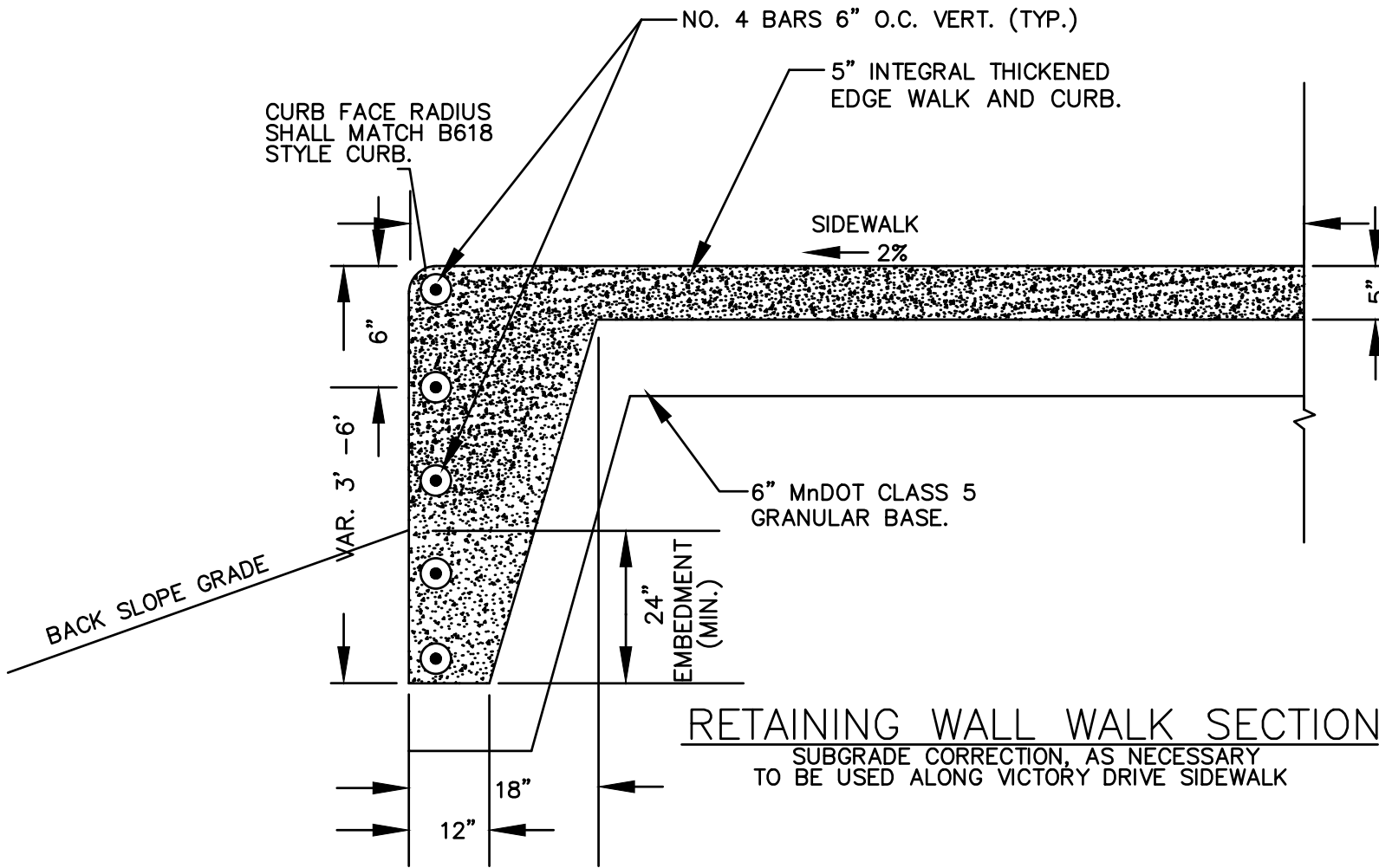
1. INSTALL SILT FENCE AND/OR OTHER APPROPRIATE TEMPORARY EROSION CONTROL DEVICES TO PREVENT SEDIMENT FROM LEAVING OR ENTERING THE PRACTICE DURING CONSTRUCTION.
2. ALL DOWN-GRADIENT PERIMETER SEDIMENT CONTROL BMP'S MUST BE IN PLACE BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITY BEGINS.
3. PERFORM CONTINUOUS INSPECTIONS OF EROSION CONTROL PRACTICES.
4. INSTALL UTILITIES (WATER, SANITARY SEWER, ELECTRIC, PHONE, FIBER OPTIC, ETC) PRIOR TO SETTING FINAL GRADE OF BIORETENTION DEVICE.
5. ROUGH GRADE THE SITE. IF BIORETENTION AREAS ARE BEING USED AS TEMPORARY SEDIMENT BASINS LEAVE A MINIMUM OF 3 FEET OF COVER OVER THE PRACTICE TO PROTECT THE UNDERLYING SOILS FROM CLOGGING.
6. PERFORM ALL OTHER SITE IMPROVEMENTS.
7. SEED AND MULCH ALL AREAS AFTER DISTURBANCE.
8. CONSTRUCT BIORETENTION DEVICE UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA.
9. IMPLEMENT TEMPORARY AND PERMENATE EROSION CONTROL PRACTICES.
10. PLANT AND MULCH BIORETENTION DEVICE.
11. REMOVE TEMPORARY EROSION CONTROL DEVICES AFTER THE CONTRIBUTING DRAINAGE AREA IS ADEQUATELY VEGETATED.

GENERAL NOTES

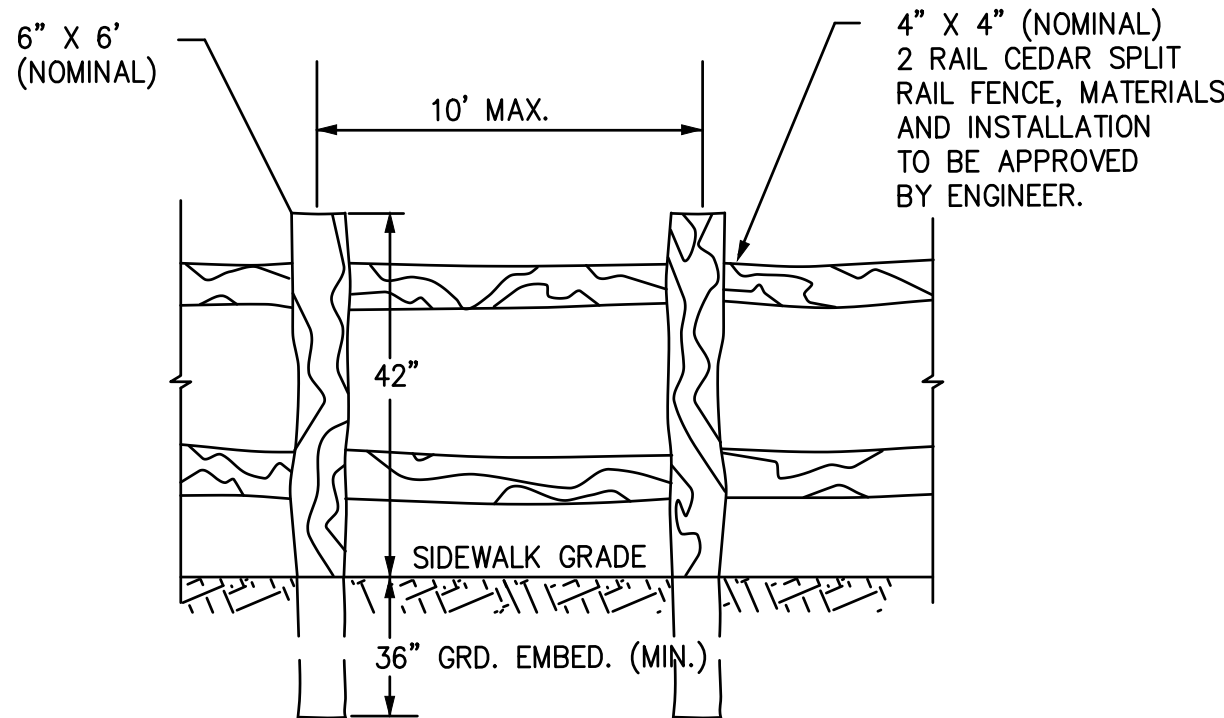
1. IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL SHALL BE REMOVED FROM THE PRACTICE PRIOR TO CONTINUING CONSTRUCTION.
2. GRADING OF BIORETENTION DEVICES SHALL BE ACCOMPLISHED USING LOW-COMPACTION EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF UNDERLYING SOILS.
3. ALL SUB MATERIALS BELOW THE SPECIFIED BIORETENTION DEPTH (ELEVATION) SHALL BE UNDISTURBED, UNLESS OTHERWISE NOTED.
4. CONFIRM DURING CONSTRUCTION THAT THE EXISTING WATER TABLE OR BEDROCK DOES NOT EXCEED THE HEIGHT OF THE BOTTOM OF THE FILTRATION BASIN



VICTORY DRIVE SIDEWALK SECTION



RETAINING WALL WALK SECTION



SPLIT RAIL WOOD FENCE REQUIRED ALONGSIDE SIDEWALK INSTALLED WITH ADJACENT 4:1 OR GREATER SLOPES

SPLIT RAIL WOOD FENCE

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 Engineer under the laws of the State of Minnesota.

Brian Johnson
Professional Engineer
Reg. No. 42944

JONES HAUGH SMITH
Engineers & Surveyors
515 South Washington Ave. Albert Lea, MN 56737-4376
Date: 9/20/25

Consultant

MANKATO APARTMENTS

Project:

Revision:

No.: Date: 9/20/2025

Drawn: **bjj** Checked:

Project Manager:

Project Status: **CD**

Sheet Title:

DETAILS

Sheet No.:

C9

GOVERNING SPECIFICATIONS

The Minnesota Department of Transportation's "Standard Specifications for Construction" 2018 Edition, including the Mn/DOT Special Provisions modified for this project, Minnesota Plumbing Code and the City Engineers Association of Minnesota Standard Specification, 2018 Edition, will govern except as modified or altered in the Special Provisions. All references to "State of Minnesota" or "Commissioner of Transportation" or "Department" are hereby revised to mean "Owner."

WORK WITHIN PROPERTY

The Contractor will work only in areas secured by the Owner, and will comply with all requirements of access agreements.

MATERIALS TESTING

Materials Testing will be by the Contractor. The Contractor will hire an independent testing consultant, approved by the Engineer, prior to the start of work to be tested.

1. The following materials tests will be provided by the Testing Company:

Work to be Tested	Method	Reference Spec.	Testing Rate
Sewer & Water Service Trenches	Specified Density	MnDOT 2105, 2451, 2501	1 test per 500 lf
Storm Sewer Trench Compaction	Specified Density	MnDOT 2105, 2451, 2501	1 test per 500 lf
Subgrade/Embankment Compaction	Specified Density	MnDOT 2105	1 test per 2500 cy placed (Clay, Sand, etc.)
Test Rolling	Fully Loaded Dump Truck		1 test per road
Select Granular Borrow	Specified Density	MnDOT 3149	1 per 5000 ton
	Gradation	MnDOT 3149	1 per Source
Aggregate Base (CL 3, CL 5)	Modified DCP	MnDOT 2211	2 tests per 1000 ton
	Gradation	MnDOT 2211	1 per 5000 ton
Bituminous Paving	Ordinary Comp.-Control Strip	MnDOT 2360	1 control strip per mobilization and/or per workday
Concrete Curb & Gutter	Air, Slump, Temp, Strength	MnDOT 2461	If non-integrant
	Air, Temp, - 1 per day		
	Slump, Strength - 1 per day; and each time water is added at the site		
Concrete Driveway or Sidewalk	Air, Slump, Temp, Strength	MnDOT 2461	
	Air, Temp, - 1 per day		
	Slump, Strength - 1 per day; and each time water is added at the site		
Concrete Paving		MnDOT 2301	
	All Concrete Field testing or Concrete Pavement per 2012 MnDOT Schedule of Materials Control (page 32), except Pavement Texture and Smoothness.		

Table Notes:

- Specified Density also requires Moisture-Density and Relative Density
- The Engineer may omit duplicative trench compaction tests at his discretion

MAINTENANCE OF TRAFFIC (1404)

The Contractor will be responsible for traffic control on the Project, and will furnish, erect, and maintain all necessary traffic control devices required to provide safe movement of vehicular traffic through the Project. Any traffic control device installed will meet the requirements of the Minnesota Manual on Uniform Traffic Control Devices, Field Manual, latest edition, and the latest MnDOT specifications approved at the time of bid.

The Contractor will prepare and submit to the City Engineer and County Engineer for Approval a Traffic Control Plan for any work in or utilization of traveled Right-of-Way. The plan will be submitted a minimum of 48 hours prior to the commencement of work. No work in the Right-of-Way will commence without an Approved Traffic Control Plan.

Traffic control will be in accordance with the Traffic Control Layout Plan and the following:

Traffic control devices include, but are not limited to, barricades, warning signs, lane markings, trailers, flashers, cones, and drums, as required, and sufficient barricade weights to maintain barricade stability. No material will be deposited on a traveled roadway. Materials will not be placed on road right of way more than one week in advance of their use. Contractor will notify the affected parties at least one week prior to commencement of disturbance of the private or business drives. Coordination will be maintained with the Fire and Police Departments to ensure that passage is maintained for emergency vehicles at all times. The Contractor will make one person responsible for the maintenance of all signs. The Contractor will check each intersection at the end of each day whether it is a working day or not. The name and telephone number of this person will be left with the Police, the City Engineer, and the Fire Departments.

UTILITY PROPERTY AND SERVICE (1507)

Construction operations in the proximity of utility properties will be performed in accordance with the Provisions of 1507, except as modified below:

The first paragraph of 1507 is deleted and the following substituted therefore:

It will be the Contractor's responsibility to contact all local utility companies and ascertain the location of all existing underground utilities, if any, prior to performing any excavation operations. The Contractor will conduct his/her operations in the vicinity of any such facilities, which may exist, in a manner that will prevent damage thereto.

It will be the Contractor's responsibility to utilize the One-Call Excavation Notice System at 'Gopher State One Call' (1-800-252-1166) required under Minnesota Statute Chapter 216D, 48 hours prior to performing any excavation adjacent to any underground facility, which may exist, in a manner that will prevent damage thereto.

CONSTRUCTION STAKES, LINES AND GRADES (1508)

All construction staking will be provided by the Contractor and performed by or under the direct supervision of a Land Surveyor licensed in the State of Minnesota.

Field Fit Adjustments to Grade Stakes

The Engineer may make minor adjustments (< 0.5') to the grade stakes after they have been placed, in order to adjust to actual conditions in the field or to ensure proper or better drainage. Any adjustments to proposed or in-place materials required due to minor adjustments made by the Engineer are incidental to the work.

CONTROL OF HAUL ROADS (1515), LAWS TO BE OBSERVED (1701)

In addition to the requirements of 1515 and 1701, the Contractor will abide by all weight restrictions implemented by the governing road authorities in the performance of the work and in delivering materials and equipment to the project site.

AIR LAND AND WATER POLLUTION (1717)

The provisions of Mn/DOT 1717 are hereby modified and supplemented as follows:

DEWATERING

Any dewatering necessary to construct the work will be done by the Contractor. The Contractor is responsible to determine the type and method of dewatering and to provide and implement all equipment and materials necessary to accomplish the work on this project. Discharged water from dewatering will be routed through a temporary sediment basin. Sediment trapped in the temporary basins will be removed and disposed of on-site.

PROTECTION OF SURFACE STRUCTURES

The Contractor will not trespass on any private property without the express written consent of the Owner thereof. Trees, shrubs, fences, poles and all other private property will be protected unless their removal is authorized. Any property damaged will be satisfactorily restored at the expense of the Contractor. Any land survey or property monuments destroyed, covered, moved, bent or disturbed will be replaced by a Licensed Land Surveyor at the expense of the Contractor.

Wherever construction is planned to cross private property, an easement for the construction has been acquired from the property owner. The Contractor will familiarize himself with the terms of such easements, which the Owner will have on file.

Ground surface, trees, shrubbery, fences and other private property will be restored to the same condition as existed prior to the beginning of construction. This will include consolidating backfill, graveling driveways and any other leveling and landscaping required to restore the premises to original condition. The topsoil will be piled separately from subsoil material and will be replaced in the trench above the subsoil material.

Except where sodding is required, all grassed areas disturbed during the construction will be seeded following landscaping.

The Contractor will restore at his own expense streets, roads, alleys, private or public structures such as water mains, water connections and appurtenances, culverts, drain tiles, sewers, manholes, catch basins, sewer connections, curb, gutter, sidewalk, street signs, or other structures designated to remain in place which are damaged or injured in any way by his acts, and will be responsible for all damages to other utilities he may encounter.

The Contractor will not claim, or be entitled to receive, compensation for any damages sustained by reason of the inaccuracy or omission of any of the information given on the drawings relative to surface, overhead, or underground structures, or by reason of his failure to properly protect such structures.

PROTECTION OF SIDE STREETS AND HAUL ROUTES

The Contractor will be responsible for any damage of the side streets in the area and any other streets that are used as haul routes. The Contractor will discuss all haul route possibilities with the City Engineer and County Engineer prior to their use. The City Engineer, County Engineer, and the Contractor together will inspect the condition of the proposed routes before, during and after their use. The Contractor will correct any damage that is caused by the hauling activities at no cost to the Owner.

DEWATERING

Any dewatering necessary to construct the work will be done by the Contractor. The Contractor is responsible to determine the type and method of dewatering and to provide and implement all equipment and materials necessary to accomplish the work on this project. Discharged water from dewatering will be routed through a temporary sediment basin. Sediment trapped in the temporary basins will be removed and disposed of on-site.

PROTECTION OF SURFACE STRUCTURES

The Contractor will not trespass on any private property without the express written consent of the Owner thereof. Trees, shrubs, fences, poles and all other private property will be protected unless their removal is authorized. Any property damaged will be satisfactorily restored at the expense of the Contractor. Any land survey or property monuments destroyed, covered, moved, bent or disturbed will be replaced by a Licensed Land Surveyor at the expense of the Contractor.

Wherever construction is planned to cross private property, an easement for the construction has been acquired from the property owner. The Contractor will familiarize himself with the terms of such easements, which the Owner will have on file.

Ground surface, trees, shrubbery, fences and other private property will be restored to the same condition as existed prior to the beginning of construction. This will include consolidating backfill, graveling driveways and any other leveling and landscaping required to restore the premises to original condition. The topsoil will be piled separately from subsoil material and will be replaced in the trench above the subsoil material.

Except where sodding is required, all grassed areas disturbed during the construction will be seeded following landscaping.

The Contractor will restore at his own expense streets, roads, alleys, private or public structures such as water mains, water connections and appurtenances, culverts, drain tiles, sewers, manholes, catch basins, sewer connections, curb, gutter, sidewalk, street signs, or other structures designated to remain in place which are damaged or injured in any way by his acts, and will be responsible for all damages to other utilities he may encounter.

The Contractor will not claim, or be entitled to receive, compensation for any damages sustained by reason of the inaccuracy or omission of any of the information given on the drawings relative to surface, overhead, or underground structures, or by reason of his failure to properly protect such structures.

PROTECTION OF SIDE STREETS AND HAUL ROUTES

The Contractor will be responsible for any damage of the side streets in the area and any other streets that are used as haul routes. The Contractor will discuss all haul route possibilities with the City Engineer and County Engineer prior to their use. The City Engineer, County Engineer, and the Contractor together will inspect the condition of the proposed routes before, during and after their use. The Contractor will correct any damage that is caused by the hauling activities at no cost to the Owner.

INTERFERENCE OF UNDERGROUND STRUCTURES

Existing utilities crossed by the new construction will be protected against damage, and/or replaced to original grade. Protection, temporary support and maintenance of existing utilities will be furnished by the Contractor at his own expense. The final installation will provide permanent support to prevent any settlement or movement, which may result in damage to these utilities.

Whenever existing pipe is replaced, the material of replacement will be DIP or PVC pipe of the same diameter as the original, long enough to extend at least one foot into the solid bank on either side of the excavation. The backfill under and around such pipe will be thoroughly compacted by mechanical means to preclude settlement. All connections between different types or sizes of pipe or improperly matched joint types will be encased in concrete with a minimum thickness of 6 inches.

Should it become necessary during the progress of the work to remove or relocate existing utilities or structures, the Owner will cause the same to be done at no expense to the Contractor, except as otherwise provided herein. The Contractor will notify those who maintain utilities sufficiently in advance of construction so they may make the necessary location, disclosure, relocation or other preparation. Where necessary to locate existing underground utilities, the Contractor, upon order of the Engineer, will make any required subsurface explorations and excavation, and will be allowed compensation therefore. Where relocation or reconstruction of existing utilities is impracticable, a change in line and/or grade of the new construction will be ordered, and the change will be made as directed. No deviation from the line or grade set by the Engineer will be made without his approval.

CONNECT TO EXISTING SANITARY SEWER

The Contractor will connect to the existing sanitary sewer at the locations shown on the plan. Exploratory excavation for determining the location of existing utilities and the connection to the existing sanitary sewer are incidental to the work. The Contractor will verify the connection elevation at the main is reasonably close to the elevation shown on the plan prior to beginning work. If the elevation is substantially different, the Contractor will notify the Owner and Engineer.

Where new connections are made to existing sanitary sewer manholes, the contractor will core drill the manhole wall and invert to the existing flow line, construct and shape a new invert for the new pipe, and provide a waterproof boot through the wall of the manhole for the new pipe.

SANITARY SEWER CONSTRUCTION REQUIREMENTS

- Noise -- The Contractor will insure all equipment is properly fitted with mufflers to reduce noise to the minimum attainable to avoid creating a nuisance in the residential and business area.
- Trench Compaction -- All trenches will be tamped using the existing material that has been excavated. Tamping will not be paid as a bid item, therefore the cost of this work will be included in the price bid for furnishing and installing the pipe.
- Piling Excavated Materials -- Excavated material will not be piled on private property without the express permission of the owner thereof, except where easements for the sewer construction or for related work have been obtained; nor will it be piled in any location that will require backfilling machinery to operate on private property. Where excavated material is piled on private property it will be placed to cause the least possible inconvenience to the property owner. Any damage caused thereby, including damage to buildings, walls, sidewalks, driveways, trees, shrubs, lawns, or any other property, will be repaired at the expense of the Contractor. Backcasting in order to minimize disturbance is incidental to the work.
- It will be the Contractor's responsibility to protect adjacent pipes in and around manholes to be reconstructed, and will replace any pipes damaged, cracked, or broken by the Contractor at their expense.
- All excavations, trenching and/or jacking and boring pits will be sheeted and/or shored as per OSHA requirements. No unsheeted trench will be left open overnight.
- Backfilling of all trenches within the limits of street excavation will comply with the provisions of Mn/DOT Specification 2112 including achieving 100% compacted density in the upper three feet of subgrade (below aggregate base) and 95% below the upper three feet. Density testing will be performed as directed by the Owner to verify compaction. Trench areas that are determined by the Owner to have yielded due to improper compaction will be deemed as Unacceptable Work and will be corrected by the contractor at no additional cost.
- Removal of former service lines. -- Service lines no longer being utilized will be removed to the main, as directed by the City. Removal and restoration of street surfacing required for the service removal is incidental.
- RECORDS OF LATERALS: The Contractor will maintain a complete and accurate record of the location and depth of each lateral. The Contractor will make measurements from the end of each service to prominent permanent features to facilitate its location in the future. The end of each lateral will be located in plan and elevation, and a sketch made to show the plan location. These records will be turned over to the Owner.
- Contractor shall televise all sewer main to be owned by the City.

MATERIALS FOR SANITARY SEWER CONSTRUCTION:

The project calls for the use of Poly-Vinyl Chloride (PVC). Pipe and fittings should be properly bedded and encased in accordance with the Standard Detail Sheets and Standard Specifications for Sanitary Sewer Installation. All 8" and larger sanitary sewer shall be SDR 35, pipe smaller than 8" shall be SDR 26 Bedding and encasement beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. Foundation rock is incidental to pipe installation. Joints for PVC-SDR 35, and PVC-SDR 26 gravity sewer pipe will be made using Elastomeric gaskets conforming to the requirements of ASTM D3212. Joints in precast concrete manholes will be made using a joint compound equal to Ram-Nek or rubber gasketed conforming to ASTM C443. All manhole castings will be equipped with solid lid covers, self-sealing, with concealed pick holes. Manhole casting will be Neenah R1772, or equal and will be labeled 'SANITARY' on casting.

CONNECT TO EXISTING WATERMAIN

The Contractor will connect to existing watermain at the locations shown on the plan. All connections to existing water main are incidental to the work. All exploratory excavation in determining the location of existing water main is incidental to the work. The Contractor will coordinate with the utility owner and be responsible for any fees due for connections.

WATERMAIN CONSTRUCTION REQUIREMENTS

- Noise -- The Contractor will insure all equipment is properly fitted with mufflers to reduce noise to the minimum attainable to avoid creating a nuisance in the residential and business area.
- Bedding and encasement beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. Foundation rock will be paid at the unit price per ton. No payment will be made for bedding materials which, in the opinion of the Engineer, was unnecessary for proper pipe installation.
- Trench Compaction -- All trenches will be tamped using the existing material that has been excavated. Tamping will not be paid as a bid item, therefore the cost of this work will be included in the price bid for furnishing and installing the pipe.
- Piling Excavated Materials -- Excavated material will not be piled on private property without the express permission of the owner thereof, except where easements for the sewer construction or for related work have been obtained; nor will it be piled in any location that will require backfilling machinery to operate on private property. Where excavated material is piled on private property it will be placed to cause the least possible inconvenience to the property owner. Any damage caused thereby, including damage to buildings, walls, sidewalks, driveways, trees, shrubs, lawns, or any other property, will be repaired at the expense of the Contractor.
- It will be the Contractor's responsibility to protect adjacent pipes in and around manholes to be reconstructed, and will replace any pipes damaged, cracked, or broken by the Contractor at their expense.
- All excavations, trenching and/or jacking and boring pits will be sheeted and/or shored as per OSHA requirements. No unsheeted trench will be left open overnight.
- Backfilling of all trenches within the limits of street excavation will comply with the provisions of Mn/DOT Specification 2112 including achieving 100% compacted density in the upper three feet of subgrade (below aggregate base) and 95% below the upper three feet. Density testing will be performed as directed by the Engineer to verify compaction. Trench areas that are determined by the Engineer to have yielded due to improper compaction will be deemed as Unacceptable Work and will be corrected by the contractor at no additional cost.
- The Contractor will coordinate the construction of all private and municipal utilities.
- The Contractor will be responsible for all tapping or other fees paid to public or private utilities as work incidental to the contract.
- RECORDS OF LATERALS: The Contractor will maintain a complete and accurate record of the location and depth of each water lateral. The Contractor will make measurements from the end of each service to prominent features to facilitate its location in the future. The end of each lateral will be located in plan and elevation, and a sketch made to show the plan location. These records will be turned over to the Owner.

MATERIALS FOR WATERMAIN CONSTRUCTION- City standards shall govern over all material specs listed below if discrepancies exist.

- Watermain shall be DIP meeting the requirements of AWWA C-900. Pipe and fittings should be properly bedded and encased in accordance with manufacturer's requirements. Foundation rock will be used in poor soil conditions.
- Bedding and encasement for pipe, beneath, along the sides, and above the pipe will be Select Granular material, tamped in place. The only deviation will be in poor soil conditions, as approved by the Engineer, where foundation rock will be substituted. Pipe bedding is incidental to pipe installation. All joints between pipe, fittings, valves, and hydrants will be equipped to provide electrical conductivity.
- Gaskets will be mechanical joint rubber gaskets, unless otherwise specified.
- Hydrants shall be Watertous Pacer WB-67-250 with 6" mechanical joint inlet and valve boxes as manufactured by American Flow Control Series 2500 or US Metro Pipe Seal with the Top marked WATER.
- The furnishing and installing of disinfection materials to disinfect the watermains will be the responsibility of the Contractor. The City Utilities Department will assist the Contractor in flushing and testing the watermains.
- The Contractor will use restrained joint mechanical joint flanges with mega lug retainer glands or equal on all hydrants, watermain offsets, bends, or other mechanical fittings. STAINLESS STEEL BOLTS will be required on all mechanical joints and sleeves.
- All exposed parts of the bolts and nuts will be completely coated with an approved asphaltic type rust preventive material. Any parts of the fittings that have been scrapped will also be coated with an approved asphaltic type rust preventive material. Watermain fittings will conform to ANSI Standard A21.10. All watermain fittings, hydrants and retaining rods will be protected by using sacrificial zinc anode caps such as 175P190 Protecto Caps as manufactured by Ebba Iron or an approved equal. Two caps per mechanical joint will be used.

TESTING OF WATER MAIN

Hydrostatic pressure testing of water main and services will be conducted as follows:

After the pipe has been laid, including fittings and valves and blocking, all newly laid pipe or any valved section thereof, unless directed otherwise by the Engineer, will be subject to hydrostatic pressure of 150 pounds per square inch. The duration of each such test will be at least two hours.

Each section of pipe to be tested will be filled with water and all air expelled at the highest point. The required taps to expel air or to fill the water main will be supplied and installed by the Contractor and will be 3/4 inch and will include an approved service saddle when required.

The test apparatus will be applied at the lowest elevation on the section to be tested. The apparatus will be connected to the main at a service tap or special tap location.

The pressure gauge will be a standard pressure gauge. The dial will register from 0 - 200 psi and have a dial size of 4 1/2 inches with 1-psi increments.

The hydrostatic test, pressure requirement for an acceptable test will be a maximum pressure drop of 2 psi during the last hour of the two-hour pressure test. If this test requirement cannot be met, the Contractor will investigate the cause, make corrections, and retest until the pressure drop requirement can be met.

Only if several consecutive tests indicate a consistent pressure drop and only after the Contractor has made numerous attempts to resolve the problem, acceptable to the Engineer, may the Contractor request in writing and the Engineer consider the use of the leakage test. The leakage test may be performed by the Contractor to determine the magnitude of the leak, however, meeting the leakage allowance will not automatically be considered acceptance, in lieu of the pressure test, for the section being tested. Final acceptance will be at the discretion of the Engineer.

When allowed, the leakage test will be performed in accordance with AWWA C-600, Section 4.1.5, 4.1.6 and the line will be accepted as per Section 4.1.7.

Operational Testing will be conducted as follows:

At the completion of the project and in the presence of the Engineer and the Contractor, representatives of the Owner will operate all valves, hydrants, and water services to ascertain that the entire facility is in good working order; that all valve boxes are centered and valves are opened; that all hydrants operate and drain properly; that all curb boxes are plumb and centered; and that water is available at all curb stops.

Disinfection Testing:

Before being placed in service, the completed water main will be disinfected. Disinfection materials and procedures, and the collection and testing of water samples, will be in accordance with the provisions of AWWA C-651. After the final flushing the water will be tested for bacteriologic quality and found to meet the standards prescribed by the Minnesota Department of Health.

Samples will be taken and tested after 24 and 48 hours of disinfection. Both tests must be returned with passing results prior to approval for service.

Where an existing water main is out for the installation of any fitting, the pipe and fittings proposed to be installed will be disinfected prior to installation as follows:

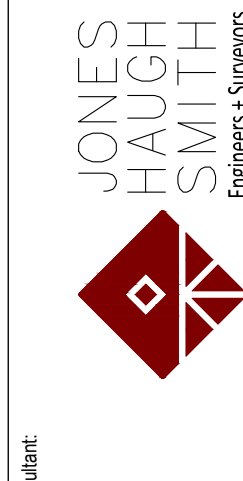
The interior of the pipe and fittings will be cleaned of all dirt and foreign material.

The interior of the pipe and fittings will be thoroughly swabbed or sprayed with a 1 percent minimum hypochlorite solution.

Unless otherwise indicated in the Plans, Specifications, and Special Provisions, the Contractor will furnish all materials and perform the disinfecting, flushing, and testing as necessary for meeting the water quality requirements.

The flushing operations and the form of chlorine and method of application to be used will be subject to approval by the Engineer.

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 Engineer under the laws of the State of Minnesota.
Brian J. Johnson
Brian J. Johnson
Reg. No. 42744
Date: 9/20/25



Consultant:

Project:

MANKATO
APARTMENTS

Revision:

No.: Date: 9/20/2025

Drawn: bj Checked:

Project Manager:

Project Status: CD

Sheet Title:

SPECIFICATIONS

Sheet No.:

C10

Specify the section of the ordinance from which a variance is sought:

Chapter 14 - Streets, Sidewalks and Other Public Places
Section 14-9
Section 14-43



Explain how you wish to vary from the applicable provisions of the ordinance:

We are asking the City of Mankato to allow us to install a 5'-0" wide concrete sidewalk adjacent to Victory Drive. The sidewalk would be 6'-5" off of the edge of the existing Victory Drive pavement. A portion of the concrete sidewalk would be supported by a concrete retaining wall.



In your opinion, is the variance in harmony with the purposes and intent of the ordinance?

Yes



The purpose of the proposed sidewalk is for connecting with existing pedestrian routes to the north and west of the proposed development. The future development on this site will include



In your opinion, is the variance consistent with the comprehensive plan?

Yes



The proposed sidewalk echoes existing pedestrian pathways to the north and to the west of this multi-family housing site.



In your opinion, does the proposal put the property to use in a reasonable manner?

Yes



The provision of this pedestrian route will define a safer path of travel for the walkers / bikers that travel to and from the multi-family buildings being proposed for construction.



In your opinion, are there circumstances unique to the property?

No



Why or why not?



In your opinion, will the variance maintain the essential character of the locality?

Yes



This new pedestrian route will increase the connectivity between local neighborhoods.



The Planning Commission must make an affirmative finding on all of the five criteria listed above in order to grant a variance. The applicant for a variance has the burden of proof to show that all of the criteria listed above have been satisfied.

Meeting Date: 01/13/2026

Title

Trestle Trail Yield Sign

Review

Construction Services staff recommend installing a YIELD (R1?2) sign on the southbound approach of Trestle Trail at the intersection of Trestle Trail, Owatonna Street, and Sibley Parkway. If feasible, the sign should be added to the existing assembly; otherwise, a new support will be provided to ensure proper placement and visibility. This recommendation follows citizen concerns that only one of the four intersection approaches is currently controlled by a YIELD sign. Staff's review confirmed that existing signage along Sibley Parkway establishes it as the through street and that other minor approaches—including an additional Trestle Trail access immediately west—are controlled by YIELD signs.

Adding a YIELD sign to this Trestle Trail approach will align it with the other minor approaches along Sibley Parkway, improving consistency, reinforcing driver expectations, and enhancing overall intersection safety given the existing traffic patterns.

Please see attached Memorandum and Supplemental Information that should be included as attachments to the agenda item.

Attachments

Detailed request

Supplemental information



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

MEMORANDUM

Date: 1/13/2026

To: Site Plan and Traffic Advisory Committee

From: Cory Bienfang, PE – City Engineer
Joe Smith, PE – Assistant City Engineer
Maury Hooper, PE – Traffic Engineer

Subject: Resolution for Directing Traffic Control Signage
Trestle Trail/Owatonna Street and Sibley Parkway Yield Sign

Construction Services staff recommend installing a YIELD (R1-2) sign on the southbound approach of Trestle Trail at the intersection of Trestle Trail, Owatonna Street, and Sibley Parkway. If feasible, the sign should be added to the existing assembly; otherwise, a new support will be provided to ensure proper placement and visibility.



R1-2

This recommendation follows citizen concerns that only one of the four intersection approaches is currently controlled by a YIELD sign. Staff's review confirmed that existing signage along Sibley Parkway establishes it as the through street and that other minor approaches—including an additional Trestle Trail access immediately west—are controlled by YIELD signs.

Adding a YIELD sign to this Trestle Trail approach will align it with the other minor approaches along Sibley Parkway, improving consistency, reinforcing driver expectations, and enhancing overall intersection safety given the existing traffic patterns. (See Figure 1.)



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

Figure 1



Attachments:

- Trestle Trail-Sibley Parkway Supplemental Info.pdf

SR #___ - YIELD Sign @ Sibley and Owatonna (complete)

Tuesday, August 12, 2025 6:45 AM

RECOMMENDATION:

Install YIELD sign for southbound Trestle Trl (Owatonna St) at Sibley Parkway. If possible, Install sign on existing support (replace support if ground clearance of new YIELD sign is unacceptable). Installing this YIELD sign will align the Trestle Trl approach with signage of the other minor approaches along Sibley, providing consistency, reinforcing driver expectations, and generally improving safety at the intersection.



Subject	FW: Intersection/signage issues here?
From	Bienfang, Cory
To	Maury Hooper
Sent	Monday, August 11, 2025 3:39 PM

*** WARNING: This email is from outside the company. Proceed with Caution***

Here is another request. There has been some precedent in installing signing to be consistent within an intersection (ie. One leg has a yield sign, but the other opposing side does not, thus justified to install another yield so both legs are consistent). The most recent situation was on a city owned property, however.

Cory Bienfang, P.E.
Interim City Engineer

City of Mankato
Intergovernmental Center | 10 Civic Center Plaza | Mankato, MN 56001
Office: (507) 387-8643

cbienfang@mankatomn.gov





Leading the way as a prosperous, diverse, regional community.
Responsive • Efficient • Greater Good • Innovative • Open • Neighborly

From: Westman, Molly <mwestman@mankatomn.gov>
Sent: Thursday, July 31, 2025 8:56 AM
To: Bienfang, Cory <cbienfang@mankatomn.gov>
Subject: RE: Intersection/signage issues here?

Hey Cory.

I intended to speak with you about this at our Parks CIP meeting so I apologies that we did not get to it.

I can provide some context to this if you want to give me a call!

Sorry about that!
Molly

From: Westman, Molly
Sent: Wednesday, July 30, 2025 10:59 AM
To: Bienfang, Cory <cbienfang@mankatomn.gov>
Subject: Intersection/signage issues here?

Hi Cory.

Could you please phone Gary Lesley regarding the intersection at Sibley and Owatonna. He has some comments/questions about this intersection/traffic volumes, etc. (704) 860-2367.

Thank you.



Molly Westman
Planning Coordinator
City of Mankato
10 Civic Center Plaza
P.O. Box 3368
Mankato, MN 56002-3368
Office: (507) 387-8571
Fax: (507) 388-7530

August 12, 2025



- Key considerations:

- City of Mankato Page 4

Meeting Date: 01/13/2026

Title

Spruce Street Stop Sign

Review

Construction Services staff recommend installing a STOP (R1-1) sign on the westbound approach of Spruce Street at the intersection of 1st Avenue and Spruce Street. The sign will be mounted on a new support to ensure proper placement and visibility. This recommendation responds to citizen concerns about limited sight distance and lack of intersection control. Staff's review confirmed that sight lines at this intersection are restricted and further complicated by direct access points to and from 1st Avenue and Spruce Street. Installing a STOP sign on the Spruce Street approach will align with existing controls on other minor approaches to 1st Avenue (including Spruce from the opposite direction), reinforcing 1st Avenue as the through street. This change promotes consistency, meets driver expectations, and improves safety—particularly given the limited visibility between conflicting movements.

Please see attached Memorandum and Supplemental Information that should be included as attachments to the agenda item.

Attachments

Detailed request

Supplemental information



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

MEMORANDUM

Date: 1/13/2026

To: Site Plan and Traffic Advisory Committee

From: Cory Bienfang, PE – City Engineer
Joe Smith, PE – Assistant City Engineer
Maury Hooper, PE – Traffic Engineer

Subject: Resolution for Directing Traffic Control Signage
1st Avenue and Spruce Street Stop Sign

Construction Services staff recommend installing a STOP (R1-1) sign on the westbound approach of Spruce Street at the intersection of 1st Avenue and Spruce Street. The sign will be mounted on a new support to ensure proper placement and visibility.



R1-1

This recommendation responds to citizen concerns about limited sight distance and lack of intersection control. Staff's review confirmed that sight lines at this intersection are restricted and further complicated by direct access points to and from 1st Avenue and Spruce Street.

Installing a STOP sign on the Spruce Street approach will align with existing controls on other minor approaches to 1st Avenue (including Spruce from the opposite direction), reinforcing 1st Avenue as the through street. This change promotes consistency, meets driver expectations, and improves safety—particularly given the limited visibility between conflicting movements. (See Image 1 – westbound and Image 2 – northbound for examples of the challenging sightlines.)



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

Image 1 (Westbound)



Image 2 (Northbound)



Attachments:

- Spruce St-1st Ave Supplemental Info.pdf

Spruce and 1st STOP Sign Request

Thursday, October 30, 2025 10:25 AM

RECOMMENDATION:

Based on engineering judgement, install a STOP sign for westbound Spruce at 1st Ave.

Despite the low volume approach and cross-street volumes, a recent complaint has highlighted the challenging sight lines for the east approach, which are further complicated by direct access to and from 1st and Spruce in this vicinity. A STOP sign will align the Spruce Street approach with signage of the other minor approaches along 1st (including Spruce from the opposite direction) which establish 1st Ave as the through street, providing consistency, reinforcing driver expectations, and generally improving safety at the intersection, particularly given the restricted views between conflicting traffic.

No information was found during review of City archived Agenda's and meeting minutes 2015 to present



Crashes: none in 10-years - MnCMAT2 (10/30/2025)

ADT: review of MnDOT TCDS, no volumes available for Spruce or 1St.
Based on area land use and nearby ADT's, volumes are assumed to be below those typically referenced to justify stop signs by themselves.

Zoning: is Light Industrial

Functional classification: local/local

Sightline are problematic for the east approach (westbound traffic). This is further complicated by various direct access along 1st Avenue, which has been designated as the through street along this segment based on the existing signing. Spruce also has some direct access in the vicinity of the intersection.





Meeting Date: 01/13/2026

Title

Augusta Drive Speed Limit

Review

Construction Services staff are recommending additional 30 MPH signs along Augusta Drive between North Riverfront Drive and Trunk Highway 22. The R2-1 (30 MPH) signs shown below would be added to new sign supports at three locations. The recommendation comes after receiving concerns of speeding along Augusta. Staff's review confirmed that Augusta is posted appropriately at 30 MPH, however, additional signage could provide benefits by informing drivers of the regulatory speed limit at the strategic locations.

Please see attached Memorandum and Supplemental Information that should be included as attachments to the agenda item.

Attachments

Detailed request

Supplemental information



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

MEMORANDUM

Date: 1/13/2026

To: Site Plan and Traffic Advisory Committee

From: Cory Bienfang, PE – City Engineer
Joe Smith, PE – Assistant City Engineer
Maury Hooper, PE – Traffic Engineer

Subject: Resolution for Directing Traffic Control Signage
Augusta Drive 30mph Signs (North Riverfront Drive to Trunk Highway 22)

Construction Services staff are recommending additional 30 MPH signs along Augusta Drive between North Riverfront Drive and Trunk Highway 22. The R2-1 (30 MPH) signs shown below would be added to new sign supports at three locations.



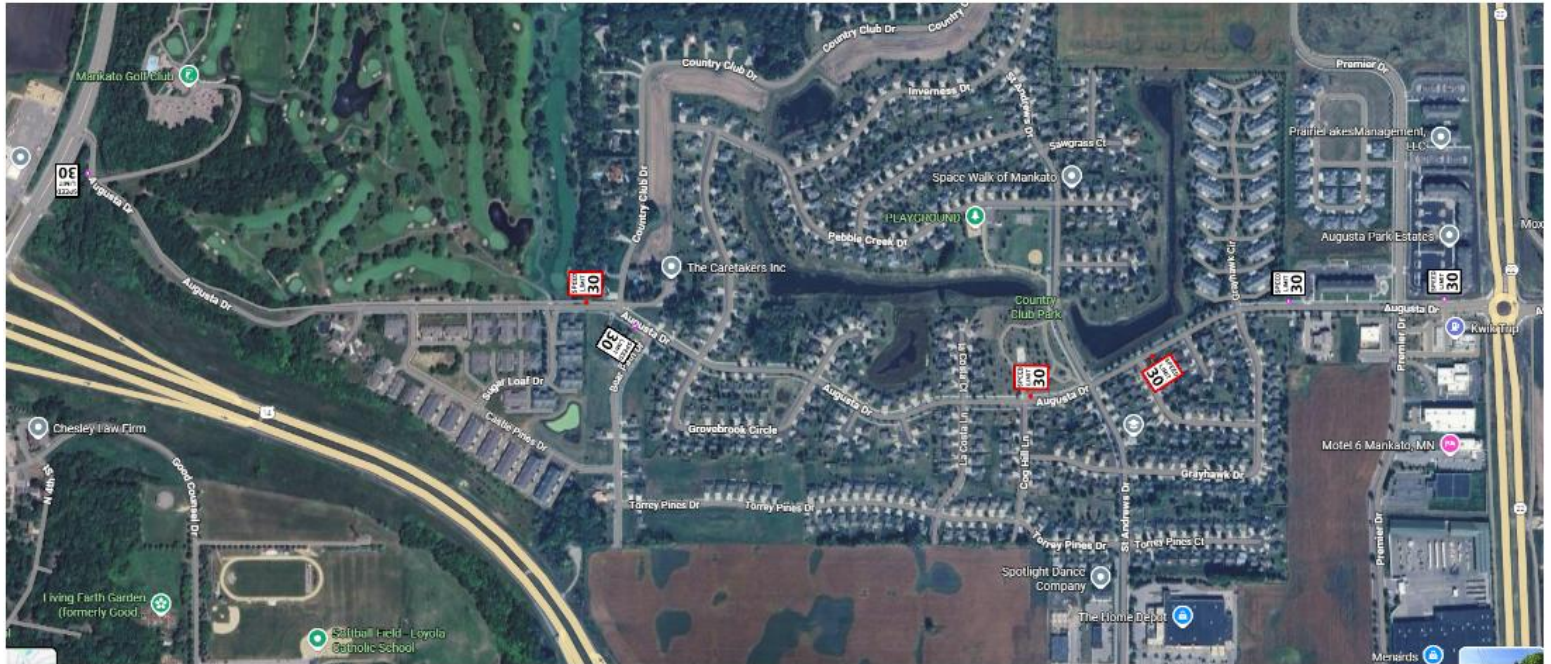
R2-1

The recommendation comes after receiving concerns of speeding along Augusta. Staff's review confirmed that Augusta is posted appropriately at 30 MPH, however, additional signage could provide benefits by informing drivers of the regulatory speed limit at the strategic locations shown in **Figure 1**.



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

Figure 1



LEGEND

-  PROPOSED - R2-1 SIGN (30 MPH)
-  IN-PLACE - R2-1 SIGN (30 MPH)

Attachments:

- Augusta Drive Supplemental Info.pdf

Augusta Drive Speed Concerns

Wednesday, October 8, 2025 11:27 AM

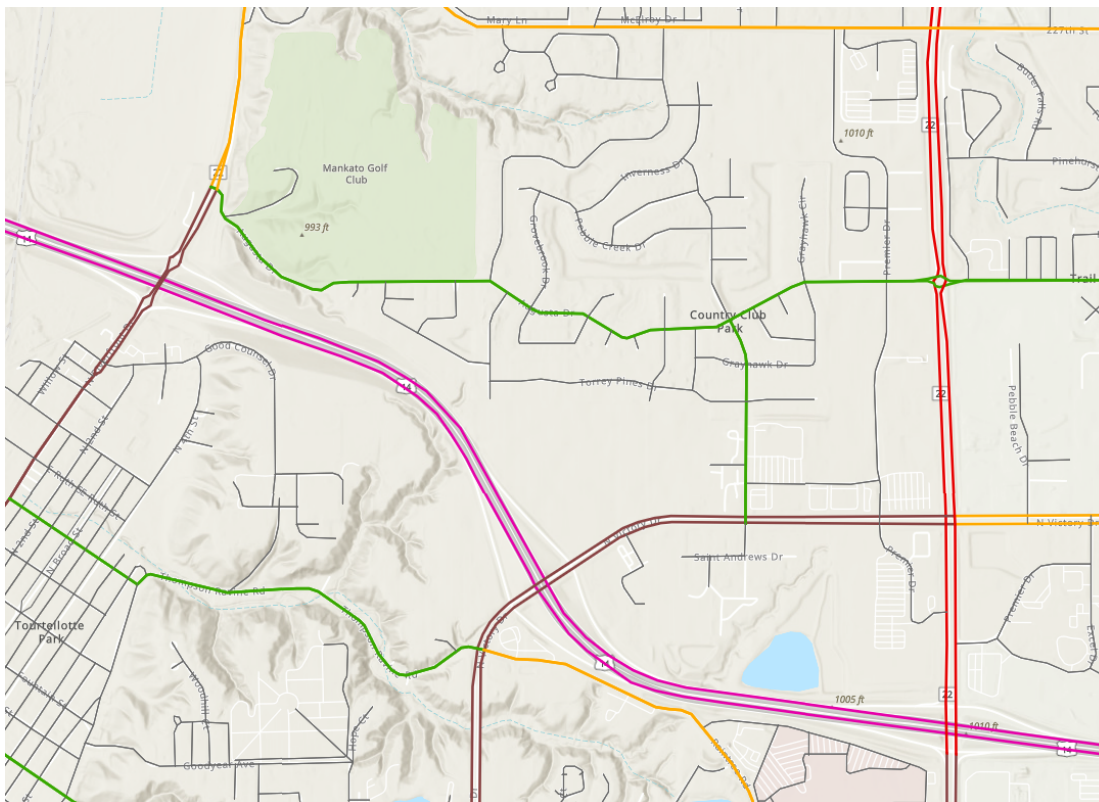
06-06-2025 Resident email Chad Honetschlager, Police Officer - Traffic Enforcement, about speeding (noted time periods 6-7AM and 4-5PM)
06-11-2025 Alec acknowledged receipt of request and will collect data.
06-11-2025 Resident response about placing speed device between residents back yard and Greyhawk.
06-16-2025 Resident noticed city took down the speed radar in the morning and inquired about seeing results
06-16-2025 Police Office response, noting additional patrols have been out but have not yet documented any excessive speed issues. Also contacted owner of vehicle with plate provided by resident
06-16-2025 City sent resident summary of results, 85th was 28 mph, driver behavior aligns with what is expected for a 30 mph posted roadway. ADT information was also provided.
06-16-2025 Resident questions the validity of the data collection and communicated that data was generally collected outside of when the speeding is occurring (morning, evening, and on the weekends). Resident requested a longer study.
06-17-2025 City staff followed up with Police about and provided speed data information collected to date.
06-17-2025 City following up on accuracy of data collection method.
06-17-2025 City staff continue correspondence on accuracy of data collection method. Developing a comparison to tube method.
06-17-2025 City staff continues to better understand speed measuring device limits.
06-17-2025 City responds to resident with speed collection information. Communicates that it intends to collect additional data, but notes that it did capture AM and PM periods that were identified by resident as concern time periods. Reinforces that Public safety staff a providing additional attention. **Inquired about what the resident ultimate goal for Engineering to take action on**
06-17-2025 Resident response to city inquiry. Concerns "no safe place to cross", increased daily traffic. **Communicated they believe an All-Way STOP is needed at Augusta/Greyhawk. Also mention a solar powered speed feedback sign as a potential effective tool.**
06-18-2025 City staff exchange about StreetLight data to support the review? (didn't see any additional StreetLight references)
07-01-2025 Speed data from tube counts (6/23 11AM to 6/27 8AM) - 85th percentile speed 35mph.
07-14-2025 City and Public Safety coordinate on temp speed wagon.
08-05-2025 Resident thanks city for speed limit control sign installation and requests one for the opposite direction.
10-05-2025 Resident initiates a follow up speed concern on Augusta.

Location link: <https://maps.app.goo.gl/4aLgTpBgUqwgzkMi6>

Augusta is an MSAS 157 and classified as a Minor Collector. One of it's purposes is to connect the higher-functional class roadways

Collector Roads

Mobility and land access are equally important on the collector road system. The collector system provides connections between neighborhoods and from neighborhoods to regional job concentrations and local centers. It also provides supplementary connections between major traffic generators within regional job concentrations. Direct land access should primarily be to development concentrations. Connectors typically serve short trips of one to four miles. Collectors connect primarily to minor arterials, other collectors, and local streets.




Augusta Dr
Tubes

Concerns: Sight lines look good with trees trimmed up.
Pedestrian crossing sight distance should be at least equal to the SSD: 200' for 30 MPH and 250 feet for 35 mph. It appears sight distance exceeds 250 to both the east and west.

ADT:

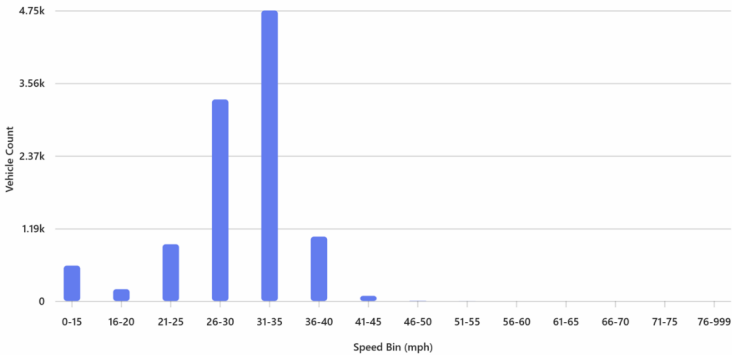
2093 west of St. Andrews Dr (No Speed data from MnDOT GIS)
3589 east of Premier Dr. (no speed data from MnDOT GIS)

Weekly Speed Review: Monday morning June 23, 2025 to Friday morning June 27, 2025

Note: the 85th percentile speed bin is 31 to 35 MPH.
10881 vehicles total in the data set
99.2% are traveling at less than 40 MPH.
89 vehicles exceeded the 41 MPH during the week

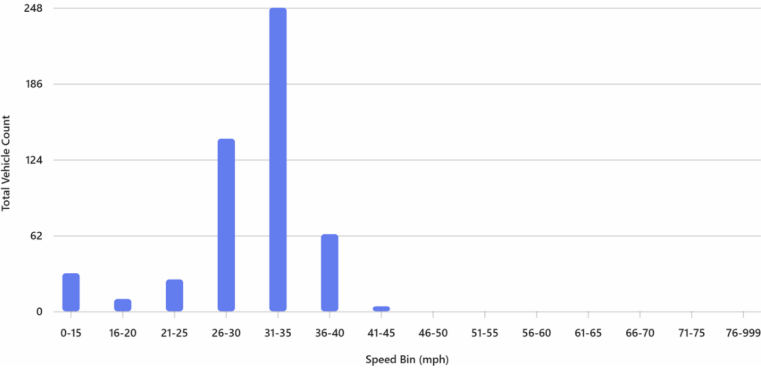


Augusta Dr
Tubes Sp...



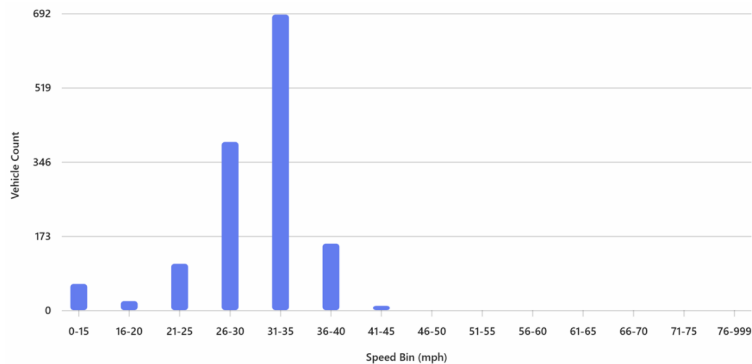
Speed Study Review for 6-7 AM:

Note: the 85th percentile speed bin is 31 to 35 MPH.
523 vehicles in the data set
99.2% are traveling at less than 40 MPH.
4 vehicles exceeded the 41 MPH



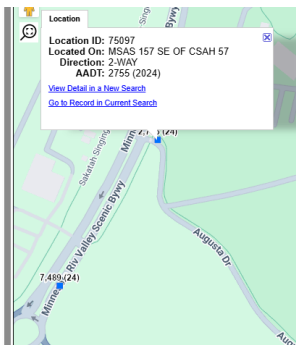
Speed Review for 4-5 PM

Note: the 85th percentile speed bin is 31 to 35 MPH.
1436 vehicles in the data set
99.3% are traveling at less than 40 MPH.
10 vehicles exceeded the 41 MPH



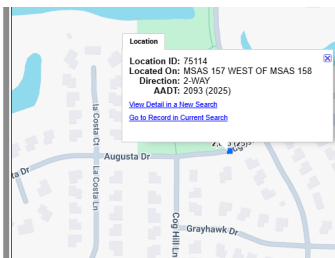
WEST END ADT:

Record	42806	of 45526	Goto Record	100
Location ID	75097	MPO ID		
Type	SPOT	HPMS ID		
On NHS		On HPMS	No	
SF Group	11 - Sim WADay/VMEnd (2025)	Route Type	MSAS	
AF Group	6-Urban Minor Collector (2025)	Route	157	
GF Group	6-Urban Minor Collector (2024)	Active	Yes	
Class Dist Grp		Category		
Seas Class Grp	Urban (2024)			
WM Group				
QC Group	Default			
Fract Class	Minor Collector	Milepost		
Located On	MSAS 157			
Loc On Alias	Augusta Dr			
SE OF	CSAH 57			
More Detail				
STATION DATA				
Directions:	2-WAY	EB	WB	
		1	1	
AADT				
Year	AADT	DHV-30	K %	D %
2024	2,755 ³			
2023	2,781			
2022	2,212			
				LEGACY
				LEGACY
				LEGACY



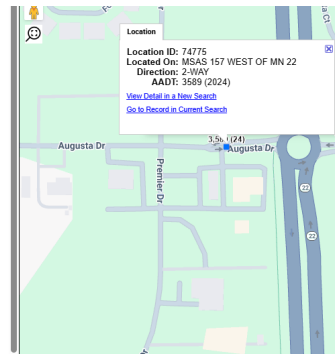
MIDDLE ADT:

Record	42483	of 45526	Goto Record	100
Location ID	75114	MPO ID		
Type	SPOT	HPMS ID		
On NHS		On HPMS	No	
SF Group	11 - Sim WADay/VMEnd (2025)	Route Type	MSAS	
AF Group	6-Urban Minor Collector (2025)	Route	157	
GF Group	6-Urban Minor Collector (2024)	Active	Yes	
Class Dist Grp		Category		
Seas Class Grp	Urban (2024)			
WM Group				
QC Group	Default			
Fract Class	Minor Collector	Milepost		
Located On	MSAS 157			
Loc On Alias	Augusta Dr			
WEST OF	MSAS 158			
More Detail				
STATION DATA				
Directions:	2-WAY	EB	WB	
		1	1	
AADT				
Year	AADT	DHV-30	K %	D %
2025	2,093			
2024	2,238 ³			
2023	2,258			
2022	1,845			
				LEGACY
				LEGACY
				LEGACY

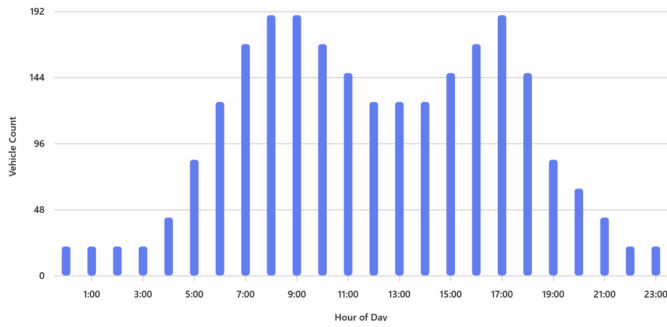


EAST END ADT:

Record	42483	of 45526	Goto Record	100
Location ID	74775	MPO ID		
Type	SPOT	HPMS ID		
On NHS		On HPMS	No	
SF Group	11 - Sim WADay/VMEnd (2025)	Route Type	MSAS	
AF Group	6-Urban Minor Collector (2025)	Route	157	
GF Group	6-Urban Minor Collector (2024)	Active	Yes	
Class Dist Grp		Category		
Seas Class Grp	Urban (2024)			
WM Group				
QC Group	Default			
Fract Class	Minor Collector	Milepost		
Located On	MSAS 157			
Loc On Alias	Augusta Dr			
WEST OF	MN 22			
More Detail				
STATION DATA				
Directions:	2-WAY	EB	WB	
		1	1	
AADT				
Year	AADT	DHV-30	K %	D %
2024	3,588			
2023	4,250 ³			
2022	4,417 ³			
2021	4,549 ³			
2020	4,300			
				LEGACY
				LEGACY
				LEGACY



Multi-Way STOP review: Using the ADT noted in MndOT application at Grayhawk Drive, the intersection falls significantly short hourly volumes required to warrant an all-way stop. The requirement is at least 300 vph entering for any 8 hours.



2B.7 Multi-Way Stop Applications

Support

Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

The restrictions on the use of STOP signs described in Section 2B.4 also apply to multi-way stop applications.

Guidance

The decision to install multi-way stop control should be based on an engineering study.

The following criteria should be considered in the engineering study for a multi-way STOP sign installation:

- Where traffic control signals are justified, the multi way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
- Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left turn collisions as well as right-angle collisions.
- Minimum volumes:
 - The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
 - The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
 - If the 85th-percentile approach speed of the major street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
- Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

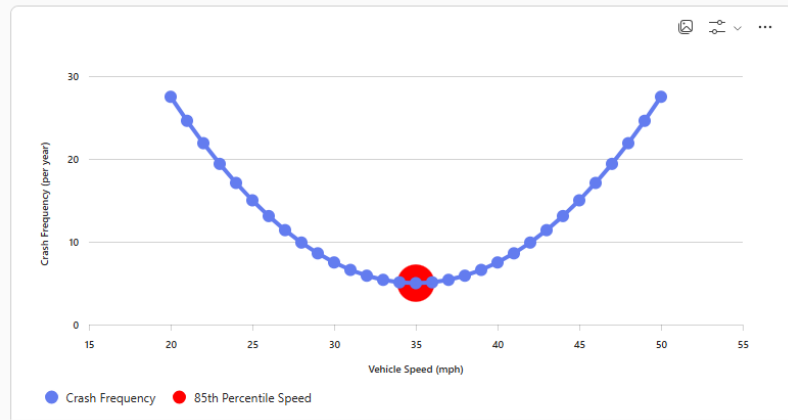


Crash_Summary_202...

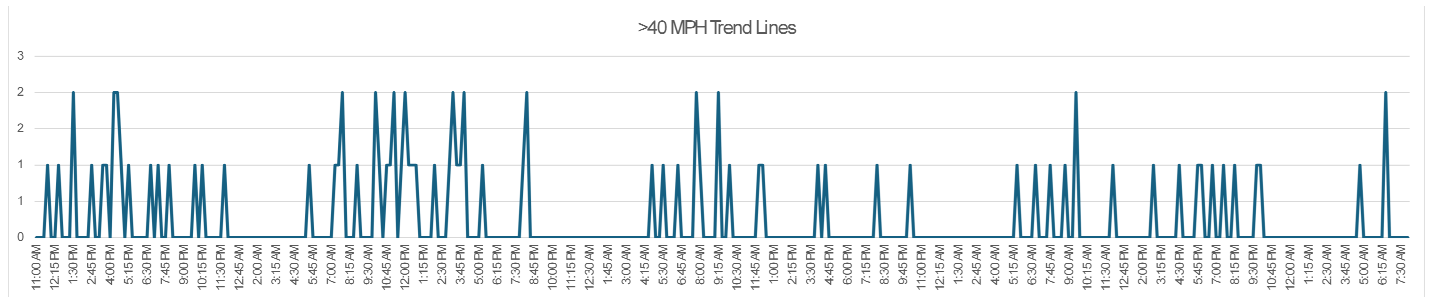


Crash_Summary_202...

Here's a chart that illustrates the relationship between vehicle speed and crash frequency, with the 85th percentile speed (35 mph) highlighted:



Vehicles exceeding >40 MPH occur very isolated and in small numbers throughout the day, 2 or less making targeted enforcement an unlikely option.



Meeting Date: 01/13/2026

Title

1st Avenue and 3rd Avenue Intersection No Outlet Sign

Review

Construction Services staff recommend adding a NO OUTLET (W14?2a) sign to the existing street name sign assembly at the NE quadrant of the intersection of 1st Avenue and 3rd Avenue. The sign should be mounted below the 1st Avenue plaque on the current assembly if feasible; otherwise, a new support will be installed to ensure proper placement and visibility. Back-to-back signs should be provided so that the sign is visible from both approach directions along 3rd Avenue (arrow orientation as appropriate). This recommendation addresses concerns raised by local business regarding large commercial vehicles entering 1st Avenue and then needing to back out after discovering it is a no-outlet street. Due to the roadway alignment, drivers cannot see that 1st Avenue has no outlet until they are fully committed, creating operational and safety issues when backing out along the street. (See Figure 1.)

Please see attached Memorandum and Supplemental Information that should be included as attachments to the agenda item.

Attachments

Detailed request

Supplemental information



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

MEMORANDUM

Date: 1/13/2026

To: Site Plan and Traffic Advisory Committee

From: Cory Bienfang, PE – City Engineer
Joe Smith, PE – Assistant City Engineer
Maury Hooper, PE – Traffic Engineer

Subject: Resolution for Directing Traffic Control Signage
1st Avenue and 3rd Avenue Intersection No Outlet Sign

Construction Services staff recommend adding a NO OUTLET (W14-2a) sign to the existing street name sign assembly at the NE quadrant of the intersection of 1st Avenue and 3rd Avenue. The sign should be mounted below the 1st Avenue plaque on the current assembly if feasible; otherwise, a new support will be installed to ensure proper placement and visibility. Back-to-back signs should be provided so that the sign is visible from both approach directions along 3rd Avenue (arrow orientation as appropriate).



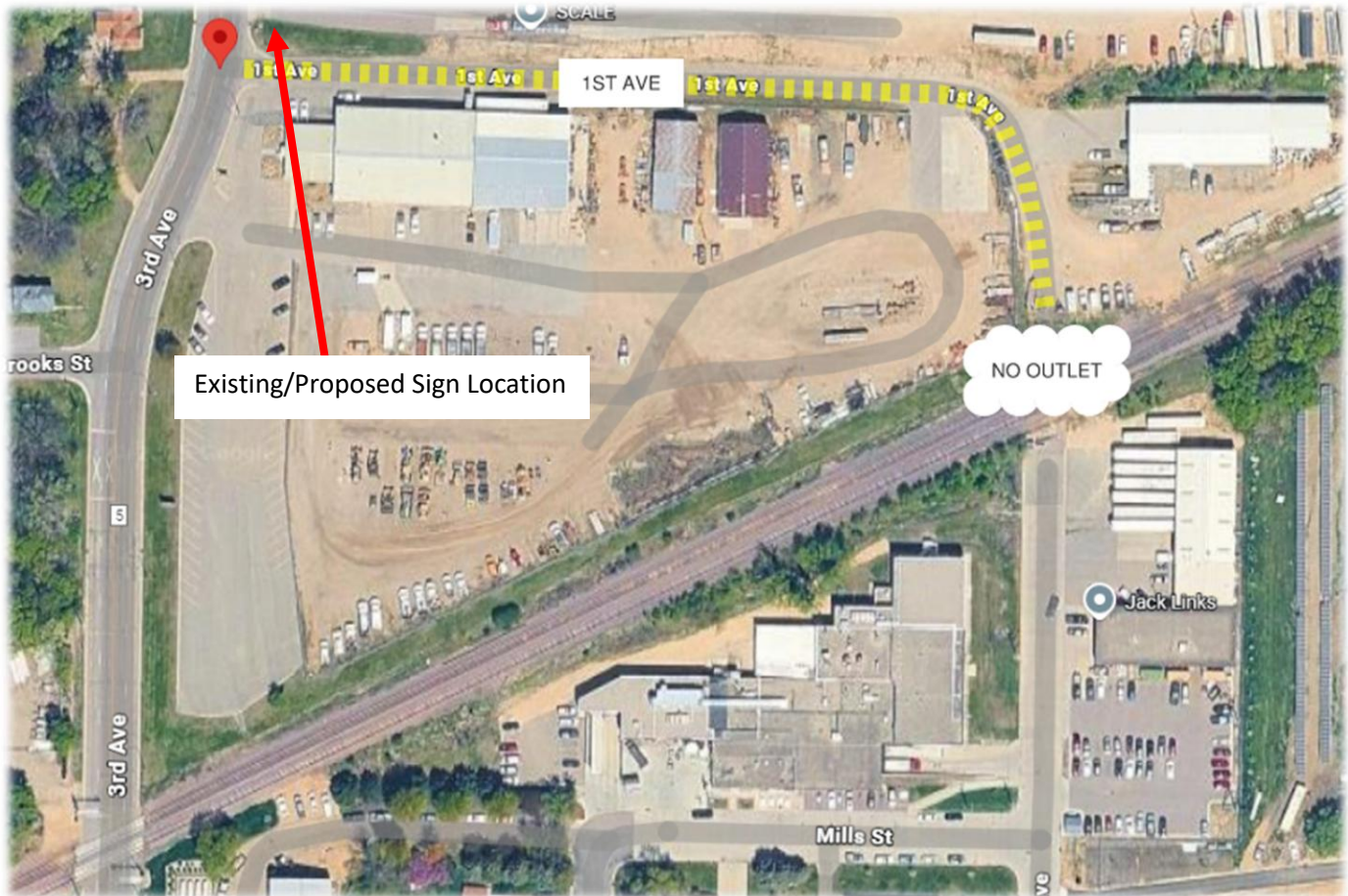
W14-2a

This recommendation addresses concerns raised by local business regarding large commercial vehicles entering 1st Avenue and then needing to back out after discovering it is a no-outlet street. Due to the roadway alignment, drivers cannot see that 1st Avenue has no outlet until they are fully committed, creating operational and safety issues when backing out along the street. (See Figure 1.)



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

Figure 1



Attachments:

- 3rd Ave-1st Ave Supplemental Info.pdf

1st Ave and 3rd Ave - No Outlet Signage

Sunday, January 4, 2026 8:43 AM

RECOMMENDATION:

Install a NO OUTLET (W14-2a) sign on the existing street name sign support. The W14-2a should be install below the 1st Avenue sign and be back to back to it is visible from both approaches.

The sign should help reduce the number of occurrences and help minimize the associated operational and safety issues of vehicles having to back out along 1st Avenue.



REVIEW:

- Location: <https://maps.app.goo.gl/5Cb9fCMoUmA9FV6W9>
- ZONING - The adjacent area is zoned heavy industrial, so the presence of large vehicles on a regular basis is likely.
- The alignment and length of 1st Avenue does not facilitate a sight line to the dead end, requiring drivers to commit before learning that no outlet exists.



From: Smith, Joe <jsmith@mankatomn.gov>
Sent: Wednesday, November 19, 2025 3:09 PM
To: Maury Hooper <maury.hooper@bolton-menk.com>
Cc: Bienfang, Cory <cbienfang@mankatomn.gov>
Subject: Re: No Outlet Sign

*** WARNING: This email is from outside the company. Proceed with Caution***

Hi Maury,

Let's treat this one like any of our Customer Service Requests. Please add to your list to put together the 1-page memo recommendation for the advisory committee.

Once approved by the traffic advisory committee, we would move to a city council resolution.

Let me know if you have questions.

Thanks,

Joe

From: Maury Hooper <maury.hooper@bolton-menk.com>
Sent: Wednesday, November 19, 2025 2:56 PM
To: Bienfang, Cory <cbienfang@mankatomn.gov>; Smith, Joe <jsmith@mankatomn.gov>
Subject: Re: No Outlet Sign

Caution: Think Security – This email originated from an external source. Be cautious with any links or attachments.

This Message has originated outside your organization.

Hello Cory,

I believe that installation of "NO OUTLET" sign would address the issue.



W14-2a

This sign could be mounted in conjunction with the street name sign as depicted below. Note: the street name sign should go above the "no outlet" sign.



Let me know if you have any question.

Best,
Maury



Maury Hooper, PE (MN)
Transportation Project Manager
Bolton & Menk, Inc.



(651) 392-4461

From: Bienfang, Cory <cbienfang@mankatomn.gov>
Sent: Wednesday, November 19, 2025 1:34 PM
To: Smith, Joe <jsmith@mankatomn.gov>; Maury Hooper <maury.hooper@bolton-menk.com>
Subject: FW: No Outlet Sign

***** WARNING: This email is from outside the company. Proceed with Caution*****

Please review and advise.

Cory Bienfang, P.E.

Interim City Engineer

City of Mankato

Intergovernmental Center | 10 Civic Center Plaza | Mankato, MN 56001

Office: (507) 387-8643

cbienfang@mankatomn.gov



Leading the way as a prosperous, diverse, regional community.

Responsive • Efficient • Greater Good • Innovative • Open • Neighborly

From: Lozinski, Kari <klozinski@mankatomn.gov>

Sent: Wednesday, November 19, 2025 12:58 PM

To: Bienfang, Cory <cbienfang@mankatomn.gov>

Subject: FW: No Outlet Sign

They are requesting a Dead End sign.

Kari Lozinski

Engineering Project Coordinator

City of Mankato

Intergovernmental Center | 10 Civic Center Plaza | Mankato, MN 56001

Office: (507) 387-8634 | **Mobile:** (507) 380-7821

klozinski@mankatomn.gov





Leading the way as a prosperous, diverse, regional community.

Responsive • Efficient • Greater Good • Innovative • Open • Neighborly

From: Fischer, Dan <dfischer@mankatomn.gov>

Sent: Wednesday, November 19, 2025 8:38 AM

To: Lozinski, Kari <klozinski@mankatomn.gov>

Subject: FW: No Outlet Sign

Not sure who should get this?

From: City of Mankato Website <communications@mankatomn.gov>

Sent: Wednesday, November 19, 2025 8:36 AM

To: Fischer, Dan <dfischer@mankatomn.gov>

Subject: No Outlet Sign

This Message has originated outside your organization.

Message submitted from the <Mankato, MN> website.

Site Visitor Name: Jennifer Brunz

Site Visitor Email: jbrunz@huntelec.com

Hello,

I am not sure where to start so I thought I would send an email-

Our business is 1905 1st Ave - Off of Third Ave in between MPM and Hubbard. (River City Electric DBA Hunt Elec)

Our road is not a Thru Street- I am wondering if there could be a sign placed at the start of 1st Ave that says No Outlet - Not a Thru Street?

We get semi's that come down 1st Ave thinking that they can get across--- Guessing to Jack Links - 99% of them can get backed out but we have a lot of equipment in the yard and it is getting harder and harder for them. Today alone there has been 3 semi 1 of them a tanker truck come in and then they realize that they can not get through and have to back out.

If you could point me to the right person to get help with this - if not you that would be great.

Thank You

Jennifer Brunz

Hunt Electric

507-208-8069

Meeting Date: 01/13/2026

Title

Riverfront Drive No Parking Sign (SE Quadrant of N Riverfront Drive and E Rock Street)

Review

Construction Services staff recommend installing a NO PARKING (R8?3) sign to reinforce Minnesota Statute 169.34, which prohibits parking within 30 feet of a traffic signal. This measure will help maintain clear sight lines and allow the intersection approach to function as marked. The sign should be added to an existing support if feasible; otherwise, a new support will be provided to ensure proper placement and visibility. This recommendation follows citizen concerns that vehicles have been parked in the signal approach lane. Staff's review confirmed that existing pavement markings designate this space as a travel lane adjacent to the curb, not a parking lane. A photo provided by the citizen further verifies that the area is currently being used for parking. The owner of Mom & Pop's Ice Cream at 629 N Riverfront Drive has been contacted regarding the proposed sign installation and is supportive.

Please see attached Memorandum and Supplemental Information that should be included as attachments to the agenda item.

Attachments

Detailed request

Supplemental information



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

MEMORANDUM

Date: 1/13/2026

To: Site Plan and Traffic Advisory Committee

From: Cory Bienfang, PE – City Engineer
Joe Smith, PE – Assistant City Engineer
Maury Hooper, PE – Traffic Engineer

Subject: Resolution for Directing Traffic Control Signage
Riverfront Drive No Parking Sign (SE Quadrant of N Riverfront Drive and E Rock Street)

Construction Services staff recommend installing a NO PARKING (R8-3) sign to reinforce Minnesota Statute 169.34, which prohibits parking within 30 feet of a traffic signal. This measure will help maintain clear sight lines and allow the intersection approach to function as marked. The sign should be added to an existing support if feasible; otherwise, a new support will be provided to ensure proper placement and visibility.



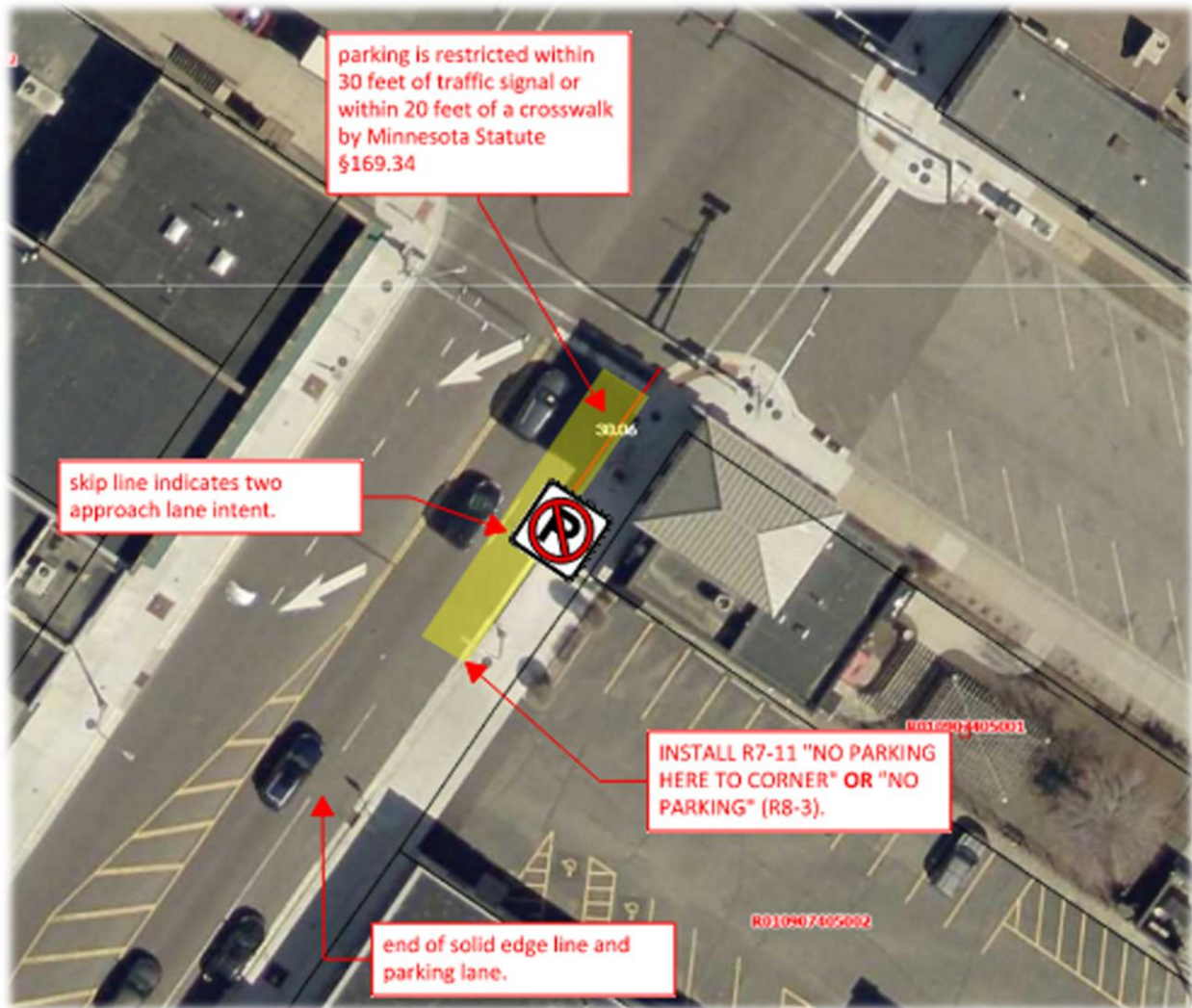
R8-3

This recommendation follows citizen concerns that vehicles have been parked in the signal approach lane. Staff's review confirmed that existing pavement markings designate this space as a travel lane adjacent to the curb, not a parking lane. A photo provided by the citizen further verifies that the area is currently being used for parking. See Figure 1 for the recommended parking restriction zone. The owner of Mom & Pop's Ice Cream at 629 N Riverfront Drive has been contacted regarding the proposed sign installation and is supportive.



City of Mankato, MN
10 Civic Center Plaza
PO 3368
Mankato, MN 56002-3368.

Figure 1



Attachments:

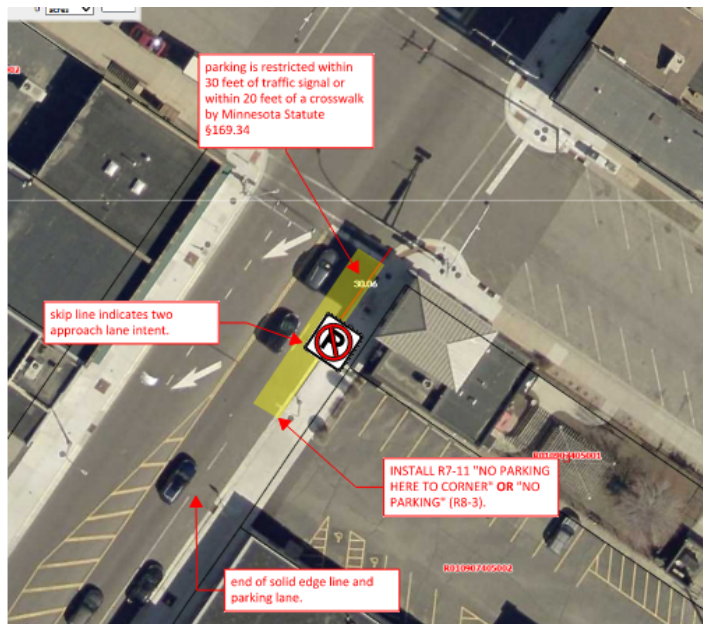
- Riverfront Dr No Parking Supplemental Info.pdf

SR 25-14606-001 No Parking Sign Request - N Riverfront Drive/E Rock St.

Wednesday, September 10, 2025 12:24 PM

RECOMMENDATION:

Installation of no parking signing is recommended for the segment between the access to Mom & Pop's parking lot and the crosswalk (identified by the yellow box in the image below). This would reinforce the intent of the in-place striping and align with Mn Statute that restricts parking with 30' of a traffic signal and 20 feet of a crosswalk.



Subject	Customer Service Request # 25-14606-001: Parking complaint
From	Blenfang, Cory
To	Maury Hooper
Sent	Tuesday, September 9, 2025 10:28 AM
Attachments	Image 1

*** WARNING: This email is from outside the company. Proceed with Caution***

Please add to the spreadsheet and review. I would request your prioritization the best you are able.

