PRELIMINARY PLANS

FOR:

RIVER NORTH INDUSTRIAL CENTER

CLIENT:

UNITED PROPERTIES
250 NICOLLET MALL STE. 250
MINNEAPOLIS, MN
PH: 512-543-1116
EMAIL: NICOLE.FONTAINE@UPROPERTIES.COM

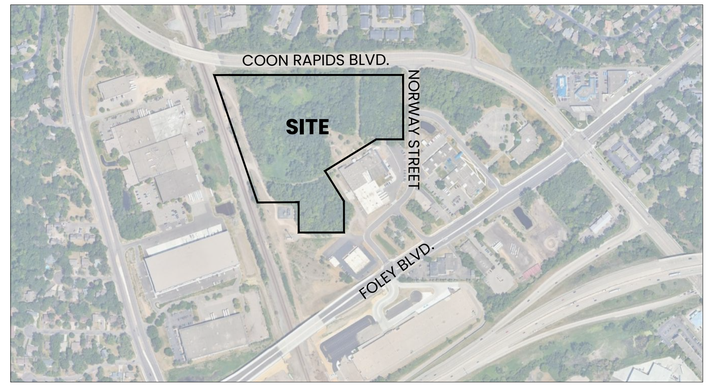
ENGINEER/LANDSCAPE ARCHITECT:

MEASURE GROUP - PETE MOREAU, PE
PO BOX 10
WAYZATA, MN 55391
PH: 612-440-0934
EMAIL: PMOREAU@MEASUREGRP.COM

MEASURE GROUP - JOSH MCKINNEY, PLA
PO BOX 10
WAYZATA, MN 55391
PH: 612-440-0934
EMAIL: JMCKINNEY@MEASUREGRP.COM

ARCHITECT:

POPE DESIGN GROUP - RICKY TEJEDA, AIA
767 N. EUSTIS STREET STE. 190
ST. PAUL , MN 55114
PH: 651-642-9200
EMAIL: RTEJEDA@POPEDESIGN.COM



VICINITY MAP- NOT TO SCALE

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measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

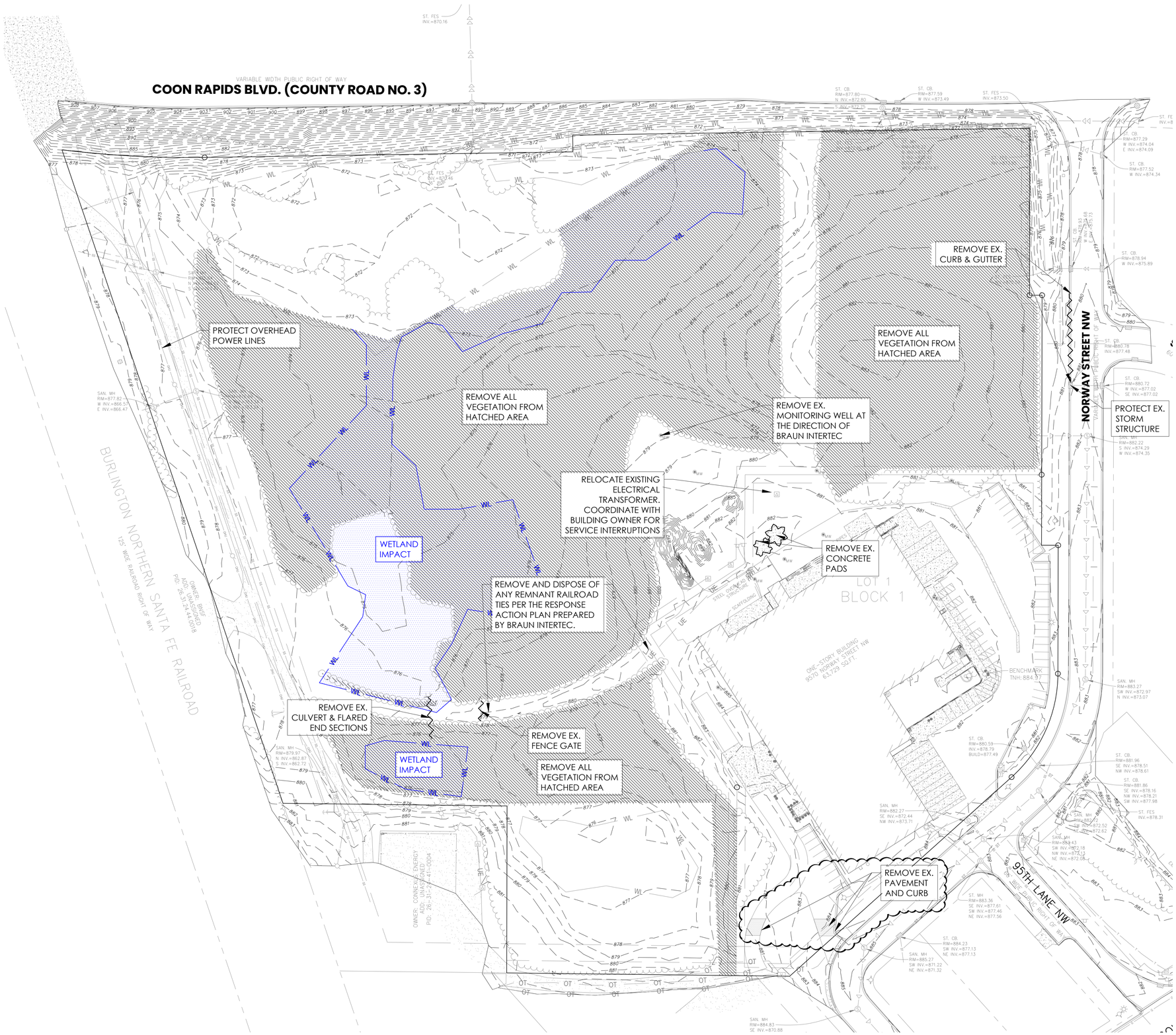
Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

NOT FOR CONSTRUCTION
Date: XX.XX.XX Lic. No.:

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	5/11/2026	CITY SUBMITTAL
	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
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Issue Date: 5/11/2026
Sheet Title:
COVER SHEET
Sheet:
C1.0

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LEGEND

- PROPERTY BOUNDARY
- LOT LINE
- SETBACK LINE
- RIGHT OF WAY LINE
- EASEMENT
- STANDARD CURB AND GUTTER
- FENCE
- RETAINING WALL
- PROPOSED REMOVAL
- PROPOSED STRUCTURE REMOVAL
- REMOVE VEGETATION
- REMOVE EXISTING PAVEMENT

DEMOLITION NOTES

1. DEMOLITION NOTES ARE NOT COMPREHENSIVE. CONTRACTOR SHALL VISIT THE SITE PRIOR TO CONSTRUCTION TO OBTAIN A CLEAR UNDERSTANDING OF THE INTENDED SCOPE OF WORK.
2. THE DESIGN SHOWN IS BASED ON ENGINEER'S UNDERSTANDING OF EXISTING CONDITIONS. **THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON ALTA AND TOPOGRAPHIC MAPPING PREPARED BY HILL INC. DATED 04-09-26.** IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS WITHOUT EXCEPTION, CONTRACTOR SHALL HAVE MADE, AT OWN EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
3. THE CONTRACTOR IS RESPONSIBLE FOR DEMOLITION, REMOVAL, AND DISPOSING IN ALOCATION APPROVED BY ALL GOVERNING AUTHORITIES AND IN ACCORDANCE WITH APPLICABLE CODES, OF ALL STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE STRUCTURES, UTILITIES, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE GEOTECHNICAL REPORT AND/OR GEOTECHNICAL ENGINEER.
4. CLEARING AND GRUBBING: CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
5. . CONTRACTOR IS RESPONSIBLE FOR THE DISCONNECTION OF UTILITY SERVICES TO EXISTING BUILDINGS PRIOR TO DEMOLITION OF THE BUILDINGS.
6. CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO REMOVAL AND/OR RELOCATION OF UTILITIES. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANIES' FORCES AND ANY FEES WHICH ARE TO BE PAID TO UTILITY COMPANIES FOR SERVICES. CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
7. CONTRACTOR IS SPECIFICALLY CAUTIONED THAT LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM INFORMATION AVAILABLE. ENGINEER ASSUMES NO RESPONSIBILITY FOR THE UTILITY MAPPING ACCURACY. PRIOR TO START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES 48 HOURS PRIOR TO ANY EXCAVATION FOR ON-SITE LOCATIONS OF EXISTING UTILITIES. THE LOCATIONS OF UTILITIES SHALL BE OBTAINED BY THE CONTRACTOR BY CALLING MINNESOTA GOPHER STATE ONE CALL AT 800-252-1166.
8. THE MAPPING LOCATION OF ALL EXISTING SEWERS, PIPING, AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH WORK. UTILITIES DETERMINED TO BE ABANDONED SHALL BE REMOVED IF UNDER THE BUILDING INCLUDING 10' BEYOND FOUNDATIONS.
9. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ROAD RIGHT OF WAY DURING CONSTRUCTION.
10. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES.
11. CONTINUOUS ACCESS SHALL BE MAINTAINED FOR THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES
12. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED AND APPROVED BY THE LOCAL AUTHORITY.
13. CONTRACTOR SHALL LIMIT SAW-CUT & PAVEMENT REMOVAL TO ONLY THOSE AREAS WHERE IT IS REQUIRED AS SHOWN ON THESE CONSTRUCTION PLANS BUT IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
14. CONTRACTOR TO PROTECT EXISTING FEATURES WHICH ARE TO REMAIN. DAMAGE TO ANY EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
15. ABANDON OR REMOVE ALL SANITARY, WATER AND STORM SERVICES PER CITY STANDARDS. COORDINATE ALL WORK WITH CITY. ALL STREET RESTORATION SHALL BE COMPLETED IN COMPLIANCE WITH LOCAL STANDARDS.
16. CONTRACTOR SHALL PREPARE AND SUBMIT TO THE GOVERNING AUTHORITY A TRAFFIC AND/OR PEDESTRIAN TRAFFIC PLAN PER CITY/COUNTY/STATE STANDARDS TO BE APPROVED BY THE LOCAL GOVERNING AUTHORITY.

measure

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UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

Peter J. Moreau, PE
Date: XX.XX.XX Lic. No.: 53735

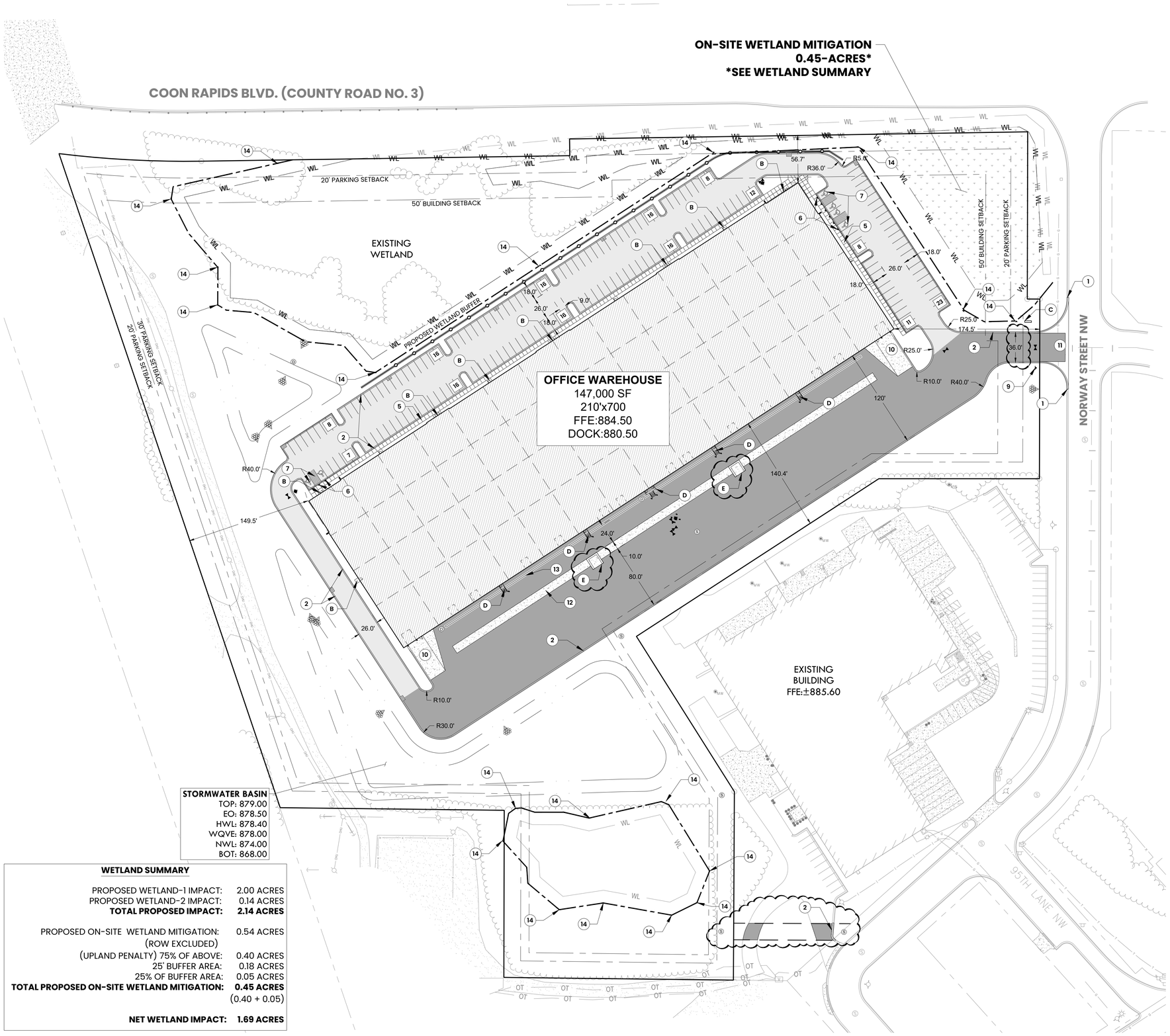
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Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
DEMOLITION PLAN

Sheet:
C2.0

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STORMWATER BASIN
TOP: 879.00
EO: 878.50
HWL: 878.40
WQVE: 878.00
NWL: 874.00
BOT: 868.00

WETLAND SUMMARY

PROPOSED WETLAND-1 IMPACT:	2.00 ACRES
PROPOSED WETLAND-2 IMPACT:	0.14 ACRES
TOTAL PROPOSED IMPACT:	**2.14 ACRES**
PROPOSED ON-SITE WETLAND MITIGATION: (ROW EXCLUDED)	0.54 ACRES
(UPLAND PENALTY) 75% OF ABOVE:	0.40 ACRES
25' BUFFER AREA:	0.18 ACRES
25% OF BUFFER AREA:	0.05 ACRES
TOTAL PROPOSED ON-SITE WETLAND MITIGATION:	**0.45 ACRES** (0.40 + 0.05)
NET WETLAND IMPACT:	**1.69 ACRES**

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LEGEND

PROPOSED

- PROPERTY BOUNDARY
- SETBACK LINE
- RIGHT OF WAY LINE
- EASEMENT
- STANDARD CURB AND GUTTER
- HEAVY DUTY BITUMINOUS PAVEMENT
- LIGHT DUTY BITUMINOUS PAVEMENT
- CONCRETE SIDEWALK
- HEAVY DUTY CONCRETE PAVEMENT
- WETLAND MITIGATION
- FENCE
- RETAINING WALL (BY OTHERS)
- TRAFFIC SIGN
- LIGHT POLE

DEVELOPMENT SUMMARY

ZONING INFORMATION

CURRENT SITE ZONING:	INDUSTRIAL
PROPOSED SITE ZONING:	INDUSTRIAL

SITE DATA

GROSS SITE AREA:	16.7 AC
LOT 1, BLOCK 1	16.7 AC

	REQUIRED	PROPOSED
BUILDING SETBACKS		
FRONT - NORTH:	35'	55.6'
SIDE - EAST:	35'	174.5'
SIDE - WEST:	25'	149.5'
REAR - SOUTH:	25'	140.4'
PARKING		
LIGHT INDUSTRY (147,000 SF / 1,000 SF)	147 STALLS 1 PER 1K SF	173 STALLS 1.18 PER 1K SF
PARKING DIMENSIONS		
STALL DIMENSIONS	9' x 18'	9' x 18'
DRIVE AISLE WIDTH	24' MIN.	26'
BUILDING COVERAGE	50%	20.18%
IMPERVIOUS SURFACE	85%	47% (7.8 AC)

KEYNOTES

1. MATCH EXISTING
2. B6-12 CURB & GUTTER - SEE DETAIL ON SHEET C8.1
3. CURB TRANSITION- SEE GRADING PLAN
4. FLUSH CURB - SEE DETAIL ON SHEET C8.1
5. CONCRETE SIDEWALK - PRIVATE -SEE DETAIL ON SHEET C8.1
6. ADA SIGNAGE & BOLLARDS - SEE DETAIL ON SHEET C8.1
7. ADA PARKING STRIPING - SEE DETAIL ON SHEET C8.1
8. PEDESTRIAN RAMP - SEE DETAIL ON SHEET C8.1
9. STOP SIGN - SEE DETAIL ON SHEET C8.1
10. VEHICULAR RAMP
11. CONCRETE DRIVEWAY APRON - SEE DETAIL ON SHEET C8.7
12. HEAVY DUTY CONCRETE DOLLY PAD SEE DETAIL
13. TRENCH DRAIN - SEE DETAIL
14. WETLAND BUFFER SIGN - SEE DETAIL

DESIGN/ SELECTION BY OTHERS

- A. LIGHT POLE WITH FOUNDATION - SEE ELECTRICAL PLANS
- B. ARCHITECTURAL STOOP - COORDINATE WITH STRUCTURAL
- C. MONUMENT SIGNAGE - SEE ARCH.
- D. METAL STEPS AND RAILING - SEE ARCH.
- E. TRASH ENCLOSURE - SEE ARCH.

SCALE 0 60 120 IN FEET

measure

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MINNEAPOLIS, MINNESOTA 55401

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COON RAPIDS, MINNESOTA

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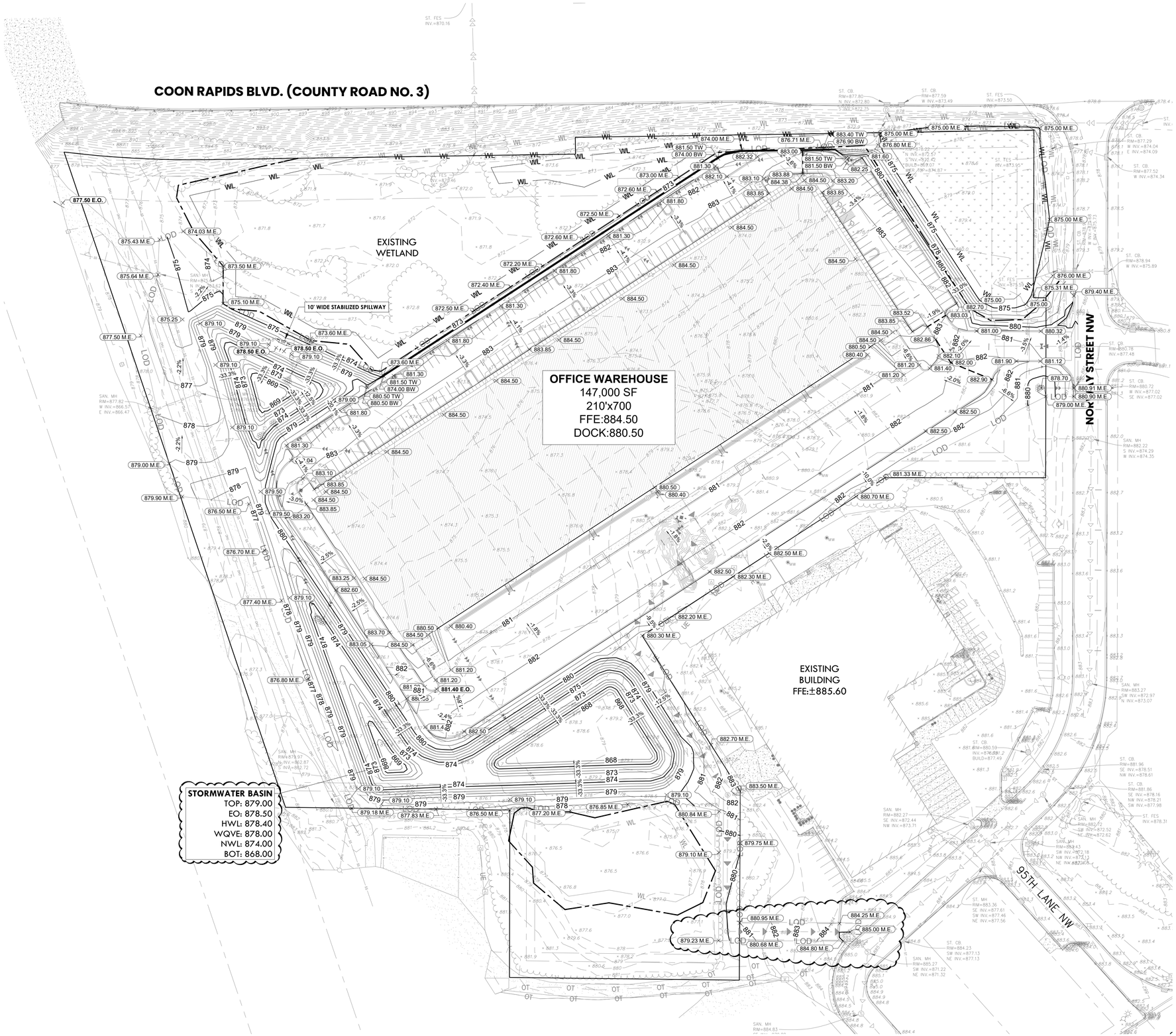
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SITE PLAN

Sheet:
C3.0



LEGEND

- PROPERTY BOUNDARY
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SETBACK LINE
- RIGHT OF WAY LINE
- EASEMENT
- STANDARD CURB AND GUTTER
- STORM SEWER
- FLARED END SECTION
- RETAINING WALL
- DRAINTILE
- GRADING LIMITS (LOD)
- SPOT ELEVATION (×1000.00)
- FLOW DIRECTION (-1.50%)
- EMERGENCY OVERFLOW (E.O.)

SPOT ELEV. LABELS
M.E.=MATCH EXISTING
TW=TOP OF WALL
BW=BOTTOM OF WALL
TC=TOP OF CURB

GRADING NOTES

1. LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.
2. CONTRACTORS SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVEMENT, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS, AND EXACT LOCATIONS AND NUMBER OF DOWNSPOUTS.
3. ALL EXCAVATION SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR TRENCH EXCAVATION AND BACKFILL/SURFACE RESTORATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA.
4. ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE SIX INCHES OF TOPSOIL AND SOD OR SEED. THESE AREAS SHALL BE WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. SEE LANDSCAPE PLAN FOR PLANTING AND TURF ESTABLISHMENT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGMEN AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPROPRIATE MNDOT STANDARDS
6. ALL SLOPES SHALL BE GRADED TO 3:1 OR FLATTER, UNLESS OTHERWISE INDICATED ON THIS SHEET.
7. CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AND PROVIDE A SMOOTH FINISHED SURFACE WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN OR BETWEEN SUCH POINTS AND EXISTING GRADES.
8. **SPOT ELEVATIONS SHOWN INDICATE FINISHED PAVEMENT ELEVATIONS & GUTTER FLOW LINE UNLESS OTHERWISE NOTED**. PROPOSED CONTOURS ARE TO FINISHED SURFACE GRADE.
9. SEE SOILS REPORT FOR PAVEMENT THICKNESSES AND HOLD DOWNS.
10. CONTRACTOR SHALL DISPOSE OF ANY EXCESS SOIL MATERIAL THAT EXISTS AFTER THE SITE GRADING AND UTILITY CONSTRUCTION IS COMPLETED. THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS SOIL MATERIAL IN A MANNER ACCEPTABLE TO THE OWNER AND THE REGULATING AGENCIES.
11. CONTRACTOR SHALL PROVIDE A STRUCTURAL RETAINING WALL DESIGN CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER.
12. ALL CONSTRUCTION SHALL CONFORM TO LOCAL, STATE AND FEDERAL RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
13. PRIOR TO PLACEMENT OF ANY STRUCTURE OR PAVEMENT, A PROOF ROLL, AT MINIMUM, WILL BE REQUIRED ON THE SUBGRADE. PROOF ROLLING SHALL BE ACCOMPLISHED BY MAKING MINIMUM OF 2 COMPLETE PASSES WITH FULLY-LOADED TANDEM-AXLE DUMP TRUCK, OR APPROVED EQUAL, IN EACH OF 2 PERPENDICULAR DIRECTIONS WHILE UNDER SUPERVISION AND DIRECTION OF THE INDEPENDENT TESTING LABORATORY. AREAS OF FAILURE SHALL BE EXCAVATED AND RE-COMPACTED AS SPECIFIED HEREIN.
14. EMBANKMENT MATERIAL PLACED BENEATH BUILDINGS AND STREET OR PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFIED DENSITY METHOD AS OUTLINED IN MNDOT 2105.3F1 AND THE REQUIREMENTS OF THE GEOTECHNICAL ENGINEER.
15. EMBANKMENT MATERIAL NOT PLACED IN THE BUILDING PAD, STREETS OR PARKING AREA, SHALL BE COMPACTED IN ACCORDANCE WITH REQUIREMENTS OF THEORDINARY COMPACTION METHOD AS OUTLINED IN MNDOT 2105.3F2.
16. ALL SOILS AND MATERIALS TESTING SHALL BE COMPLETED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. EXCAVATION FOR THE PURPOSE OF REMOVING UNSTABLE OR UNSUITABLE SOILS SHALL BE COMPLETED AS REQUIRED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOILS TESTS AND INSPECTIONS WITH THE GEOTECHNICAL ENGINEER.

SCALE 0 60 120 IN FEET

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measure

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MINNEAPOLIS, MINNESOTA 55401

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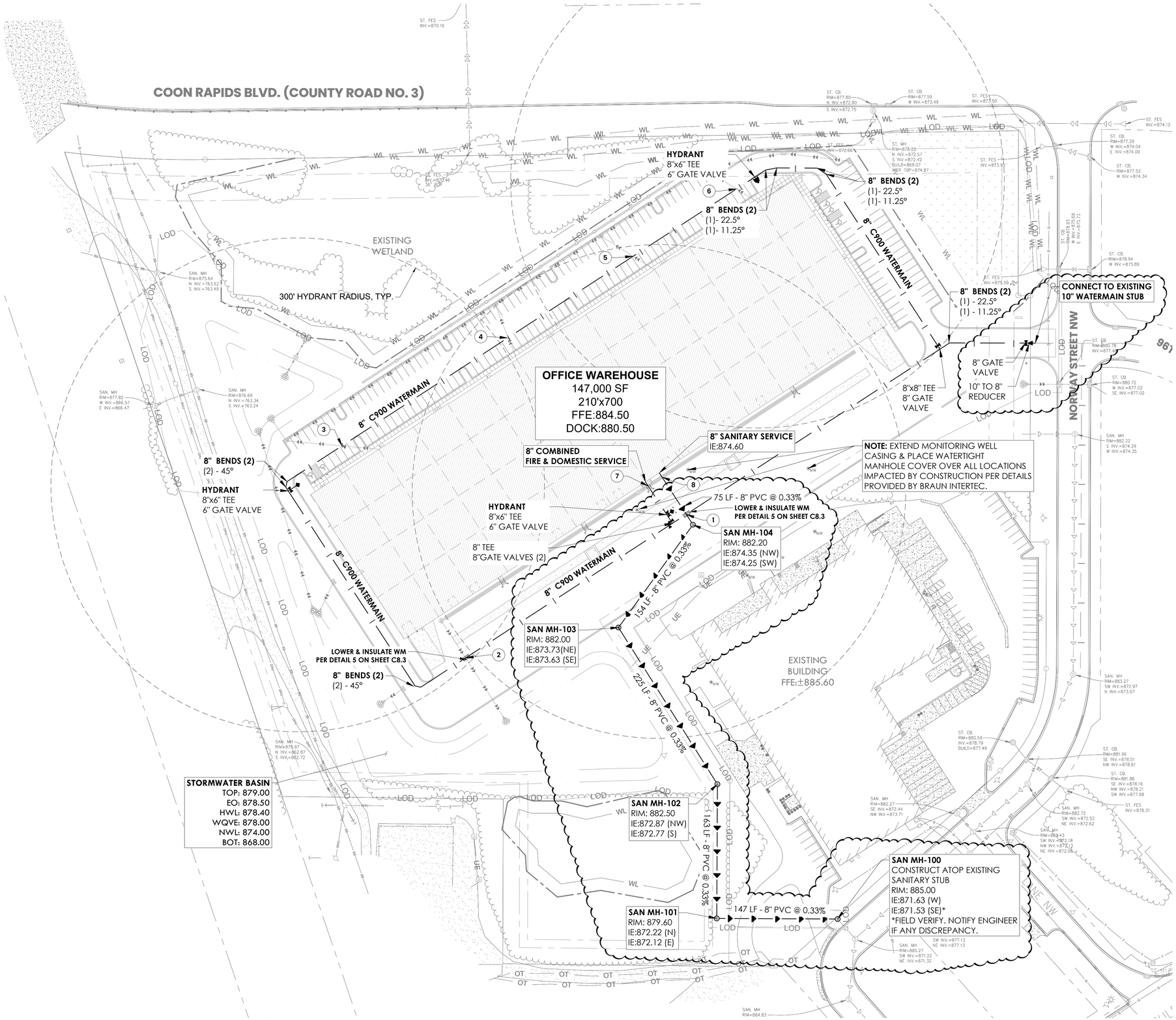
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GRADING PLAN

Sheet:
C4.0



LEGEND

PROPOSED

- PROPERTY BOUNDARY
- EASEMENT
- CURB AND GUTTER
- WATER MAIN
- HYDRANT
- GATE VALVE
- SANITARY SEWER
- STORM SEWER
- FLARED END SECTION W/ RIP RAP & TRASH GUARD
- DRAINTILE
- RETAINING WALL
- GAS
- UNDERGROUND ELECTRIC
- OVERHEAD ELECTRIC
- TELEPHONE/FIBER
- LIGHT POLE

UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
2. ALL SANITARY SEWER, STORM SEWER AND WATER MAIN MATERIAL AND INSTALLATIONS SHALL BE PER CITY REQUIREMENTS, MINNESOTA PLUMBING CODE, AND IN ACCORDANCE WITH THE CURRENT EDITION OF THE STANDARD UTILITIES SPECIFICATION AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM).
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN THE NECESSARY FEDERAL, STATE AND LOCAL PERMITS FOR THE PROPOSED WORK OR VERIFY WITH THE OWNER OR ENGINEER THAT PERMITS HAVE BEEN OBTAINED. PERMIT FEES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE ARRANGED WITH THE OWNER.
4. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATION AND DIMENSIONS OF DOORWAYS, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY CONNECTION LOCATIONS.
5. ALL PRIVATE UTILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE APPROPRIATE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE SERVICE LINE CONSTRUCTION WITH THE UTILITY COMPANIES.
6. CONTRACTOR SHALL OBTAIN ALL NECESSARY CITY PERMITS FOR UTILITY CONNECTIONS AND UTILITIES SHALL BE INSPECTED AND APPROVED BY THE CITY. THE CITY SHALL BE NOTIFIED 48-HOURS PRIOR TO COMMENCING WITH THE UTILITY CONSTRUCTION OR ANY REQUIRED TESTING. CONTRACTOR SHALL NOT OPERATE, INTERFERE WITH, CONNECT ANY PIPE OR HOSE TO, OR TAP ANY WATER MAIN BELONGING TO THE CITY UNLESS DULY AUTHORIZED TO DO SO BY THE CITY. ANY ADVERSE CONSEQUENCES OF SCHEDULED OR UNSCHEDULED DISRUPTIONS OF SERVICE TO THE PUBLIC ARE TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. PROVIDE WATER MAIN THRUST RESTRAINTS PER CITY STANDARD REQUIREMENTS.
8. 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.
9. UTILITY SERVICES TYPICALLY TERMINATE 5' OUTSIDE BUILDING WALL UNLESS OTHERWISE SHOWN OR NOTED.
10. WATERMAIN PIPE SHALL EITHER BE AWWA C900 PVC WITH DUCTILE IRON FITTINGS AND RISERS, OR DIP CLASS 52.
11. ALL WATER LINES SHALL HAVE 8' MINIMUM COVER (TOP OF PIPE TO FINISH GRADE). INSULATE WATER MAIN IF LESS THAN 8' OF COVER. INSULATION SHALL BE DOW STYROFOAM HI BRAND 35 OR EQUIVALENT, WITH 4 INCHES OF THICKNESS.
12. SANITARY SEWER PIPE OUTSIDE THE BUILDING ENVELOPE THAT IS 8" OR GREATER SHALL BE POLYVINYL CHLORIDE (PVC) SDR 26. SCHEDULE 40 MUST BE USED IS THE PIPE IS 6" OR SMALLER. C900 IS REQUIRED FOR DEPTHS GREATER THAN 20 FEET. SANITARY SEWER PIPE WITHIN 5 FEET OF THE BUILDING AND UNDER FOOTINGS SHALL BE SCHEDULE 40 PER ASTM D2665. ALL PLASTIC SANITARY SEWER SHALL BE INSTALLED PER D2321. SOLVENT WELD JOINTS MUST INCLUDE USE OF A PRIMER WHICH IS OF A CONTRASTING COLOR TO THE PIPE AND CEMENT. ALL SANITARY SEWER SHALL BE TESTED COMPLIANT TO CURRENT MINNESOTA PLUMBING CODE.
13. STORM SEWER PIPE:
    - 13.1. HDPE OR POLYPROPYLENE PIPE MAY BE INSTALLED WITH APPROVAL OF LOCAL GOVERNING AGENCIES.
    - 13.2. HDPE STORM PIPE 4- TO 60-INCHES IN DIAMETER SHALL MEET REQUIREMENTS OF ASTM F2648. FITTINGS SHALL BE PER ASTM F2306 AND INSTALLED PER ASTM D2321.
    - 13.3. POLYPROPYLENE STORM PIPE 12- TO 60-INCHES IN DIAMETER SHALL MEET REQUIREMENTS OF ASTM F2881. APPROVED FITTINGS SHALL MEET JOINT PERFORMANCE REQUIREMENTS OF ASTM D3212. AT PIPE JOINTS, THE SPIGOT SHALL UTILIZE TWO GASKETS MEETING THE REQUIREMENTS OF ASTM F477. INSTALL IN ACCORDANCE WITH ASTM D2321.
    - 13.4. PVC STORM SEWER PIPE AND FITTINGS SHALL BE SCHEDULE 40 PIPE PER ASTM D2665 AND INSTALLED PER ASTM D2321.
    - 13.5. IF REQUIRED BY AHJ, REINFORCED CONCRETE PIPE SHALL BE CLASS 5 FOR PIPE DIAMETERS 18" AND SMALLER AND CLASS 3 FOR PIPE DIAMETERS 21" AND LARGER UNLESS OTHERWISE NOTED, PER ASTM C76 WITH R-4 GASKETS.
14. ALL PORTIONS OF SANITARY & STORM SEWER SYSTEMS, INCLUDING STRUCTURES, LOCATED WITHIN 10-FEET OF A BUILDING AND/OR WATER LINE SHALL BE TESTED IN ACCORDANCE WITH MINNESOTA RULES, PART 4714 AND CURRENT MINNESOTA PLUMBING CODE.
15. ALL STRUCTURES OUTSIDE OF PAVEMENT AREA REQUIRE A STRUCTURE MARKER SIGN, SEE CITY STANDARD DETAIL PLATE GEN-5 ON C8.7.

CROSSING #	UPPER UTILITY BOTTOM OF PIPE	LOWER UTILITY TOP OF PIPE	SEPARATION
1	SANITARY IE=874.20	WATER TOP= 872.70	1.50' (LOWER WM)
2	STORM IE=874.70	WATER TOP= 873.20	1.50' (LOWER WM)
3	STORM IE=876.85	WATER TOP= 874.70	LOWER WATERMAIN FOR THE ENTIRETY OF THE NORTH SIDE OF THE BUILDING TO PROVIDE 9' OF COVER
4	STORM IE=877.17	WATER TOP= 874.75	
5	STORM IE=877.10	WATER TOP=874.75	
6	STORM IE=877.40	WATER TOP=876.65	
7	STORM IE=876.45	WATER TOP= 872.90	3.55'
8	STORM IE=877.50	SANITARY TOP=875.5	2.00'

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

Peter S Moreau, PE

Date: XX.XX.XX Lic. No.: 53735

Rev.	Date	Description
	5/11/2026	CITY SUBMITTAL
	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
UTILITY PLAN

Sheet:
C5.0

COON RAPIDS BLVD. (COUNTY ROAD NO. 3)

NORWAY STREET NW

95TH LANE NW

EXISTING WETLAND

EXISTING BUILDING
FFE:±885.60

OFFICE WAREHOUSE
147,000 SF
210'x700
FFE:884.50
DOCK:880.50

CB-106
RIM: 882.92
(12") INV(E): 877.65
(12") INV(W): 877.65

98 LF -12" HDPE @ 0.50%

CBMH-105
RIM: 881.30
(15") INV(SE): 877.16
(12") INV(E): 877.16
(24") INV(SW): 877.16

80 LF -12" HDPE @ 0.50%

CB-107
RIM: 881.60
(12") INV(W): 878.10

ROOF DRAIN CONNECTION-D
INV: 878.00

78 LF -15" SCH. 40 PVC @ 1.10%

CBMH-104
RIM: 881.30
(15") INV(SE):876.40
(24") INV(NE):876.40
(24") INV(SW):876.40

150 LF -24" HDPE @ 0.50%

77 LF -15" SCH. 40 PVC @ 2.10%

ROOF DRAIN CONNECTION-C
INV: 878.00

FES-600
INV: 873.60

50 LF -36" RCP @ 1.43%

OCS-601
LOW RIM: 879.00
(36") INV(SW): 874.00
(36") INV(NE): 874.00
2' SUMP: 872.00
SEE DETAIL ON C8.7

CBMH-103
RIM: 881.30
(15") INV(S): 876.60
(24") INV(NE): 875.65
(30") INV(SW): 875.65

153 LF -24" HDPE @ 0.50%

71 LF -15" SCH. 40 PVC @ 2.00%

ROOF DRAIN CONNECTION-B
INV: 878.00

22 LF -36" RCP @ -9.10%

FES-602
INV: 872.00

FES-100
INV: 874.00

26 LF -36" RCP @ 0.50%

150 LF -30" HDPE @ 0.50%

CBMH-102
RIM: 881.30
(30") INV(NE): 874.90
(30") INV(SW): 874.90

CBMH-101
RIM: 881.30
(15") INV(E): 875.75
(30") INV(NE): 874.13
(36") INV(NW): 874.13
4' SUMP: 870.13

ROOF DRAIN CONNECTION-A
INV: 878.00

113 LF -15" SCH. 40 PVC @ 2.00%

FES-200
INV: 874.00

222 LF -36" RCP @ 0.00%

CB-301
RIM: 882.60
(12") INV: 874.60
4' SUMP:870.60

FES-201
INV: 874.00

40 LF -12" RCP @ 1.50%

FES-300
INV: 874.00

TRENCH DRAIN-ADS DURASLOT* ATOP 18" HDPE STORM LINE-314 LIN. FT.
RIM: 880.40
INV (NE): 878.15
*SEE DETAILS

STMH-402
RIM: 880.40
(18") INV(NE): 876.90
(24") INV(SW): 876.40

TRENCH DRAIN-ADS DURASLOT* ATOP 24" HDPE STORM LINE-286 LIN. FT.
RIM: 880.40
INV (NE): 876.40
INV (SW):875.25
*SEE DETAILS

STMH-401
RIM: 880.40
(24") INV(NE): 876.40
(24") INV(SE): 875.25
4' SUMP:871.25

CB-501
RIM: 880.55
(12") INV: 874.60
4' SUMP: 870.60

142 LF - 24" HDPE @ 0.88%

30 LF -12" RCP @ 2.00%

FES-500
INV: 874.00

FES-400
INV: 874.00

STORMWATER BASIN
TOP: 879.00
EO: 878.50
HWL: 878.40
WQVE: 878.00
NWL: 874.00
BOT: 868.00

LEGEND

PROPOSED

- PROPERTY BOUNDARY
- EASEMENT
- CURB AND GUTTER
- WATER MAIN
- HYDRANT
- GATE VALVE
- SANITARY SEWER
- STORM SEWER
- FLARED END SECTION W/ RIP RAP & TRASH GUARD
- DRAINTILE
- RETAINING WALL
- GAS
- UNDERGROUND ELECTRIC
- OVERHEAD ELECTRIC
- TELEPHONE/FIBER
- LIGHT POLE

STORM SEWER NOTES

1. STORM SEWER PIPE:
   - **1.1.** HDPE OR POLYPROPYLENE PIPE MAY BE INSTALLED WITH APPROVAL OF LOCAL GOVERNING AGENCIES.
   - **1.2.** HDPE STORM PIPE 4~ TO 60~INCHES IN DIAMETER SHALL MEET REQUIREMENTS OF ASTM F2306. FITTINGS SHALL BE PER ASTM F2306 AND INSTALLED PER ASTM D2321.
   - **1.3.** POLYPROPYLENE STORM PIPE 12~ TO 60~INCHES IN DIAMETER SHALL MEET REQUIREMENTS OF ASTM F2881. APPROVED FITTINGS SHALL MEET JOINT PERFORMANCE REQUIREMENTS OF ASTM D3212. AT PIPE JOINTS, THE SPIGOT SHALL UTILIZE TWO GASKETS MEETING THE REQUIREMENTS OF ASTM F477. INSTALL IN ACCORDANCE WITH ASTM D2321.
   - **1.4.** PVC STORM SEWER PIPE AND FITTINGS SHALL BE SCHEDULE 40 PIPE PER ASTM D2665 AND INSTALLED PER ASTM D2321.
   - **1.5.** IF REQUIRED BY AHJ, REINFORCED CONCRETE PIPE SHALL BE CLASS 5 FOR PIPE DIAMETERS 18" AND SMALLER AND CLASS 3 FOR PIPE DIAMETERS 21" AND LARGER UNLESS OTHERWISE NOTED, PER ASTM C76 WITH R~4 GASKETS.
   - **1.6.** **STORM MANHOLE SIZES SHALL BE VERIFIED BY THE CONTRACTOR AND STRUCTURE SUPPLIER FOR COMPATIBILITY WITH CONNECTING PIPE SIZES.**

FOR GENERAL UTILITY NOTES, SEE SHEET C5.0.

0 60 120
SCALE IN FEET

G:\Shared Drives\Active Projects\Coon Rapids\UP Industrial\CAD\Sheets\26-106_C5.1 STORM SEWER PLAN.dwg

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

Peter Moreau, PE

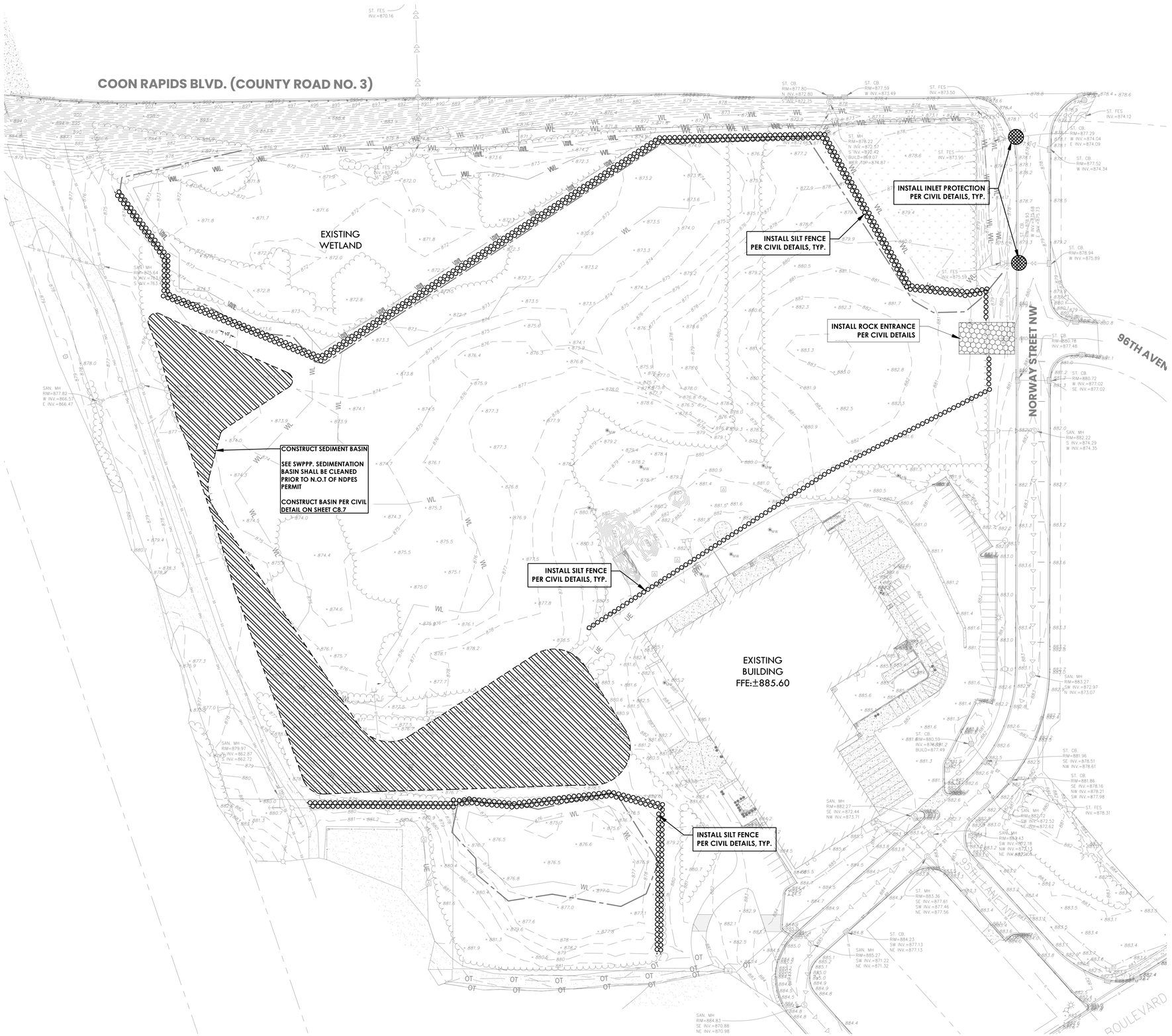
Date: XX.XX.XX Lic. No.: 53735

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Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
STORM SEWER PLAN

Sheet:
C5.1



LEGEND

- PROPERTY BOUNDARY
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SETBACK LINE
- RIGHT OF WAY LINE
- EASEMENT
- STANDARD CURB AND GUTTER
- STORM SEWER
- FLARED END SECTION
- RETAINING WALL
- DRAINTILE
- GRADING LIMITS
- SPOT ELEVATION
- -1.50% — FLOW DIRECTION
- E.O. — EMERGENCY OVERFLOW
- ROCK CONSTRUCTION ENTRANCE
- EROSION CONTROL BLANKET
- INLET PROTECTION
- SILT FENCE
- BIOROLL
- TURF REINFORCEMENT MAT FOR SPILLWAY

EROSION CONTROL NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND LIMITED MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION SHALL NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE OWNER OR ENGINEER OF DISCREPANCIES.
2. ALL SILT FENCE AND OTHER EROSION CONTROL FEATURES SHALL BE IN-PLACE PRIOR TO ANY EXCAVATION/CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUNDCOVER HAS BEEN ESTABLISHED. EXISTING SILT FENCE ON-SITE SHALL BE MAINTAINED AND OR REMOVED AND SHALL BE CONSIDERED INCIDENTAL TO THE GRADING CONTRACT. IT IS OF EXTREME IMPORTANCE TO BE AWARE OF CURRENT FIELD CONDITIONS WITH RESPECT TO EROSION CONTROL. TEMPORARY PONDING, DIKES, HAYBALES, ETC., REQUIRED BY THE CITY SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
3. EROSION AND SILTATION CONTROL (ESC): THE CONTRACTOR SHALL ASSUME COMPLETE RESPONSIBILITY FOR CONTROLLING ALL SILTATION AND EROSION OF THE PROJECT AREA. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO CONTROL THE EROSION AND SILTATION INCLUDING BUT NOT LIMITED TO: CATCH BASIN INSERTS, CONSTRUCTION ENTRANCES, EROSION CONTROL BLANKET, AND SILT FENCE. ESC SHALL COMMENCE WITH GRADING AND CONTINUE THROUGHOUT THE PROJECT UNTIL ACCEPTANCE OF THE WORK BYTHE OWNER. THE CONTRACTOR'S RESPONSIBILITY INCLUDES ALL IMPLEMENTATION AS REQUIRED TO PREVENT EROSION AND THE DEPOSITING OF SILT. THE OWNER MAY DIRECT THE CONTRACTOR'S METHODS AS DEEMED FIT TO PROTECT PROPERTY AND IMPROVEMENTS. ANY DEPOSITION OF SILT OR MUD ON NEW OR EXISTING PAVEMENT OR IN EXISTING STORM SEWERS OR SWALES SHALL BE REMOVED AFTER EACH RAIN EVENT. AFFECTED AREAS SHALL BE CLEANED TO THE SATISFACTION OF THE OWNER, ALL AT THE EXPENSE OF THE CONTRACTOR. ALL TEMPORARY EROSION CONTROL SHALL BE REMOVED BY THE CONTRACTOR AFTER THE TURF IS ESTABLISHED.
4. ALL STREETS DISTURBED DURING WORKING HOURS MUST BE CLEANED AT THE END OF EACH WORKING DAY. A CONSTRUCTION ENTRANCE TO THE SITE MUST BE PROVIDED ACCORDING TO DETAILS TO REDUCE TRACKING OF DIRT ONTO PUBLIC STREETS.
5. PROPOSED PONDS SHALL BE EXCAVATED FIRST AND USED AS TEMPORARY PONDING DURING CONSTRUCTION.
6. WHEN INSTALLING END-OF-LINE FLARED END SECTIONS, BRING THE SILT FENCE UP & OVER THE FLARED END SECTIONS & COVER DISTURBED AREAS WITH RIP RAP. THE UPSTREAM FLARED END SECTIONS SHALL HAVE WOOD FIBER BLANKET INSTALLED ON THE DISTURBED SOILS.
7. ALL UNPAVED AREAS ALTERED DUE TO CONSTRUCTION ACTIVITIES MUST BE RESTORED WITH SEED AND MULCH, SOD, EROSION CONTROL BLANKET OR BE HARD SURFACED WITHIN 2 WEEKS OF COMPLETION OF CONSTRUCTION.
8. THE SITE MUST BE STABILIZED PER THE REQUIREMENTS OF THE MPCA, NPDES, MNDOT, AND CITY.
   A. TEMPORARY (GREATER THAN 1-YEAR) SEED SHALL BE MNDOT SEED MIX 22-111 AT 30.5-POUNDS PER ACRE.
   B. TEMPORARY (LESS THAN 1-YEAR) SEED SHALL BE MNDOT SEED MIX 21-112 (FALL) OR 21-111 (SPRING/SUMMER) AT 100-POUNDS PER ACRE
   C. INFILTRATION/FILTRATION BASIN SHALL BE MNDOT SEED MIX 34-262 AT 14.5-POUNDS PER ACRE.
   D. POND SLOPES SHALL BE MNDOT SEED MIX 33-261 AT 35-POUNDS PER ACRE.
   E. GENERAL SEEDING SHALL BE MNDOT SEED MIX 25-151 AT 70-POUNDS PER ACRE.
   F. MULCH SHALL BE MNDOT TYPE 1 APPLIED AT 2-TONS PER ACRE.
9. FOR AREAS WITH SLOPES OF 3:1 OR GREATER, RESTORATION WITH SOD OR EROSION CONTROL BLANKET IS REQUIRED.
10. ALL TEMPORARY STOCKPILES MUST HAVE SILT FENCE INSTALLED AROUND THEM TO TRAP SEDIMENT.
11. ALL PERMANENT PONDS USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION SHALL BE DREDGED AFTER THE SITE HAS BEEN STABILIZED TO RESTORE THE POND TO THE PROPOSED BOTTOM ELEVATION.
12. ALL CONSTRUCTION SHALL CONFORM TO LOCAL AND STATE RULES INCLUDING THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS.
13. THE SITE MUST BE KEPT IN A WELL-DRAINED CONDITION AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING, OR OTHER MEANS REQUIRED TO INSURE PROPER DRAINAGE DURING CONSTRUCTION. LOW POINTS IN ROADWAYS OR BUILDING PADS MUST BE PROVIDED WITH A POSITIVE OUTFLOW.

0 60 120
SCALE IN FEET

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

Reviewed by: Jason Wiersgalla, PLA
Date: XX.XX.XX Lic. No.: 53736

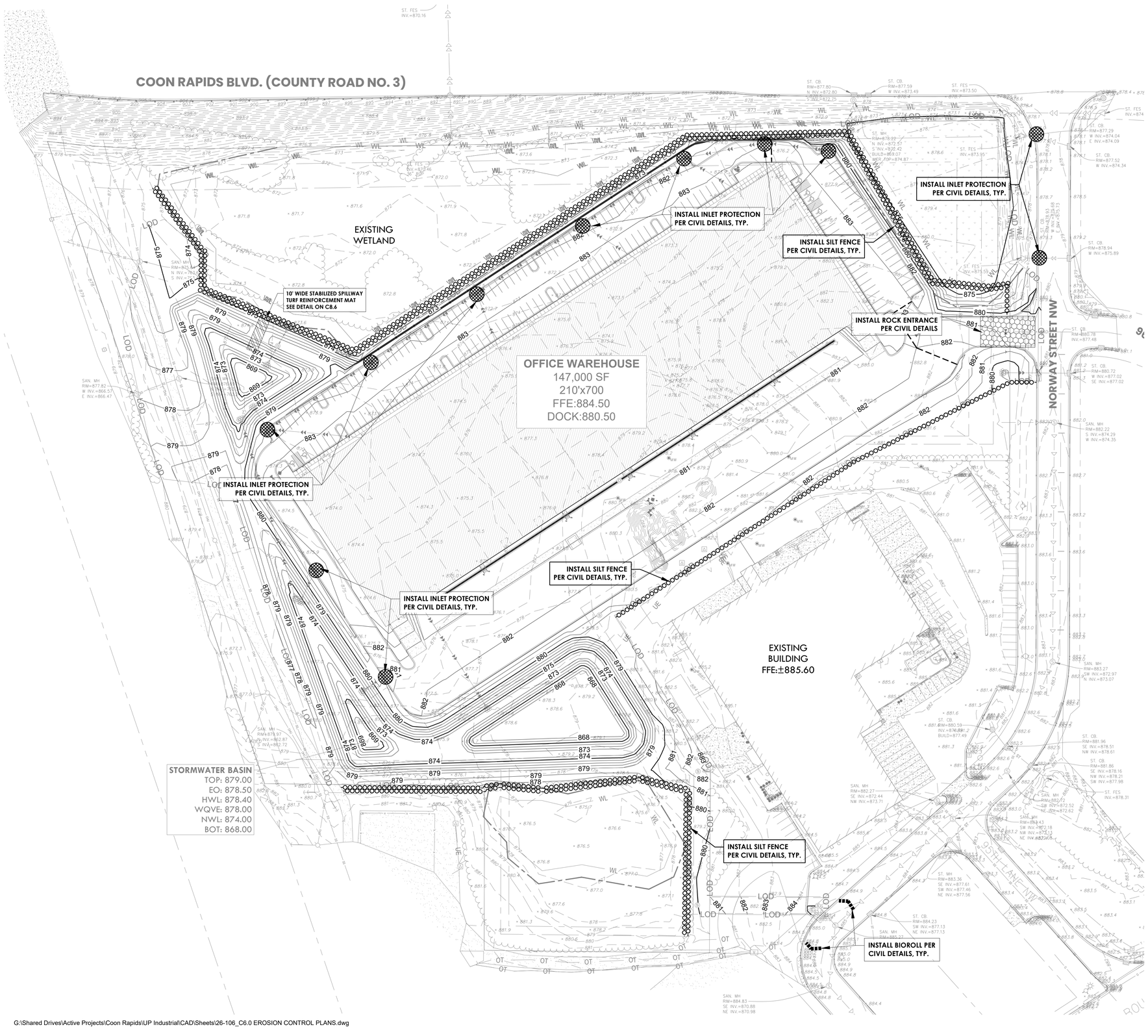
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	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
PHASE 1 EROSION CONTROL

Sheet:
C6.0

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LEGEND

- PROPERTY BOUNDARY
- EXISTING CONTOUR
- PROPOSED CONTOUR
- SETBACK LINE
- RIGHT OF WAY LINE
- EASEMENT
- STANDARD CURB AND GUTTER
- STORM SEWER
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   - E. GENERAL SEEDING SHALL BE MNDOT SEED MIX 25-151 AT 70-POUNDS PER ACRE.
   - F. MULCH SHALL BE MNDOT TYPE 1 APPLIED AT 2-TONS PER ACRE.
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0 60 120
SCALE IN FEET

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

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NOT FOR CONSTRUCTION

Benjamin Mackey, PLA
Date: XX.XX.XX Lic. No.: 53736

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	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
PHASE 2 EROSION CONTROL

Sheet:
C6.1

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SWPPP NARRATIVE

THE SWPPP IS PREPARED IN ACCORDANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REGULATIONS AS ESTABLISHED BY THE CLEAN WATER ACT. THE MINNESOTA POLLUTION CONTROL AGENCY'S CONSTRUCTION GENERAL PERMIT MN R100001 (CSGP) (EXPIRATION DATE JULY 31, 2023) PROVIDES A FRAME WORK OF REQUIREMENTS FOR COMPLIANCE TO DISCHARGE STORMWATER FROM A CONSTRUCTION SITE.

THE SWPPP IS FOR IMPLEMENTATION BY THE OWNER AND OPERATOR, AS LISTED BELOW, RJ RYAN. THIS REPORT SHALL BE ON THE SITE AT ALL TIMES DURING CONSTRUCTION. THE OWNER MUST ALSO KEEP THIS SWPPP ON FILE FOR THREE YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION. THE FOLLOWING ARE OUTLINED IN THIS SWPPP:
- CONTROL MEASURES FOR STORM WATER POLLUTION PREVENTION PRIOR TO AND DURING CONSTRUCTION
- CONTROL MEASURES FOR STORM WATER POLLUTION PREVENTION AFTER CONSTRUCTION
- SOURCES OF STORMWATER AND NON-STORMWATER POLLUTION
- INSPECTION AND MAINTENANCE PROCEDURES

THE GRADING AND EROSION CONTROL PLAN PREPARED FOR RIVER NORTH INDUSTRIAL CENTER SHALL BE CONSIDERED PART OF THE SWPPP.

PROJECT LOCATION
THIS DOCUMENT PRESENTS A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR RIVER NORTH INDUSTRIAL CENTER IN COON RAPIDS, MINNESOTA. THE SITE IS LOCATED ON 16.7 ACRES NEAR THE INTERSECTION OF COON RAPIDS BLVD & NORWAY STREET.

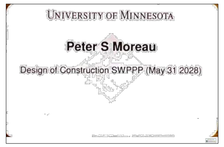
PROJECT CONTACT INFORMATION
OWNER/DEVELOPER: UNITED PROPERTIES
OWNER ADDRESS: 250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MN 55401

OWNER EMAIL: NICOLE.FONTAINE@UPROPERTIES.COM
CONTRACTOR: TBD
COMPANY NAME: TBD

IDENTIFY PERSONNEL INVOLVED WITH THE PROJECT AND THEIR RELATED NECESSARY TRAINING COMMENSURATE WITH THEIR TASK PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

SWPPP DESIGNER: MEASURE GROUP, LLC

PETER MOREAU
PO BOX 10
WAYZATA, MN 55391
612-440-0934
PMOREAU@MEASUREGRP.COM



DESIGN OF CONSTRUCTION SWPPP, U OF M 05/31/25

SWPPP INSPECTION:

TBD

BMP INSTALLER:

TBD

OWNER/OPERATOR RESPONSIBILITIES

OWNER
- DEVELOPMENT OF SWPPP PRIOR TO APPLICATION/NOI SUBMITTAL.
- SUBMIT A COMPLETE AND ACCURATE APPLICATION FORM (NOI)
- COMPLIANCE WITH ALL TERMS AND CONDITIONS OF CONSTRUCTION GENERAL STORMWATER PERMIT
- SWPPP SUBMITTAL FOR 30 DAY REVIEW FOR PROTECT GREATER THAN 50 ACRES & DISCHARGING TO SPECIAL/IMPAIRED WATERS WITHIN 1 MILE OF SITE DISCHARGE.
- KEEPING PERMIT COVERAGE UP-TO-DATE (TRANSFER/SUBDIVISION)
- SUBMIT NOTICE OF TERMINATION (NOT) WITHIN 30 DAYS AFTER ALL PERMIT TERMINATION CONDITIONS AS LISTED IN SECTION 13 ARE COMPLETE
- SUBMIT NOTICE OF TERMINATION (NOT) WITHIN 30 DAYS OF MEETING REQUIREMENTS OF FINAL STABILIZATION
- IDENTIFY WHO HAS LONG TERM OPERATION AND MAINTENANCE RESPONSIBILITY OF THE PERMANENT STORMWATER SYSTEM.
- DEVELOP CHAIN OF RESPONSIBILITY WITH ALL OPERATORS TO ENSURE NPDES COMPLIANCE.
- IDENTIFY TRAINED PERSONNEL TO DEVELOP THE SWPPP, INSTALL AND MAINTAIN BEST MANAGEMENT PRACTICES, AND OVERSEE THE SWPPP AND CONDUCT INSPECTIONS

OPERATOR
- COMPLETION OF AN ACCURATE NOI WITH THE OWNER
- COMPLIANCE WITH CSGP SECTIONS 3, 4, 6-22, 24 AND ANY APPLICABLE REQUIREMENTS FOR CONSTRUCTION ACTIVITY IN SECTION 23 (MINN. R. 7090)
- KEEPING THE PERMIT UP-TO-DATE WITH THE OWNER (PARTIAL, WHOLE, CONTRACTOR, BUILDER, ETC)
- COMPLETE AND SIGN APPLICATIONS FOR PERMIT TRANSFER AND MODIFICATION AND NOTICE OF TERMINATION WITH OWNER AS NEEDED.

PROJECT DESCRIPTION

THE SITE IS APPROXIMATELY 16.7 ACRES. THE PROPOSED PHASE OF THE DEVELOPMENT WILL CONSIST OF THE CONSTRUCTION OF A MANUFACTURING WAREHOUSE FACILITY WITH ASSOCIATED GRADING, BUILDING, PARKING LOT, AND UTILITY INFRASTRUCTURE.

PROJECT TRIBUTARY DRAINAGE AREA = 35.6 AC (18.9 AC OF OFFSITE RUN-ON)
DISTURBED AREA = 11.4 AC
EXISTING IMPERVIOUS AREA = 0.4 AC
PROPOSED IMPERVIOUS AREA = 7.8 AC

PRE-DEVELOPMENT SITE CONDITIONS
SITE IS GENERALLY CONSISTENT WITH TYPE "B" SOILS. THE EXISTING SITE GENERALLY DRAINS FROM SOUTH TO NORTH REFER TO GEOTECHNICAL REPORT DATED 4/16/2026 COMPLETED BY BRAUN INTERTEC.

POST-DEVELOPMENT SITE CONDITIONS
THE PROPOSED SITE MAINTAINS THE OVERALL EXISTING DRAINAGE PATTERNS. MOST OF THE SITE DRAINS FROM SOUTH TO NORTH. THE RUNOFF FROM MOST OF THE SITE WILL BE DIRECTED THROUGH STORM SEWER TO THE RETENTION BASIN.
STORM WATER MANAGEMENT PLAN
- THE TEMPORARY STORMWATER MANAGEMENT PLAN WILL CONSIST OF GUIDELINES SET FORTH IN ITEMS 7 AND 8 OF THE SWPPP NOTES SECTION.
- THE PERMANENT STORM WATER MANAGEMENT PLAN WILL CONSIST OF SURFACE DRAINAGE BY CURB AND GUTTER, SWALES AND STORM SEWER PIPE.
- THE SITE DRAINAGE WILL BE ROUTED TO PROPOSED STORM SEWER WHICH WILL DISCHARGE TO THE WET BASIN .
- REFER TO THE PROJECT STORMWATER MANAGEMENT REPORT FOR MORE INFORMATION REGARDING THE PRE-DEVELOPMENT SITE CONDITIONS, POST-DEVELOPMENT SITE CONDITIONS, AND STORM WATER MANAGEMENT CALCULATIONS.
- THE SITE STORM WATER RETENTION BASIN FACILITY WILL BE CONSTRUCTED TO MEET OR EXCEED LOCAL, STATE AND FEDERAL REQUIREMENTS.
- TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL BMP'S ALONG WITH THE PROCEDURES TO BE USED TO ESTABLISHED ADDITIONAL TEMPORARY BMP'S AS NECESSARY FOR SITE CONDITIONS DURING CONSTRUCTION ARE IDENTIFIED ON THE SITE GRADING AND EROSION CONTROL PLAN PREPARED FOR THE DEVELOPMENT OF THIS PROJECT, AND WITHIN THE PROJECT STORM WATER POLLUTION PREVENTION PLAN.

POTENTIAL STORM WATER POLLUTANTS
POTENTIAL POLLUTANT SOURCES, INCLUDING CONSTRUCTION AND WASTE MATERIALS THAT ARE USED OR STORED AT THE SITE, ARE DESCRIBED IN THE SECTION. BY IMPLEMENTATION OF THESE BMPS, THE POTENTIAL POLLUTANT SOURCES ARE NOT REASONABLY EXPECTED TO AFFECT THE STORM WATER DISCHARGES FROM THE SITE.

CONSTRUCTION MATERIALS, CHEMICALS AND WASTE MATERIALS THAT WILL BE USED OR STORED AT THE SITE:

POTENTIAL POLLUTANT	LOCATION	CONTROL MEASURE
ANTIFREEZE	VARIOUS	SECONDARY CONTAINMENT/DRIP PAN
DIESEL FUEL	VARIOUS	SECONDARY CONTAINMENT/DRIP PAN
FERTILIZER	LANDSCAPE CONTRACTOR	SECONDARY CONTAINMENT
GASOLINE	IN EQUIPMENT/FUELING AREA	SECONDARY CONTAINMENT/DRIP PAN
GLUE/ADHESIVES	CONTRACTOR	SECONDARY CONTAINMENT
HYDRAULIC OIL	CONTRACTOR	SECONDARY CONTAINMENT
PAINTS	CONTRACTOR	SECONDARY CONTAINMENT
GREASE	CONTRACTOR	SECONDARY CONTAINMENT/DRIP PAN
SANITARY WASTE	PORTABLE BATHROOMS	SERVICE PROVIDER TO SECURE UNITS FROM TIPPING
SOIL AMENDMENTS	LANDSCAPE CONTRACTOR	SECONDARY CONTAINMENT
CONCRETE	TRUCK WASHOUT	WASHOUT AREA
CONCRETE/MORTAR	MOBILE MIXER	S.C / WASHOUT AREA

CONSTRUCTION SEQUENCE

THE INTENDED SEQUENCING OF MAJOR SITE CONSTRUCTION ACTIVITIES IS AS FOLLOWS:
1. INSTALL PERIMETER CONTROL DEVICES (SILT FENCE, BIO-LOGS, ETC.) AND INLET PROTECTION TO EXISTING STRUCTURES AS SHOWN ON PLAN.
INSTALL TREE PROTECTION FENCE AS SHOWN ON PLAN.
2. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCE.
3. CLEAR AND GRUB SITE.
4. STRIP AND STOCKPILE TOPSOIL.
5. ROUGH GRADE OF SITE.
6. STABILIZE DENUDED AREAS AND STOCKPILES.
7. INSTALL SANITARY SEWER, WATERMAIN, STORM SEWER AND SERVICES.
8. INSTALL INLET PROTECTION AROUND CATCH BASINS.
9. INSTALL STREET SECTION.
10. INSTALL CURB AND GUTTER.
11. INSTALL PAVEMENT.
12. INSTALL SMALL UTILITIES (GAS, ELECTRIC, PHONE, CABLE, ETC.)
13. FINE GRADE BOULEVARD, LANDSCAPE AREAS, SEED AND MULCH.
14. REMOVE ACCUMULATED SEDIMENT.
15. FINAL GRADE.
16. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED BY EITHER SEED OR SOD AND LANDSCAPING, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

CONSTRUCTION NOTES
IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR MAINTAIN A STOCKPILE OF EROSION CONTROL DEVICES AND SEDIMENT CONTROL BMP'S ON SITE AT ALL TIMES FOR IMMEDIATE USAGE. IN THE EVENT OF AN ACCIDENTAL SEDIMENT DISCHARGE TO WATERS OF THE STATE, OR ANY DISCHARGE OF HAZARDOUS MATERIAL OF REPORTABLE QUANTITY, CONTACT THE MPCA STATE DUTY OFFICER AT 1-800-422-0798.

TIMING OF BMP INSTALLATION
THE EROSION PREVENTION AND SEDIMENT CONTROL BMP'S SHALL BE INSTALLED TO MINIMIZE EROSION FROM DISTURBED SURFACES AND CAPTURE SEDIMENT ON SITE. THE FOLLOWING LIST DEFINES THE TIMING OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES IN SPECIFIC AREAS.
PRIOR TO START OF CONSTRUCTION
THE FOLLOWING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE SHOWN IN THE PLANS AND SHALL BE IMPLEMENTED PRIOR TO CONSTRUCTION:
1. INSTALL SILT FENCE OR OTHER SEDIMENT CONTROL AROUND THE PERIMETER OF AREAS TO BE GRADED AND ALL AREAS WHICH ARE NOT TO BE DISTURBED AS SHOWN ON THE GRADING AND EROSION CONTROL PLAN.
2. CONSTRUCT GRAVEL CONSTRUCTION ENTRANCES AT FIELD ENTRANCES TO THE SITE AS SHOWN ON THE CONSTRUCTION PLANS.
3. INLET PROTECTION IS TO BE INSTALLED AT ALL STORM WATER INLETS WHICH HAVE THE POTENTIAL TO RECEIVE STORM WATER RUNOFF FROM THE CONSTRUCTION SITE WITHIN 200 FEET OF LIMITS OF CONSTRUCTION.
4. INSTALL SILT FENCE OR OTHER SEDIMENT CONTROL AROUND ALL TEMPORARY INACTIVE STOCKPILES. ALL SILT FENCES FOR STOCKPILES SHALL BE INCIDENTAL TO GRADING CONTRACT IF STOCKPILES ARE PLACED OUTSIDE OF SILT FENCES SHOWN ON THE PLAN.

DURING CONSTRUCTION
THE FOLLOWING EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE SHOWN IN THE PLANS AND SHALL BE IMPLEMENTED DURING CONSTRUCTION:
1. PHASE GRADING WORK TO MINIMIZE THE DURATION THAT ANY DISTURBED SOIL IS EXPOSED.
2. ALL DISTURBED AREAS SHALL HAVE TEMPORARY PROTECTION OR PERMANENT COVER OVER EXPOSED SOIL AREAS IF NOT BEING ACTIVELY GRADED AND/OR IF NOT AT FINAL GRADE WITHIN 7 DAYS OF DISTURBANCE ACTIVITY TEMPORARILY OR PERMANENTLY CEASING. TEMPORARY SEED MIX 22-111, APPLIED AT A RATE OF 30.5 LBS/ACRE, SHALL BE USED PRIOR TO WINTER, IF SITE NOT SODDED.
3. STRIP AND STOCKPILE TOPSOIL FOR REPLACEMENT OF 6 INCHES OF TOPSOIL OVER TURF AREAS WHEN GRADING IS COMPLETE.
4. PLACE A MINIMUM OF 2 TONS/ACRE OF STRAW ON ALL AREAS AFTER REACHING FINAL GRADE WITH TOPSOIL AND ANCHOR STRAW WITH EITHER A STRAIGHT DISK, HYDROMULCH OR POLYMER.
5. STABILIZATION OF TEMPORARY OR PERMANENT DRAINAGE DITCHES THAT DRAIN WATER FROM THE CONSTRUCTION SITE MUST BE INITIATED WITHIN 24 HOURS OF CONNECTING THE DRAINAGE DITCH TO ANY CONVEYANCE SYSTEM THAT DISCHARGES TO SURFACE WATERS. THE FIRST 200 LINEAR FEET MUST BE STABILIZED WITHIN 24 HOURS. THE REMAINING DITCH SHALL BE STABILIZED WITHIN 7 DAYS.
6. INSTALL SILT FENCE AROUND ALL TEMPORARY INACTIVE STOCKPILES WHICH ARE NOT PLACED WITHIN EXISTING SILT FENCES OR OTHER PERIMETER CONTROLS.
7. TEMPORARY OR PERMANENT ENERGY DISSIPATION AT PIPE APRON OUTLETS WILL BE PLACED PRIOR TO BUT NO SOONER THAN 7 DAYS BEFORE APRON IS INSTALLED. RIPRAP SHALL BE INSTALLED UNDER APRON LIP ACCORDING TO THE STANDARD DETAIL.
8. SUFFICIENT PERSONNEL, EQUIPMENT, AND MATERIALS SHALL BE MOBILIZED WITHIN 24 HOURS OF A WRITTEN ORDER BY THE OWNER OR OWNER'S REPRESENTATIVE TO CONDUCT CORRECTIVE WORK AND INSTALL TEMPORARY EROSION CONTROL WORK IN THE CASE OF AN EMERGENCY.
9. REMOVE ANY SEDIMENT THAT HAS BEEN TRACKED ONTO PUBLIC STREETS AT THE END OF THE DAY OR WITHIN 24 HOURS OF DETECTION, OR MORE FREQUENT AT DIRECTION OF SITE INSPECTOR.
10. COLLECT ALL CONSTRUCTION DEBRIS IN DUMPSTERS AND ROLL-OFF BOXES, EMPTY WHEN DEBRIS REACHES TOP OF DUMPSTER
11. INSPECT POLLUTION CONTROL MEASURES AS SPECIFIED WITHIN SECTION 11 OF THE GENERAL PERMIT.

INLET SEDIMENT CONTROL BMP REMOVAL
IF INLET SEDIMENT CONTROLS (WIMCO TYPE OR EQUAL) BMP'S ARE REMOVED FOR FLOODING / FREEZING CONCERNS UPON REQUEST OF THE MUNICIPALITY, WATERSHED DISTRICT OR OTHER AGENCY, DOCUMENTATION SHALL BE ATTACHED TO THE INSPECTION REPORTS AND THIS SWPPP OR BE
AVAILABLE WITHIN 72 HOURS OF REQUEST. DOCUMENTATION SHALL BE A WRITTEN FORM OF CORRESPONDENCE VERIFYING THE NEED FOR REMOVAL.

UPON COMPLETION OF CONSTRUCTION ACTIVITIES
PERMIT TERMINATION CONDITIONS ARE ACHIEVED FOR THE PROJECT WHEN PERMANENT EROSION CONTROL BMP'S ARE APPLIED TO THE SITE. THE PERMANENT EROSION CONTROL BMP'S MAY BE A COMBINED OF VEGETATIVE AND NON-VEGETATIVE COVER TYPES.

ADDITIONAL REQUIREMENTS TO ACHIEVING FINAL STABILIZATION PERMIT TERMINATION CONDITIONS INCLUDE:
1. ALL SOIL DISTURBING ACTIVITY IS COMPLETED. ALL DISTURBED AREA WITHOUT PERMANENT IMPERMEABLE SURFACES ARE VEGETATED FOR FINAL STABILIZATION.
2. PERMANENT STORMWATER TREATMENT SYSTEM (IF REQUIRED) IS CONSTRUCTED AND ACCUMULATED SEDIMENT HAS BEEN REMOVED FROM CONSTRUCTION ACTIVITY. CLEAN OUT ALL SEDIMENT FROM CONVEYANCES AND FROM TEMPORARY SEDIMENT BASINS THAT ARE TO BE USED AS PERMANENT WATER QUALITY MANAGEMENT BASINS. THE CLEAN OUT OF PERMANENT BASINS MUST BE SUFFICIENT TO RETURN THE BASIN TO DESIGN CAPACITY.
3. THE VEGETATIVE COVER FOR THE SITE IS AT A DENSITY, WITH UNIFORM PERENNIAL COVER OF 70% OF THE EXPECTED FINAL GROWTH DENSITY.
4. ALL TEMPORARY, SYNTHETIC BMP'S HAVE BEEN REMOVED.

PERMANENT VEGETATION ESTABLISHMENT

PERMANENT TURF SHALL FOLLOW THE RECOMMENDATIONS PER NOTES AND SPECIFICATIONS IN THE GRADING AND/OR LANDSCAPE PLAN. SEED THAT IS TO OCCUR AFTER OCTOBER 20TH SHALL CONFORM TO THE MNDOT SPECIFICATIONS FOR DORMANT SEEDING.

SWPPP INSPECTIONS AND MAINTENANCE EROSION AND SEDIMENT CONTROL INSPECTIONS
CONSTRUCTION ACTIVITY AND ALL SUPPORT ACTIVITIES MUST BE INSPECTED (USING MPCA CONSTRUCTION STORMWATER INSPECTION CHECKLIST OR AN ALTERNATIVE FORM) WITHIN THE PARAMETERS OF THE SCHEDULE BELOW. THE INSPECTOR SHALL BE A PERSON TRAINED AND FAMILIAR WITH THE REQUIREMENTS OF THIS SWPPP AND THE MPCA MN R100001 PERMIT. ALTERNATES WILL INCLUDE INDIVIDUALS TO BE DESIGNATED BY THE OWNER AND MAY INCLUDE CONTRACTOR PERSONNEL OR OTHER QUALIFIED INDIVIDUALS AND SHALL BE LISTED IN THE PROJECT CONTACT INFORMATION SECTION OF THIS PLAN

INSPECTION SCHEDULE:
- IF THE SITE IS ACTIVE: INSPECTION NEEDED ONCE EVERY 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL GREATER THAT 0.5 INCHES.
- INACTIVE AND STABILIZED AREAS: INSPECTION NEEDED ONCE EVERY 30 CALENDAR DAYS.
- INACTIVE AREAS WITH FINAL STABILIZATION: INSPECTION NEEDED ONCE EVERY MONTH FOR 12 MONTHS (NOT INCLUDING FROZEN CONDITIONS).
- SUBJECT TO WINTER/FROZEN CONDITIONS: NOT APPLICABLE/NOT NEEDED IF NO CONSTRUCTION ACTIVITY IS OCCURRING.

SCOPE OF INSPECTION SHALL INCLUDE:
1. RECORD DATE AND TIME OF INSPECTION
2. NAME OF PERSON(S) CONDUCTING INSPECTION
3. FINDINGS OF THE INSPECTION
4. LOCATION AND CORRECTIVE ACTIONS NEEDED
5. CORRECTIVE ACTIONS TAKEN (DATE.TIME/BY WHOM)
6. DATE AND AMOUNT OF RAINFALL (RAINFALL AMOUNTS TO BE TAKEN FROM AN ONSITE RAIN GAUGE)
7. OBSERVED DISCHARGES LOCATIONS
8. DESCRIBE DISCHARGE (COLOR, ODOR, FLOATING. SETTLED, SOLIDS, FOAM, OIL SHEEN)
9. THE SITE INSPECTOR WILL VISUALLY CHECK A DISCHARGE FROM A TEMPORARY OR PERMANENT SEDIMENTATION BASIN TO ENSURE ADEQUATE TREATMENT IS OBTAINED AND DISCHARGE WATER WILL NOT CONTRIBUTE EXCESSIVE SEDIMENT OR OTHER NUISANCE CONDITIONS.
10. RECORD CHANGES MADE TO THE SWPPP. AMENDMENTS FROM INSPECTIONS NEED TO BE COMPLETED WITHIN 7 DAYS.
11. ALL INSPECTIONS SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER COMPLETING THE FIELD INSPECTION AND AVAILABLE IN PAPER OR ELECTRONIC FORM ON SITE.

MAINTENANCE OF EROSION AND SEDIMENT CONTROL DEVICES
THE OWNER/CONTRACTOR IS RESPONSIBLE FOR THE OPERATION, MAINTENANCE OF TEMPORARY AND PERMANENT WATER QUALITY MANAGEMENT BMPS AS WELL AS ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS, FOR THE DURATION OF THE CONSTRUCTION WORK AT THE SITE. THE CONTRACTOR MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS DURING ALL ROUTINE AND POST RAINFALL EVENTS. ALL NONFUNCTIONAL BMPS MUST BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS UNLESS ANOTHER TIME FRAME IS SPECIFIED BELOW.

THE FOLLOWING GUIDELINES WILL BE USED TO DETERMINE IF THE EROSION AND SEDIMENT CONTROL DEVICES REQUIRE MAINTENANCE, REPAIR, OR REPLACEMENT:

1. ALL NON-FUNCTIONAL BMPS - OBSERVED CONDITION; SEDIMENT OVERTOPPING, UNDER WATER, SCOURED ENDS, UNDERMINED, DESTROYED, NON-FUNCTION AS DESIGNED, ETC. - SHALL BE MAINTAINED OR REPLACED BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY OR NOTIFICATION, OR AS SOON AS FIELD CONDITIONS ALLOW.
2. PERIMETER SEDIMENT CONTROL (SILT FENCE, FIBER LOGS, BERMS, ETC.) - OBSERVED CONDITION TO BE 1/2 FULL OF SEDIMENT, FLATTENED TO $\frac{1}{2}$ HEIGHT, DRIVEN OVER, UNDERMINED, SCOURED, MOVED FOR ACCESS, ETC. - SHALL BE MAINTAINED, REPAIRED OR SUPPLEMENTATION OF PERIMETER SEDIMENT CONTROL SHOULD BE DONE BY THE END OF NEXT BUSINESS DAY OR AD FIELD CONDITIONS ALLOW.
3. INLET PROTECTION BMPS, CONVEYANCES, SURFACE WATERS - OBSERVED CONDITION; SEDIMENT DEPOSITION, SEDIMENT DELTAS AN ACCUMULATION OF SEDIMENT MATERIAL, DEVICES APPEAR PLUGGED WITH SEDIMENT - REMOVAL/CLEAN OUT OF ACCUMULATED SEDIMENT AND DELTAS TO BE REMOVED WITHIN 7 DAYS, STABILIZE AS NEEDED IF SOILS ARE EXPOSED DURING REMOVAL/CLEAN OUT.
4. TEMPORARY SEDIMENT BASINS AND TRAPS/PERMANENT SEDIMENT BASINS - OBSERVED TO HAVE SEDIMENT DEPOSITION AND ACCUMULATION TO 1/2 OF THE STORAGE VOLUME - CLEAN OUT, REMOVE ACCUMULATED SEDIMENT MATERIAL WITHIN 7 DAYS OF OBSERVATION, OR AS FIELD CONDITIONS ALLOW ACCESS.
5. SITE EXIT LOCATIONS, ROCK EXIT PADS, OTHER ANTI-TRACKING PRACTICES - OBSERVED TO HAVE ACCUMULATED SEDIMENT IN ROCK OR OTHER ANTI-TRACKING BMP, TRACKING OF SEDIMENT FROM THE SITE ONTO PAVED SURFACES - TOP DRESS ROCK, MAINTAIN ROCK EXIT OR OTHER ANTI-TRACKING CONTROLS, SCRAP PAVED SURFACES, SWEEP PAVED SURFACES WITHIN 1 CALENDAR DAY OF DISCOVERY.
6. PAVED SURFACES AND ADJACENT STREETS - OBSERVED TO BE TRACKED WITH SEDIMENT AND SOIL MATERIAL FRO THE SITE HAULING OR ACCESS -SWEEP WITHIN 1 CALENDAR DAY OF DISCOVERY, ADDITIONAL AND/OR MORE FREQUENT SWEEPING MAY BE NEEDED TO MAINTAIN PUBLIC SAFETY
OR PREVENT WASHING FROM FORECASTED RAINS.
7. STREET SWEEPING IS REQUIRED ONE TIME PER WEEK AND AFTER RAINFALL OR MORE FREQUENTLY IF DIRECTED BY CITY ENGINEER.

TERMINATION OF COVERAGE
THE PROJECT PERMIT MAY BE TERMINATED IN ONE OF THE FOLLOWING SCENARIOS:
1. ALL CONSTRUCTION ACTIVITY IS COMPLETE, TEMPORARY SYNTHETIC BMP'S ARE REMOVED, ACCUMULATED SEDIMENT FROM CONSTRUCTION IS REMOVED, AND PERMANENT COVER HAS BEEN ACHIEVED WITH VEGETATIVE AND/OR NON-VEGETATIVE COVER. THE NOTICE OF TERMINATION FORM FROM THE PCA SHOULD BE COMPLETED WITHIN 30 DAYS OF MEETING THE CONDITIONS ABOVE. UPON MIDNIGHT OF THE POST MARKED DATE, THE PERMIT COVERAGE IS TERMINATED UNLESS OTHERWISE NOTIFIED BY THE MPCA.
OR:
2. WITHIN 30 DAYS OF SELLING OR OTHERWISE LEGALLY TRANSFERRING OWNERSHIP OF THE SITE IN IT'S ENTIRETY (INCLUDING STREET SWEEPING AND STORMWATER INFRASTRUCTURE) FROM THE ORIGINAL OWNER TO ANOTHER PARTY TAKING RESPONSIBILITY OF OWNERSHIP. THE TERMINATION IS EFFECTIVE UPON MIDNIGHT OF THE SUBMISSION DATE OF THE NOT. IF A PORTION OF THE SITE IS TRANSFERRED (I.E. OUTLOTS,LOTS/BLOCKS) THAT PORTION OF THE SITE IS TERMINATED FROM THE ORIGINAL PERMIT COVERAGE AT MIDNIGHT OF THE SUBMISSION DATE. OR:
3. PERMIT COVERAGE CAN BE TERMINATED IF ALL OF THE FOLLOWING ARE MET:
3.a. CONSTRUCTION ACTIVITY HAS CEASED FOR 90 DAYS; AND
3.b. AT LEAST 90% OF THE AREA OF THE ORIGINALLY PROPOSED ACTIVITY HAS BEEN COMPLETED AND PERMANENTLY ESTABLISHED WITH VEGETATION OR NON-VEGETATIVE COVER; AND
3.c. WHERE CONSTRUCTION ACTIVITY IS NOT COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED; AND
3.d. THE SITE IS COMPLIANT WITH PERMIT SECTIONS 13.3 THROUGH 13.7.
4. WHERE THE PROJECT OBTAINED PERMIT COVERAGE BUT NEVER STARTED CONSTRUCTION ACTIVITY DUE TO CANCELLATION OR OTHER REASONS, DOCUMENTATION SHOULD BE SENT TO THE MPCA WITH THE NOT FORM AND IS SUBJECT TO MPCA APPROVAL.

SWPPP BMP QUANTITIES

SILT FENCE	5,242 LF
BIO-ROLL	30 LF
INLET PROTECTION	11 EACH
ROCK CONSTRUCTION ENTRANCE	1 EACH
STREET SWEEPING	1 EACH

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

Peter S Moreau, PE
Date: XX.XX.XX Lic. No.: 53735

Rev.	Date	Description
	5/11/2026	CITY SUBMITTAL
	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
SWPPP NARRATIVE

Sheet:
C7.0

LISTED BELOW ARE ADDITIONAL BMP'S THAT MAY BE CONSIDERED FOR USE IF THE BMP'S IDENTIFIED IN THE EROSION CONTROL PLANS PROVE TO BE INSUFFICIENT. PAYMENT FOR THESE BMP'S MAY ONLY BE MADE IF PRIOR APPROVAL FROM
AN OWNER HAS BEEN GIVEN.

1. IMPORTANT VEGETATION

- SAFETY FENCE OR A SIMILAR METHOD OF PROTECTION SHALL BE INSTALLED TO PROTECT IMPORTANT VEGETATION AND PROHIBIT VEHICULAR TRAFFIC.
- A SECONDARY SILT FENCE SHALL BE INSTALLED AT FIELD OFFICES, STORED EQUIPMENT (INCLUDING VEHICLE PARKING), CONSTRUCTION MATERIAL LOCATIONS, AND TOPSOIL OR FILL STOCKPILES INSTALLED WITHIN A 25-FOOT MINIMUM BUFFER OUTSIDE THE DRIP LINE OF TREES.

2. DITCH PROTECTION (TEMPORARY OR PERMANENT)

- THE LAST 200 FEET OF ANY DITCH CONNECTING TO A SURFACE WATER SHALL HAVE TEMPORARY OR PERMANENT STABILIZATION MEASURES IN PLACE WITHIN 24 HOURS OF DIRECT CONNECTION TO A SURFACE WATER. DITCHES MAY BE KEPT IN A "SMOOTH" ROUGH GRADED CONDITION IN ORDER TO PROPERLY INSTALL EROSION CONTROL SEEDING, MULCH, MATS AND BLANKETS.
- STABILIZATION METHODS FOR DITCH BOTTOM WETTED PERIMETER MAY INCLUDE ONE OF THE FOLLOWING OR COMBINATIONS OF EROSION CONTROL BLANKET, MATS, RIP-RAP, BIO-ROLLS OR ROCK CHECK DAMS. THE METHOD CHOSEN WILL BE BASED ON AN ANALYSIS OF THE SLOPE AND VELOCITY OF THE RUNOFF. THESE ARE ADDITIONAL BMP'S WHICH MAY BE CONSIDERED FOR USE IF THE BMP'S IDENTIFIED IN THE EROSION CONTROL PLANS PROVE TO BE INSUFFICIENT. PAYMENT FOR THESE BMP'S MAY ONLY BE MADE IF PRIOR APPROVAL FROM AN OWNER HAS BEEN GIVEN.
- WHERE DITCH GRADES EXCEED 5%, ROCK CHECK DAMS OR EQUIVALENT BMP SHALL BE INSTALLED. CHECK DAMS TO BE SPACED SO THAT THE CREST OF THE DOWNSTREAM DAM IS AT THE ELEVATION OF THE TOE OF THE UPSTREAM DAM. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- ABOVE THE WETTED PERIMETER, THE DITCH WILL BE STABILIZED BY SEEDING AND MULCH AND/OR EROSION CONTROL BLANKETS DEPENDING ON SIDE SLOPE STEEPNESS AND LENGTH.
- ALL DITCHES WILL BE STABILIZED WITHIN 14 DAYS.

3. WORK NEXT TO WETLANDS

- PRESERVE A 100' FROM SPECIAL WATERS) NATURAL BUFFER, OR IF A BUFFER IS INFEASIBLE, PROVIDE REDUNDANT SEDIMENT CONTROLS PRIOR TO DISTURBANCE OF UP-GRADIENT AREAS.
- FILL SLOPES ADJACENT TO WETLANDS SHALL BE SEEDED AND MULCHED WITHIN 7 DAYS OF COMPLETION OF WORK. INSTALL EROSION CONTROL BLANKET AS INDICATED ON THE EROSION CONTROL / GRADING PLAN.

4. LONG-STEEP CUT/FILL SLOPES

- THERE WILL BE NO UNBROKEN SURFACE SLOPE LENGTHS OF GREATER THAN 75 FEET FOR SLOPES WITH A GRADE OF 3:1 OR STEEPER WITHIN 200 FEET OF SURFACE WATERS. ALL EXPOSED AREAS WITH A CONTINUOUS POSITIVE SLOPE WITHIN 200 FEET OF A SURFACE WATER WILL HAVE A TEMPORARY OR PERMANENT COVER YEAR ROUND. THE EXPOSED SOILS SHALL BE STABILIZED WITHIN 14 DAYS
- PLANNED SLOPES OF 3:1 (H:V) OR STEEPER AND GREATER THAN 75 FT IN LENGTH WILL BE TEMPORARILY OR PERMANENTLY STABILIZED IN INCREMENTS NOT TO EXCEED 75 FT, PRIOR TO CONSTRUCTION OR DISTURBING A NEW INCREMENT.
- LONG SLOPES SHOULD BE BROKEN INTO SHORTER LENGTHS BY INSTALLING STRAW BIOROLLS IN INTERLOCKING HERRINGBONES AS SHOWN ON THE GRADING PLAN. IF TEMPORARY SEEDING AND MULCH CAN NOT BE USED ON SLOPES STEEPER THAN 3:1, THEN THE SLOPE MAY BE COVERED WITH TARPS OR PLASTIC SHEETING. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- THE SOIL SURFACE ON RE-VEGETATED SLOPES WILL BE ROUGHENED USING ANY APPROPRIATE IMPLEMENT THAT CAN BE SAFELY OPERATED ON THE SLOPE, SUCH AS BULLDOZERS OR DISKS. THE GROOVES SHALL BE CREATED PERPENDICULAR TO THE SLOPE TO HELP ESTABLISH VEGETATIVE COVER, REDUCE RUNOFF VELOCITY, INCREASE INFILTRATION, AND PROVIDE FOR SEDIMENT TRAPPING.

5.CULVERT INLET/OUTLET PROTECTION

- SOD MAY BE PLACED AND ANCHORED AT CULVERT INLETS AS SHOWN ON THE GRADING PLAN, UNLESS VELOCITIES REQUIRE RIPRAP.
- AT LEAST ONE 2-FOOT WIDE STRIP OF SOD OR FIBER BLANKET SHALL BE PLACED ALONG THE EDGES OF CULVERT HEADWALLS AND WINGWALLS AS SHOWN ON THE GRADING AND/OR UTILITY PLANS.
- RIPRAP AT PIPE APRON OUTLETS WILL BE PLACED PRIOR TO BUT NO SOONER THAN 7 DAYS BEFORE APRON IS INSTALLED. RIPRAP SHALL BE INSTALLED UNDER APRON LIP ACCORDING TO THE STANDARD DETAIL.

6.STORM SEWER INLET PROTECTION

- STORM DRAIN INLETS SHALL BE PROTECTED UNTIL THE DISTURBED AREAS THAT COULD DISCHARGE TO AN INLET HAVE BEEN STABILIZED.
- INFRASAFE SEDIMENT CONTROL BARRIERS OR APPROVED EQUAL SHALL BE USED WHEN CASTINGS ARE NOT IN PLACE AS INDICATED ON THE UTILITY PLAN AND AS APPROVED BY THE OWNER.
- INFRASAFE DEBRIS COLLECTION DEVICE OR APPROVED EQUIVALENT SHALL BE USED WHEN CASTINGS ARE IN PLACE AS INDICATED ON THE UTILITY PLAN AND AS APPROVED BY THE OWNER.
- DOCUMENTATION IS NEEDED WITHIN 72 HOURS IF REMOVAL OF PROTECTION BMPS IS NEEDED DUE TO WINTER CONDITIONS OR FLOODING CONCERNS.

7.STORM WATER POND OUTLETS

- TEMPORARY OR PERMANENT ENERGY DISSIPATION MEASURES SHALL BE IN PLACE AT THE STORM WATER POND OUTLETS WITHIN 24 HOURS OF DIRECT CONNECTION TO A SURFACE WATER.
- RIPRAP AT PIPE APRON OUTLETS WILL BE PLACED PRIOR TO APRON INSTALLATION AND SHALL BE INSTALLED UNDER THE APRON LIP.
- POND EMERGENCY SPILLWAYS SHALL BE LINED BASED ON THE DESIGN DISCHARGE FLOW VELOCITY AND AS INDICATED ON GRADING AND/OR UTILITY PLANS.

8.TEMPORARY SEDIMENT BASINS

- TEMPORARY SEDIMENT BASINS WILL BE PROVIDED WHERE 10 OR MORE ACRES OF DISTURBED SOIL DRAIN TO ACOMMON LOCATION. THE BASIN SIZE IS BASED ON RUNOFF FROM A 2-YEAR, 24 HOUR STORM, FOR EACH ACRE DRAINED TO THE BASIN. AT A MINIMUM, THE BASIN WILL PROVIDE 1800 CUBIC FEET OF STORAGE FOR EACH ACRE DRAINED TO THE BASIN.
- SEDIMENT BASINS WILL DETAIN WATER LONG ENOUGH TO SETTLE OUT AT LEAST 75 PERCENT OF THE SEDIMENT. THE USE OF FLOCS MAY BE NECESSARY. THE DISCHARGE QUALITY SHALL BE EQUAL TO OR BETTER THAN THE RECEIVING WATER. THE TEMPORARY BASIN MAY BE DRAWN DOWN WITH A PUMP TO INCREASE CAPACITY FOR THE NEXT RAIN EVENT. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- THE SEDIMENT PONDS WILL BE EXCAVATED TO MAINTAIN THE NECESSARY SEDIMENT CAPACITY AND CONTAINMENT.·
- TEMPORARY SEDIMENT FOREBAYS WILL BE CONSTRUCTED TO CAPTURE SEDIMENT BEFORE IT ENTERS THE POND, IF
- NECESSARY.
- THE SEDIMENT PONDS WILL BE MONITORED BY THE CONTRACTOR TO DETERMINE THE SEDIMENT LEVEL IN THE POND.
- WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE TEMPORARY BASIN REACHES ½ FULL (50% OF THE STORAGE VOLUME) THE BASIN SHALL BE DRAINED USING PUMPS AND ENERGY DISSIPATION AND SEDIMENT REMOVAL SHALL BE COMPLETED WITHIN 72 HOURS OF DISCOVERY OF THE BASIN BEING 1/2 FULL OF SEDIMENT, OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- TEMPORARY SEDIMENT BASINS WILL HAVE A STABILIZED EMERGENCY OVERFLOW AND CONTAIN ENERGY DISSIPATION AT BASIN OUTLET.

9.DEEP UTILITIES: WATER AND SANITARY/GAS LINE

- SILT FENCE OR A SIMILAR TYPE OF PERIMETER CONTROL SHALL BE PLACED DOWN GRADIENT OF THE EXCAVATED SOIL IF WORK IS DONE WITHIN 200 FEET OF WETLANDS OR STREAMS.
- DISTURBANCE OF CHANNEL BANKS, WETLANDS, AND IMPORTANT VEGETATION AREAS SHALL BE MINIMIZED TO THE EXTENT POSSIBLE.
- THE UTILITY CONSTRUCTION SITE SHALL BE SEEDED WITH A TEMPORARY
- SEED MIX AND MULCH AFTER INSTALLATION IF THE SITE WILL BE IDLE FOR 7, 14, OR 21 DAYS DEPENDING UPON SLOPES OF STEEPER THAN 3:1, 3:1 TO 10:1 AND FLATTER THAN 10:1 RESPECTIVELY.

10.STOCKPILES (TEMPORARY AND PERMANENT)

- LOCATE STOCKPILES A MINIMUM OF 100 FEET FROM CATCH BASIN INLETS, PONDS, AND SITE DRAINAGE ROUTES PERIMETER CONTROLS SUCH AS SILT FENCE SHALL BE INSTALLED AROUND ALL STOCKPILES IF NOT PLACED WITHIN EXISTING SILT FENCES OR OTHER SEDIMENT CONTROL.
- TEMPORARY SEED AND MULCH SHALL BE USED TO STABILIZE THE STOCKPILES AND THE STOCKPILES SHALL BE SHAPED TO FACILITATE SEEDING AND MINIMIZE EROSION AND SHALL BE SEEDED WITHIN 7 DAYS. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- IF TEMPORARY SEED AND MULCH CANNOT BE USED, THEN THE STOCKPILES SHALL BE COVERED WITH HYDROMULCH, TARPS OR PLASTIC SHEETING AS APPROVED BY THE OWNER.
- IF STOCKPILES MUST BE PLACED WITHIN A CONVEYANCE A TEMPORARY BYPASS SHALL BE INSTALLED (I.E. PVC PIPE) TO ADEQUATELY CONVEY RUNOFF. TEMPORARY BYPASS BMPS SHALL BE INCIDENTAL TO THE CONTRACT UNLESS PREVIOUSLY APPROVED BY THE OWNER / ENGINEER

11.CONSTRUCTION DEWATERING

- DURING DEWATERING ACTIVITIES, THE SEDIMENT LADEN WATER CANNOT BE DIRECTLY DISCHARGED TO SURFACE WATERS. OPTIONS FOR REDUCING THE TURBIDITY OF THE WATER INCLUDE:

(TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT):

1. CONSTRUCT A TEMPORARY SEDIMENT TRAP FOR TURBID WATER DISCHARGE.
2. USE A PORTABLE SEDIMENT TRAP SYSTEM.
3. APPLY NATURAL BASED FLOCCULENT TECHNOLOGY SUCH AS CHITOSAN IN SEDIMENT TRAPS OR A SERIES OF DITCH CHECKS TO CONTAIN SEDIMENT.
4. DISCHARGE THROUGH FIBERLOGS OR A ROCK WEEPER INTO A LARGE VEGETATIVE BUFFER AREA.
5. PUMP TO A TEMPORARY SEDIMENT BASIN.
6. ENERGY DISSIPATION WILL BE PROVIDED AT ALL DISCHARGE POINTS.
7. DEWATERING OR BASIN DRAINING ACTIVITIES WILL NOT CAUSE EROSION IN RECEIVING CHANNELS OR ADVERSELY IMPACT WETLANDS.
8. ALL EROSION CONTROL OR SEDIMENT TRAPS REQUIRED FOR CONSTRUCTION DEWATERING SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION ACTIVITY REQUIRING DEWATERING.

12.CONSTRUCTION ENTRANCES

- A TEMPORARY CRUSHED ROCK OR WOOD CHIP PAD SHALL BE LOCATED WHERE VEHICLES LEAVE THE CONSTRUCTION SITE.
- THE CONSTRUCTION ENTRANCE PAD SHALL BE AT LEAST 50 FEET IN LENGTH.
- GEOTEXTILE FABRIC MAY BE PLACED UNDER THE CRUSHED ROCK OR WOOD CHIPS TO PREVENT MIGRATION OF MUD FROM UNDERLYING SOIL INTO THE CONSTRUCTION ENTRANCE MATERIAL.
- ROCK PADS SHALL BE CONSTRUCTED OF ROCK 1 TO 3 INCHES IN SIZE AND PLACED IN 6 INCH LAYERS.
- CONSTRUCTION ENTRANCES SHALL BE INSPECTED AT LEAST EVERY 7 DAYS AND MAINTAINED AS NEEDED.
- TRACKED SEDIMENTS SHALL BE REMOVED FROM PAVED SURFACES AT THE END OF EACH DAY USING PICK-UP TYPE STREET SWEEPER.
- IF TRACKING INTO ROADWAY BECOMES PROBLEMATIC THE ENTRANCE PADS SHALL BE LENGTHENED OR ANOTHER TECHNIQUE APPLIED. TEMPORARY EROSION CONTROL DEVICES REQUIRED DUE TO CONTRACTORS METHOD OF SEQUENCING THEIR CONSTRUCTION WORK SHALL BE INCIDENTAL TO THE GRADING CONTRACT.
- THE CONSTRUCTION ENTRANCE SHALL BE MONITORED CLOSELY DURING WET CONDITIONS. IF TRACKING INTO ADJACENT ROADWAYS OCCURS, THE FREQUENCY OF STREET SWEEPING SHALL BE INCREASED.

13.CONCRETE TRUCK WASHOUT

- CONCRETE TRUCKS SHALL UTILIZE THE CONCRETE WASHOUT AREA SHOWN ON THE PLANS TO WASH AND RINSE THEIR EQUIPMENT PRIOR TO LEAVING THE SITE.
- WASHOUT OF CONCRETE MIXER TRUCKS WILL BE PERFORMED IN THE DESIGNATED AREAS ONLY.
- WASHOUTS WILL BE CONSTRUCTED AND MAINTAINED TO PROVIDE SUFFICIENT CONTAINMENT FOR ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- WASHOUTS SHALL BE CLEARLY MARKED ON SITE WITH SIGNAGE BY THE UTILITY CONTRACTOR WITH APPROVAL FROM OWNER.
- WASHOUTS SHALL BE LOCATED A MINIMUM OF 50 FEET FROM DRAINAGE FACILITIES AND WATERCOURSES.
- CONCRETE WASHOUT AREAS WILL HAVE AN IMPERMEABLE LINER TO PREVENT CONCRETE WASHOUT WATER FROM INFILTRATING/CONTACTING WITH SOIL.
- IMPERMEABLE LINER INCLUDES 10 MIL POLYLINER OR COMPACTED CLAY LINER.
- WASHOUT SYSTEMS CAN BE USED AS ALTERNATE WASHOUT AREAS.

14.VEHICLE MAINTENANCE

- ROUTINE MAINTENANCE OF VEHICLES AND EQUIPMENT SHALL OCCUR IN STAGING AREAS ONLY.
- VEHICLE WASHING SHOULD BE AVOIDED. IF WASHING IS NECESSARY, RUNOFF FROM THE WASHING WILL BE CONTAINED AND LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE CONTAINED AND WASTE PROPERLY DISPOSED OF
- ENGINE DEGREASING SHALL BE AVOIDED. IF DEGREASING IS NECESSARY, RUNOFF FROM THE OPERATION WILL BE CONTAINED IN A LINED SEDIMENT TRAP AND PROPERLY DISPOSED OF AT A TREATMENT FACILITY.
- ALL REQUIRED SEDIMENT TRAPS AND CONTAINMENT FACILITIES AND PROPER DISPOSAL OF WASH WATER/DEGREASING AT A TREATMENT FACILITY SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT.

15.FUELING

- ANY FUEL TANK OR TRUCK STORED ON THE PROJECT SITE SHALL BE PROTECTED BY A SECONDARY CONTAINMENT SYSTEM.
- FUELING AREAS SHALL NOT BE WASHED OR RINSED WITH WATER SINCE THIS COULD CAUSE FUEL SPILLS TO BE DISCHARGED INTO STORM WATER SYSTEMS.
- ABSORBENT MATERIALS SHALL BE AVAILABLE ON SITE FOR USE IN CLEANING UP SMALL SPILLS.
- ALL REQUIRED FUEL CONTAINMENT AND CLEAN-UP MATERIALS AND THE PROPER DISPOSAL OF THE MATERIALS SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT.

16.HAZARDOUS MATERIALS

- HAZARDOUS MATERIALS SHALL BE PROPERLY STORED TO PREVENT VANDALISM OR UNAUTHORIZED ACCESS.
- CONTAINMENT UNITS SHALL BE INSTALLED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
- MPCA STORING AND DISPOSAL REQUIREMENTS SHALL BE FOLLOWED FOR ALL HAZARDOUS WASTE.
- NO HAZARDOUS MATERIAL SHOULD BE STORED WITHIN 200 FEET OF AN IDENTIFIED CRITICAL AREA.
- ABSORBENT MATERIALS SHALL BE AVAILABLE FROM THE CONTRACTOR ON SITE FOR USE IN CLEANING UP SMALL SPILLS.
- IF BUILDING MATERIALS, CHEMICALS, OR GENERAL REFUSE IS BEING USED, STORED, DISPOSED OF, OR OTHERWISE MANAGED INAPPROPRIATELY, THE CONTRACTOR SHALL CORRECT SUCH DEFECTS WITHIN 24 HOURS OF DETECTION OR NOTIFICATION.
- ALL REQUIRED CONTAINMENT / STORAGE UNITS / ABSORBENT MATERIAL AND REQUIRED DISPOSAL SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT.

17.CHEMICAL CONTAINMENT

- GASOLINE, OIL, PAINT, SOLVENTS, AND OTHER CHEMICALS NECESSARY FOR CONSTRUCTION ARE NOT ALLOWED TO CONTACT THE GROUND SURFACE, BE EXPOSED TO GROUNDWATER OR BE RELEASED TO A SURFACE OR GROUNDWATER EXCEPT IN DE MINIMIS QUANTITIES.
- ALL PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINER, WITH ORIGINAL LABELS STILL ATTACHED, UNLESS THE CONTAINER IS NOT RESEALABLE.
- HAZARDOUS MATERIALS SHALL BE RETURNED TO THE HAZARDOUS MATERIAL STORAGE AREA AT THE END OF EACH DAY.
- AN EFFORT SHOULD BE MADE TO STORE ONLY ENOUGH PRODUCTS TO DO THE REQUIRED JOB.
- THE CONTRACTOR SHALL PROVIDE TANKS OR BARRELS TO COLLECT LIQUID BYPRODUCTS THAT POSE A POLLUTION HAZARD.
- THE POLLUTANTS SHALL BE REMOVED FROM THE SITE ON A WEEKLY BASIS AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
- ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY, IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDED METHODS.
- ALL REQUIRED CONTAINMENT / STORAGE UNITS / ABSORBENT MATERIAL AND REQUIRED DISPOSAL SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT
- ALL STORAGE AREAS SHALL BE SECURED TO PREVENT UNAUTHORIZED ACCESS.

18.SOLID WASTE

- SOLID WASTE SHALL BE STORED IN APPROPRIATE CONTAINERS AND PROPERLY DISPOSED OF ON A REGULAR BASIS.
- CONTAINERS SHALL BE COVERED TO PREVENT WIND BLOWING THE WASTE AROUND THE SITE.
- MPCA DISPOSAL REQUIREMENTS WILL BE FOLLOWED FOR ALL SOLID WASTE.
- SOLID WASTE STORAGE CONTAINERS AND PROPER DISPOSAL SHALL BE CONSIDERED INCIDENTAL TO THE CONSTRUCTION CONTRACT.

19.DUST CONTROL

- THE CONTRACTOR SHALL USE A VARIETY OF DUST CONTROL INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
- RAPID STABILIZATION METHODS ON SLOPES
- WATER ON ROADWAYS AND GRADED AREAS
- ALTERNATIVES: IN THE FORM OF VEGETABLE POLYMERS, WATER AND CALCIUM CHLORIDE PETROLEUM EMULSION RESINS, OR ACRYLIC COPOLYMERS MAY ALSO BE USED.
- ALL REQUIRED DUST CONTROL SHALL BE INCIDENTAL TO THE CONSTRUCTION CONTRACT AS PER SPECIFICATIONS.

20.WINTER STABILIZATION

- COVER EXPOSED SOILS ON OR AROUND NOV. 15TH AND/OR PRIOR TO TERMINATION OF CONSTRUCTION ACTIVITIES FOR WINTER
- ALL EXPOSED SOILS TO BE COVERED WITH 2 TONS TYPE 1 MULCH
- ALL EXPOSED SOILS TO BE SEEDED WITH MNDOT SEED MIX 150
- ALL LOW POINTS IN ROADS TO BE ADEQUATELY DRAINED IN ACCORDANCE WITH NPDES DEWATERING REQUIREMENTS PART IV. CONSTRUCTION ACTIVITY REQUIREMENTS. SECTION D. DEWATERING AND BASIN DRAINING.
- PERIMETER SILT FENCE OR OTHER CONTROLS TO BE INSTALLED 3-5 FEET FROM THE BACK OF THE CURB AND OUT OF THE PLOWED SNOW AREA.
- PERIMETER CONTROLS AROUND PERMANENT STORMWATER BASINS TO BE INSTALLED AND MAINTAINED
- INLET CONTROLS TO BE REMOVED ACCORDING TO LEGAL REQUIREMENTS WITH DOCUMENTATION WITHIN 72 HOURS FROM LEGAL AUTHORITY.
- IF WORK HAS OCCURRED NEAR OR IN STREAMS OR OTHER SURFACE WATERS, THE EXPOSED SOILS SHALL BE STABILIZED TO PROTECT AGAINST FLOODING AND SPRING RUNOFF TO THE 100-YR FLOOD ELEVATION.
- ALL TEMPORARY AND PERMANENT STORMWATER BASINS AND SEDIMENT BASINS SHOULD HAVE OUTLETS AND STABILIZED EMERGENCY OVERFLOWS INSTALLED AS PER THE GRADING AND/OR UTILITY PLAN AND AT THE APPROVAL OF THE OWNER.

21.NON-STORMWATER DEWATERING

- HYDRANT FLUSHING: FLUSHING OF HYDRANTS WILL BE DISCHARGED
- THROUGH TEMPORARY PIPES AS NECESSARY, ONTO IMPERVIOUS SURFACES OR TO STABILIZED ARES WITH ENERGY DISSIPATION AT THE DISCHARGE POINT. THE DISCHARGE SHOULD BE COLLECTED BY THE STORM WATER BASINS AND STORM SEWER SYSTEM.
- POTABLE WATER DISCHARGE: ALL WATER LINES WILL BE FLUSHED USING HOSES AND DISCHARGED ONTO AN IMPERVIOUS SURFACE AND DIRECTED TO THE STORM SEWER INFRASTRUCTURE BY NON-EROSIVE MEANS.

22.WORK NEAR OR IN IMPAIRED WATERS

- EXPOSED SOILS MUST BE STABILIZED WITHIN 7 DAYS OF ACTIVITY TEMPORARILY OR PERMANENTLY CEASED.
- TEMPORARY SEDIMENT BASIN NEEDED WITHIN AREAS 5 ACRE DISTURBANCE WITH COMMON POINT OF DISCHARGE.
- IF WORK IS NEAR SPECIAL WATERS REFER TO APPENDIX A OF THE NPDES PERMIT FOR ADDITIONAL NOTES AND REQUIREMENTS.
- NO UNTREATED DEWATERING WILL TAKE PLACE AND DISCHARGE TO "IMPAIRED WATERS"
- SEE PERMIT FOR ADDITIONAL NOTES AND REQUIREMENTS

23.INFILTRATION/FILTRATION AREAS

- FENCE OFF AREA PRIOR TO BEGINNING CONSTRUCTION.
- EXCAVATION AREA SHALL TAKE PLACE AFTER CONTRIBUTING AREAS ARE AT FINAL GRADE AND STABILIZED.
- DO NOT USE HEAVY/WHEELED EQUIPMENT IN FILTRATION AREA.
- DIVERSIONS, REDUNDANT SEDIMENT AND EROSION CONTROLS MUST BE USED TO PROTECT AREA.
- ENSURE 8 FT MAINTENANCE ACCESS IS ADEQUATE FOR AREA.
- IF GRADING MUST OCCUR IN FILTRATION AREA, LEAVE GRADE 3 FT HIGH TEMPORARILY UNTIL AREA CAN BE FINAL GRADED AND STABILIZED

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

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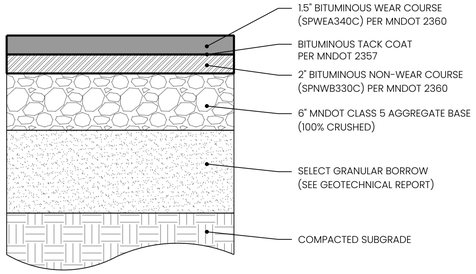
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Rev.	Date	Description
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	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

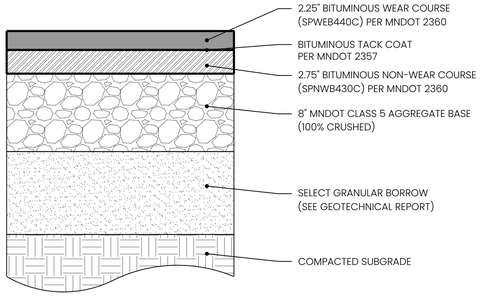
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Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
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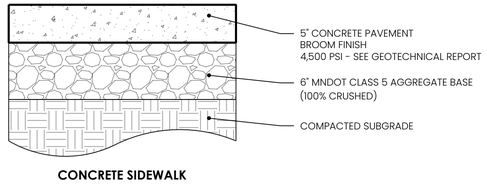


LIGHT DUTY BITUMINOUS PAVEMENT

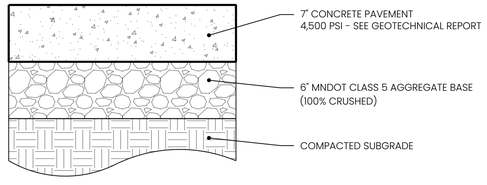


HEAVY DUTY BITUMINOUS PAVEMENT

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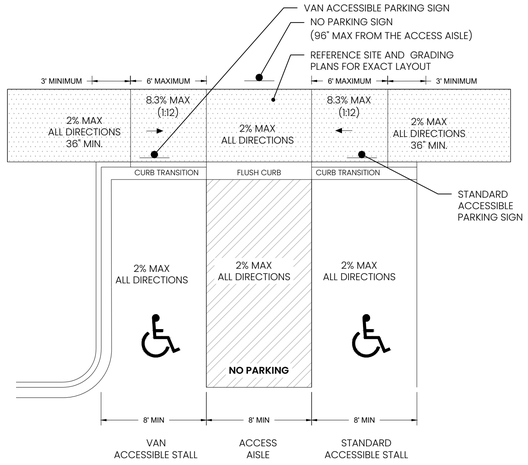


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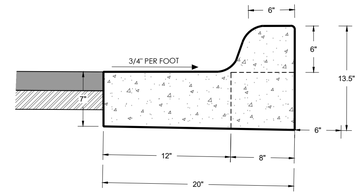


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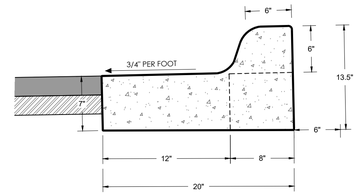
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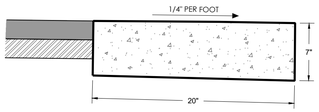
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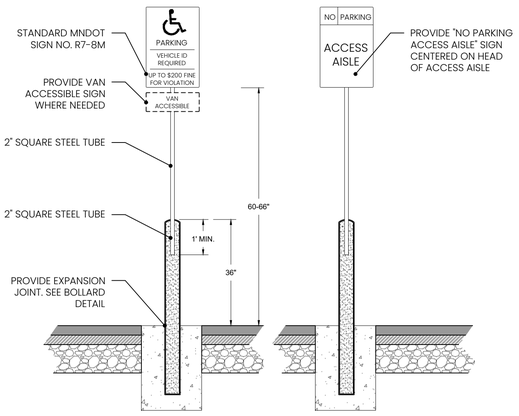


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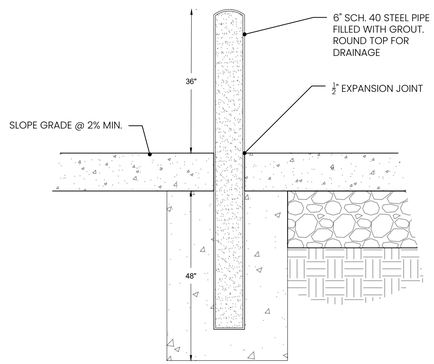


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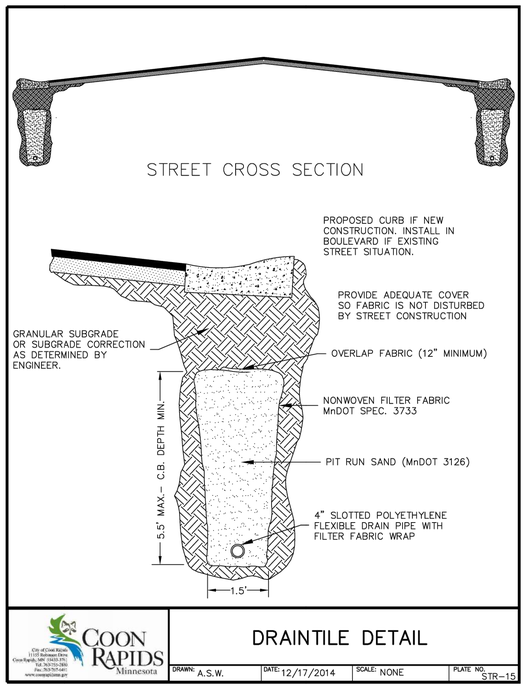
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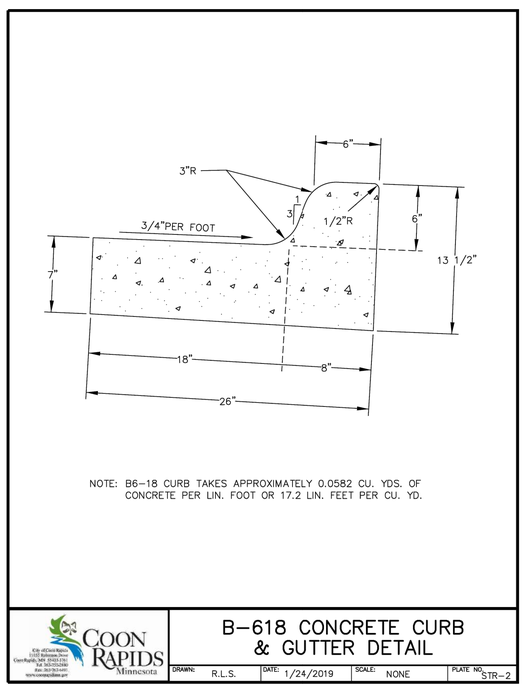
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6 C8.0 **BOLLARD DETAIL - PAVEMENT ADJACENT**
NOT TO SCALE



7 C8.0



7 C8.0

measure

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UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

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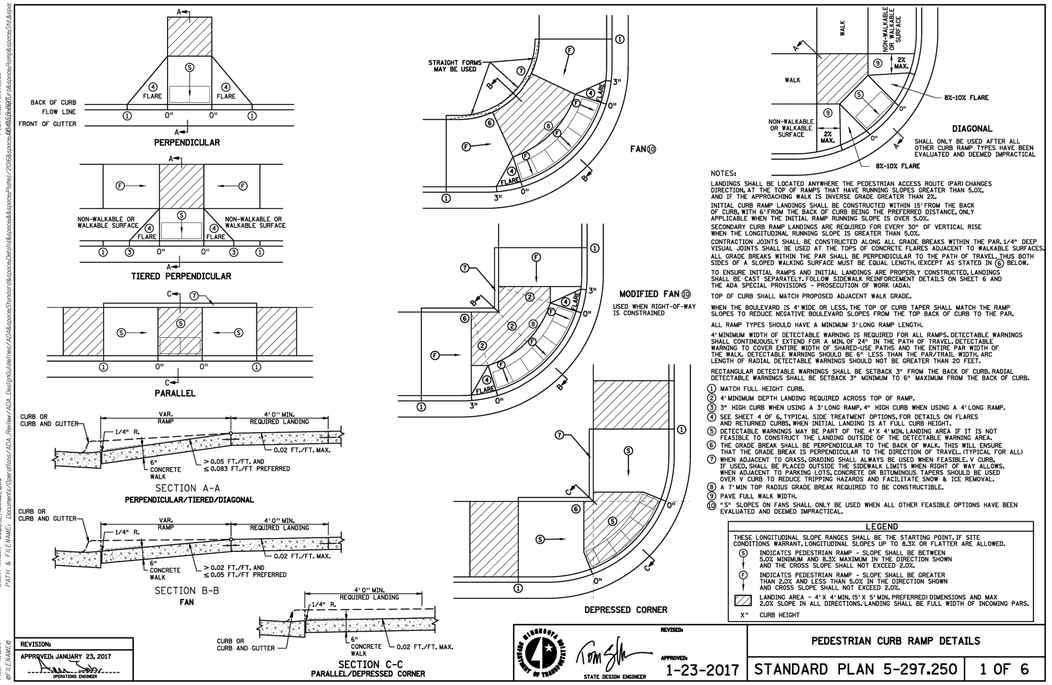
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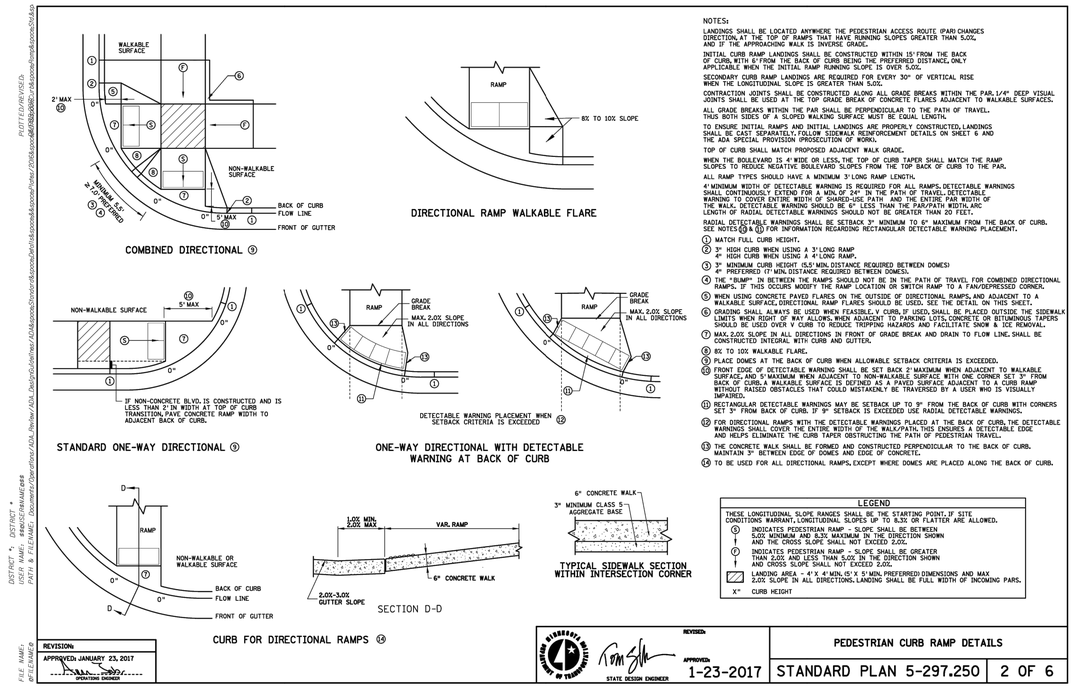
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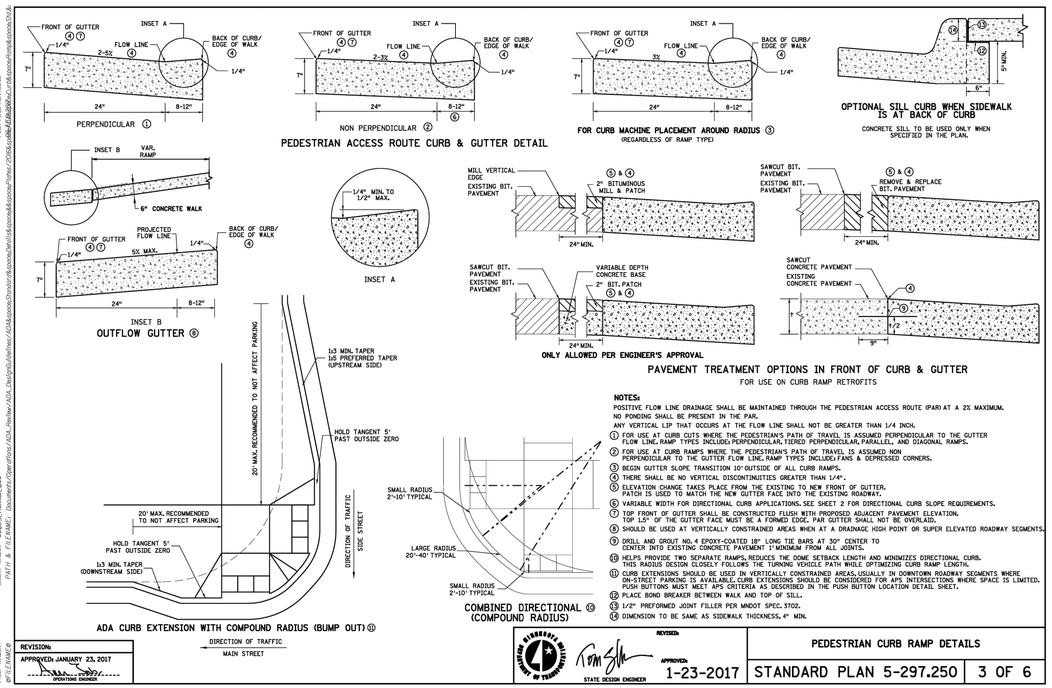
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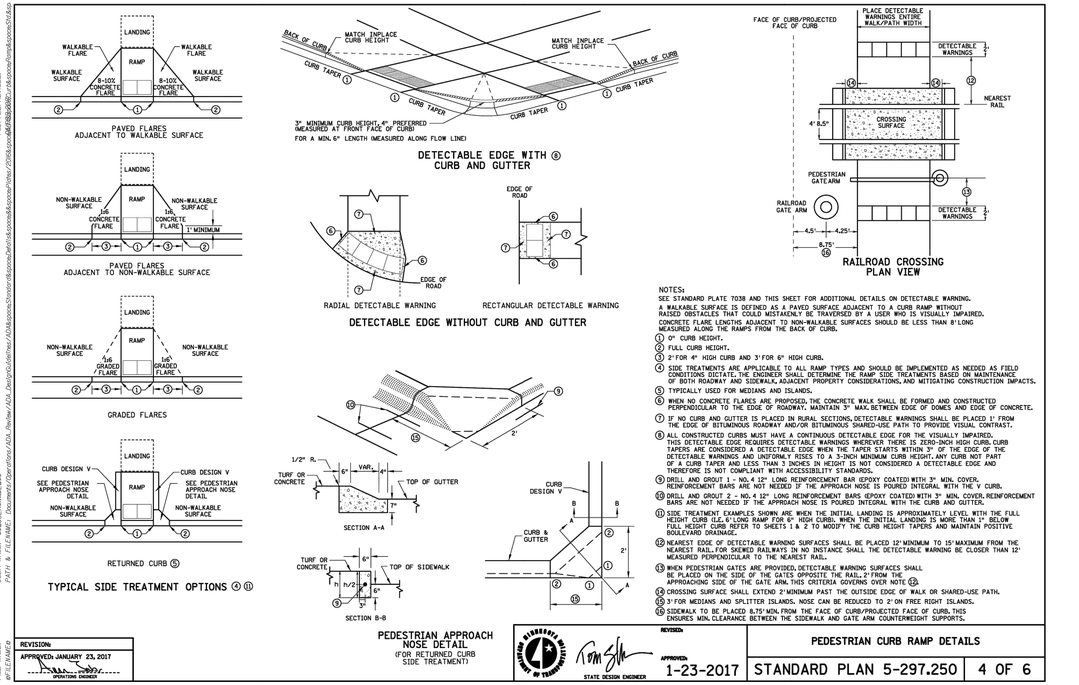
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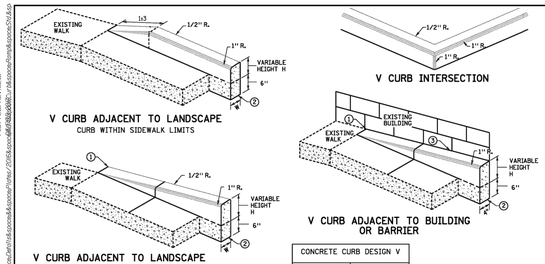
Rev.	Date	Description
	5/11/2026	CITY SUBMITTAL
	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026
Sheet Title:

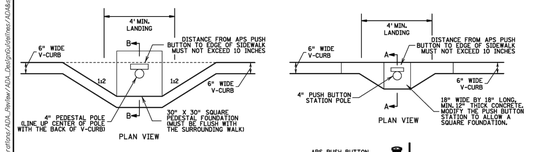
ADA DETAILS

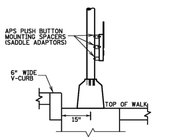
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C8.1

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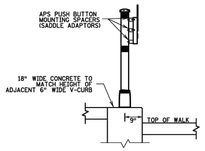


CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
<6"	4"
≥6"	6"

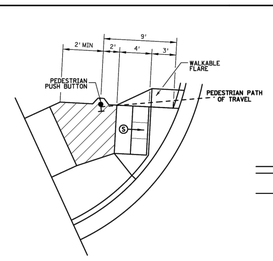




SIGNAL PEDESTAL & PUSH BUTTON (V-CURB)



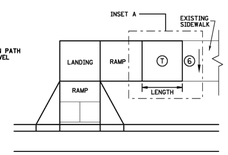
PUSH BUTTON STATION (V-CURB)

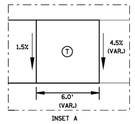


SEMI-DIRECTIONAL RAMP (3,4,9)

3' DOME SETBACK, 4' LONG RAMP AND PUSH BUTTON 9' FROM THE BACK OF CURB

PRIMARILY USED FOR APS APPLICATIONS WHERE THE PAR DOES NOT CONTINUE PAST THE PUSH BUTTON (DEAD-END SIDEWALK)





TRANSITION PANEL 4 5

NOTES:

A WALKABLE FLARE IS AN 8-10% CONCRETE FLARE THAT IS REQUIRED WHEN THE FLARE IS ADJACENT TO A WALKABLE SURFACE, OR WHEN THE PEDESTRIAN PATH OF TRAVEL OF A PUSH BUTTON TRAVERSES THE FLARE.

ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.

WHERE RIGHT-OF-WAY ALLOWS, USE OF V CURB SHOULD BE MINIMIZED. GRADING ADJACENT TURF OR SLOPING ADJACENT PAVEMENT IS PREFERRED.

V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.

V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.

1. END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
2. ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
3. EDGE BETWEEN NEW V CURB AND INPLACE STRUCTURE SHALL BE SEALED AND BOND BREAKER SHALL BE USED BETWEEN EXISTING STRUCTURE AND PLACED V-CURB.
4. THE MAX. RATE OF CROSS SLOPE TRANSITIONING IS 1% LINEAR FOOT OF SIDEWALK PER HALF PERCENT CROSS SLOPE, WHEN PAR WIDTH IS GREATER THAN 6' OR THE RUNNING SLOPE IS GREATER THAN 5%, DOUBLE THE CALCULATED TRANSITION LENGTH.
5. TRANSITION PANELS ARE TO ONLY BE USED AFTER THE RAMP, OR IF NEEDED, LANDING ARE AT THE FULL CURB HEIGHT (TYPICAL SECTION).
6. EXISTING CROSS SLOPE GREATER THAN 2.0%.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT, IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

- (5) INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
- LANDING AREA - 4'X 4' MIN.(5'X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.
- (T) TRANSITION PANEL(S) - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A RAMP TO THE EXISTING WALK CROSS-SLOPE. RATE OF TRANSITION SHOULD BE 0.5% PER 1 LINEAR FOOT OF WALK. SEE THIS SHEET FOR ADDITIONAL INFORMATION.

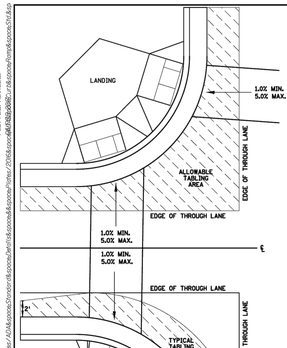
REVISION:
APPROVED: JANUARY 23, 2017
OPERATIONS ENGINEER

REVISED:
APPROVED: 1-23-2017
STATE DESIGN ENGINEER

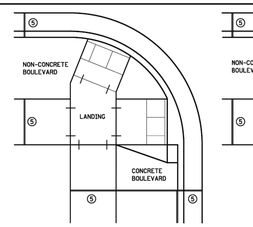
PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 5 OF 6

1
C8.2

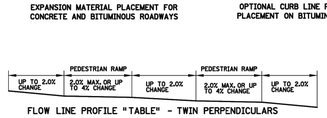


CURB LINE AND ROAD CROSSING ADJUSTMENTS

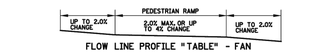


EXPANSION MATERIAL PLACEMENT FOR CONCRETE AND BITUMINOUS ROADWAYS

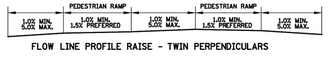
OPTIONAL CURB LINE REINFORCEMENT PLACEMENT ON BITUMINOUS ROADWAYS 4



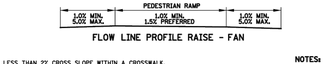
FLOW LINE PROFILE "TABLE" - TWIN PERPENDICULARS



FLOW LINE PROFILE "TABLE" - FAN



FLOW LINE PROFILE RAISE - TWIN PERPENDICULARS



FLOW LINE PROFILE RAISE - FAN

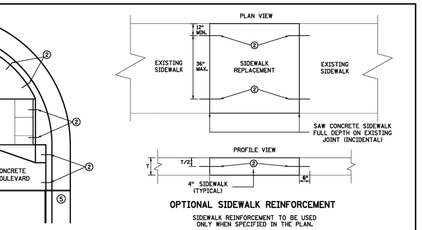
*TABLING" OF CROSSWALKS MEANS MAINTAINING LESS THAN 2% CROSS SLOPE WITHIN A CROSSWALK, IS REQUIRED WHEN A ROADWAY IS IN A STOP ON YIELD CONDITION AND THE PROJECT SCOPE ALLOWS.

RECONSTRUCTION PROJECTS ON FULL PAVEMENT REPLACEMENT PROJECTS
*TABLING" OF ENTIRE CROSSWALK SHALL OCCUR WHEN FEASIBLE.

MILL & OVERLAY PROJECTS *TABLING" OF FLOW LINES IN FRONT OF THE PEDESTRIAN RAMP, IS REQUIRED WHEN THE EXISTING FLOW LINE IS GREATER THAN 2% WARPING OF THE BITUMINOUS PAVEMENT CAN NOT EXTEND INTO THE THROUGH LANE, TABLE THE FLOW LINE TO 2% OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:
1) 5.0% MAX. CROSS-SLOPE OF THE ROAD
2) 5.0% MAX. CROSS-SLOPE OF THE ROAD
3) "TABLE" FLOW LINE UP TO 4% CHANGE FROM EXISTING SLOPE IN FRONT OF PEDESTRIAN RAMP
4) UP TO 2% CHANGE IN FLOW LINE FROM EXISTING SLOPE BEYOND THE PEDESTRIAN CURB RAMP

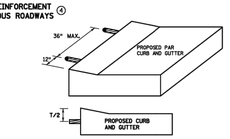
STAND-ALONE ADA RETROFITS FOLLOW MILL & OVERLAY CRITERIA ABOVE HOWEVER ALL PAVEMENT WARPING IS DONE WITH BITUMINOUS PATCHING ON BITUMINOUS ROADWAYS AND FULL-DEPTH APRON REPLACEMENT ON CONCRETE ROADWAYS.

RAISING OF CURB LINES SHOULD OCCUR IN VERTICALLY CONSTRAINED AREAS, RAISE THE CURB LINES ENOUGH TO ALLOW COMPLIANT RAMPS OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:
1) 1.0% MIN. AND 5.0% MAXIMUM CROSS-SLOPE OF THE ROAD
2) 1.0% MIN. FLOW LINE 10ft EITHER SIDE OF PEDESTRIAN RAMP TO MAINTAIN POSITIVE DRAINAGE
3) 5.0% RECOMMENDED MAX. FLOW LINE
4) LONGITUDINAL THROUGH LANE ROADWAY TAPERS SHOULD BE 1" VERTICAL PER 15' HORIZONTAL

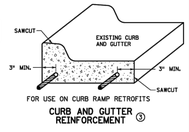


OPTIONAL SIDEWALK REINFORCEMENT

SIDEWALK REINFORCEMENT TO BE USED ONLY WHEN SPECIFIED IN THE PLAN.

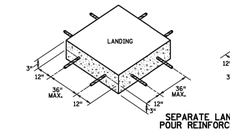


OPTIONAL CURB LINE REINFORCEMENT DETAILS 2 4



FOR USE ON CURB RAMP RETROFITS

CURB AND GUTTER REINFORCEMENT 3



SEPARATE LANDING POUR REINFORCEMENT 1

NOTES:

1. TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE (RUNNING SLOPE GREATER THAN 2.5%) SHALL BE FORMED AND PLACED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET FOR ALL SEPARATELY POURED INITIAL LANDINGS.
2. DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS AT 36" MAXIMUM CENTER TO CENTER (EPOXY COATED). BARS TO BE ADJUSTED TO MATCH RAMP GRADE.
3. DRILL AND GROUT 2 - NO. 4 X 12" LONG REINFORCEMENT BARS (EPOXY COATED). REINFORCEMENT REQUIRED FOR ALL CONSTRUCTION JOINTS WITHIN RADIUS.
4. THIS OPTIONAL CURB LINE REINFORCEMENT DETAIL SHOULD ONLY BE USED ON BITUMINOUS ROADWAYS WHEN SPECIFIED IN THE PLAN.
5. 1/2 IN. PREFORMED JOINT FILLER MATERIAL PER MNDOT SPEC. 3702.

REVISED:
APPROVED: 1-23-2017
STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

STANDARD PLAN 5-297.250 | 6 OF 6

1
C8.2

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

Peter S Moreau, PE
Date: XX.XX.XX Lic. No.: 53735

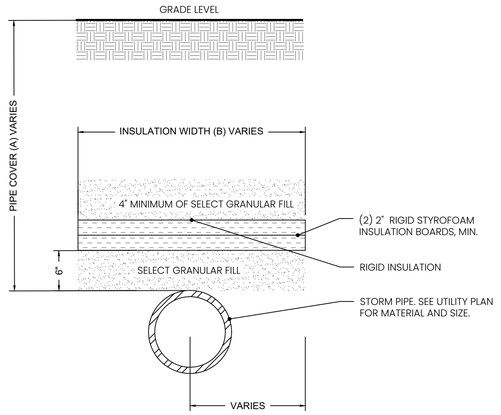
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	5/11/2026	CITY SUBMITTAL
	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
ADA DETAILS -CONTINUED

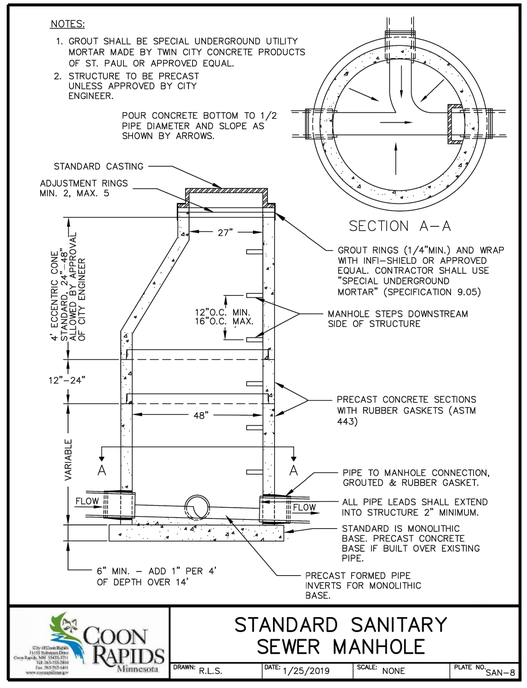
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PLOTTED/REVISED:
DISTRICT *, DISTRICT *
DISK#, FILENAME: #####DISK#####
PATH & FILENAME: Documents\Operations\ADA_Retrofits\ADA_Details\Sheet\ADA Details\Sheet\ADA Details.dgn
FILE NAME: @FILENAME



PIPE COVER (A)	INSULATION BOARD WIDTH (B)
2'	11'
3'	9'
4'	7'
5'	5'

1 C8.3 **STORM SEWER INSULATION**
NOT TO SCALE

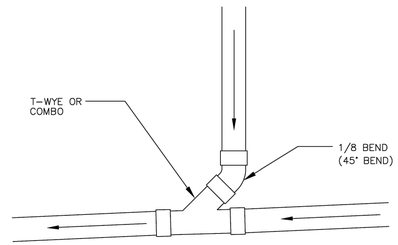


COON RAPIDS Minnesota

STANDARD SANITARY SEWER MANHOLE

DRAWN:	DATE:	SCALE:	PLATE NO.
R.L.S.	1/25/2019	NONE	SAN-8

2 C8.3

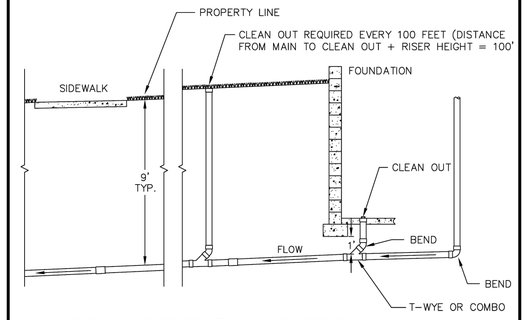


COON RAPIDS Minnesota

SANITARY SEWER PIPE WITH A CHANGE IN DIRECTION

DRAWN:	DATE:	SCALE:	PLATE NO.
R.L.S.	1/7/2019	NONE	SAN-2

3 C8.3



COON RAPIDS Minnesota

SANITARY SEWER SERVICE FROM PROPERTY LINE TO INSIDE BUILDING

DRAWN:	DATE:	SCALE:	PLATE NO.
R.L.S.	1/7/2019	NONE	SAN-3

4 C8.3

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

Peter S Moreau, PE
Date: XX.XX.XX Lic. No.: 53735

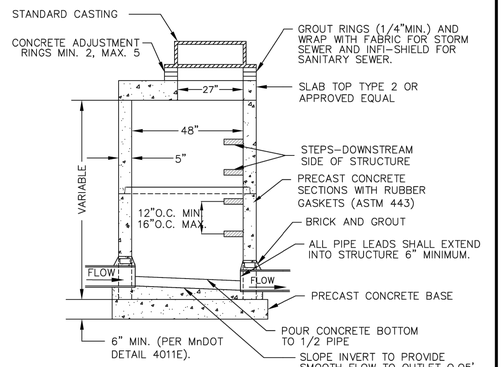
Rev.	Date	Description
	5/11/2026	CITY SUBMITTAL
	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
UTILITY DETAILS - SANITARY

Sheet:
C8.3

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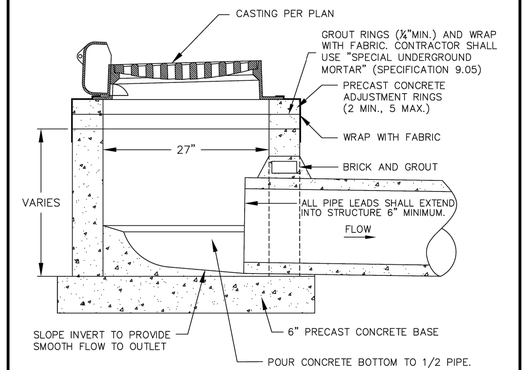
1. THIS TYPE SHALL BE USED WHEN SPECIFIED OR WHEN MANHOLE DEPTH IS LESS THAN 8'.
2. SLOPE BENCH TO INVERT, TOP OF BENCH TO BE AT HALF THE HEIGHT OF DOWN STREAM PIPE DIAMETER. (DO NOT ADD FILLERS BEFORE POURING BENCH)
3. FILL VOID BETWEEN STRUCTURE AND PIPE WITH BRICK AND GROUT BETWEEN THEM AND ACROSS THE FACE. CONTRACTOR SHALL USE "SPECIAL UNDERGROUND UTILITY MORTAR". (SEE SPECIFICATION 9.05)
4. STRUCTURE TO BE PRECAST UNLESS APPROVED BY CITY ENGINEER.

COON RAPIDS Minnesota

SLAB TOP MANHOLE

DRAWN: R.L.S. | DATE: 1/7/2019 | SCALE: NONE | PLATE NO. STM-1

1 C8.4



NOTES:

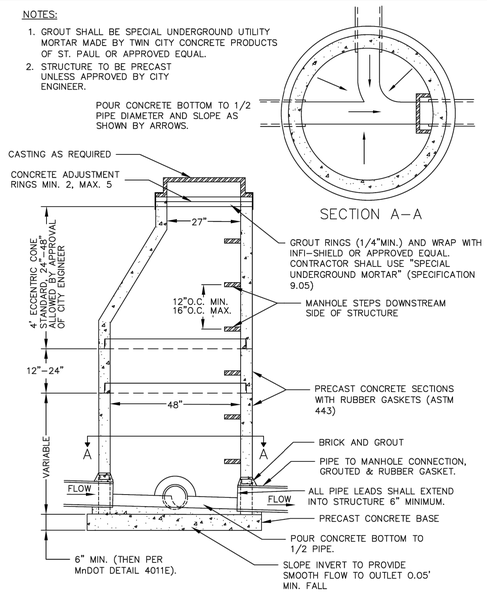
1. SLOPE BENCH TO INVERT, TOP OF BENCH TO BE AT HALF THE HEIGHT OF DOWN STREAM PIPE DIAMETER. (DO NOT ADD FILLERS BEFORE POURING BENCH)
2. FILL VOID BETWEEN STRUCTURE AND PIPE WITH BRICK AND GROUT BETWEEN THEM AND ACROSS THE FACE. CONTRACTOR SHALL USE "SPECIAL UNDERGROUND UTILITY MORTAR". (SEE SPECIFICATION 9.05)
3. STRUCTURE TO BE PRECAST UNLESS APPROVED BY CITY ENGINEER.

COON RAPIDS Minnesota

STANDARD 27" CATCH BASIN

DRAWN: R.L.S. | DATE: 11/27/2018 | SCALE: NONE | PLATE NO. STM-4

2 C8.4

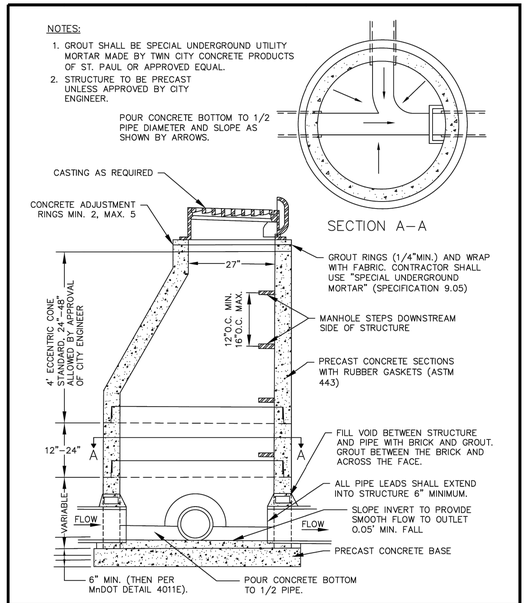


COON RAPIDS Minnesota

STANDARD STORM DRAIN MANHOLE

DRAWN: R.L.S. | DATE: 1/29/2019 | SCALE: NONE | PLATE NO. STM-9

3 C8.4

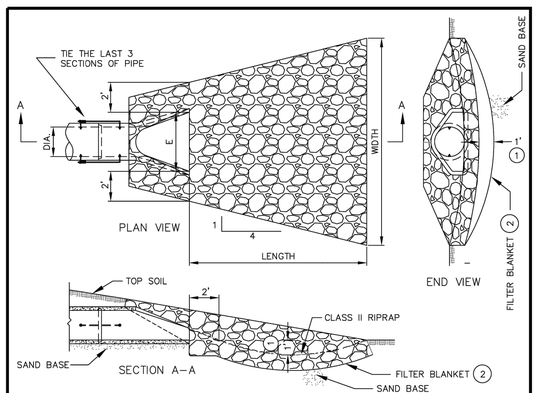


COON RAPIDS Minnesota

STANDARD STORM DRAIN INLET MANHOLE

DRAWN: R.L.S. | DATE: 1/29/2019 | SCALE: NONE | PLATE NO. STM-11

4 C8.4



1 FOR PIPE SIZE GREATER THEN OR EQUAL TO 30", USE 1.5 FEET

2 GEOTEXTILE FILTER BLANKET UNLESS OTHERWISE SPECIFIED IN THE PLANS. THE FABRIC SHOULD COVER THE AREA OF THE RIPRAP AND EXTEND UNDER THE FLARED END SECTION TO THE TOP OF RIPRAP.

TABLE OF QUANTITIES FOR RIPRAP
(RIPRAP TO BE FIELD STONE OR GRANITE)

DIA. OF PIPE (IN.)	LENGTH (FEET)	WIDTH (FEET)	E=WIDTH F.E.S.(IN.)	12" DEPTH CL II RIPRAP(CU.YDS.)
12	8	10	24	2.8
15	8	10.5	30	2.9
18	10	12	36	3.9
21	10	12.5	42	4.2
24	12	14	48	5.5
27	12	14.5	54	5.8
30	14	16	60	7.3
36	16	18	72	9.2
42	18	19.5	78	10.9
48	20	21	84	12.9

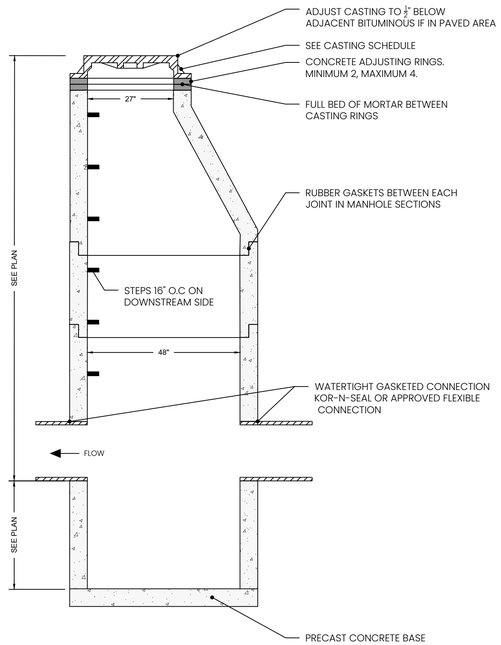
PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN

COON RAPIDS Minnesota

RIPRAP DETAIL (NO MOW STRIP)

DRAWN: R.L.S. | DATE: 11/28/2018 | SCALE: NONE | PLATE NO. STM-12

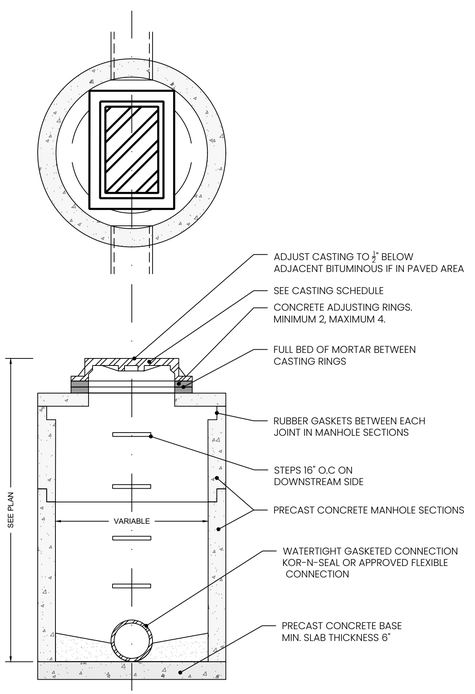
5 C8.4



STORM SEWER SUMP MANHOLE

NOT TO SCALE

6 C8.4



CATCH BASIN MANHOLE

NOT TO SCALE

7 C8.4

STORM SEWER CASTING SCHEDULE

MH/ CB NAME	TYPE	CASTING	NOTES
CBMH-101	ROUND	R-3067-V	
CBMH-102	ROUND	R-3067-V	
CBMH-103	ROUND	R-3067-V	
CBMH-104	ROUND	R-3067-V	
CBMH-105	ROUND	R-3067-V	
CBMH-106	ROUND	R-3067-V	
CB-107	27"	R-3067-V	
CB-301	27"	R-3067-V	
STMH-401	ROUND	R-3227-D	
STMH 402	ROUND	R-3227-D	
TRENCH DRAIN	SEE DETAILS ON SHEET C8.7		
CB-501	27"	R-3067-V	

STORM SEWER CASTING SCHEDULE

NOT TO SCALE

8 C8.4

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measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

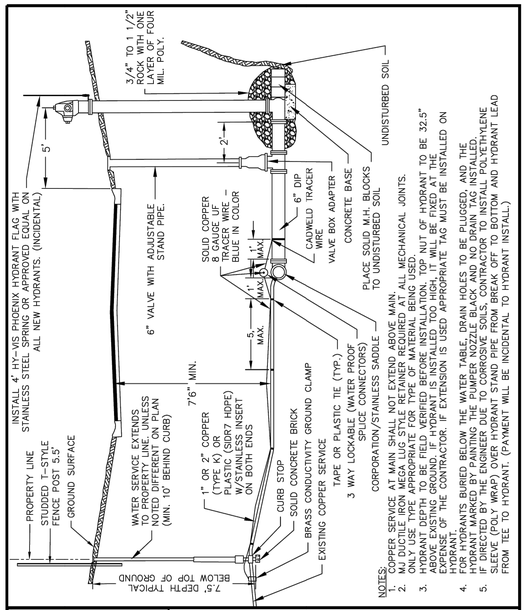
Peter S Moreau, PE
Date: XX.XX.XX Lic. No.: 53735

Rev.	Date	Description
	5/11/2026	CITY SUBMITTAL
	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
UTILITY DETAILS - STORM

Sheet:
C8.4



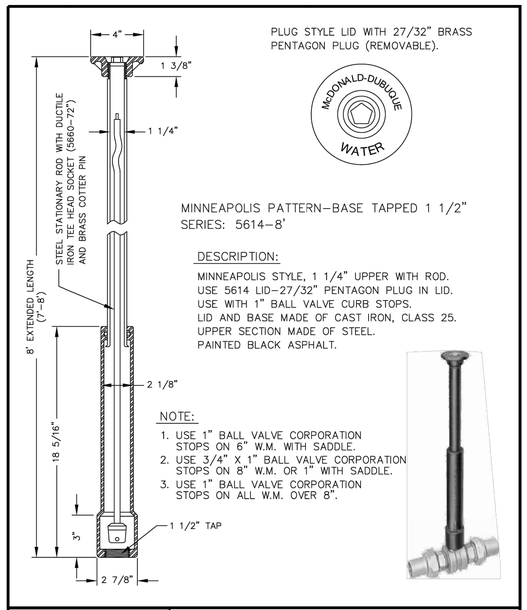
NOTES:
1. COPPER SERVICE AT MAIN SHALL NOT EXTEND ABOVE MAIN.
2. MJ DUCTILE IRON MEGA LUG STYLE RETAINER REQUIRED AT ALL MECHANICAL JOINTS.
3. CURB STOP BOX SHALL BE PROPERLY SET AND ADJUSTED SO THAT THE TOP NUT OF HYDRANT DEPTH TO BE FIELD VERIFIED BEFORE INSTALLATION. TOP NUT OF HYDRANT TO BE 32.5" ABOVE EXISTING GROUND. IF HYDRANT IS INSTALLED TOO HIGH, IT WILL BE FIXED AT THE EXPENSE OF THE CONTRACTOR. IF EXTENSION IS USED APPROPRIATE TAG MUST BE INSTALLED ON HYDRANT.
4. FOR HYDRANTS BURIED BELOW THE WATER TABLE, DRAIN HOLES TO BE PLUGGED, AND THE HYDRANT MARKED BY PAINTING THE PUMPER NOZZLE BLACK AND NO DRAIN TAG INSTALLED.
5. ALL PIPE, FITTINGS, VALVES, HYDRANTS, ETC. SHALL BE CORROSIVE SOILS CONTRACTOR TO INSTALL POLYETHYLENE SLEEVE (POLYWRAP) OVER HYDRANT LEAD FROM TEE TO HYDRANT. (PAYMENT WILL BE INCIDENTAL TO HYDRANT INSTALL.)

COON RAPIDS Minnesota

TYPICAL HYDRANT & WATER SERVICE LAYOUT FOR NEW & TOTAL REPLACEMENT OF WATER MAIN

DRAWN: R.L.S. | DATE: 1/21/2020 | SCALE: NONE | PLATE NO. WM-3

1
C8.5



PLUG STYLE LID WITH 27/32" BRASS PENTAGON PLUG (REMOVABLE).

McDONALD-DUBUQUE WATER

MINNEAPOLIS PATTERN–BASE TAPPED 1 1/2"
SERIES: 5614–8'

DESCRIPTION:

MINNEAPOLIS STYLE, 1 1/4" UPPER WITH ROD.
USE 5614 LID–27/32" PENTAGON PLUG IN LID.
USE WITH 1" BALL VALVE CURB STOPS.
LID AND BASE MADE OF CAST IRON, CLASS 25.
UPPER SECTION MADE OF STEEL.
PAINTED BLACK ASPHALT.

NOTE:
1. USE 1" BALL VALVE CORPORATION STOPS ON 6" W.M. WITH SADDLE.
2. USE 3/4" X 1" BALL VALVE CORPORATION STOPS ON 8" W.M. OR 1" WITH SADDLE.
3. USE 1" BALL VALVE CORPORATION STOPS ON ALL W.M. OVER 8".

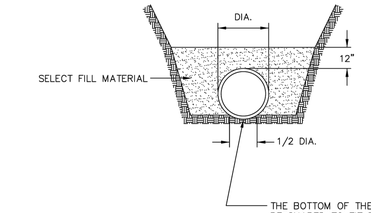
COON RAPIDS Minnesota

CURB STOP BOX WITH ROD

DRAWN: R.L.S. | DATE: 1/16/2019 | SCALE: NONE | PLATE NO. WM-4

2
C8.5

NOTE:
SURROUND THE PIPE TO A MINIMUM OF 12" ABOVE IT'S TOP WITH SELECT FILL MATERIAL, PLACED IN 2 LIFTS, FIRST LIFT NO MORE THEN 1' DEPTH, AND COMPACTED WITH GAS POWERED WHACKER FOR FULL LENGTH OF THE PIPE, TO ENSURE FILLING OF ALL VOIDS UNDER AND ADJACENT TO THE PIPE.

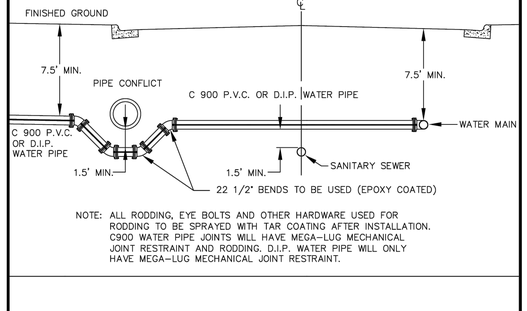


COON RAPIDS Minnesota

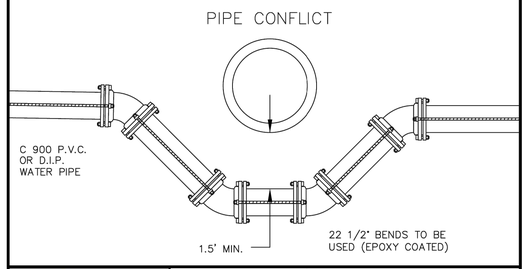
CLASS C PIPE BEDDING

DRAWN: R.L.S. | DATE: 1/12/2005 | SCALE: NONE | PLATE NO. WM-5

3
C8.5



NOTE: ALL RODDING, EYE BOLTS AND OTHER HARDWARE USED FOR RODDING TO BE SPRAYED WITH TAR COATING AFTER INSTALLATION. C900 WATER PIPE JOINTS WILL HAVE MEGA–LUG MECHANICAL JOINT RESTRAINT AND RODDING. D.I.P. WATER PIPE WILL ONLY HAVE MEGA–LUG MECHANICAL JOINT RESTRAINT.



COON RAPIDS Minnesota

VERTICAL BENDS DETAIL

DRAWN: R.L.S. | DATE: 1/7/2019 | SCALE: NONE | PLATE NO. WM-6

4
C8.5

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

NOT FOR CONSTRUCTION

Peter S Moreau, PE
Date: XX.XX.XX Lic. No.: 53735

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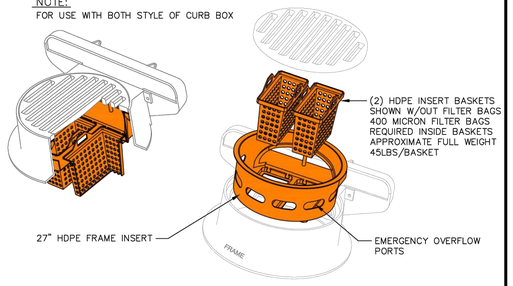
Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
UTILITY DETAILS – WATER

Sheet:
C8.5

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NOTE:
FOR USE WITH BOTH STYLE OF CURB BOX



MEETS MN/DOT SPECIFICATION 3891.F
"STORM DRAIN INLET PROTECTION–FILTER BAG INSERT"
DESIGNED FOR NEENAH R–3250–A OR R–3250–1
(MNDOT 801) FRAME CASTING

FILTER AREA	5.65 FT²
OVERFLOW AREA	0.42 FT²
MAXIMUM OVERFLOW RATE (@ 7" HEAD)	1.99 CFS
MAXIMUM OVERFLOW RATE (@ 13" HEAD)	2.79 CFS
BASKET WEIGHT (EMPTY)	1 LB
BASKET WEIGHT (FULL–APPROX.)	45 LBS

GENERAL NOTES:

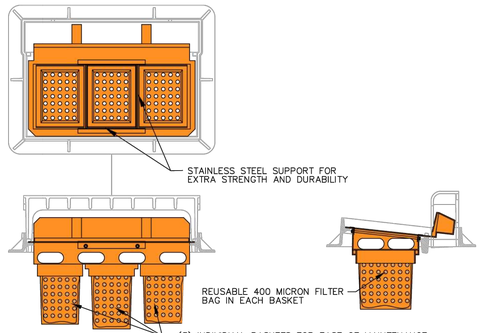
1. PRODUCT DESIGN DOES NOT INTERFERE WITH LOAD BEARING CAPACITY OF FRAMES.
2. MADE OF UV RESISTANT MATERIAL.
3. DURABLE ECO–FRIENDLY HDPE PROVIDES A LIGHTWEIGHT AND STRONG PRODUCT THAT CAN EASILY BE RE–USED NEXT PROJECT.
4. FLOW RATES COMPARE TO OR EXCEED FLOW RATES OF COMMONLY USED GRATES.
5. BASKET DESIGN PROVIDES LARGER FILTER AREA AND PROVIDES EASY CLEANING, REDUCING OVERFLOW INSTANCES AND SEDIMENT LOAD ON THE SEWER SYSTEM.
6. DESIGNED TO FIT NEENAH R–3250–1 (Mndot 801).

COON RAPIDS Minnesota

INFRASAFE 27" DIA. INLET PROTECTION DEVICE

DRAWN: R.L.S. | DATE: 3/4/2019 | SCALE: NONE | PLATE NO. EC–1

1 C8.6



FILTER AREA	6.5 FT²
OVERFLOW AREA	0.6 FT²
MAXIMUM OVERFLOW RATE (@ 7" HEAD)	3.00 CFS
MAXIMUM OVERFLOW RATE (@ 13" HEAD)	4.00 CFS
BASKET WEIGHT (EMPTY)	1 LB
BASKET WEIGHT (FULL–APPROX.)	70 LBS

GENERAL NOTES:

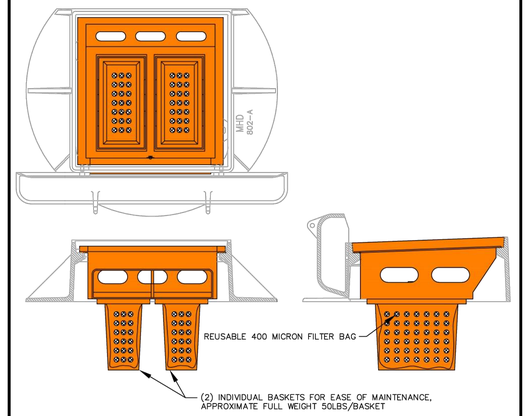
1. PRODUCT DESIGN DOES NOT INTERFERE WITH LOAD BEARING CAPACITY OF FRAMES.
2. MADE OF UV RESISTANT MATERIAL.
3. DURABLE ECO–FRIENDLY HDPE PROVIDES A LIGHTWEIGHT AND STRONG PRODUCT THAT CAN EASILY BE RE–USED NEXT PROJECT.
4. FLOW RATES COMPARE TO OR EXCEED FLOW RATES OF COMMONLY USED GRATES.
5. BASKET DESIGN PROVIDES LARGER FILTER AREA AND PROVIDES EASY CLEANING, REDUCING OVERFLOW INSTANCES AND SEDIMENT LOAD ON THE SEWER SYSTEM.
6. DESIGNED TO FIT NEENAH R–3067 OR R–3290 SERIES.

COON RAPIDS Minnesota

INFRASAFE 2'X3' INLET PROTECTION DEVICE

DRAWN: R.L.S. | DATE: 3/1/2019 | SCALE: NONE | PLATE NO. EC–2

2 C8.6



FILTER AREA	2.75 FT²
OVERFLOW AREA	0.4 FT²
MAXIMUM OVERFLOW RATE (@ 7" HEAD)	2.00 CFS
MAXIMUM OVERFLOW RATE (@ 13" HEAD)	2.90 CFS
BASKET WEIGHT (EMPTY)	1 LB
BASKET WEIGHT (FULL–APPROX.)	50 LBS

GENERAL NOTES:

1. PRODUCT DESIGN DOES NOT INTERFERE WITH LOAD BEARING CAPACITY OF FRAMES.
2. MADE OF UV RESISTANT MATERIAL.
3. DURABLE ECO–FRIENDLY HDPE PROVIDES A LIGHTWEIGHT AND STRONG PRODUCT THAT CAN EASILY BE RE–USED NEXT PROJECT.
4. FLOW RATES COMPARE TO OR EXCEED FLOW RATES OF COMMONLY USED GRATES.
5. BASKET DESIGN PROVIDES LARGER FILTER AREA AND PROVIDES EASY CLEANING, REDUCING OVERFLOW INSTANCES AND SEDIMENT LOAD ON THE SEWER SYSTEM.
6. DESIGNED TO FIT NEENAH R–3250–006 (Mndot 802 OR 805).

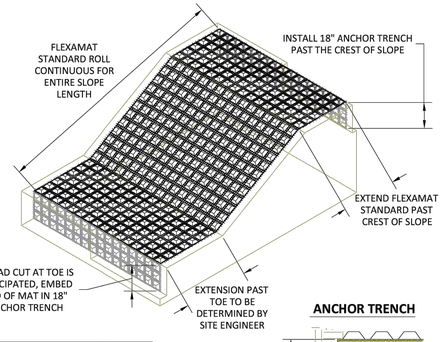
COON RAPIDS Minnesota

INFRASAFE 2'X2' INLET PROTECTION DEVICE

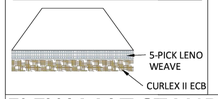
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3 C8.6

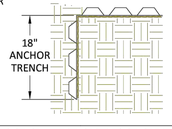
ISOMETRIC VIEW OF SLOPE AND ANCHOR TRENCHES



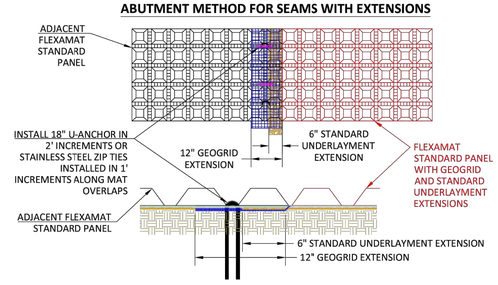
FLEXAMAT STANDARD UNDERLAYMENT



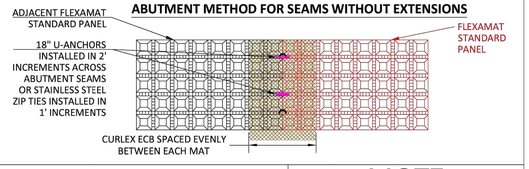
ANCHOR TRENCH



ABUTMENT METHOD FOR SEAMS WITH EXTENSIONS



ABUTMENT METHOD FOR SEAMS WITHOUT EXTENSIONS



FLEXAMAT STANDARD - SLOPE ARMORING

CONSTRUCTION NOTES:

1. AN ENGINEER OR MANUFACTURERS REPRESENTATIVE SHALL BE ONSITE FOR THE START OF THE INSTALLATION.
2. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND.
3. PRIOR TO FLEXAMAT STANDARD INSTALLATION SEED AND FERTILIZE SUBGRADE WITH SITE SPECIFIC SEED MIX IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.
4. INSTALL FLEXAMAT STANDARD ROLLS THAT ARE CONTINUOUS FOR ENTIRE SLOPE LENGTH. FOR SLOPES LONGER THAN 16', USE MATS WITH EXTENSIONS CUT TO THE LENGTH OF THE SLOPE. INSTALL MATS TO THAT THE MATTING EXTENDS PAST THE CREST OF SLOPE AND INTO AN 18" ANCHOR TRENCH.
   - 4.1. FOR ARMORED SLOPE LENGTHS 16' OR LESS, INSTALL CURLEX ECB EQUALLY UNDER ADJACENT MATS. SECURE SEAM WITH #3 REBAR 18" U-ANCHORS IN 2' INCREMENTS THE LENGTH OF THE ABUTMENT.
   - 4.2. ARMORED SLOPE LENGTHS LONGER THAN 16', INSTALL NEXT MAT OVER EXTENSIONS.
5. INSTALL SUBSEQUENT MATS OVER THE GEOGRID EXTENSION AND STANDARD UNDERLAYMENT EXTENSION OF THE PREVIOUSLY INSTALLED MAT. ENSURE THE GEOGRID AND STANDARD UNDERLAYMENT EXTENSIONS ARE LAYING FLAT ON THE SUBGRADE BEFORE INSTALLING ADJACENT MAT OVER THE EXTENSIONS.
6. INSTALL #3 REBAR 18" U-ANCHORS IN 2' INCREMENTS ACROSS THE GEOGRID AND STANDARD EXTENSION ABUTMENT. INSTALL ANCHORS PERPENDICULAR TO THE SLOPE DIRECTLY BEHIND FIRST ROW OF BLOCKS ON THE ADJACENT MAT.
7. AT THE END OF THE ARMORED SLOPE, IF HEAD CUT IS ANTICIPATED, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SUITABLE FILL.

MOTZ ENTERPRISES, INC.
Flexamat
(513)772-6689
Info@Flexamat.com
Flexamat.com

Flexamat® PERMANENT EROSION CONTROL

REV - 1

4 C8.6 TURF REINFORCEMENT MAT FOR STORMWATER E.O. SPILLWAY (FLEXAMAT OR APPROVED EQUAL)

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

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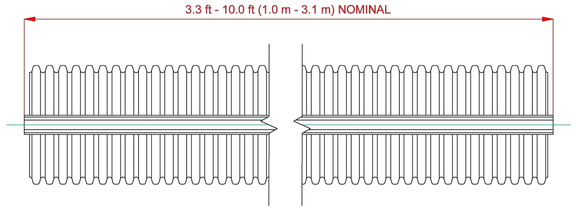
Peter S Moreau, PE
Date: XX.XX.XX Lic. No.: 53735

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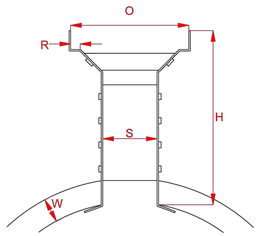
Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026
Sheet Title:

EROSION CONTROL DETAILS

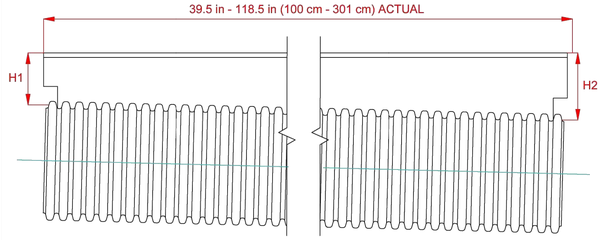
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PLAN VIEW



CROSS SECTION



PROFILE VIEW

PIPE Ø in (mm)	H1-H2, in (mm)	W, in (mm)	O, in (mm)	S, in (mm)	R, in (mm)	PRODUCT #
6 (150)	3.00 - 24.00 (76 - 610)	0.46 (13)	5.00 (127)	2.25 (57)	0.32 (8)	0690DSXL
8 (200)	3.00 - 24.00 (76 - 610)	0.61 (15)				0890DSXL
10 (250)	3.00 - 24.00 (76 - 610)	0.73 (19)				1090DSXL
12 (300)	3.50 - 24.00 (89 - 609)	1.15 (29)				1290DSXL
12 (300)	24.01 - 36.00 (610 - 914)					1290DSDTXL
15 (375)	3.75 - 24.00 (95 - 609)	1.30 (33)				1590DSXL
15 (375)	24.01 - 36.00 (610 - 914)					1590DSDTXL
18 (450)	4.00 - 24.00 (102 - 609)	1.57 (40)				1890DSXL
18 (450)	24.01 - 36.00 (610 - 914)					1890DSDTXL
24 (600)	4.25 - 24.00 (121 - 609)	1.86 (47)				2490DSXL
24 (600)	24.01 - 36.00 (610 - 914)					2490DSDTXL
30 (750)	5.00 - 24.00 (127 - 609)	2.55 (65)				3090DSXL
30 (750)	24.01 - 36.00 (610 - 914)					3090DSDTXL
36 (900)	5.25 - 24.00 (133 - 609)	2.85 (72)				3690DSXL
36 (900)	24.01 - 36.00 (610 - 914)					3690DSDTXL

NOTES:
1. SEE GRATING DETAILS FOR SURFACE TREATMENT OPTIONS
2. H1 AND H2 VARY BASED ON PROJECT SPECIFICATIONS AND MAY NOT RESEMBLE THE IMAGES SHOWN ABOVE.
3. ALL DIMENSIONS ARE FOR REFERENCE ONLY.

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REV.	DESCRIPTION	BY	MM/DD/YY	CHK'D
3	Updated Layers & Logo	KJS	01/09/25	-

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DEPICT THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT, NOR HAS ADS INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEERS RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEETS OR EXCEEDS THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

Duraslot XL Pipe Custom Slot Height

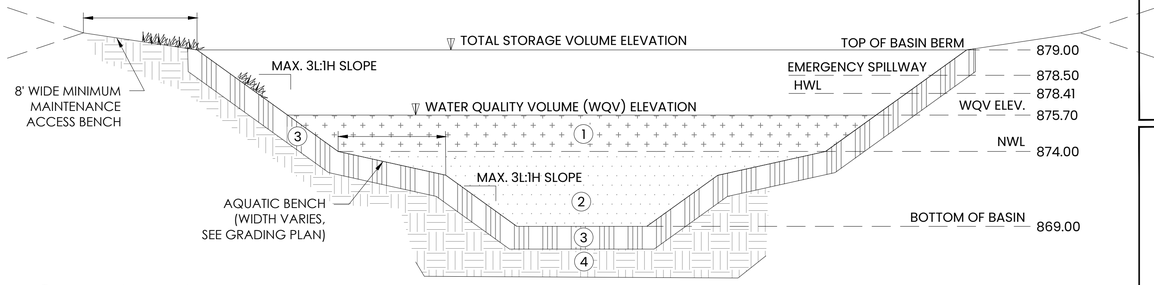
DRAWING NUMBER: STD-1401B

ADS Advanced Drainage Systems, Inc.

4640 TRUEMAN BLVD
HILLIARD, OHIO 43026

DRAWN BY: KJS
DESIGNED: 04-18-2023
CHK'D BY: -
SCALE: NTS
SHEET: 1 OF 1

1 C8.7

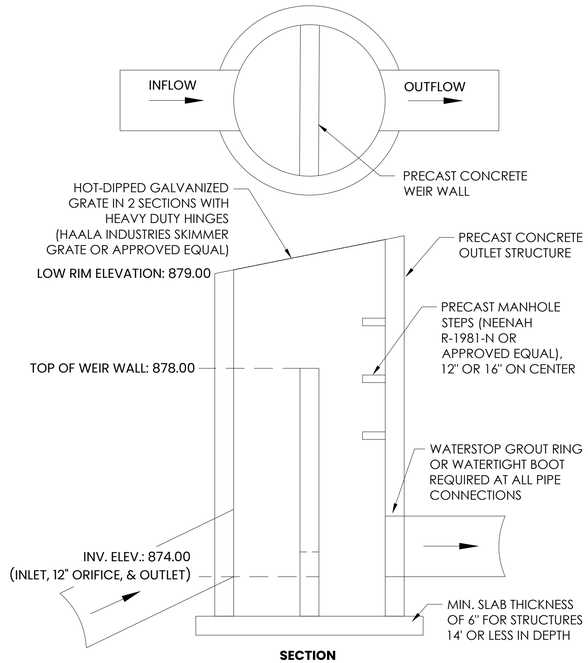


1. WATER QUALITY VOLUME
   NURP DESIGN LEVEL 2 (WQV > 1.1" x REGULATED IMPERVIOUS AREA)
2. DEAD POOL VOLUME (>1,800 C.F. PER TRIBUTARY AREA, 3' MIN. TO 10' MAX. DEPTH)
3. LINER MEETING MPCA LEVEL 1 REQUIREMENTS: MIN. 2' THICK CLAY LINER OR APPROVED EQUAL (COORDINATE WITH GEOTECHNICAL ENGINEER)
4. COMPACTED SUBGRADE (SEE STORMWATER MANUAL FOR SUBGRADE PREPARATION)

RETENTION BASIN GENERAL NOTES
1. In the event that sediment is introduced into the basin during or immediately following excavation, this material shall be removed from the basin prior to continuing construction.
2. Design is based on the WQV draining within 48 hours maximum.

RETENTION BASIN CONSTRUCTION SEQUENCING
1. Install 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, especially after each rainfall event.
4. Install all utilities (water, sanitary sewer, electric, natural gas, phone, fiber optic, etc) prior to setting final grade of basin.
5. Rough grade the site.
6. Complete, stabilize, and vegetate all other site improvements.
7. Construct and vegetate basin following stabilization of contributing drainage area. Ensure that critical elevations, such as underdrain invert (if applicable), aquatic bench, and invert of overflow structure (if present) are correct.
8. Remove temporary erosion control devices after the contributing drainage area is adequately vegetated.

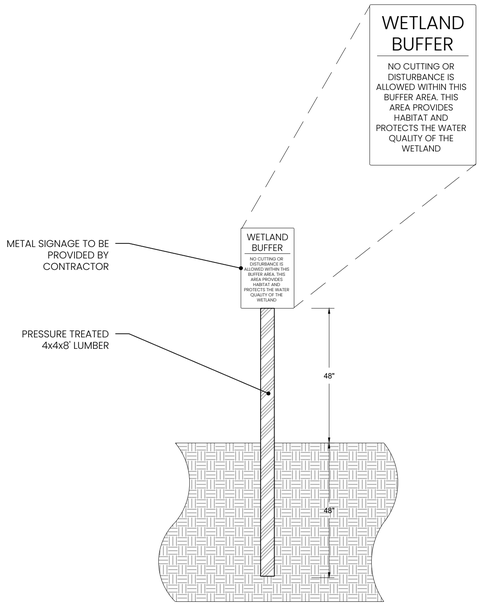
2 C8.7 **RETENTION BASIN SECTION**
NOT TO SCALE



SECTION

4 C8.7 OUTLET CONTROL STRUCTURE (OCS-601)
NOT TO SCALE

SIGNAGE ENLARGEMENT



NOTE: SIGNAGE TO BE PROVIDED AT LOCATIONS SHOWN ON THE SITE PLAN

3 C8.7 **WETLAND BUFFER SIGNAGE**
NOT TO SCALE

Client: **UNITED PROPERTIES**
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title: **RIVER NORTH INDUSTRIAL CENTER**
COON RAPIDS, MINNESOTA

I hereby certify that this plan, specifications 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.

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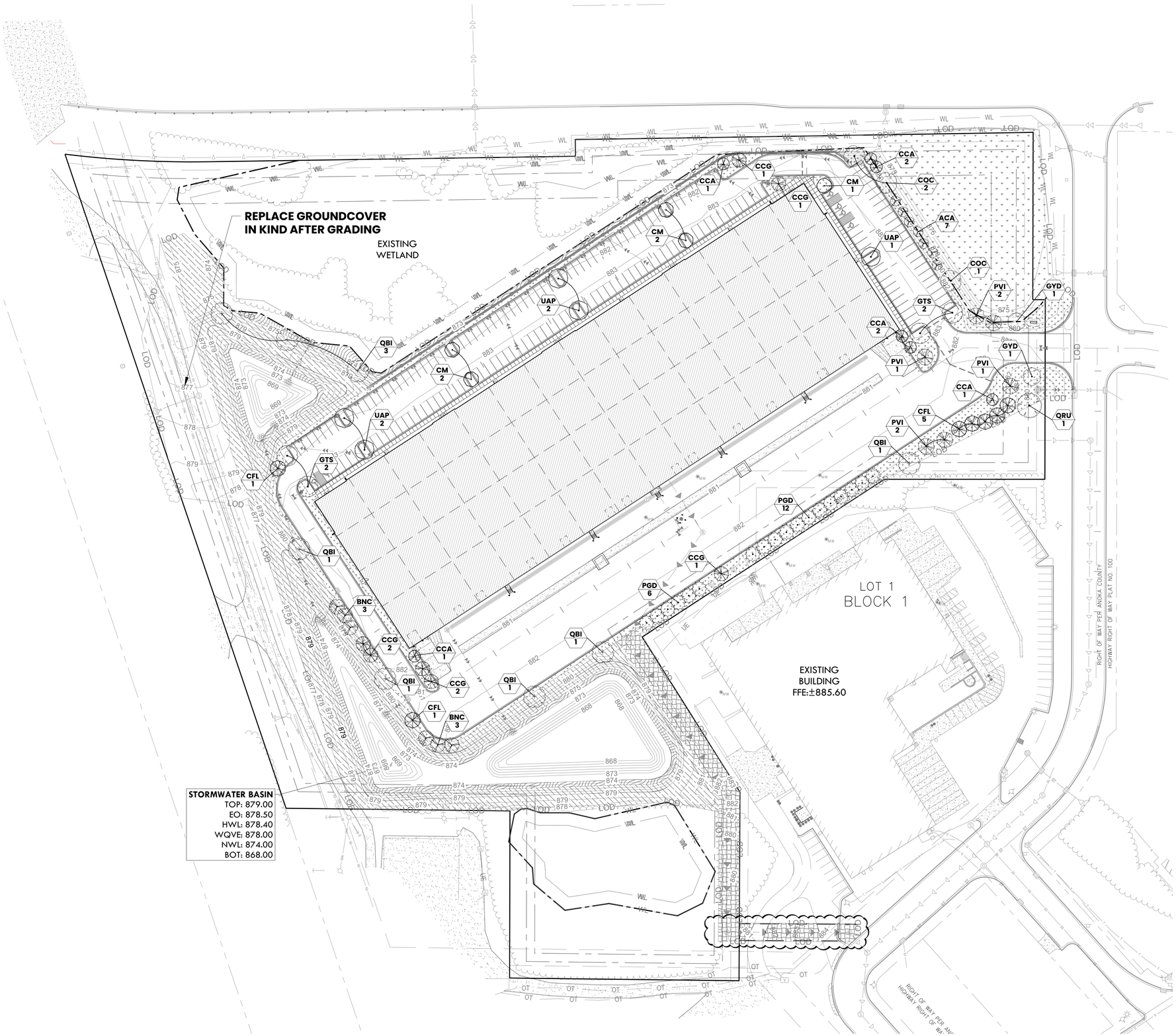
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Sheet Title: **MISC DETAILS**

Sheet: **C8.7**

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LEGEND

PROPOSED

- PROPERTY BOUNDARY
- SETBACK LINE
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- EASEMENT
- CURB AND GUTTER
- WATER MAIN
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- STORM SEWER
- FLARED END SECTION
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- TREE PROTECTION FENCE
- RETAINING WALL (BY OTHERS)
- SIGN
- LIGHT POLE

- HEAVY DUTY BITUMINOUS PAVEMENT
- LIGHT DUTY BITUMINOUS PAVEMENT
- CONCRETE SIDEWALK
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LANDSCAPE REQUIREMENTS

LANDSCAPING REQUIRED:	REQUIRED	PROPOSED
STREET FRONTAGE (120 LF)		
1 OVERSTORY TREE PER 40 LF:	3	3
1 DECIDUOUS AND 1 CONFIEROUS SHRUB PER 5 LF:	24	27
OPEN YARD (41,002 SF)		
1 OVERSTORY TREE PER 3,000 SF:	14	17
1 ORNAMENTAL TREE PER 1,500 SF:	28	34
1 EVERGREEN TREE PER 3,000 SF:	14	18
1 DECIDUOUS/EVERGREEN SHRUB PER 100 SF:	410	454
PARKING LOT (57,604 SF)		
3% OF PARKING AREA CONTAIN LANDSCAPE ISLANDS:	1,729 SF	2,418 SF (4.2%)

PLANT SCHEDULE

SYMBOL	CODE	COMMON / BOTANICAL NAME	SIZE	TYPE	QTY
TREES					
	UAP	AMERICAN ELM / ULMUS AMERICANA 'PRINCETON'	2.5" CAL.	B&B	5
	CM	ARMSTRONG FREEMAN MAPLE / ACER X FREEMANII 'ARMSTRONG'	B & B	2.5"CAL	5
	COC	COMMON HACKBERRY / CELTIS OCCIDENTALIS	2.5" CAL.	B&B	3
	BNC	HERITAGE BIRCH / BETULA NIGRA 'CULLY' TM	2.5" CAL.	B&B	6
	QRU	RED OAK / QUERCUS RUBRA	2.5" CAL.	B&B	1
	GTS	SKYLINE HONEY LOCUST / GLEDITSIA TRIACANTHOS 'SKYLINE'	2.5" CAL.	B&B	4
	QBI	SWAMP WHITE OAK / QUERCUS BICOLOR	2.5" CAL.	B&B	8
	GYD	TRUE NORTH™ KENTUCKY COFFEETREE / GYMNOCLADUS DIOICUS 'UMNYNERGY'	2.5" CAL.	B&B	2
		SUBTOTAL:			34
CONIFERS					
	PGD	BLACK HILLS SPRUCE / PICEA GLAUCA DENSATA	6' HT.	B&B	18
		SUBTOTAL:			18
ORN. TREES					
	ACA	AUTUMN BRILLIANCE SERVICEBERRY / AMELANCHIER CANADENSIS 'AUTUMN BRILLIANCE'	2" CAL.	B&B	7
	PVI	CHOKECHERRY / PRUNUS VIRGINIANA	2" CAL.	B&B	6
	CCA	EASTERN REDBUD / CERCIS CANADENSIS	2" CAL.	B&B	7
	CFL	FLOWERING DOGWOOD / CORNUS FLORIDA	2" CAL.	B&B	7
	CCG	THORNLESS HAWTHORN / CRATAEGUS CRUS-GALLI 'INERMIS'	2" CAL.	B&B	7
		SUBTOTAL:			34
SYMBOL		COMMON / BOTANICAL NAME			
GROUND COVERS					
		FORMERLY MNDOT SEED MIX 25-131 / MNDOT SEED MIX SOUTHERN BOULEVARD			
		FORMERLY MNDOT SEED MIX 33-261 / MNDOT SEED MIX WET DITCH			
		FORMERLY MNDOT SEED MIX 35-241/36-211 / MNDOT SEED MIX SOUTHERN TALLGRASS ROADSIDE			
		PER WETLAND REPLACEMENT PLAN / WETLAND MITIGATION AREA			
		SOD / TURF SOD HIGHLAND SOD			

0 60 120
SCALE IN FEET

measure

Client:
UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:
RIVER NORTH INDUSTRIAL CENTER
COON RAPIDS, MINNESOTA

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

NOT FOR CONSTRUCTION

Joshua J McKinney, PLA
Date: XX.XX.XX Lic. No.: 53234

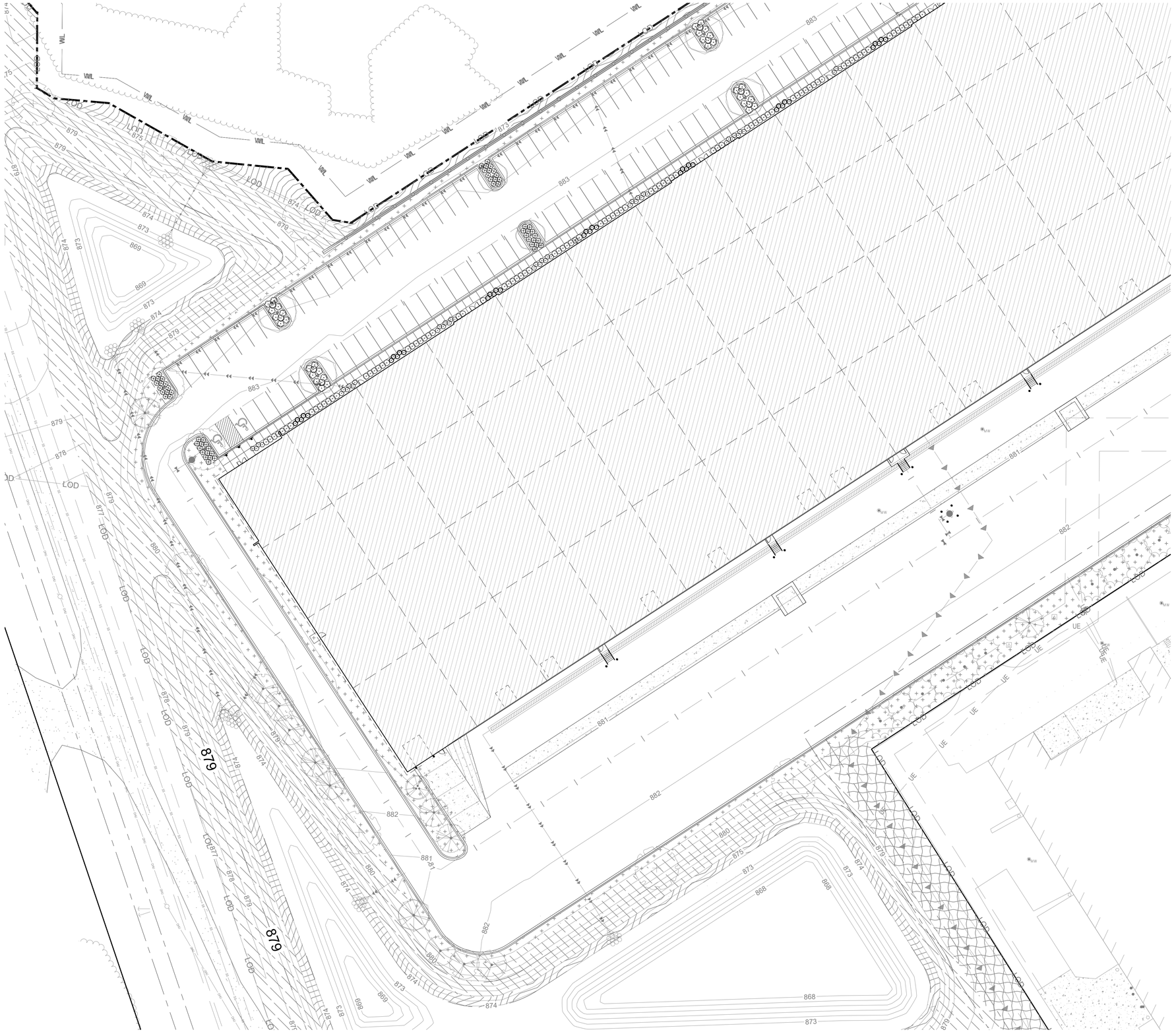
Rev.	Date	Description
	5/11/2026	CITY SUBMITTAL
	5/21/2026	PRICING REV.
	6/10/2026	CCWD SUBMITTAL
	6/23/2026	CCWD COMMENTS

Project #: 26-106
Drawn By: JW
Checked By: PM /JM
Issue Date: 5/11/2026

Sheet Title:
LANDSCAPE PLAN

Sheet:
L1.0

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PLANT SCHEDULE

SHRUB SCHEDULE

SYMBOL	CODE	COMMON / BOTANICAL NAME	SIZE	QTY
SHRUBS				
	AJ	ANDORRA COMPACT JUNIPER / JUNIPERUS HORIZONTALIS 'COMPACTA'	5 GAL	9
	VDC	BLUE MUFFIN® ARROWWOOD VIBURNUM / VIBURNUM DENTATUM 'CHRISTOM'	5 GAL	18
	DLO	DWARF BUSH HONEYSUCKLE / DIERVILLA LONICERA	5 GAL	84
	SBK	FIRST EDITIONS® CANDY™ SNOWBERRY / SYMPHORICARPOS X DOORENBOSII 'KOLMCAN'	5 GAL	60
	RAG	GRO-LOW FRAGRANT SUMAC / RHUS AROMATICA 'GRO-LOW'	5 GAL	70
	MP	MCKAY'S WHITE BUSH CINQUEFOIL / POTENTILLA FRUTICOSA 'MCKAY'S WHITE'	5 GAL	88
	TN	TINY WINE NINEBARK / PHYSOCARPUS OPULIFOLIUS 'SMPOTW'	5 GAL	161
		SUBTOTAL:		490

0 30 60
SCALE IN FEET

measure

Client:

UNITED PROPERTIES
250 NICOLLET MALL SUITE 500
MINNEAPOLIS, MINNESOTA 55401

Project Title:

RIVER NORTH INDUSTRIAL CENTER

COON RAPIDS, MINNESOTA

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Sheet Title:

SHRUB PLAN - WEST

Sheet:

L1.1

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LEGEND

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PLANT SCHEDULE

SHRUB SCHEDULE

SYMBOL	CODE	COMMON / BOTANICAL NAME	SIZE	QTY
SHRUBS				
	AJ	ANDORRA COMPACT JUNIPER / JUNIPERUS HORIZONTALIS 'COMPACTA'	5 GAL	9
	VDC	BLUE MUFFIN® ARROWWOOD VIBURNUM / VIBURNUM DENTATUM 'CHRISTOM'	5 GAL	18
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	SBK	FIRST EDITIONS® CANDY™ SNOWBERRY / SYMPHORICARPOS X DOORENBOSII 'KOLMCAN'	5 GAL	60
	RAG	GRO-LOW FRAGRANT SUMAC / RHUS AROMATICA 'GRO-LOW'	5 GAL	70
	MP	MCKAY'S WHITE BUSH CINQUEFOIL / POTENTILLA FRUTICOSA 'MCKAY'S WHITE'	5 GAL	88
	TN	TINY WINE NINEBARK / PHYSOCARPUS OPULIFOLIUS 'SMPOTW'	5 GAL	161
		SUBTOTAL:		490

LOT 1
BLOCK 1

0 30 60
SCALE IN FEET

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measure

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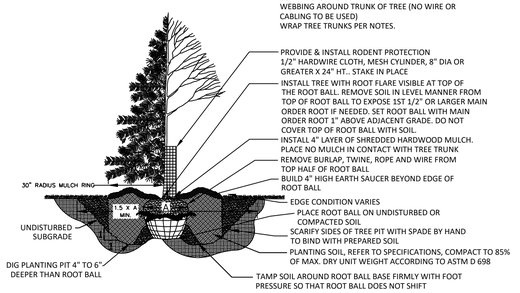
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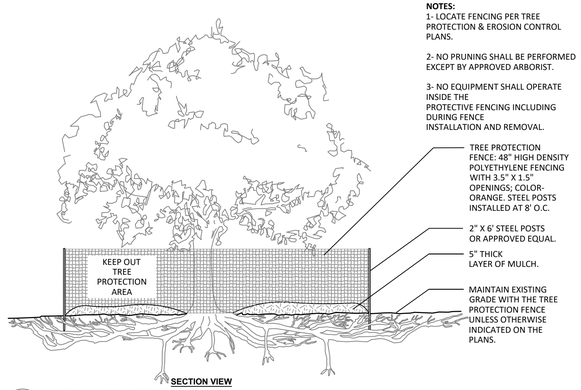
Sheet Title:
SHRUB PLAN - EAST

Sheet:
L1.2



1 L2.0 **TREE PLANTING DETAIL**

NOT TO SCALE



2 L2.0 **TREE PROTECTION DETAIL**

NOT TO SCALE

PLANTING NOTES

1. NO PLANTS SHALL BE INSTALLED UNTIL FINAL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
2. ALL PLANTING STOCK SHALL CONFORM TO THE "AMERICAN STANDARD FOR NURSERY STOCK," ANSI-Z60, LATEST EDITION, OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIALS.
3. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE AND BE CONTAINER GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE LANDSCAPE LEGEND.
4. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
5. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANTS WHICH ARE DEEMED UNSATISFACTORY BEFORE, DURING, OR AFTER INSTALLATION.
6. NO SUBSTITUTIONS OF PLANT MATERIAL SHALL BE ACCEPTED UNLESS APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.
7. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MULCHES AND PLANTING SOIL QUANTITIES TO COMPLETE THE WORK SHOWN ON THE PLAN.
9. ALL PLANTS SHALL BE GUARANTEED FOR TWO COMPLETE GROWING SEASONS (APRIL 1 - NOVEMBER 1), UNLESS OTHERWISE SPECIFIED. THE GUARANTEE SHALL COVER THE FULL COST OF REPLACEMENT INCLUDING LABOR AND PLANTS.
10. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 3 DAYS PRIOR TO PLANNED DELIVERY. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AT LEAST 24 HOURS IN ADVANCE OF BEGINNING PLANT INSTALLATION.
11. SEASONS/TIME OF PLANTING AND SEEDING: NOTE: THE CONTRACTOR MAY ELECT TO PLANT IN OFF-SEASONS ENTIRELY AT HIS/HER RISK.
    - 11.1. DECIDUOUS /B&B: 4/1 - 6/1; 9/21 - 11/1
    - 11.2. EVERGREEN B&B: 4/1 - 5/1; 9/21 - 11/1

GROUNDCOVER INSTALLATION NOTES

MAINTAINED TURF NOTES:

TURF ESTABLISHMENT SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE PROVISIONS OF THE MN/DOT 2105 AND 2575 EXCEPT AS MODIFIED BELOW:

1. ALL AREAS TO RECEIVE SOD SHALL ALSO RECEIVE 6" OF TOPSOIL PRIOR TO INSTALLING SOD. TOPSOIL SHALL BE FREE OF TREE ROOTS, STUMPS, BUILDING MATERIAL, AND TRASH, AND SHALL BE FREE OF STONES LARGER THAN 1 ½" INCHES IN ANY DIMENSION.
2. WHERE SOD ABUTS PAVED SURFACES, FINISHED GRADE OF SOD/SEED SHALL BE HELD 1" BELOW SURFACE ELEVATION OF TRAIL, SLAB, CURB, ETC.
3. SOD SHALL BE LAID PARALLEL TO THE CONTOURS AND SHALL HAVE STAGGERED JOINTS. ON SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES, SOD SHALL BE STAKED SECURELY.
4. TURF ON ALL OTHER AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED BY SEEDING, MULCHING AND FERTILIZING. SEED MIXTURES HALL BE APPLIED PER THE APPLICATION RATES FOUND IN THE TABLES ABOVE.
5. ALL DISTURBED AREAS TO BE TURF SEEDED, ARE TO RECEIVE 6" TOP SOIL, SEED, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. FOR SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES INSTALL EROSION CONTROL BLANKET.
6. ALL DISTURBED AREAS TO RECEIVE NATIVE SEED, ARE TO RECEIVE PLANTING SOIL, SEED, MULCH, AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. FOR SLOPES STEEPER THAN 3:1 OR IN DRAINAGE SWALES INSTALL EROSION CONTROL BLANKET.

LOW MAINTENANCE TURF NOTES:

1. DURING GROWING SEASON NEVER MOW SHORTER THAN 3.5 INCHES, PREFERRED MAINTENANCE IS MOW ONCE PER MONTH AT 5" HEIGHT
2. DO NOT USE HIGH NITROGEN FERTILIZER
3. OVERSEED THIN,BARE SPOTS IN FALL
4. SET MOWER TO 3" FOR BAGGING AND MOWING IN LATE FALL AFTER GROWING SEASON
5. IF SEEDED OUTSIDE OF SUMMER MONTHS, A COVER CROP OF WINTER WHEAT.

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measure

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L2.0