

CITY OF MANKATO

BASSETT DRIVE EXTENSION

MANKATO, MINNESOTA

CONSTRUCTION PLANS

ISG PROJECT # 25-32569



SHEET INDEX

- 1 TITLE
- 2 LEGENDS AND NOTES
- 3 TYPICAL DETAILS
- 4 TYPICAL DETAILS
- 5 SWPPP NARRATIVE AND QUANTITIES
- 6 SWPPP NARRATIVE AND QUANTITIES
- 7 SWPPP DETAILS
- 8 SWPPP DETAILS
- 9 PRE- CONSTRUCTION SWPPP
- 10 SWPPP
- 11 EXISTING SITE AND REMOVAL PLAN
- 12 OVERALL EXISTING SITE
- 13 OVERALL SITE PLAN
- 14 INTERSECTION PLAN
- 15 OVERALL UTILITY PLAN
- 16 UTILITY PROFILES
- 17 PLAN AND PROFILE
- 18 PLAN AND PROFILE
- 19 PLAN AND PROFILE
- 20 OVERALL GRADING PLAN
- 21 DETAILED GRADING PLAN
- 22 DETAILED GRADING PLAN
- 23 DETAILED GRADING PLAN
- 24 PAVEMENT MARKING PLAN
- 25 CROSS SECTIONS
- 26 CROSS SECTIONS
- 27 CROSS SECTIONS
- 28 CROSS SECTIONS
- 29 TURF RESTORATION AND PLANTING PLAN
- 30 LIGHTING PLAN
- 31 LIGHTING DETAILS AND WIRING DIAGRAM

PROJECT GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE CONTRACT DOCUMENTS, WHICH INCLUDE, BUT ARE NOT LIMITED TO, THE OWNER - CONTRACTOR AGREEMENT, THE PROJECT MANUAL (WHICH INCLUDES GENERAL SUPPLEMENTARY CONDITIONS AND SPECIFICATIONS), DRAWINGS OF ALL DISCIPLINES AND ALL ADDENDA, MODIFICATIONS, AND CLARIFICATIONS ISSUED BY ARCHITECT/ENGINEER.
2. CONTRACT DOCUMENTS SHALL BE ISSUED TO ALL SUBCONTRACTORS BY THE GENERAL CONTRACTOR IN COMPLETE SETS IN ORDER TO ACHIEVE THE FULL EXTENT AND COMPLETE COORDINATION OF ALL WORK.
3. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
4. FIELD VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS. NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES OR CONDITIONS REQUIRING INFORMATION OR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
5. DETAILS SHOWN ARE INTENDED TO BE INDICATIVE OF THE PROFILES AND TYPE OF DETAILING REQUIRED THROUGHOUT THE WORK. DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO DETAILS SHOWN, WHERE SPECIFIC DIMENSIONS, DETAILS, OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
6. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, CLEANED, AND CONDITIONED ACCORDING TO MANUFACTURERS' INSTRUCTIONS. IN CASE OF DISCREPANCIES BETWEEN MANUFACTURERS' INSTRUCTIONS AND THE CONTRACT DOCUMENTS, NOTIFY ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
7. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO AVOID GALVANIC CORROSION.
8. THE LOCATION AND TYPE OF ALL EXISTING UTILITIES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY AND ARE ACCURATE AND COMPLETE TO THE BEST OF THE KNOWLEDGE OF I & S GROUP, INC. (ISG). NO WARRANTY OR GUARANTEE IS IMPLIED. THE CONTRACTOR SHALL VERIFY THE SIZES, LOCATIONS, AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES OR VARIATIONS FROM PLAN.
9. THE CONTRACTOR IS TO CONTACT "GOPHER STATE ONE CALL" FOR UTILITY LOCATIONS A MINIMUM OF 2 BUSINESS DAYS PRIOR TO ANY EXCAVATION / CONSTRUCTION (1-800-252-1166).

CERTIFICATIONS

CITY ENGINEER

DATE:

PROJECT INDEX:

OWNER:
CITY OF MANKATO
10 CIVIC CENTER PLAZA
MANKATO, MINNESOTA, 56001
PHONE:

PROJECT ADDRESS / LOCATION:

BASSETT DRIVE

MANKATO, MINNESOTA

MANAGING OFFICE:
I & S GROUP, INC. (ISG)

MANKATO OFFICE
115 EAST HICKORY STREET
SUITE 300
MANKATO, MN 56001
PHONE: 507.387.6651

PROJECT MANAGER: KYLE RENNEKE
EMAIL: KYLE.RENNKE@ISGINC.COM



SPECIFICATIONS REFERENCE

ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF MANKATO REQUIREMENTS AND MnDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2020 EDITION, THE STANDARD SPECIFICATIONS FOR SANITARY SEWER, STORM DRAIN AND WATERMAIN AS PROPOSED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA, 2023 EDITION, AND THE CURRENT VERSION OF THE MINNESOTA STATE PLUMBING CODE UNLESS DIRECTED OTHERWISE.

PROJECT DATUM

HORIZONTAL COORDINATES HAVE BEEN REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), 1996 ADJUSTMENT (NAD83(1996)) ON THE BLUE EARTH COUNTY COORDINATE SYSTEM, IN U.S. SURVEY FEET.

ELEVATIONS HAVE BEEN REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88). RTK GPS METHODS WERE USED TO ESTABLISH HORIZONTAL AND VERTICAL COORDINATES FOR THIS PROJECT.

B.M. ELEVATION=1018.59
TOP NUT OF FIRE HYDRANT

TOPOGRAPHIC SURVEY

THIS PROJECT'S TOPOGRAPHIC SURVEY CONSISTS OF DATA COLLECTED IN APRIL 2025 BY ISG.



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

KYLE J. RENNEKE
DATE: 06/27/25 LIC. NO. 52626

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PROJECT

CITY OF MANKATO

BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-CO-GENERAL
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

TITLE

SHEET

1

OF 31

SYMBOL LEGEND		
EXISTING		PROPOSED
	STORM MANHOLE	
	STORM CATCH BASIN	
	STORM CLEANOUT	
	STORM CULVERT	
	DOWNSPOUT	
	ROOF DRAIN	
	SANITARY MANHOLE	
	SANITARY CLEANOUT	
	LIFT STATION	
	WATER REDUCER	
	WATER VALVE	
	WATER VALVE MAHOLE	
	WATER CURB STOP	
	WATER SHUT-OFF	
	POST INDICATOR VALVE	
	FIRE DEPARTMENT CONNECTION	
	WELL	
	MONITORING WELL	
	LAWN SPRINKLER BOX	
	LAWN SPRINKLER HEAD	
	HYDRANT	
	YARD HYDRANT	
	UTILITY POLE	
	LIGHT POLE	
	GROUND LIGHT	
	GUY WIRE	
	TRANSFORMER	
	HANDHOLE	
	ELECTRIC MANHOLE	
	ELECTRIC METER	
	UTILITY VAULT	
	AIR CONDITIONER	
	GAS METER	
	GAS VALVE	
	SOIL BORING	
	FLAG POLE	
	MAILBOX	
	TRAFFIC SIGNAL	
	SIGN	
	STREET SIGN	
	WHEEL STOP	
	RAILROAD CROSSING SIGN	
	POST	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
	BUSH	
	TREE STUMP	
	WETLAND / MARSH	
	ROCK / BOULDER	
NOTE: CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.		

EXISTING		PROPOSED
	STORM DRAIN	
	SANITARY SEWER	
	SANITARY SEWER FORCEMAIN	
	WATER MAIN	
	GAS	
	OVERHEAD ELECTRIC	
	UNDERGROUND ELECTRIC	
	UNDERGROUND TELEPHONE	
	UNDERGROUND TV	
	OVERHEAD UTILITY	
	UNDERGROUND UTILITY	
	FIBER OPTIC	
	WETLAND	
	WATER EDGE	
	DITCH / SWALE	
	FENCE LINE	
	TREE LINE	
	PROPERTY / LOT LINE	
	RIGHT OF WAY LINE	
	ACCESS CONTROL	
	EASEMENT LINE	
NOTE: CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.		

ABBREVIATIONS					
ADA	AMERICANS WITH DISABILITIES ACT	GC	GENERAL CONTRACTOR	PSI	POUNDS PER SQUARE INCH
ADD	ADDENDUM	GFE	GARAGE FLOOR ELEVATION	PVC	POLYVINYL CHLORIDE
AFF	ABOVE FINISHED FLOOR	GL	GUTTER LINE	PVMT	PAVEMENT
AGG	AGGREGATE	GPM	GALLONS PER MINUTE	QTY	QUANTITY
APPROX	APPROXIMATE	GV	GATE VALVE	R	RIM
ARCH	ARCHITECT, ARCHITECTURAL	HDPE	HIGH DENSITY POLYETHYLENE	RAD	RADIUS
BFE	ELEVATION	HD	HEAVY DUTY	RCP	REINFORCED CONCRETE PIPE
BIT	BITUMINOUS	HH	HANDHOLE	RD	ROOF DRAIN
BLDG	BUILDING	HMA	HOT MIX ASPHALT	REBAR	REINFORCING BAR
BM	BENCHMARK	HORIZ	HORIZONTAL	REM	REMOVE
CAD	COMPUTER-AIDED DESIGN	HR	HOUR	ROW	RIGHT OF WAY
CB	CATCH BASIN	HWL	HIGH WATER LEVEL	RW	RIGHT OF WAY
CFS	CUBIC FEET PER SECOND	HWY	HIGHWAY	SAN	SANITARY
CF	CUBIC FOOT	HYD	HYDRANT	SCH	SCHEDULE
CI	CAST IRON	I	INVERT	SF	SQUARE FOOT
CIP	CAST IRON PIPE	ID	INSIDE DIAMETER	SG	SPECIFICATION
CIPC	CAST IN PLACE CONCRETE	IN	INCH	STA	SQUARE
CJ	CONTROL JOINT	INV	INVERT	STM	STORM
CL	CENTERLINE	IP	IRON PIPE	SY	SQUARE YARD
CMP	CORRUGATED METAL PIPE	IPS	IRON PIPE SIZE	T/C	TOP OF CURB
CO	CLEANOUT	J-BOX	JUNCTION BOX	TEL	TELEPHONE
CONC	CONCRETE	JT	JOINT	TEMP	TEMPORARY
CONST	CONSTRUCTION	LF	LINEAR FEET	THRU	THROUGH
CONT	CONTINUOUS	LN	LINEAR	TNFB	TOP NUT OF FIRE HYDRANT
CR	COUNTY ROAD	LPS	LOW PRESSURE	TRANS	TRANSFORMER
CY	CUBIC YARD	LS	STEAM LUMP SUM LOWEST	TV	TELEVISION
C&G	CURB AND GUTTER	LSO	STRUCTURAL OPENING	T/W	TOP OF WALL
DEMO	DEMOLITION	MAX	MAXIMUM	TYP	TYPICAL
DI	DROP INTAKE	MB	MAIL BOX	UT	UTILITY, UNDERGROUND TELEPHONE
DIA	DIAMETER	MECH	MECHANICAL	VCP	VITRIFIED CLAY PIPE
DIM	DIMENSION	MH	MANHOLE	W/O	WITHOUT
DS	DOWNSPOUT	MIN	MINIMUM	W/	WITH
EA	EACH	MISC	MISCELLANEOUS	YD	YARD
ELEC	ELECTRICAL	NO	NUMBER	YR	YEAR
ELEV	ELEVATION	NTS	NOT TO SCALE		
EOF	EMERGENCY OVERFLOW	NWL	NORMAL WATER LEVEL		
EQ	EQUAL	OC	ON CENTER		
EX	EXISTING	OCEW	ON CENTER EACH WAY		
F/G	FORM GRADE	OH	OVERHEAD		
FDC	FIRE DEPARTMENT CONNECTION	OHWL	ORDINARY HIGH WATER LEVEL		
FDN	FOUNDATION	OHD	OVERHEAD DOOR		
FES	FINISHED FLOOR SECTION	OZ	OUNCE		
FFE	ELEVATION	PCC	PORTLAND CEMENT CONCRETE		
FPM	FEET PER MINUTE	PED	PEDESTAL, PEDESTRIAN		
FPS	FEET PER SECOND	PERF	PERFORATED		
FT	FOOT, FEET	PL	PROPERTY LINE		
FTG	FOOTING	PP	POLYPROPYLENE		
GA	GAUGE				
GAL	GALLON				
GALV	GALVANIZED				



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PROJECT

CITY OF MANKATO

BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

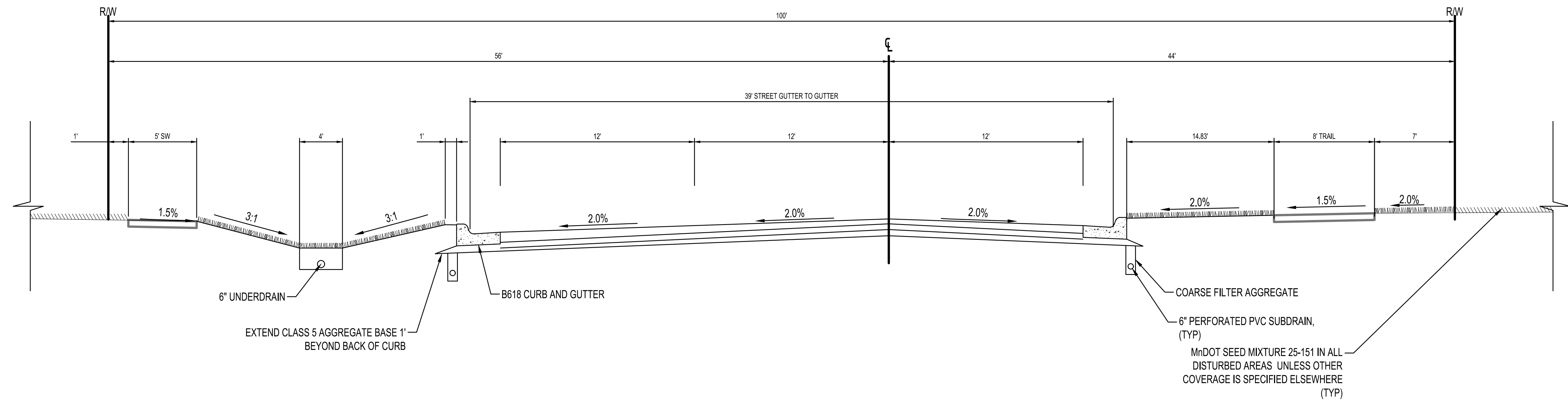
REVISION SCHEDULE		
DATE	DESCRIPTION	BY

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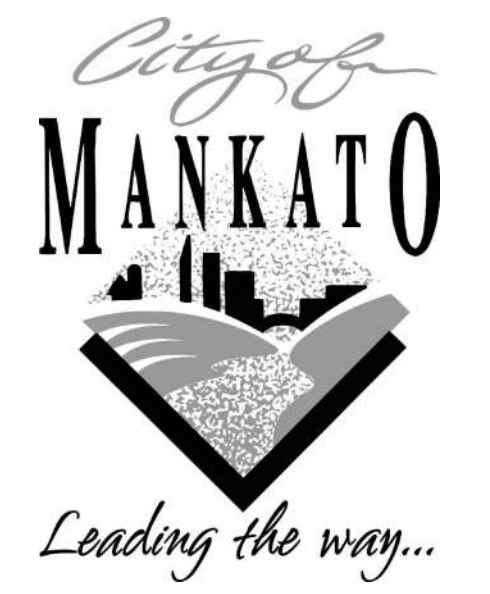
TITLE

LEGENDS AND NOTES

SHEET



TYPICAL STREET SECTION
NTS



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CITY OF
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BASSETT DRIVE
EXTENSION

MANKATO MINNESOTA

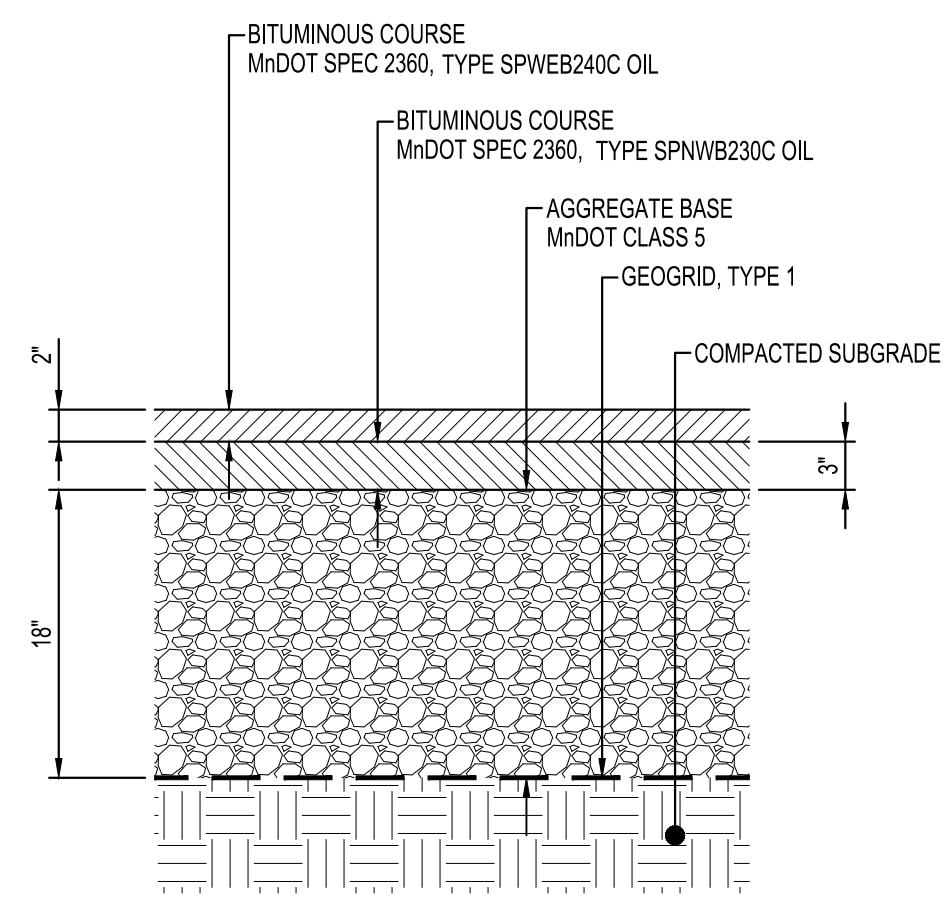
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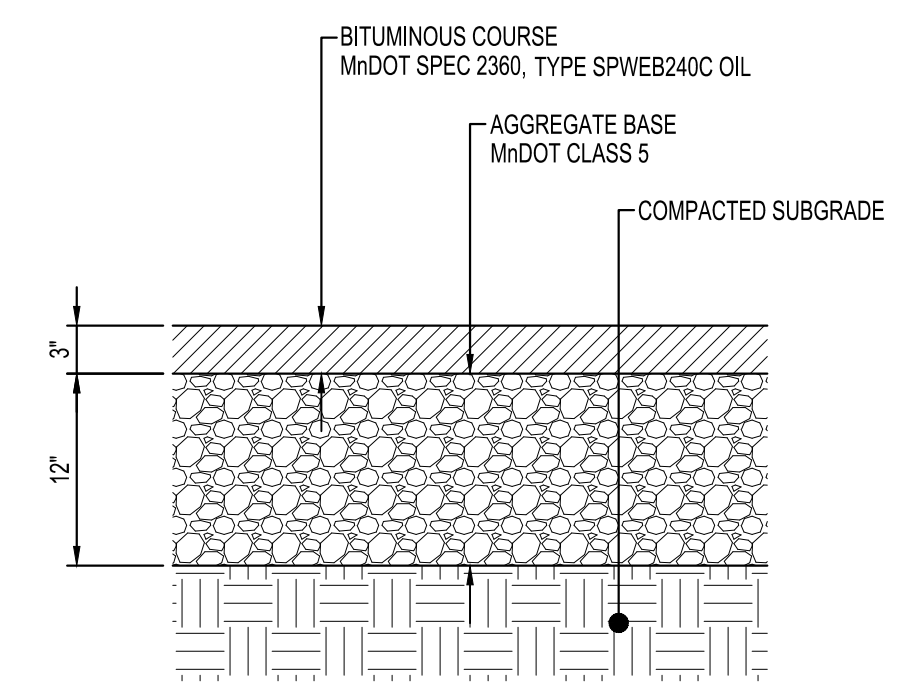
TITLE

TYPICAL DETAILS

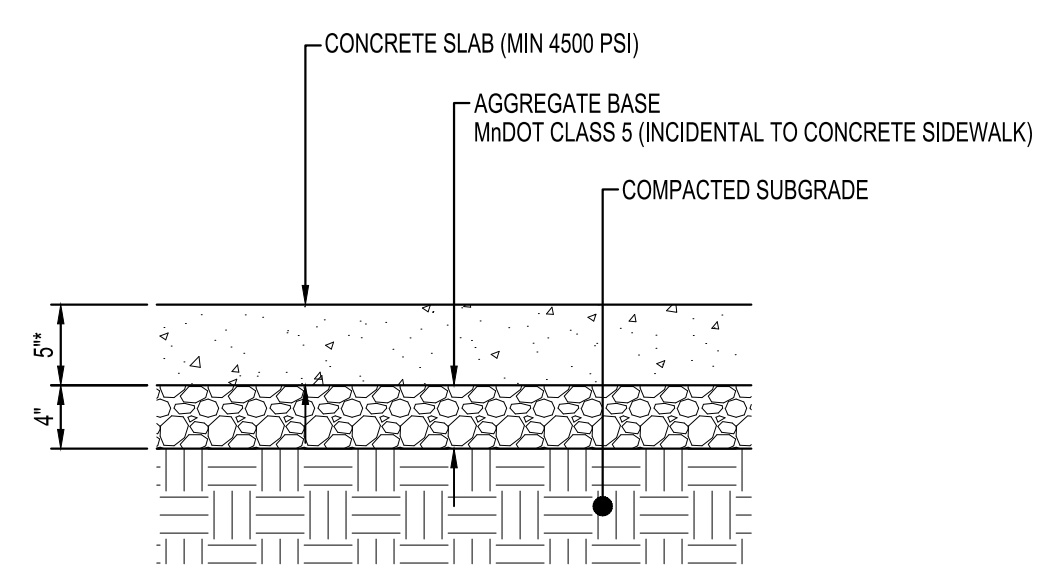
SHEET



STANDARD
BITUMINOUS PAVEMENT
NTS



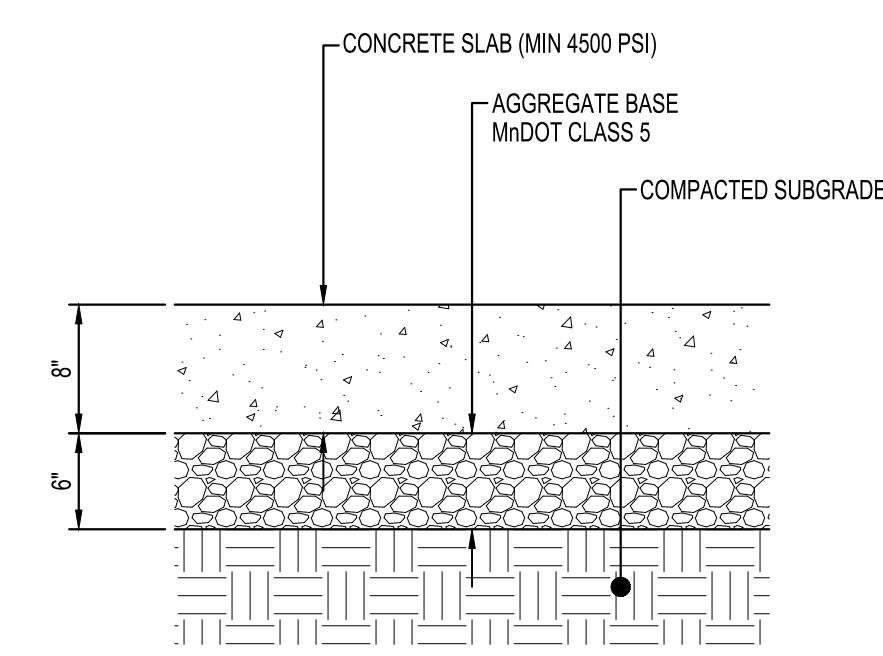
TEMPORARY
BITUMINOUS PAVEMENT
(CUL DE SAC SIDES)
NTS



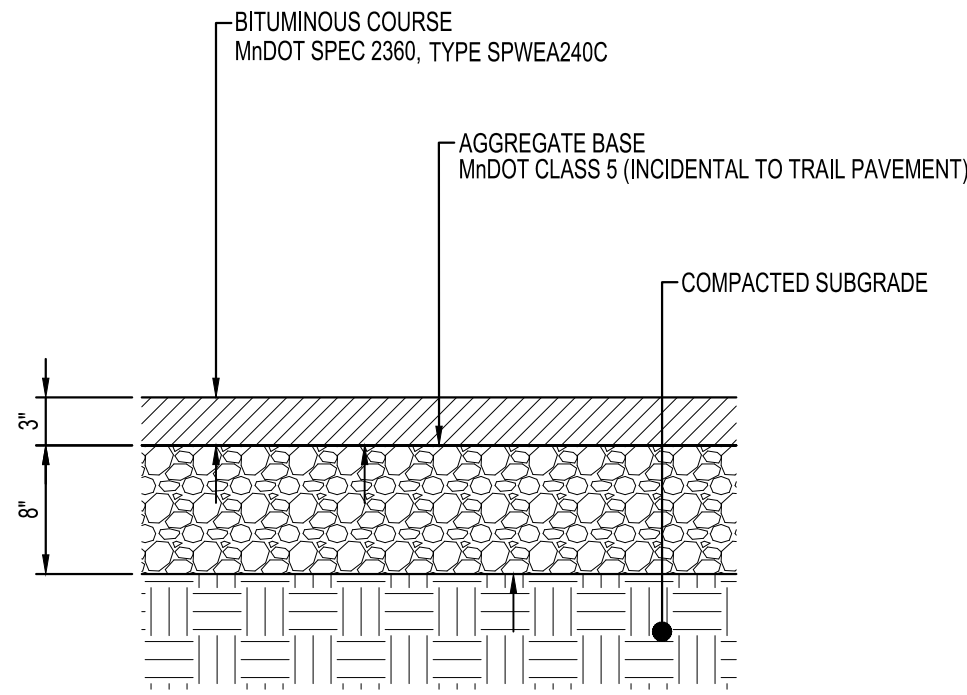
NOTE:

1. * 6" FOR PEDESTRIAN RAMP LOCATIONS

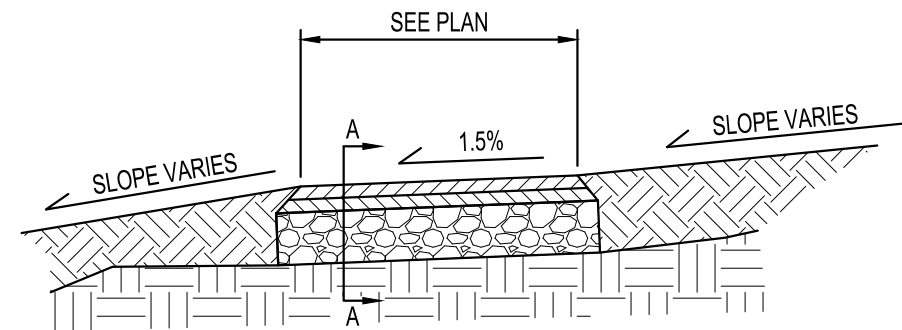
CONCRETE SIDEWALK
NTS



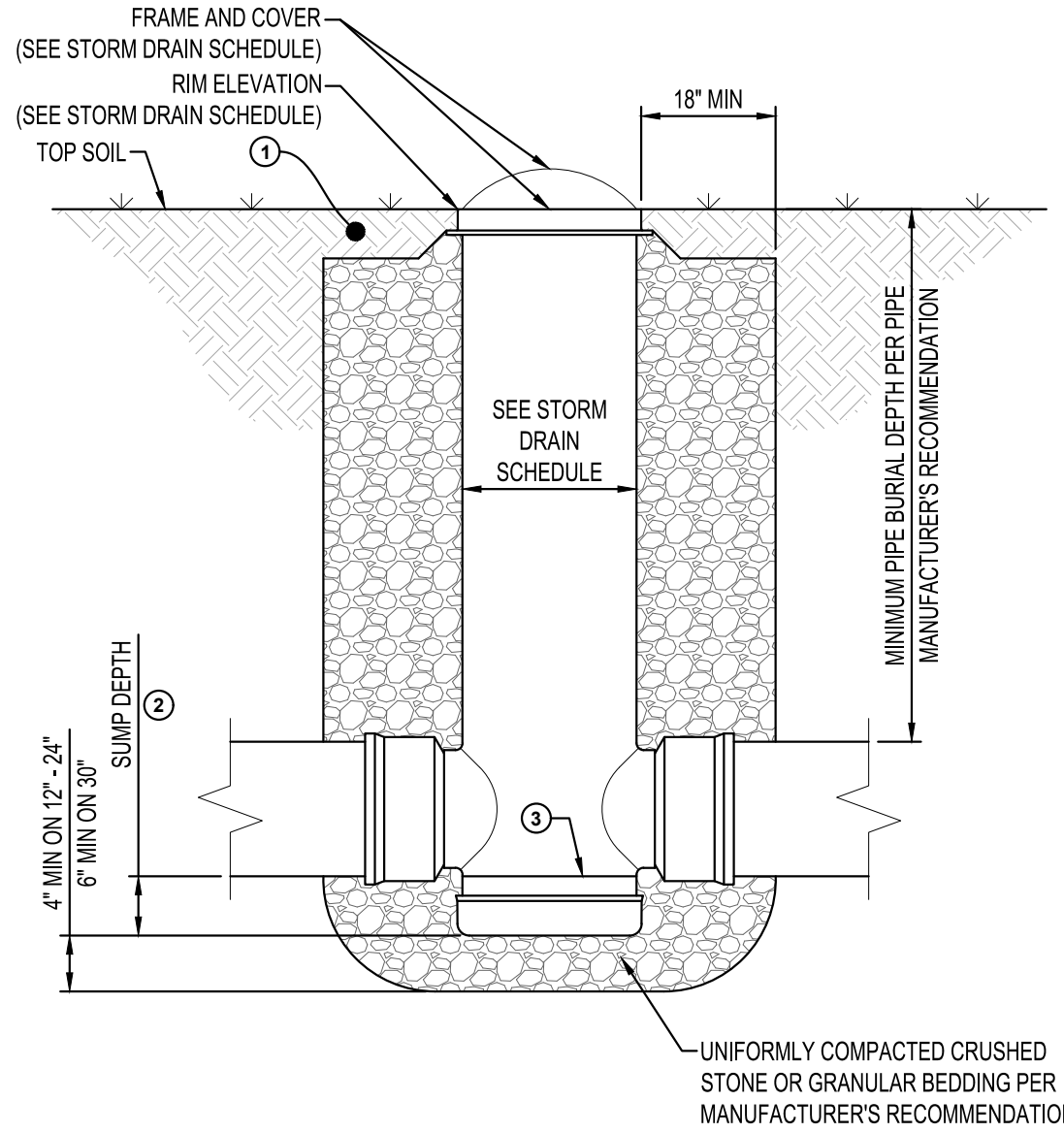
CONCRETE DRIVEWAY
NTS



SECTION A-A



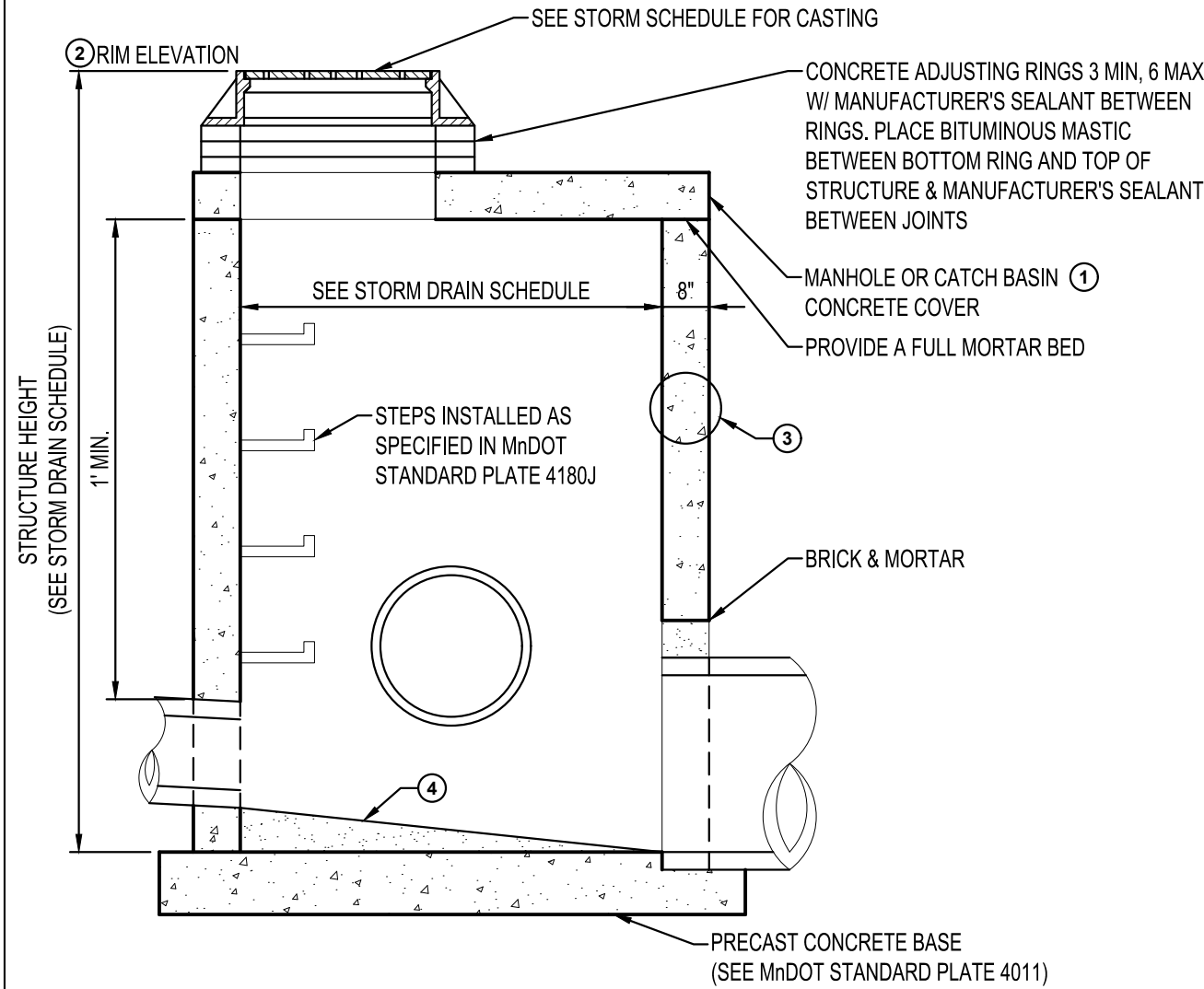
TYPICAL TRAIL SECTION
NTS



KEY NOTES:

- 1 IF ASPHALT PAVEMENT, TOP OF CONCRETE COLLAR SHOULD BE SET AT BOTTOM OF NON-WEAR COURSE.
- 2 6" MIN ON 8" - 24" DRAIN BASIN, 10" MIN ON 30" DRAIN BASIN. VERIFY WITH MANUFACTURER'S RECOMMENDATIONS.
- 3 INVERT ELEVATION (SEE STORM DRAIN SCHEDULE)

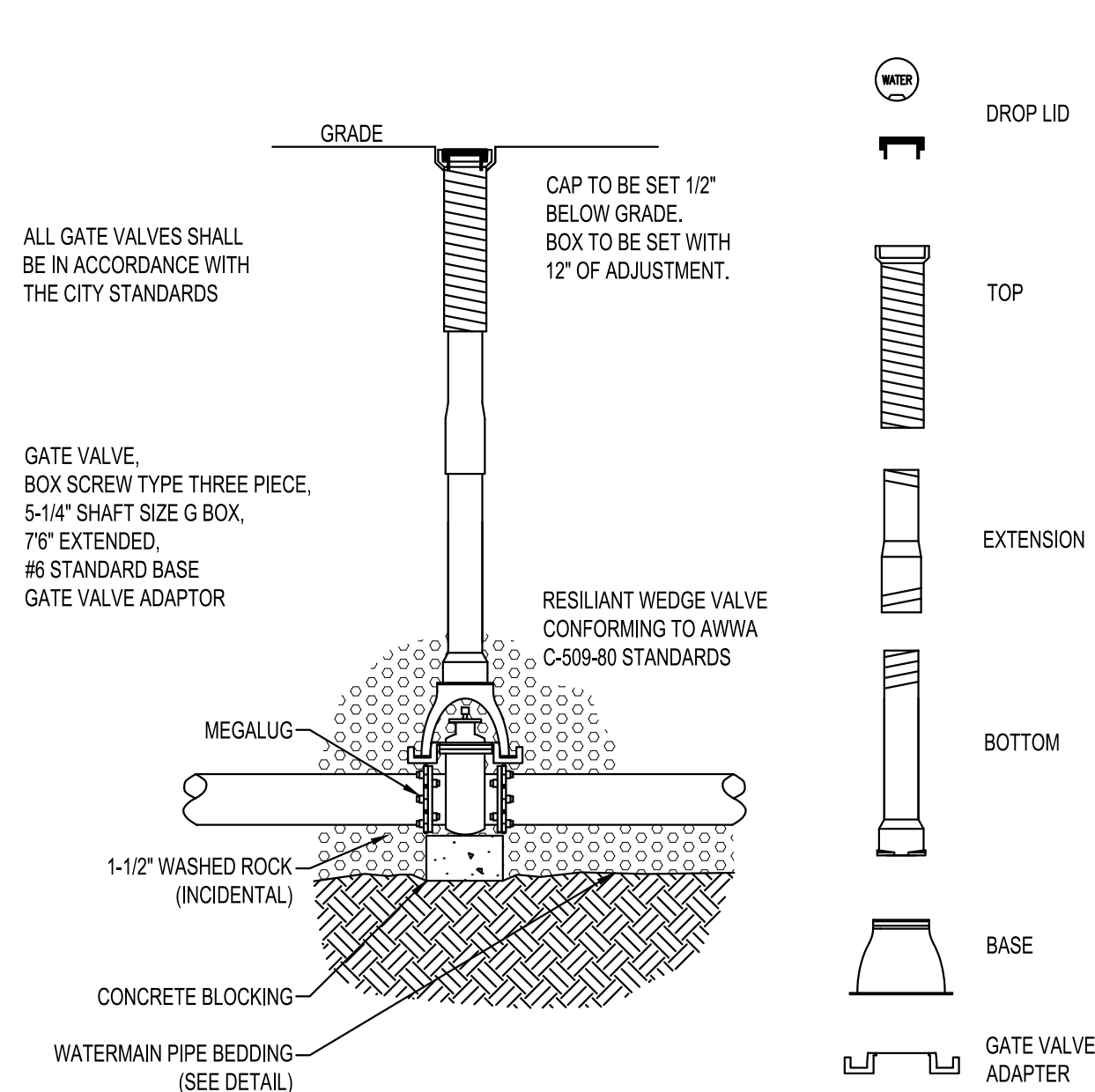
DRAIN BASIN IN TURF
NTS



KEY NOTES:

- 1 WHEN USED AS A CATCH BASIN AND REQUIRING A RECTANGULAR OPENING, USE 4022 CONCRETE COVER.
- 2 WHEN REFERRING TO A CURB CATCH BASIN, USE TOP BACK OF CURB ELEVATION.
- 3 WALL CONSTRUCTION MAY BE: CLASS II PRECAST PIPE (MnDOT STANDARD PLATE 3000); CAST IN PLACE CONCRETE MEETING THE REQUIREMENTS OF CLASS II PIPE; OR MASONRY CONSTRUCTION, BRICK OR BLOCK (MnDOT STANDARD PLATE 4000).
- 4 PROVIDE MORTAR FILLETS TO FIT BOTTOM PORTIONS OF PIPE TO DIRECT FLOW TO OUTLET.

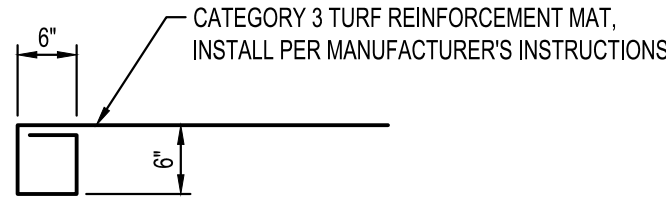
4020
MANHOLE OR CATCH BASIN
NTS



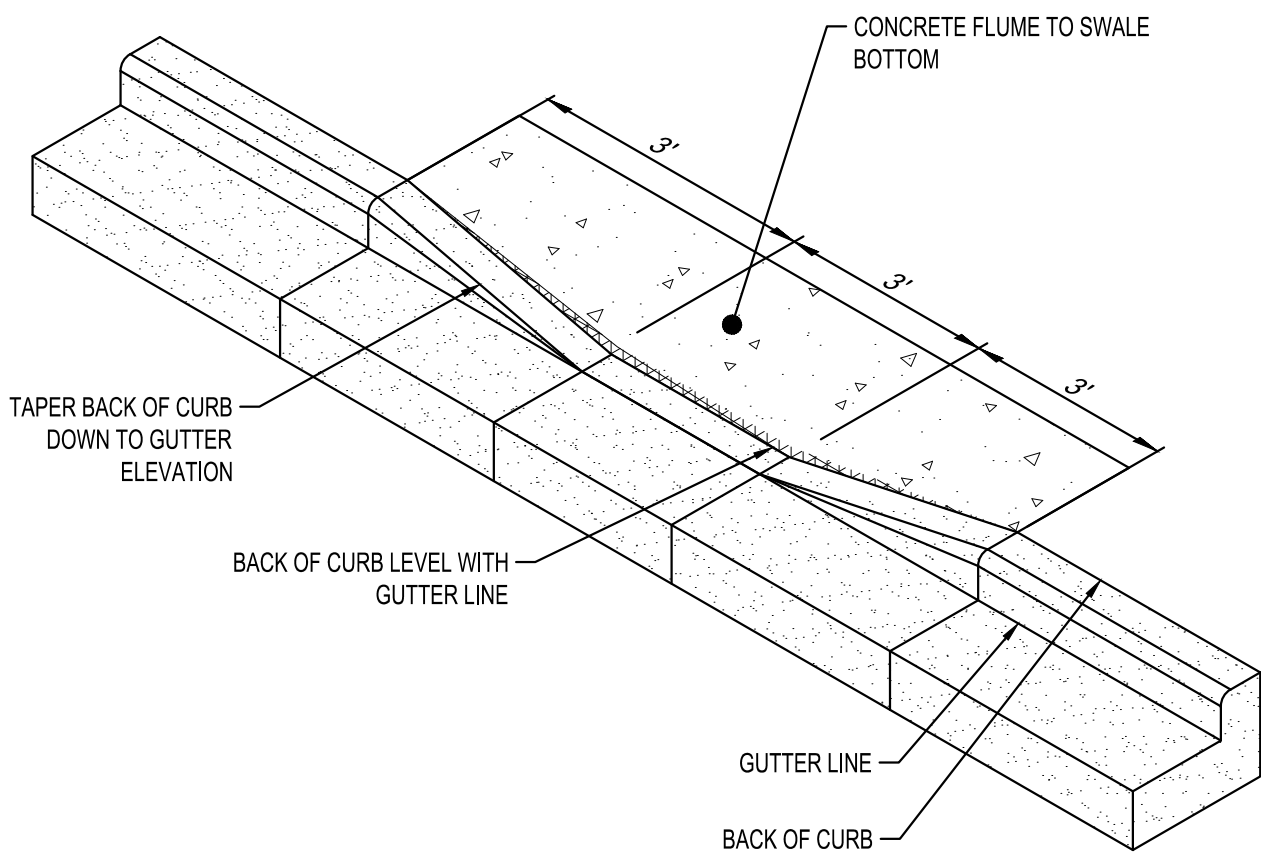
NOTES:

1. INSTALL TOP NUT EXTENDER TO 7" DEPTH ON ALL VALVES WITH OVER-DEPTH

TYPICAL
GATE VALVE & BOX INSTALLATION
NTS



ANCHOR EDGE SECTION



NOTE:

1. GRADE BEHIND CURB TO BE LEFT 2" LOWER THAN FLOW LINE TO ALLOW ROOM FOR TURF REINFORCEMENT MAT AND FOR GRASS TO NOT OBSTRUCT FLOW

CURB CUT
STORM OUTLET
NTS

FILTRATION BASIN CONSTRUCTION:

- A. Work Shall Include - All excavation and construction as outlined in the plans, specifications and details outlining the construction of the filtration basin.
- B. The Contractor shall maintain silt fence around the perimeter of the filtration basin during all phases of construction. The filtration area must be staked off and marked to keep all construction traffic, equipment and material stockpiles out of the proposed filtration area.
- C. The Contractor shall ensure that the filtration basin is not used as a sediment trap during construction and that no runoff enters the basin prior to the completion of construction and complete stabilization of surrounding areas draining to the basin. All upland drainage must be diverted to prevent runoff from entering filtration basin work area.
- D. Filtration basin shall be constructed at the end of the project after all areas surrounding it and draining into it have been constructed and fully stabilized. In order to avoid soil compaction in the basin, no equipment shall be driven in the area of the basin prior to its construction, and when it is constructed, only light earth moving equipment with tracks shall be used.
- E. After final grading, the basin's floor shall be tilled to a depth of at least 6 inches to provide a well-aerated, porous surface. Smearing of the soil in the basin shall be avoided. If smearing does occur, it shall be corrected by raking or retiling of the basin.
- F. Immediately following filtration basin construction, the entire basin shall be seeded and stabilized as indicated in the plans. Filtration basin MUST be fully stabilized prior to any upstream runoff being directed to basin.

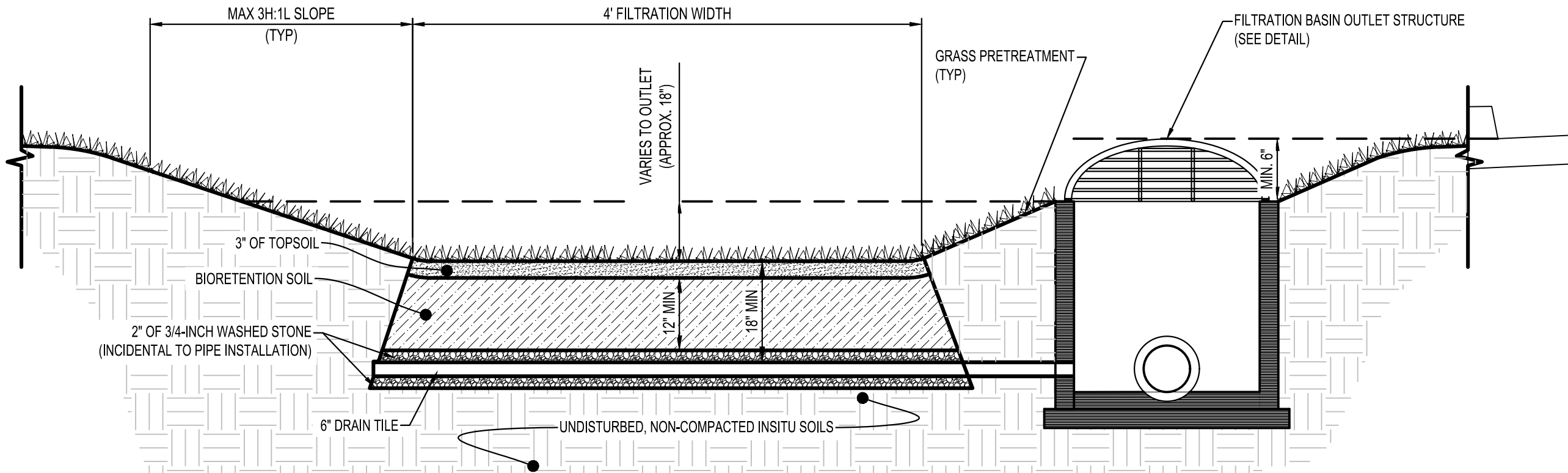
BIORETENTION SOIL:

- 70 - 85% construction sand; and
 - 15 - 30% organic matter
- Sand: Provide clean construction sand, free of deleterious materials.
(AASHTO M-6 or ASTM C-33 washed sand)

Organic Matter: MnDOT Grade 2 compost (See Specification 3890) is recommended.

BASIN SEEDING:

Refer to SWPPP Notes for basin seeding requirements.



FILTRATION BASIN
NTS

CITY OF
MANKATO
STANDARD
DETAIL PLATES

2100A

2200A

2201C

2203A

2240A

2242A

2320A

2321A

2322A

2323A

2340B

2402C

2420B

2421A1

2421A2

2460B

2650A

2660A



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EXTENSION

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TITLE

TYPICAL DETAILS

SHEET

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) NARRATIVE

PROJECT LOCATION

PROJECT/SITE NAME: BASSETT DRIVE EXTENSION
PROJECT LOCATION: BASSETT DRIVE
CITY/TOWNSHIP: MANKATO
COUNTY/STATE: MINNESOTA
ZIP CODE: 56001
LATITUDE/LONGITUDE: 44.163286, -93.938777
QUARTER SECTION, SECTION, TOWNSHIP, RANGE: SW ¼ NE ¼ SECTION 15, TOWNSHIP 108 NORTH, RANGE 26 WEST

PROJECT DESCRIPTION

THE PROJECT INCLUDES CONSTRUCTION OF A NEW THREE-LANE EAST/WEST URBAN ROADWAY WITH 8-FOOT BITUMINOUS PEDESTRIAN/BICYCLE TRAIL, 5-FOOT CONCRETE SIDEWALK, STORMWATER DITCH, AND ASSOCIATED STORM SEWER, SANITARY SEWER, AND WATER UTILITIES. INTERSECTION OF EXISTING BASSETT DRIVE AND 586TH AVENUE TO APPROXIMATELY 1300 FEET EAST OF 586TH AVENUE (APPROXIMATELY 1300 FEET IN LENGTH).

TENTATIVE CONSTRUCTION SCHEDULE (OPERATOR SHOULD PROVIDE ESTIMATED CONSTRUCTION SCHEDULE TO THE OWNER'S REPRESENTATIVE)	
CONSTRUCTION ACTIVITIES:	ESTIMATED DATES OF SOIL DISTURBANCE ACTIVITIES:
CLEARING AND GRUBBING OPERATIONS, GRADING, TEMP	JULY-DECEMBER 2025
UTILITY CONSTRUCTION	
CURB & GUTTER/SIDEWALK	
PAVING	
INITIAL TURF, LIGHTING	
LANDSCAPING, FINAL TURF, MISC.	

PRE-CONSTRUCTION IMPERVIOUS SURFACE AND DISTURBED AREA CALCULATIONS

TOTAL AREA TO BE DISTURBED = 3.14 ACRES MINIMUM AREA REQUIRING MPCA PERMIT = 1.00 ACRES
AN MPCA NPDES PERMIT IS REQUIRED FOR THIS PROJECT
IMPERVIOUS AREA: PRE-CONSTRUCTION = 0.00 ACRES/POST-CONSTRUCTION = 1.74 ACRES
NET INCREASE OF IMPERVIOUS AREA = 1.74 ACRES
MINIMUM NEW IMPERVIOUS SURFACE AREA CREATED REQUIRING PERMANENT STORMWATER MANAGEMENT = 1.00 ACRES (BASED ON MPCA PERMIT/CITY CODE/WATERSHED REQUIREMENTS)

CONTACT INFORMATION/RESPONSIBLE PARTIES

THE OWNER OWNS THE LAND, ADJACENT ROADS, AND EASEMENT AREAS ASSOCIATED WITH THE PROJECT. THE OWNER IS THE OWNER CO-PERMITTEE APPLYING FOR PERMIT COVERAGE AND WILL BE RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT INCLUDING DEVELOPING THIS SWPPP AND THE LONG-TERM MAINTENANCE PLAN OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM FOR THIS PROJECT (IF APPLICABLE). THE OWNER WILL ENSURE THAT THE DESCRIBED WORK IN THE SWPPP IS BEING COMPLETED BY THE OPERATOR PERMITTEE.

OWNER/PERMITTEE: CITY OF MANKATO (ALEC PIETZ, P.E., INTERIM CITY ENGINEER)
10 CIVIC CENTER PLAZA
MANKATO, MINNESOTA, 56001
507.387.8643/APIETZ@MANKATOMN.GOV

THE PRIMARY CONTRACTOR WILL ENTER INTO A CONTRACT WITH THE OWNER TO COMPLETE THE REQUIRED WORK FOR THIS PROJECT. THE PRIMARY CONTRACTOR WILL BECOME (UNDER CONTRACT) THE OPERATOR CO-PERMITTEE APPLYING FOR PERMIT COVERAGE ON THE NPDES PERMIT (THROUGH EXECUTION OF AN NPDES PERMIT MODIFICATION FORM) AND THEREBY AGREE TO IMPLEMENT THIS SWPPP IN COOPERATION WITH THE OWNER. THE OPERATOR IS RESPONSIBLE FOR IDENTIFYING AN EROSION CONTROL SUPERVISOR PRIOR TO STARTING CONSTRUCTION (REFER TO SWPPP AMENDMENT SECTION); THE NPDES PERMIT MODIFICATION FORM SHALL BE SUBMITTED TO THE MPCA AFTER THE PROJECT IS AWARDED TO THE OPERATION.

THE OPERATOR WILL ENSURE THAT INDIVIDUALS OVERSEEING OR IMPLEMENTING THE SWPPP HAVE BEEN PROPERLY TRAINED AND THAT CERTIFICATIONS WILL BE MADE AVAILABLE UPON REQUEST. THIS INCLUDES ANY SUB-CONTRACTORS THAT THE OPERATOR EMPLOYS UNDER SEPARATE CONTRACT. THE OPERATOR WILL PROVIDE THE CONTACT INFORMATION FOR THE EROSION CONTROL SUPERVISOR, SITE SUPERINTENDENT/FOREMAN, AND BMP INSTALLERS. THE EROSION CONTROL SUPERVISOR SHALL BE A RESPONSIBLE EMPLOYEE OF THE PRIME CONTRACTOR AND/OR DULY AUTHORIZED BY THE PRIME CONTRACTOR TO REPRESENT THE PRIME CONTRACTOR ON ALL MATTERS PERTAINING TO THE NPDES CONSTRUCTION STORMWATER PERMIT COMPLIANCE. THE EROSION CONTROL SUPERVISOR SHALL HAVE AUTHORITY OVER ALL OPERATOR ACTIVITIES WHICH INFLUENCE NPDES PERMIT COMPLIANCE, INCLUDING GRADING, EXCAVATION, BRIDGE CONSTRUCTION, CULVERT INSTALLATION, UTILITY WORK, CLEARING/GRUBBING, DEWATERING, AND ANY OTHER OPERATION THAT INCREASES THE EROSION POTENTIAL ON THE PROJECT.

THE OPERATOR WILL PERFORM A PRECONSTRUCTION SITE VISIT TO ADDRESS ANY AREAS OF CONCERN PERTAINING TO ENVIRONMENTAL COMPLIANCE. THE OPERATOR WILL IMPLEMENT AND MAINTAIN BMPS FOR THE DURATION OF CONSTRUCTION PROJECT. THE OPERATOR WILL COMPLETE THE REQUIRED SITE INSPECTIONS AND IS RESPONSIBLE FOR SECTIONS 3-4, 6-22, 24, AND APPLICABLE PARTS OF 23, TO REMAIN IN COMPLIANCE WITH NPDES PERMIT.

OPERATOR/PERMITTEE: (TO BE DETERMINED)

ISG INC. HAS BEEN CONTRACTED BY THE OWNER TO DEVELOP THE SWPPP PLAN FOR THIS PROJECT. THIS SWPPP WAS PREPARED BY AN INDIVIDUAL THAT HAS BEEN PROPERLY TRAINED IN ACCORDANCE TO SECTION 21 OF THE NPDES PERMIT (CERTIFICATION CARDS ARE AVAILABLE UPON REQUEST). ISG INC. WILL OFFER GUIDANCE FOR COMPLIANCE WITH THE NPDES PERMIT BEFORE, DURING, AND AFTER CONSTRUCTION OF THE PROJECT.

SWPPP DESIGNER:
ISG INC. (KYLE RENNEKE, P.E.)
115 E HICKORY ST, SUITE
MANKATO, MN 56001
507-387-6651/KYLE.RENNKE@ISGINC.COM

PERMANENT STORMWATER MANAGEMENT SYSTEM:
ISG INC. (KYLE RENNEKE, P.E.)
115 E HICKORY ST, SUITE 300
MANKATO, MN 56001
507-387-6651/KYLE.RENNKE@ISGINC.COM

AGENCY CONTACTS			
AGENCY	PERMIT	NAME	PHONE NUMBER/E-MAIL
MPCA (EMERGENCY)	N/A	STATE DUTY OFFICER	1-800-422-0798
MPCA	NPDES-CSW #MNR100001	BRIAN GREEN	507-206-2610/BRIAN.GREEN@STATE.MN.US
ACOE	SECTION 404	LEO GRABOWSKI	218-829-8402/LEONARD.A.GRABOWSKI@USACE.ARMY.MIL
DNR	N/A	N/A	N/A
TODD SWCD	WCA	ED UHLENKAMP	320-732-2644/ED.UHLENKAMP@CO.TODD.MN.US
WATERSHED DISTRICT	N/A	N/A	N/A

PERMANENT STORMWATER TREATMENT SYSTEMS

THE NPDES PERMANENT WATER QUALITY VOLUME (SECTION 15) FROM THE NET NEW IMPERVIOUS SURFACES OF THE PROJECT IS PROVIDED IN THE PROPOSED FILTRATION BASIN. HYDROLOGIC AND WATER QUALITY MODELING DATA AND THE CONTAMINATION CHECKLIST IS AVAILABLE UPON REQUEST. THE SITE IS ABLE UNABLE TO MEET THE FULL VOLUME REDUCTION REQUIREMENT DUE TO ON-SITE SOILS THAT ARE NOT CONDUCTIVE TO INFILTRATION AND LIMITED RIGHT OF WAY SPACE. INFILTRATION RATES WERE DETERMINED BY THE INFILTRATION RATE CHART IN THE MINNESOTA STORMWATER MANUAL UTILIZING SOIL-BORING RESULTS. THE SITE HAS BEEN DESIGNED TO MEET THE PERMIT REQUIREMENTS TO THE MAXIMUM EXTENT POSSIBLE FOR THIS SITE.

LOCATION OF SWPPP COMPONENTS		
DESCRIPTION	TITLE	LOCATION (SHEET NAME)
SWPPP NARRATIVE	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
SITE CONDITIONS	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
SITE MAPS (SOILS, WATER RESOURCES, POTENTIAL POLLUTANT GENERATING ACTIVITIES)	SWPPP MAP, SWPPP NARRATIVE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED	SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
DIRECTION OF SURFACE WATER FLOW (PRE- & POST- CONSTRUCTION IMPERVIOUS SURFACES	DRAINAGE PLAN	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
TEMPORARY EROSION & SEDIMENT CONTROL BMPS FOR STEEP SLOPES (3-1), DNR FISH EXCLUSION "WORK IN WATER RESTRICTIONS" REFER TO SWPPP	CONSTRUCTION PLAN & PROFILE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN, SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
PERMANENT EROSION PREVENTION BMPS	TURF ESTABLISHMENT PLAN, SWPPP NARRATIVE	STORMWATER POLLUTION PREVENTION PLAN (SWPPP); SWPPP GENERAL INFORMATION, DETAILS AND NOTES; TURF RESTORATION PLAN
STORM SEWER	DRAINAGE PLAN	STORMWATER POLLUTION PREVENTION PLAN (SWPPP); OVERALL UTILITY PLAN
GRADING	GRADING PLAN	OVERALL GRADING PLAN, NOTES AND EARTHWORK CALCULATIONS
ESTIMATED BMP QUANTITIES	ESTIMATED QUANTITIES	STORMWATER POLLUTION PREVENTION PLAN (SWPPP)
BMP DETAILS/SPECIFICATIONS	BMP DETAILS, SWPPP NARRATIVE	SWPPP GENERAL INFORMATION, DETAILS AND NOTES
HYDROLOGIC/WATER QUALITY MODELING		AVAILABLE UPON REQUEST

EXISTING SITE CONDITIONS, SOILS, & WATER RESOURCES

SOILS AND NATIVE TOPSOIL: NATIVE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR FINAL GRADING OPERATIONS, WHERE INDICATED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS. METHODS AND EQUIPMENT TO MINIMIZE SOIL COMPACTION (IN PROPOSED INFILTRATION AREAS, DRIP LINE OF TREES TO BE PRESERVED, ETC.) SHALL BE DETERMINED BY THE OPERATOR'S SWPPP AMENDMENT. TRACKED VEHICLES ARE PREFERRED AND WHEELED VEHICLES ARE DISCOURAGED IN THESE AREAS. THE FOLLOWING USDA-NRCS MAPPED SOILS ARE SHOWN AS "NOT HIGHLY ERODIBLE," POTENTIALLY HIGHLY ERODIBLE, AND HIGHLY ERODIBLE" ON THE COUNTY SOIL SURVEY MAP.

USDA-NRCS MAPPED SOIL SURVEY UNIT NO., NAME, TEXTURE, SLOPE PERCENTAGE	PERCENTAGE OF PROJECT AREA	APPROXIMATE PARTICLE SIZE RANGE (MM)		
		SAND (0.05-2.00+)	SILT (0.002-0.05)	CLAY (<0.002)
110- MARNA SILTY CLAY LOAM, 0-2% SLOPES	28.4%			
287- MINNETONKA SILTY CLAY LOAM	71.6%			

DESCRIPTION OF RECEIVING WATERS (LOCATED WITHIN 1-MILE): STORMWATER FROM THIS PROJECT WILL BE CONVEYED INTO SEVERAL LOCATIONS. THE EASTERLY PORTION OF THE IMPROVEMENTS WILL CONTINUE TO DRAIN EAST TO THE EXISTING AGRICULTURAL FIELD AREA VIA OVERLAND FLOW, AND WESTERLY PORTION OF THE ROADWAY AND RIGHT OF WAY WILL DRAIN TO THE EXISTING UNDERGROUND STORMWATER CONVEYANCE SYSTEM LOCATED IN THE INTERSECTION OF BASSETT DRIVE AND CARVER ROAD. STORMWATER RUNOFF FROM THE ROADWAY SECTIONS (STA. 102+75 TO STA 111+50 ON THE NORTH PORTION OF THE STREET CROWN) IS FILTERED THROUGH THE VEGETATED SWALE AND FILTRATION TRENCH BEFORE ENTERING UNDERGROUND PIPING CONVEYANCE. THE NPDES PERMANENT WATER QUALITY VOLUME (SECTION 15) FROM THE NET NEW IMPERVIOUS SURFACES OF THE PROJECT IS PROVIDED TO THE MAXIMUM EXTENT FEASIBLE ON THE SITE VIA THE CONSTRUCTED DITCHES. HYDROLOGIC AND WATER QUALITY MODELING DATA IS AVAILABLE UPON REQUEST.

DESCRIPTION OF IMPAIRED WATERS OR WATER SUBJECT TO TMDLS: A SPECIAL AND IMPAIRED WATERS SEARCH WAS COMPLETED USING THE MPCA SEARCH ENGINE (HTTPS://MPCA.MAPS.ARCGIS.COM/APPS/WEBAPPVIEWER/INDEX.HTML?ID=E03EF170FA3E41F6BE92F9FAFEC100CC) ON 5/30/2025. THE SEARCH SHOWED NO IMPAIRED WATERS OR WATERS SUBJECT TO TMDLS WITHIN THE PROJECT LIMITS.

POTENTIAL FOR SEDIMENT AND/OR OTHER POLLUTANT(S) DISCHARGING FROM THE PROJECT SITE

THE TEMPORARY EROSION AND SEDIMENT CONTROL BMPS IN THIS SWPPP HAVE BEEN DESIGNED TO MINIMIZE THE POTENTIAL OF SEDIMENTS DISCHARGING OFF-SITE FROM A 0.5 INCH RAINFALL WITHIN A 24-HOUR PERIOD. THE NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATE FOR THE PROJECT LOCATION WAS REVIEWED AND USED FOR ANTICIPATED INSPECTION FREQUENCY, BMP DESIGN, AND ESTIMATING CONSTRUCTION ACTIVITIES IN THIS SWPPP. ATLAS 14 RESULTS DO NOT NECESSARILY REFLECT ANY DESIGN CRITERIA IN THE PERMANENT STORMWATER MANAGEMENT SYSTEM.

ROUTINE INSPECTION AND BMP MAINTENANCE BY THE OPERATOR IS CRUCIAL IN ENSURING THE FUNCTIONALITY OF EACH BMP. STEEP SLOPES AND OTHER ENVIRONMENTALLY SENSITIVE AREAS THAT ARE AT A HIGHER RISK OF SEDIMENTATION ARE DEFINED IN THIS SWPPP (IF APPLICABLE).

CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED

AREAS NOT TO BE DISTURBED ARE TO BE DELINEATED BEFORE WORK BEGINS. PERMITTEES ARE RESPONSIBLE FOR PRESERVING A 50 FOOT NATURAL BUFFER OR (IF INFEASIBLE AND DOCUMENTED) PROVIDE REDUNDANT SEDIMENT CONTROL BMPS, WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET AND RECEIVES DRAINAGE FROM THE PROJECT'S GRADING LIMITS. THIS REQUIREMENT DOES NOT APPLY TO ADJACENT ROAD SIDE DITCHES, JUDICIAL/COUNTY DITCHES, STORMWATER CONVEYANCES, STORM DRAIN INLETS, AND SEDIMENT BASINS.

ENVIRONMENTALLY SENSITIVE AREAS

STEEP SLOPES: EXISTING AND PROPOSED SLOPES 1 IN 3 (33.33%) AND STEEPER THAT ARE PROPOSED TO BE DISTURBED ARE ILLUSTRATED ON THE PLAN SHEETS. STEEP SLOPES MAY BE TEMPORARILY CREATED DURING GRADING OPERATIONS IF NECESSARY, AT WHICH TIME TEMPORARY BMPS MUST BE IMPLEMENTED BY THE OPERATOR (THROUGH AN APPROVED SWPPP AMENDMENT) WITHIN 14 DAYS OF NO LONGER WORKING THE STEEP SLOPE.

CONTAMINATED PROPERTIES: THE MPCA'S "WHAT'S IN MY NEIGHBORHOOD" DATABASE WAS REVIEWED ON 05/30/2025 (WWW.PCA.STATE.MN.US/DATA/WHATS-MY-NEIGHBORHOOD) AND A CONTAMINATION ASSESSMENT WAS PERFORMED (AVAILABLE UPON REQUEST). THE RESULTS OF THIS REVIEW SHOW NO KNOWN CONTAMINATED PROPERTIES OR LEAK SOURCES LOCATED WITHIN AND ADJACENT TO THE PROJECT LIMITS.

STORMWATER POLLUTION MITIGATION MEASURES (AS IDENTIFIED FROM ENVIRONMENTAL REVIEW): NO FORMAL ENVIRONMENTAL REVIEW WAS REQUIRED FOR THIS PROJECT. THEREFORE, NO ADDITIONAL STORMWATER RELATED MITIGATION MEASURES APPLY.

KARST AREAS: THERE ARE NO KNOWN ACTIVE KARST AREAS WITHIN OR ADJACENT TO THE PROJECT LIMITS.

SITE PLAN REQUIRED AREAS: NO AREAS OF "HIGH ENVIRONMENTAL RISKS" ARE KNOWN TO BE LOCATED WITHIN OR IMMEDIATELY ADJACENT TO THE PROJECT LIMITS.

FLOOD CONTINGENCY PLAN: PROJECT ACTIVITIES MAY NOT OCCUR WITHIN THE 100-YEAR FLOODPLAIN OR FLOODWAY. THEREFORE, THE PROJECT ENGINEER (AT THEIR DISCRETION) MAY REQUIRE A PREVENTATIVE FLOOD CONTINGENCY PLAN FOR SPECIFIC PROJECT ACTIVITIES AND AREAS IF SEASONAL PRECIPITATION POSSES A POTENTIAL RISK OF FLOODING WORK AREAS WITHIN THE PROJECT LIMITS. THIS PLAN SHALL BE SUBMITTED BY THE OPERATOR TO THE OWNER'S REPRESENTATIVE FOR APPROVAL A MINIMUM OF 72 HOURS PRIOR TO THE SCHEDULED WORK AND/OR DURING ACTIVE WORK WITHIN THE FLOODPLAIN. NO WORK WITHIN THE FLOODPLAIN CAN COMMENCE UNTIL WRITTEN APPROVAL/NOTICE TO PROCEED FROM THE OWNERS REPRESENTATIVE IS RECEIVED.

FISH EXCLUSION DATES:

FISH EXCLUSION DATES ARE NOT APPLICABLE TO THIS PROJECT LOCATION.

AQUATIC INVASIVE SPECIES: ALL IN-STREAM AND DEWATERING EQUIPMENT SHALL BE DECONTAMINATED OF ALL AQUATIC PLANTS AND PROHIBITED INVASIVE SPECIES PRIOR TO USING WITHIN SURFACE WATERS ON-SITE AND TRANSPORTING OFF-SITE. ALL DECONTAMINATION ACTIVITIES SHALL MEET THE CHAPTER 1 STANDARDS OF THE MINNESOTA DNR'S BEST PRACTICES MANUAL FOR MEETING DNR GENERAL PUBLIC WATERS WORK PERMIT GP 2004-0001.

WETLANDS: NO WETLANDS EXIST WITHIN OR IMMEDIATELY ADJACENT TO THE PROJECT LIMITS.

APPLICABLE FEDERAL, TRIBAL, STATE OR LOCAL PROGRAMS: THE PROJECT FALLS UNDER THE JURISDICTION OF SEVERAL ENTITIES, AS IDENTIFIED IN THE "AGENCY CONTACTS" TABLE ON PAGE 1 OF THE SWPPP. THE MORE STRINGENT OF LOCAL VS. STATE VS. FEDERAL RULES SHALL APPLY WHERE THEY CONFLICT. INFORMATION PERTAINING TO THE STATE NPDES PERMIT CAN BE FOUND AT: (HTTP://WWW.PCA.STATE.MN.US/INDEX.PHP/WATER/WATER-TYPES-AND-PROGRAMS/STORMWATER/CONSTRUCTION-STORMWATER). THE OPERATOR IS RESPONSIBLE TO COMPLY WITH ALL APPLICABLE PERMITS, MNDOT SPECIAL PROVISION, MNDOT SPEC BOOK (2018 EDITION), MNDOT SPECIFICATIONS 1717.

SEQUENCE OF CONSTRUCTION/TIMING OF BMP INSTALLATION

NO CONSTRUCTION OPERATIONS, INCLUDING REMOVALS, THAT REQUIRE EROSION & SEDIMENT CONTROL PER THE SWPPP CAN COMMENCE UNTIL THE OPERATOR'S EROSION CONTROL SUPERVISOR CERTIFIES THE PROPER INSTALLATION OF BMPS AND A CHAIN OF RESPONSIBILITY FOR SWPPP IMPLEMENTATION IS CREATED FOR ALL OPERATORS ON THE SITE. PERIMETER SEDIMENT CONTROLS (SILT FENCE, INLET PROTECTION, CONSTRUCTION ENTRANCES, ETC.) SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. THESE PRACTICES SHALL REMAIN IN PLACE UNTIL FINAL STABILIZATION IS ACHIEVED. OPERATOR SHALL IMPLEMENT THE NECESSARY ON-SITE BMPS IN ACCORDANCE WITH THE NPDES PERMIT REQUIREMENTS TO PREVENT NUISANCE CONDITIONS (MN RULES 7050.2010) FROM ANY DISCHARGES UNDER COVERAGE OF THE NPDES PERMIT. IN SOME CASES, MULTIPLE OR REDUNDANT APPLICATIONS OF SOME BMPS MAY BE NEEDED TO MEET THESE REQUIREMENTS.

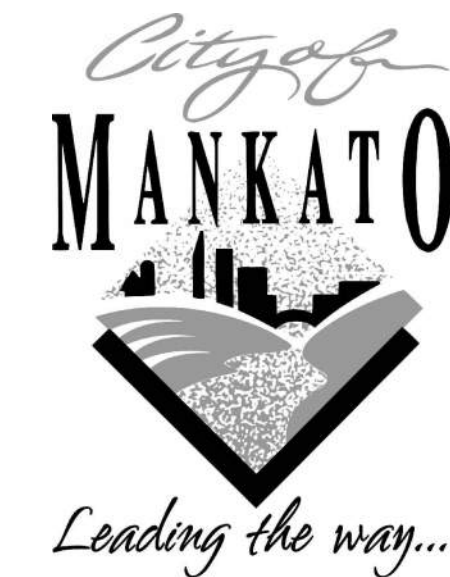
INSPECTION PROCEDURES, SWPPP AMENDMENTS, RECORD KEEPING, & TRAINING

- THE SWPPP MUST BE AMENDED BY THE OPERATOR WHEN THE IDENTITY OF THE RESPONSIBLE SITE OPERATORS (EROSION CONTROL SUPERVISOR, SUB-CONTRACTORS, ETC.) ARE KNOWN.
- THE OPERATOR MUST INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS. THE OPERATOR SHALL PROVIDE A RAINFALL GAUGE ON-SITE, WITHIN ONE MILE OF THE SITE, OR SOURCE OF THE WEATHER REPORTING SYSTEM THAT USES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES. THE LOCATION AND SOURCE OF THE RAINFALL GAUGE OR REPORTING SYSTEM MUST BE DOCUMENTED IN THE FIRST SWPPP INSPECTION REPORT. THE INSPECTION FREQUENCY MAY BE REDUCED TO ONCE PER MONTH OR SUSPENDED IF SITE CONDITIONS MEET ITEM 11.10 OF THE NPDES PERMIT. ALL INSPECTIONS AND MAINTENANCE CONDUCTED MUST BE RECORDED IN WRITING BY THE OPERATOR AND RETAINED WITH THE SWPPP. THE MPCA SITE INSPECTION FORM IS AVAILABLE FOR OPERATORS TO USE TO COMPLETE THE REQUIRED INSPECTIONS. THE FORM CAN BE FOUND ON THE MPCA WEBSITE OR AVAILABLE UPON REQUEST FOR THE PROJECT OWNER. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:
A. DATE, TIME, AND NAME OF PERSON(S) CONDUCTING INSPECTIONS;
B. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
C. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); INCLUDING DOCUMENTATION/PHOTOS OF IMPLEMENTED BMPS INTENDED TO CORRECT A PROBLEM BUT FAILED.
D. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS;
E. DOCUMENTATION OF CHANGES MADE TO THE SWPPP.
- SWPPP AMENDMENTS AND SITE PLANS WILL BE PREPARED BY THE OPERATOR AND SUBMITTED TO THE OWNER FOR REVIEW AND WRITTEN APPROVAL BY THE PROJECT OWNER (OR DESIGNATED REPRESENTATIVE). ALL OWNER ACCEPTED AND DENIED SWPPP AMENDMENTS AND SITE PLANS MUST BE RECORDED IN WRITING AND RETAINED WITH THE SWPPP.
- THE SWPPP SHALL BE AMENDED TO INCLUDE ADDITIONAL OR MODIFIED BMPS, DESIGNED TO CORRECT IDENTIFIED PROBLEMS OR ADDRESS SITUATIONS (UNDER SECTION 6 OF THE NPDES PERMIT), PRIOR TO CONDUCTING SPECIFIC STAGES/PHASES OF THE PROJECT, AS REQUIRED BY THE OWNER AND DEFINED IN THIS PROJECT SWPPP.

THE TABLE BELOW IS A SUMMARY OF THE REQUIRED SWPPP AMENDMENTS:

SUMMARY OF OPERATOR PREPARED SWPPP AMENDMENTS (REQUIRED BY OWNER)		
SWPPP AMENDMENT NAME	SWPPP AMENDMENT DETAILS	SUBMITTAL TIMEFRAME
OPERATOR CHAIN OF RESPONSIBILITY	REFER TO "CONTACT INFORMATION/RESPONSIBLE PARTIES" SECTION	7 DAY PRIOR TO INITIATING WORK
BMP AMENDMENTS	SUBSTITUTED, ADDITIONAL, OR REDUNDANT BMPS TO COMPENSATE FOR FAILING/FAILED BMPS	DURING/AFTER CONSTRUCTION ACTIVITIES
METHODS TO MINIMIZE SOIL COMPACTION	REFER TO "EXISTING SITE CONDITIONS, SOILS, AND WATER RESOURCES" SECTION	7 DAYS PRIOR TO WORK WITHIN INFILTRATION BASINS AND PRESERVED TREE AREAS
STEEP SLOPES PHASING PLAN	REFER TO "ENVIRONMENTALLY SENSITIVE AREAS" SECTION	7 DAYS PRIOR TO INITIATING WORK
SPILL PREVENTION & RESPONSE PLAN	REFER TO "POLLUTION PREVENTION MANAGEMENT MEASURES"	7 DAY PRIOR TO INITIATING WORK
DEWATERING PLAN	REFER TO "DEWATERING" SECTION	7 DAYS PRIOR TO ACTIVITY
FLOOD CONTINGENCEY PLAN	REFER TO "ENVIRONMENTALLY SENSITIVE AREAS" SECTION	72 HOURS PRIOR TO ACTIVITY

- THE SWPPP (ORIGINAL OR COPIES), ALL CHANGES TO THE SWPPP, PROJECT MANUAL, AND INSPECTIONS/MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE OPERATOR WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN THE FIELD OFFICE OR ON-SITE VEHICLE DURING NORMAL WORKING HOURS. THE PERMITTEES MUST KEEP AND MAKE AVAILABLE TO FEDERAL, STATE, AND LOCAL OFFICIALS WITHIN THREE DAYS THE SWPPP, OTHER STORMWATER RELATED PERMITS, RECORDS OF ALL INSPECTION/MAINTENANCE, ALL PERMANENT OPERATIONS AND MAINTENANCE AGREEMENTS, ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS AND OTHER INFORMATION REQUIRED BY THE GENERAL PERMIT FOR THREE YEARS FOLLOWING THE NOTICE OF TERMINATION.



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

KYLE J. RENNEKE

DATE: 06/27/25 LIC. NO. 52626

SHEET NOT VALID UNLESS THIS TEXT IS COLOR.

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PROJECT

CITY OF
MANKATO
BASSETT DRIVE
EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C1-SWPPP
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

SWPPP NARRATIVE
AND QUANTITIES

SHEET

6. THE OPERATOR MUST ASSIGN A TRAINED INDIVIDUAL(S) (PURSUANT TO SECTION 21) TO OVERSEE THE IMPLEMENTATION, MAINTENANCE, AND REPAIR OF BMPS. THIS INDIVIDUAL(S) SHALL ALSO PERFORM INSPECTIONS, REVISE/AMEND THE SWPPP (DOCUMENT IN SWPPP AS NECESSARY), AND BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY THE PERMITTED OWNER (OR ITS DESIGNEE), LOCAL GOVERNMENT UNITS, OR MPCA. MNDOT LEAD PROJECTS REQUIRE AVAILABLE ONSITE INSPECTION WITHIN 24 HOURS.

POLLUTION PREVENTION MANAGEMENT MEASURES

POTENTIAL SOURCES OF POLLUTANTS FROM CONSTRUCTION ACTIVITIES INCLUDE:

- SEDIMENT AND FUGITIVE DUST GENERATED FROM CLEARING AND GRUBBING, IMPORT/EXPORT OPERATIONS, REMOVALS/COMPACTION, MASS/FINE GRADING, EXCAVATIONS, TRENCHING, TOPSOIL STRIPPING STOCKPILING, WET/DRY PAVEMENT CUTTING, STREET CONSTRUCTION.
- BASIC/ACIDIC PH LEVELS FROM CURB AND GUTTER, MANHOLE STRUCTURES, SIDEWALKS, DRIVEWAY APRONS, FOUNDATIONS, BRIDGE ABUTMENTS, WET/DRY PAVEMENT CUTTING, AND MASONRY WASHOUT/CLEANOUT.
- EXCESS NUTRIENTS FROM LANDSCAPING INSTALLATIONS, SOIL ADDITIVES, FERTILIZATION, MULCHING
- HYDROCARBONS FROM STREET CONSTRUCTION, DEMOLITION/REMOVALS, WET/DRY PAVEMENT CUTTING

OPERATOR WILL COMPLY WITH ALL OF THE POLLUTION PREVENTION AND MANAGEMENT MEASURES IDENTIFIED IN THE NPDES-CSW PERMIT. OPERATOR WILL SUBMIT A SPILL PREVENTION AND RESPONSE PLAN (SPRP) TO THE ENGINEER PRIOR TO ANY CONSTRUCTION ACTIVITY. THE SPRP MUST SATISFACTORILY ADDRESS (AT A MINIMUM) THE FOLLOWING NPDES REQUIREMENTS BY THE PROPOSED IMPLEMENTATION AND MAINTENANCE OF APPROPRIATE BMPS:

NO-EXPOSURE: CONSTRUCTION AND BUILDING PRODUCTS (THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS), PESTICIDES, HERBICIDES, INSECTICIDES, FERTILIZERS, TREATMENT CHEMICALS, AND LANDSCAPING MATERIALS MUST BE UNDER COVER (PLASTIC SHEETING OR TEMPORARY ROOFS) TO MINIMIZE CONTACT WITH STORMWATER AND PRECIPITATION.

SOLID WASTE: SEDIMENT, ASPHALT, CONCRETE MILLINGS, CONSTRUCTION AND DEMOLITION DEBRIS, AND OTHER WASTES MUST BE DISPOSED OF PROPERLY AND SHALL COMPLY WITH MPCA DISPOSAL REQUIREMENTS (CH. 7035).

HAZARDOUS MATERIALS: GAS, DIESEL, OIL, ANTIFREEZE, PAINT SOLVENTS, SOAPS, DETERGENTS, WOOD PRESERVATIVES, CLEANING SOLVENTS, CURING COMPOUNDS, ACIDS, ETC., MUST BE STORED IN SEALED CONTAINERS. SECONDARY SPILL CONTAINMENT IS REQUIRED FOR ALL MATERIALS IF STORED ON-SITE FOR MORE THAN 24 CONSECUTIVE HOURS (DOUBLE WALLED TANKS ARE ACCEPTABLE FOR SECONDARY CONTAINMENT). STORAGE AND DISPOSAL OF HAZARDOUS WASTES AND MATERIALS MUST BE IN COMPLIANCE WITH MPCA REGULATIONS (CH. 7045).

PORTABLE TOILETS: MUST BE POSITIONED AND SECURED SO THEY ARE NOT TIPPED OR KNOCKED OVER. SANITARY WASTE MUST BE PROPERLY DISPOSED OF IN ACCORDANCE WITH MPCA REGULATIONS (CH. 7041).

SPILLED OR LEAKED CHEMICALS: REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICAL OR FUEL WILL BE LOADED OR UNLOADED. PROCEDURES FOR SPILL RESPONSE AND MATERIALS FOR CONTAINMENT, CLEANUP (DRIP PANS, ABSORBENTS, AND SPILL KITS), AND APPROPRIATE DISPOSAL SHALL BE AVAILABLE AT ALL TIMES ON-SITE. PERMITTEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINNESOTA STATUTE 115.061.

EQUIPMENT/VEHICLE WASHING: WHEN VEHICLE/EQUIPMENT WASHING MUST OCCUR ON-SITE, THE ACTIVITY IS LIMITED TO A CONTAINED PORTION OF THE STAGING AREA UNLESS INFEASIBLE THROUGH A SWPPP AMENDMENT. SOAPS, DETERGENTS, AND SOLVENTS ARE TO BE USED AND STORED PROPERLY. RUNOFF MUST BE CONTAINED FROM THE WASHING AREAS AND DISPOSED OF PROPERLY.

CONCRETE, STUCCO, PAINT, CURING COMPOUNDS, SOLVENTS, AND OTHER WASHOUT WASTES: TEMPORARY OR LONG-TERM STORAGE OF WASHOUT WASTE IS PROHIBITED ON-SITE (SLURRY MUST BE HAULED IMMEDIATELY OFF-SITE). OPERATOR MUST SUBMIT A CONCRETE WASHOUT PLAN TO THE PROJECT ENGINEER FOR APPROVAL OF ALL ON-SITE WASHOUT LOCATIONS. ON-SITE WASHOUT LOCATIONS MUST BE LOCATED 200 FEET FROM AN ENVIRONMENTALLY SENSITIVE AREA AND SURFACE WATERS, HAVE "CONCRETE WASHOUT AREA" SIGNAGE, AND BE CONTAINED IN A LEAK PROOF CONTAINER OR IMPERMEABLE LINER. LIQUID AND SOLID WASTES SHOULD NOT CONTACT THE GROUND (UNLESS PERMITTED IN THE CONCRETE WASHOUT PLAN), BE CONTAINED TO PREVENT RUNOFF FROM THE WASHOUT LOCATION, AND MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS.

BURNING: BURNING OF GARBAGE, CONSTRUCTION DEBRIS, TREES, BRUSH, OR OTHER VEGETATIVE MATERIAL IS NOT ALLOWED ON SITE UNLESS PRIOR APPROVAL IS GRANTED BY THE OWNER.

CONSTRUCTION ACTIVITY REQUIREMENTS: EROSION PREVENTION PRACTICES, PROCEDURES, & MAINTENANCE STANDARDS

THE OPERATOR IS RESPONSIBLE FOR THE INSTALLATION, OPERATION, AND CONTINUED MAINTENANCE OF ALL 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 UNTIL FINAL STABILIZATION IS ACHIEVED, ALL BMPS MUST BE ADEQUATELY LOCATED, DESIGNED, INSTALLED, AND MAINTAINED TO PREVENT EROSION FROM A MINIMUM 0.5 INCH TOTAL RAINFALL EVENT WITHIN 24 HOURS.

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 IN THE SWPPP. ALL ERODED MATERIAL THAT LEAVES THE SITE SHALL BE COLLECTED BY THE OPERATOR AND RETURNED TO THE SITE AT THE OPERATOR'S EXPENSE AND INCIDENTAL TO THE PROJECT COST.

TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED AS SOON AS POSSIBLE, BUT NO LATER THAN THE END OF THE NEXT WORK DAY FOLLOWING THE DAY EARTH-DISTURBING ACTIVITIES IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. ALL EXPOSED SOIL AREAS SHALL BE STABILIZED WITHIN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. INITIATED STABILIZATION IS DEFINED AS COMPLETING ONE (OR MORE) OF THE FOLLOWING: SOIL PREPARATION FOR VEGETATION, MULCHING (OR OTHER TEMPORARY NON-VEGETATIVE BMP), SEEDING/PLANTING, OR SCHEDULING STABILIZATION MEASURES TO BE FULLY INSTALLED AND COMPLETED WITHIN THE 14 DAY TIMEFRAME.

FOR PUBLIC WATERS THAT THE MINNESOTA DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF THE WATER'S EDGE AND THAT DRAIN TO THESE WATERS WITHIN 24 HOURS DURING THE RESTRICTION PERIOD.

TEMPORARY STABILIZATION BMPS SHALL ONLY BE IMPLEMENTED WHEN PERMANENT STABILIZATION BMPS CANNOT BE IMPLEMENTED WITHIN THE 14 DAY TIMEFRAME FOR EXPOSED SOILS.

TEMPORARY/PERMANENT DRAINAGE DITCHES & SWALES: THE NORMAL WETTED PERIMETER (2-YEAR, 24-HOUR PRECIPITATION EVENT) OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH, CHANNEL, OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN THE LAST 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER WITHIN 24 HOURS OF CONNECTION. STABILIZATION REMAINING OF THE REMAINING PORTIONS OF THE CHANNEL MUST BE STABILIZED WITHIN 14 DAYS. ALL STORMWATER CONVEYANCE CHANNELS MUST USE EROSION CONTROL AND VELOCITY DISSIPATION DEVICES WITHIN AND ALONG THE LENGTH OF THE CHANNEL AND AT ANY OUTLETS. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A TEMPORARY SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED, THESE AREAS, HOWEVER, MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM. MULCH, HYDROMULCH, TACKIFIER, OR POLYARCRLAMIDE BELOW THE WETTED PERIMETER OF A DITCH, SWALE, OR OTHER SURFACE WATER CONVEYANCE IS NOT ACCEPTABLE STABILIZATION.

EROSION CONTROL BLANKETS/MATS: OPERATOR SHALL VERIFY DURING REGULAR INSPECTIONS THAT NO GULLIES, RILLS, OR SCOUR HOLES HAVE FORMED UNDER EROSION CONTROL BLANKETS AND MATS. ALL REPAIRS MUST BE COMPLETED WITHIN 24 HOURS OF DISCOVERY OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.

MULCH: OPERATOR MUST APPLY MULCH IN A UNIFORM PATTERN OVER THE DISTURBED SOILS TO ACHIEVE A MINIMUM OF 90% GROUND COVER.

DUST CONTROL: DUST FROM THE SITE WILL BE CONTROLLED BY INCREASED STREET SWEEPING AND/OR USING A MOBILE PRESSURE-TYPE DISTRIBUTOR TRUCK TO APPLY POTABLE WATER TO DISTURBED AREAS. THE MOBILE UNIT WILL APPLY WATER AT A RATE NECESSARY TO PREVENT RUNOFF AND PONDING.

STORM SEWER OUTLETS: PIPE OUTLETS MUST HAVE TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER HYDRAULIC CONNECTION TO A RECEIVING SURFACE WATER.

TEMPORARY & PERMANENT EROSION PREVENTION BMPS

TYPE 1 MULCH: APPLY TO DISTURBED SLOPES LESS THAN 1:3 (V:H) WITH BLOWER EQUIPMENT OR CONCURRENTLY WITH HYDROMULCH AT 2 TONS/ACRE. IMMEDIATELY OVERSPRAY (IF NOT HYDROMULCHED) WITH TACKIFIER (PER MANUFACTURER'S RECOMMENDED RATES) OR DISC-ANCHORED.

RAPID STABILIZATION METHOD #3: THIS WORK SHALL CONSIST OF OPERATIONS NECESSARY TO RAPIDLY STABILIZE SMALL CRITICAL AREAS WITHIN 200 FEET OF SURFACE WATERS TO PREVENT OFF-SITE SEDIMENTATION AND OR TO COMPLY WITH PERMIT REQUIREMENTS. INSTALL PER MNDOT SPECIFICATIONS 2575.3N.

RAPID STABILIZATION METHOD #4 (WOOD FIBER, NATURAL NET ONLY) IS AN ACCEPTABLE BMP FOR DISTURBED AREAS ADJACENT TO ENVIRONMENTALLY SENSITIVE AREAS, SURFACE WATERS, AND WITHIN THE LAST 200 FEET OF DITCH BOTTOMS.

TEMPORARY WINTER COVER: AREAS OF EXPOSED SOILS THAT ARE NOT COMPLETED BEFORE THE WINTER WILL BE STABILIZED WITH TYPE #3 (CERTIFIED AS WEED FREE) ADJACENT TO WETLAND OR STORMWATER PONDS. ALL OTHER DISTURBED AREAS SHALL BE STABILIZED WITH TYPE #1 MULCH UNLESS AN ALTERNATIVE, MORE PROTECTIVE BMPS ARE SPECIFIC WITHIN THE SWPPP. ALL EXPOSED SOILS SHALL BE STABILIZED BEFORE CONSTRUCTION IS COMPLETED FOR THE SEASON.

HYDRO-MULCH TYPE #5: HYDRAULIC SOIL STABILIZER IN COMBINATION WITH A TACKIFIER WILL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS TO EXPOSED SOILS AREAS TO PROVIDE TEMPORARY LONG-TERM OR PERMANENT COVER FOR VEGETATION ESTABLISHMENT.

CONSTRUCTION ACTIVITY REQUIREMENTS: SEDIMENT CONTROL PRACTICES, PROCEDURES, & MAINTENANCE STANDARDS

DOWNGRADIENT SYSTEMS: IF THE DOWNGRADIENT TREATMENT SYSTEM IS OVERLOADED, ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS MUST BE INSTALLED TO ELIMINATE THE OVERLOADING, AND THE SWPPP MUST BE AMENDED TO IDENTIFY THESE ADDITIONAL PRACTICES.

PERIMETER CONTROL BMPS (SILT FENCES, CHIP/SLASH MULCH SACKS, BIOROLLS, FLOATING SILT CURTAIN, ETC.): PERIMETER CONTROL BMPS SHALL BE INSTALLED ON ALL DOWNGRADIENT PERIMETERS AND UPGRADIENT OF ANY BUFFER AREAS PRIOR TO INITIATING UPGRADIENT LAND DISTURBANCE ACTIVITIES. UPLAND PERIMETER CONTROL BMPS SHALL BE PLACED AS CLOSE AS POSSIBLE TO FOLLOW A SINGLE CONTOUR ELEVATION. ALL PERIMETER CONTROL DEVICES MUST BE REPAIRED, REPLACED, OR MAINTAINED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE. FLOATING SILT CURTAIN SHALL BE INSTALLED AS CLOSE TO THE SHORELINE AS POSSIBLE FOR SHORELAND-IN-WATER SHORT-TERM CONSTRUCTION ACTIVITIES. IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IN THAT AREA IS COMPLETE, AN UPLAND PERIMETER CONTROL MUST BE INSTALLED IF EXPOSED SOILS CONTINUE TO DRAIN TO THE SURFACE WATER.

50 FOOT NATURAL BUFFER(S): REFER TO "CONSTRUCTION PHASING/STAGING, BUFFERS, & AREAS NOT TO BE DISTURBED" SECTION OF THIS SWPPP.

TEMPORARY SEDIMENTATION BASINS: WHERE TEN (10) OR MORE ACRES OF DISTURBED SOIL DRAIN TO A COMMON LOCATION, A TEMPORARY SEDIMENT BASIN MUST BE PROVIDED PRIOR TO RUNOFF LEAVING THE CONSTRUCTION SITE OR ENTERING SURFACE WATERS. ALL TEMPORARY BASINS SHALL BE CONSTRUCTED AND OPERATIONAL PRIOR TO GRADING TEN (10) OR MORE ACRES. BASINS MUST PROVIDE A LIVE STORAGE VOLUME FROM A 2-YEAR 24-HOUR STORM EVENT FROM EACH ACRE (DISTURBED AND UNDISTURBED) DRAINING TO THE BASIN OR 1,800 CUBIC FEET OF LIVE STORAGE PER ACRE DRAINED, WHICHEVER IS GREATER. AT A MINIMUM, IF CALCULATIONS ARE NOT PERFORMED, THE BASIN SHALL PROVIDE 3,600 CUBIC FEET OF LIVE STORAGE FROM EACH ACRE. THE BASIN INTAKE MUST BE DESIGNED TO WITHDRAW WATER FROM THE SURFACE, PREVENT SHORT CIRCUITING AND THE DISCHARGE OF FLOATING DEBRIS, INCLUDE AN EMERGENCY OVERFLOW ABOVE THE LIVE STORAGE ELEVATION, AND PROVIDE ENERGY DISSIPATION AT THE BASIN OUTLET. BASINS MUST BE DRAINED AND SEDIMENT REMOVED WHEN THE DEPTH OF COLLECTED SEDIMENT IN THE BASIN REACHES 1/2 THE LIVE STORAGE VOLUME. IF A BASIN IS INFEASIBLE WITHIN THE PROJECT LIMITS, EQUIVALENT SEDIMENT CONTROL BMPS MUST BE IMPLEMENTED AND DOCUMENTED IN THE SWPPP OR SWPPP AMENDMENT.

TEMPORARY STOCKPILES: ALL STOCKPILES MUST HAVE SILT FENCE OR EQUIVALENT PERIMETER SEDIMENT CONTROLS IMPLEMENTED AND MAINTAINED AT ALL TIMES. PILES CANNOT BE PLACED IN BUFFER AREAS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS OR CONDUITS AND DITCHES, UNLESS THERE IS A BYPASS IN PLACE TO PREVENT STORMWATER RUN-ON INTO THE STOCKPILE. STABILIZATION ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY, OR ORGANIC COMPONENTS IS NOT REQUIRED.

CONSTRUCTION SITE ENTRANCE/VEHICLE TRACKING: OPERATOR MUST MINIMIZE SEDIMENT FROM LEAVING THE CONSTRUCTION SITE (OR ONTO STREETS WITHIN THE SITE) BY IMPLEMENTING BMPS SUCH AS ROCK PADS, SLASH MULCH, CONCRETE OR STEEL WASH RACKS, OR EQUIVALENT SYSTEMS. STREET SWEEPING MUST BE USED DAILY DURING CONSTRUCTION OPERATIONS IF SUCH BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE STREET. TRACKED SEDIMENT MUST BE REMOVED FROM ALL PAVED SURFACES (ON AND OFF-SITE) WITHIN 24 HOURS OF DISCOVERY OR SOONER AS DIRECTED BY THE PROJECT OWNER. MULTIPLE STREET SWEEPINGS AT THE OPERATOR'S EXPENSE MAY BE REQUIRED ON ALL ENTRY/EXIT POINTS TO THE SITE AT THE DISCRETION OF THE PROJECT OWNER.

SURFACE WATERS: INCLUDING OFF-SITE AND DOWNSTREAM DRAINAGE DITCHES, CATCH BASINS, AND CONVEYANCE SYSTEMS, MUST BE INSPECTED FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. THE REMOVAL AND STABILIZATION OF EXPOSED SOILS MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) CALENDAR DAYS OF OBTAINING ACCESS. THE PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE, AND FEDERAL AGENCIES AND RECEIVING ANY APPLICABLE PERMITS PRIOR TO CONDUCTING ANY WORK.

INLET PROTECTION: ALL STORM DRAIN INLETS (INCLUDING DOWNGRADIENT, OFF-SITE) MUST BE PROTECTED BY APPROPRIATE BMPS DURING CONSTRUCTION UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED. SILT FENCE IS NOT AN ACCEPTABLE CATCH BASIN INLET PROTECTION BMP. CONTRACTOR SHALL CLEAN, REMOVE, AND DISPOSE OF SEDIMENT AND/OR REPLACE STORM DRAIN INLET PROTECTION ON A ROUTINE BASIS TO ENSURE THE DEVICE IS FULLY FUNCTIONAL PRIOR TO THE NEXT FORECASTED PRECIPITATION EVENT (30% OR GREATER). INLET PROTECTION MAY BE REMOVED FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (STREET FLOODING/FREEZING) HAS BEEN IDENTIFIED BY THE PERMITTEE(S) OR THE JURISDICTIONAL AUTHORITY (E.G. CITY/COUNTY/TOWNSHIP/MNDOT ENGINEER). WRITTEN CORRESPONDENCE REGARDING THE NEED FOR REMOVAL MUST BE DOCUMENTED IN THE SWPPP.

CHEMICAL TREATMENTS: OPERATOR MUST AMEND THE SWPPP TO INCLUDE THE INTENDED USES AND LOCATIONS OF FLOCCULANTS, POLYMERS, AND OTHER SEDIMENTATION TREATMENT CHEMICALS. CHEMICAL TREATMENTS MAY ONLY BE APPLIED IN AREAS WHERE TREATED STORMWATER IS DIRECTED TO A RECEIVING SEDIMENT CONTROL SYSTEM (NOT DIRECTLY DISCHARGED TO NATURAL WATER BODIES). THIS INCLUDES DOCUMENTING THE EXPECTED SOIL TYPES, MANUFACTURER'S RECOMMENDED DOSING, APPLICATION RATES/QUANTITIES, AND MONITORING RESULTS (TURBIDITY, PH).

TEMPORARY & PERMANENT SEDIMENT CONTROL BMPS

TEMPORARY SEDIMENT BASIN: A TEMPORARY SEDIMENT BASIN IS NOT REQUIRED BECAUSE LESS THAN FIVE (5) ACRES WILL BE DISTURBED BY PROJECT.

DEWATERING, STREAM DIVERSION, AND BASIN DRAINING

DEWATERING, STREAM DIVERSION, OR BASIN DRAINING IS ANTICIPATED DURING CONSTRUCTION OF THIS PROJECT. CULVERT CONSTRUCTION AND NEW DITCH GRADING WILL REQUIRE SITE DEWATERING. WHEN DEWATERING OR BASIN DRAINING IS REQUIRED, THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN AND NARRATIVE TO THE PROJECT ENGINEER FOR APPROVAL PRIOR TO UNDERTAKING THESE ACTIVITIES. DEWATERING PLAN MUST INCLUDE BMPS TO PREVENT SEDIMENT TRANSPORT, EROSION, AND ADVERSE IMPACTS TO DOWNSTREAM RECEIVING WATERS. THE DEWATERING PLAN MUST ALSO INCLUDE ANY SPECIFIC CHEMICAL TREATMENTS (FLOC, POLYMERS, ETC.) THAT WILL BE USED. IF AN APPROVED TMDL WASTE LOAD ALLOCATION IS ESTABLISHED FOR CONSTRUCTION ACTIVITIES ON A RECEIVING WATERBODY, THE OPERATOR MUST IMPLEMENT ALL NECESSARY BMPS TO MEET THE ASSIGNED WLA. THE DEWATERING PLAN AND DNR APPROPRIATIONS PERMIT WILL BECOME PART OF THE SWPPP. WATER THAT IS TURBID OR HAS SEDIMENT MUST BE DISCHARGED TO A TEMPORARY OR PERMANENT SEDIMENTATION BASIN (AND/OR OTHER APPROPRIATE BMPS) ON THE PROJECT SITE WHENEVER POSSIBLE. DISCHARGE FROM THE TEMPORARY OR PERMANENT SEDIMENTATION BASIN MUST BE VISUALLY CHECKED TO ENSURE ADEQUATE TREATMENT IS OBTAINED IN THE BASIN AND THAT NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2), IMPACTS TO WETLANDS, AND EROSION IN RECEIVING CHANNELS OR ON DOWNLOPE PROPERTIES WILL NOT RESULT FROM THE DISCHARGE. THE DISCHARGE MUST BE DISPERSED OVER NATURAL ROCK RIPRAP, SAND BAGS, PLASTIC SHEETING, OR OTHER ACCEPTED ENERGY DISSIPATION MEASURES. ADEQUATE SEDIMENTATION CONTROL MEASURES AND ADDITIONAL FILTRATION BMPS ARE REQUIRED FOR DISCHARGE WATER THAT CONTAINS SUSPENDED SOLIDS, OIL, OR GREASE.

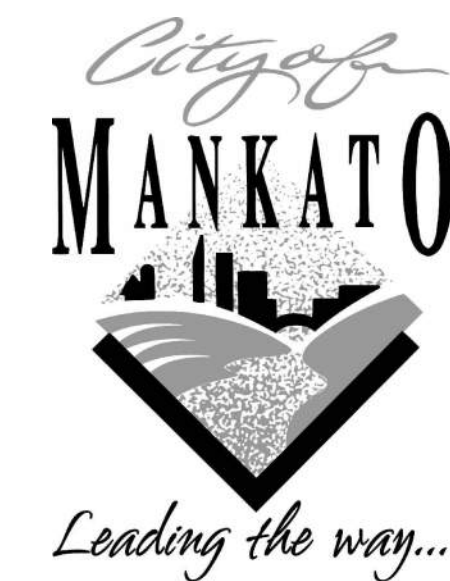
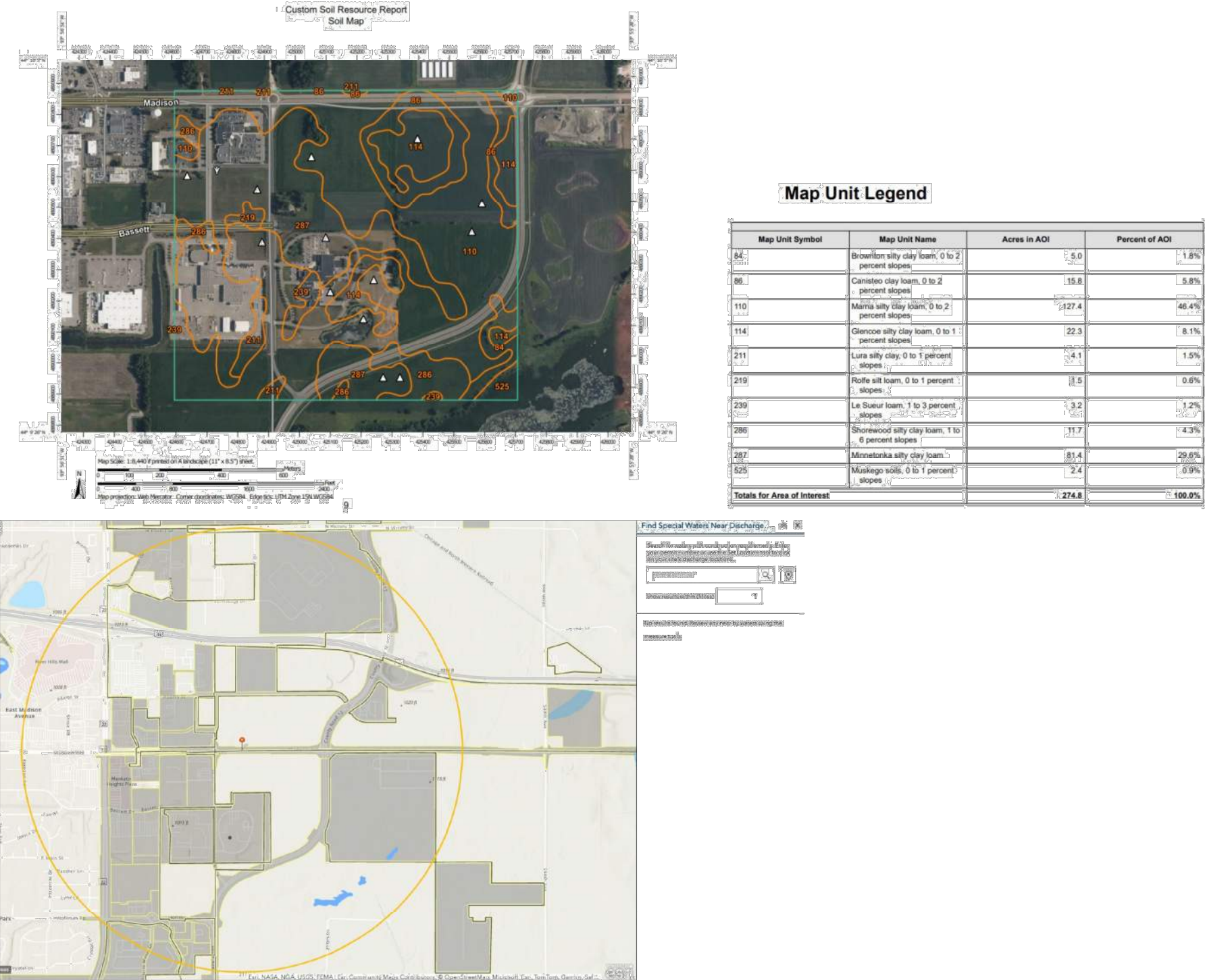
PERMIT TERMINATION CONDITIONS

PERMIT TERMINATION CONDITIONS ARE ACHIEVED WHEN THE FOLLOWING FOUR PARAMETERS ARE COMPLETED PRIOR TO SUBMISSION OF THE NOTICE OF TERMINATION TO MPCA.

1. **70% VEGETATIVE COVER:** ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED, AND ALL EXPOSED SOILS ARE STABILIZED BY A UNIFORM, LIVE PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 70% OVER THE ENTIRE PERVIOUS SURFACE AREA OR OTHER EQUIVALENT MEANS NECESSARY TO PREVENT SOIL FAILURE UNDER EROSION CONDITIONS. REFER TO PART 13.7 IF THE PROJECT IS ON AGRICULTURAL LAND. FOR RESIDENTIAL CONSTRUCTION ONLY, PLEASE REFER TO PART 13.6 OF THE NPDES PERMIT.
2. **FINAL CLEAN OUT OF PERMANENT STORMWATER MANAGEMENT SYSTEMS & CONVEYANCE SYSTEMS:** ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM PERMANENT STORMWATER MANAGEMENT SYSTEMS, CONVEYANCE SYSTEMS, AND DITCHES MUST BE STABILIZED WITH PERMANENT COVER. ALL SYSTEMS MUST OPERATE AS DESIGNED.
3. **REMOVAL OF ALL TEMPORARY SYNTHETIC BMPS:** ALL TEMPORARY SYNTHETIC AND STRUCTURAL EROSION PREVENTION AND SEDIMENT CONTROL BMPS (SUCH AS SILT FENCE) MUST BE REMOVED ON THE PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE. BMPS DESIGNED TO DECOMPOSE ON SITE (SUCH AS SOME COMPOST LOGS) MAY BE LEFT IN PLACE.
4. **OPERATOR PROVIDES THE OWNER ALL INSPECTION AND SWPPP AMENDMENT RECORDS FOR THE PROJECT.** OWNER IS RESPONSIBLE FOR KEEPING ALL RECORDS (AS DEFINED IN PART 24.5) ON FILE FOR THREE YEARS AFTER SUBMITTAL OF THE NOTICE OF TERMINATION.

THE CO-PERMITTEES (OWNER AND OPERATOR) MUST SIGN AND SUBMIT THE COMPLETED NOTICE OF TERMINATION TO THE MPCA WITHIN 30 DAYS AFTER SELLING/LEGALLY TRANSFERRING THE PROPERTY OR FINAL STABILIZATION IS ACHIEVED. PERMITTEE(S) MAY TERMINATE PERMIT COVERAGE PRIOR TO THE PROJECT COMPLETION IF THE CONDITIONS IN PART 4 OF THE NPDES-CSW PERMIT ARE MET.

INCLUDE SOILS MAP AND SURFACE WATERS MAP WITHIN 1 MILE



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KYLE J. RENNEKE

DATE: 06/27/25 LIC. NO. 52626

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PROJECT

CITY OF MANKATO BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C1-SWPPP
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

SWPPP NARRATIVE AND QUANTITIES

SHEET

CONCRETE WASHOUT

NTS

STREET INLET PROTECTION

NTS

RIPRAP AT RCP OUTLET

1. REQUIREMENTS FOR GEOTEXTILE TYPE, RIPRAP SIZE AND THICKNESS, WILL BE DESIGNATED IN THE PLANS.
2. PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN

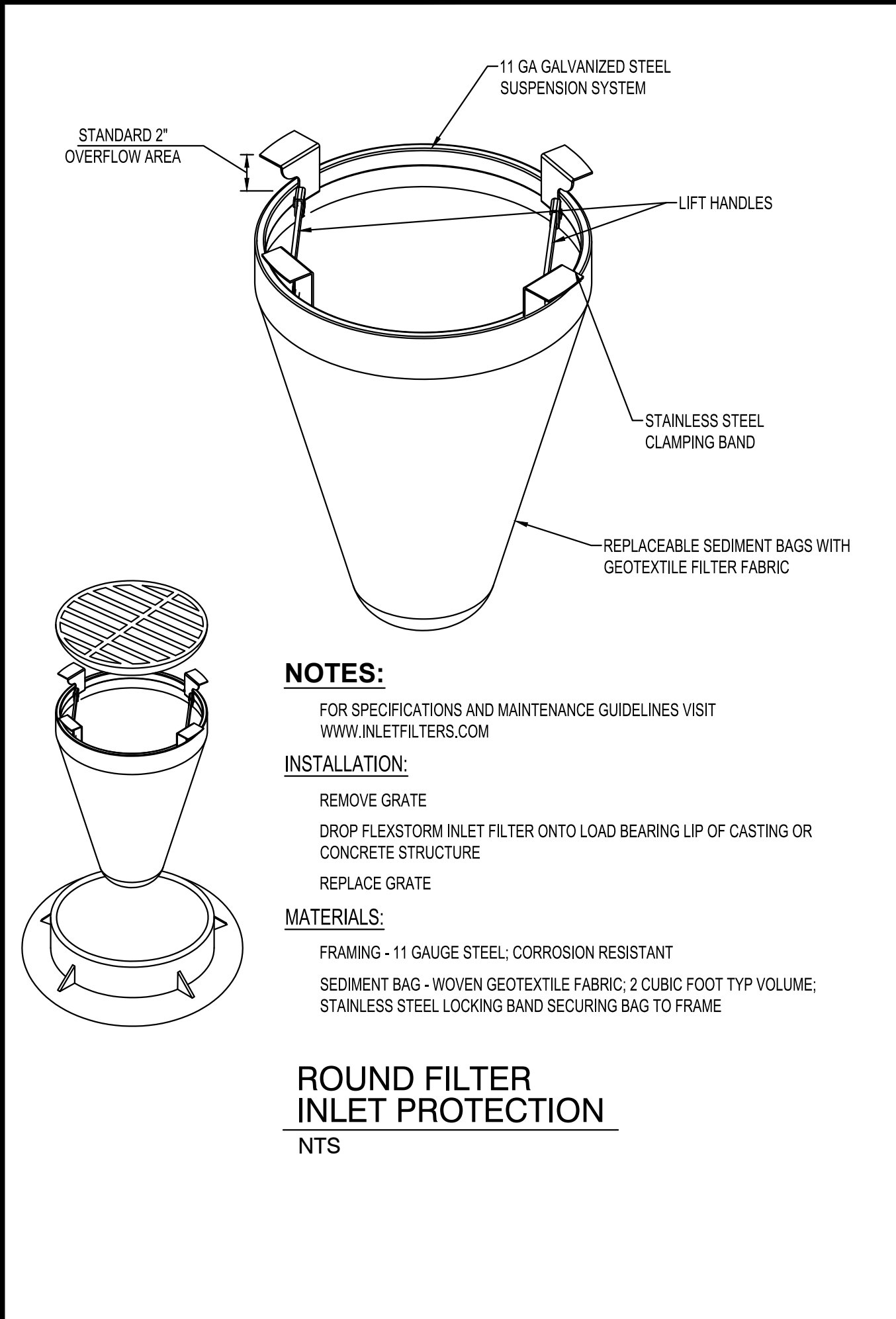
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STABILIZED CONSTRUCTION EXIT

EROSION CONTROL BLANKET INSTALLATION

1. INSTALL EROSION CONTROL BLANKET (ECB) OVER WATERWAYS AS SHOWN IN THE STORM WATER POLLUTION PREVENTION PLAN.
2. THE ECB SHALL CONFORM TO MnDOT STANDARD SPECIFICATIONS SECTION 388S.
3. PREPARE SOIL PRIOR TO INSTALLING ECB, INCLUDING SEEDING AND FERTILIZING.
4. THE ECB SHALL BE PLACED IN FIRM CONTACT WITH THE SOIL AND NOT BE ALLOWED TO BRIDGE OVER SURFACE IRREGULARITIES. THE MAT SHALL NOT BE STRETCHED.
5. START LAYING THE MATS BY ROLLING CENTER MAT IN THE DIRECTION OF FLOW, CENTERED ON THE CENTERLINE OF WATERWAY. THERE SHALL NOT BE AN OVERLAP OF MATS AT THE CENTER OF THE WATERWAY.
6. THE ECB SHALL BE ANCHORED, OVERLAPPED, AND STAPLED ACCORDING TO MANUFACTURER'S INSTRUCTIONS. IF NO MANUFACTURER'S INSTRUCTIONS ARE AVAILABLE, INSTALL THE MAT PER DETAIL.
7. STAPLES SHALL BE "U" SHAPED, 0.12" DIAMETER WIRE OR GREATER (#11 GAUGE). (SEE STAPLE DETAIL FOR DIMENSIONS)
8. STAPLES ARE TO BE PLACED ALTERNATELY IN COLUMNS (IN THE DIRECTION OF THE WATERWAY) 2' APART AND IN ROWS (ACROSS THE WATERWAY) 3' APART THROUGHOUT THE AREA COVERED BY THE ECB.

SILT FENCE
NTS



NOTES:

FOR SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT
WWW.INLETFILTERS.COM

INSTALLATION:

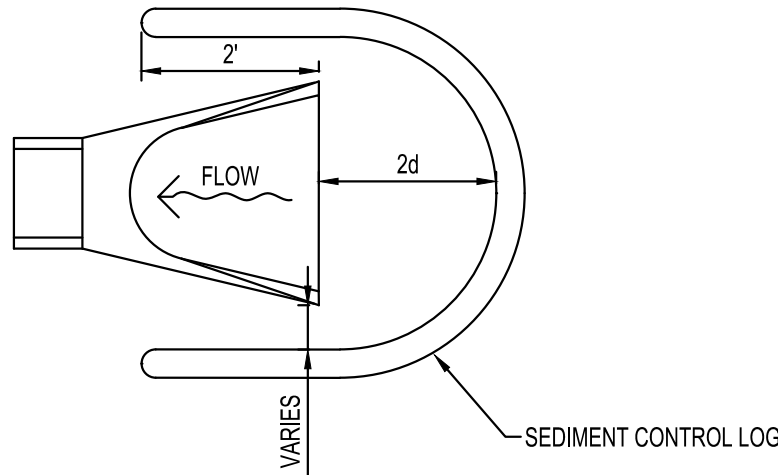
- REMOVE GRATE
- DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
- REPLACE GRATE

MATERIALS:

FRAMING - 11 GAUGE STEEL; CORROSION RESISTANT
SEDIMENT BAG - WOVEN GEOTEXTILE FABRIC; 2 CUBIC FOOT TYP VOLUME;
STAINLESS STEEL LOCKING BAND SECURING BAG TO FRAME

**ROUND FILTER
INLET PROTECTION**

NTS



NOTES:

- 1. SEDIMENT CONTROL LOG CAN BE COMPOST, WOOD CHIP, OR ROCK
- 2. d = CULVERT SIZE: 12"-36"

**CULVERT END CONTROL
SEDIMENT CONTROL LOG**

NTS



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PROJECT

**CITY OF
MANKATO**

**BASSETT DRIVE
EXTENSION**

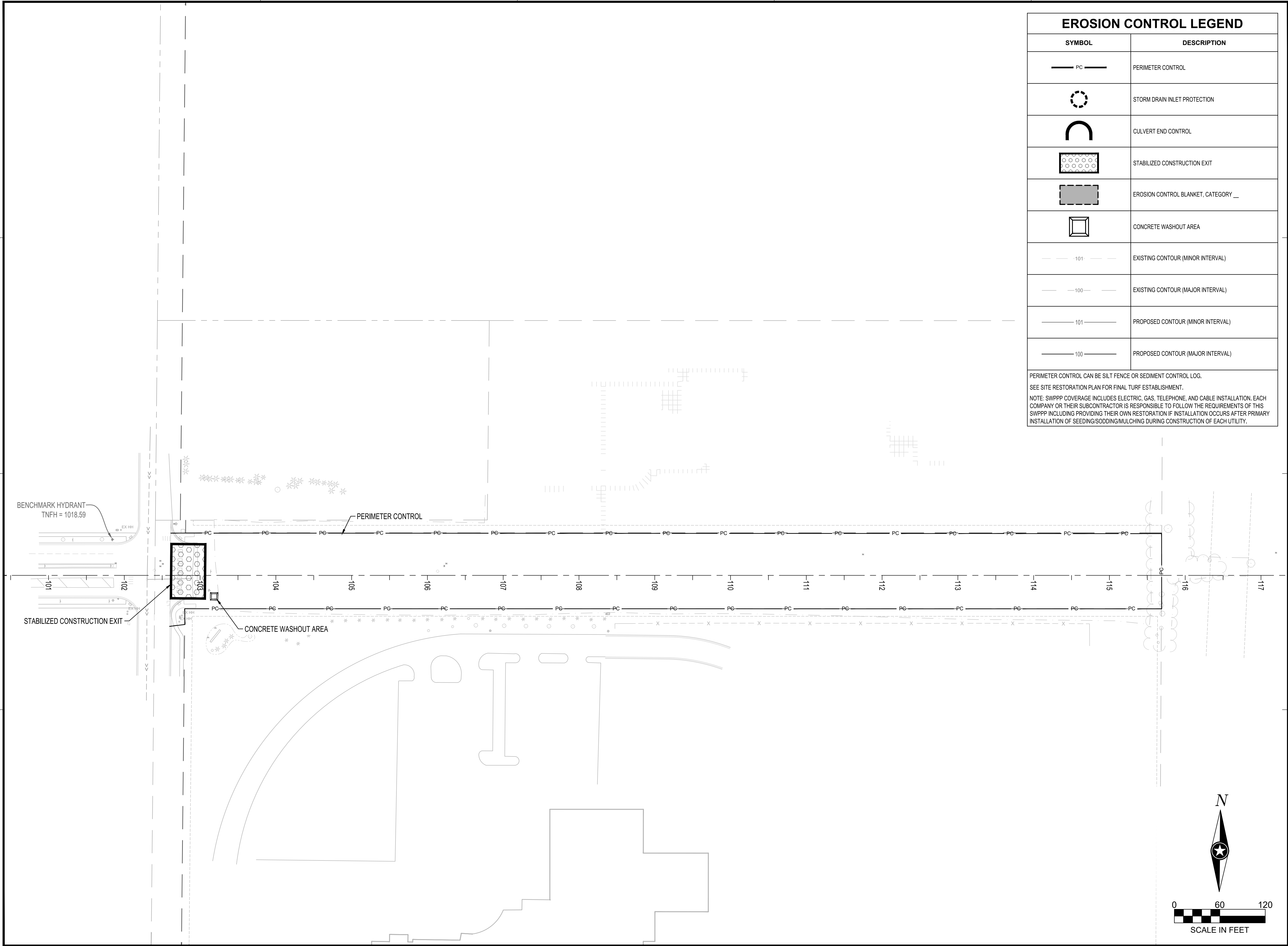
MANKATO MINNESOTA

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TITLE

SWPPP DETAILS



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
— PC —	PERIMETER CONTROL
⊙	STORM DRAIN INLET PROTECTION
⌒	CULVERT END CONTROL
⬜	STABILIZED CONSTRUCTION EXIT
▤	EROSION CONTROL BLANKET, CATEGORY __
◻	CONCRETE WASHOUT AREA
— 101 —	EXISTING CONTOUR (MINOR INTERVAL)
— 100 —	EXISTING CONTOUR (MAJOR INTERVAL)
— 101 —	PROPOSED CONTOUR (MINOR INTERVAL)
— 100 —	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.

SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.

NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.

ISG

City of MANKATO

Leading the way...

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PROJECT

CITY OF MANKATO

BASSETT DRIVE EXTENSION

MANKATO

MINNESOTA

REVISION SCHEDULE

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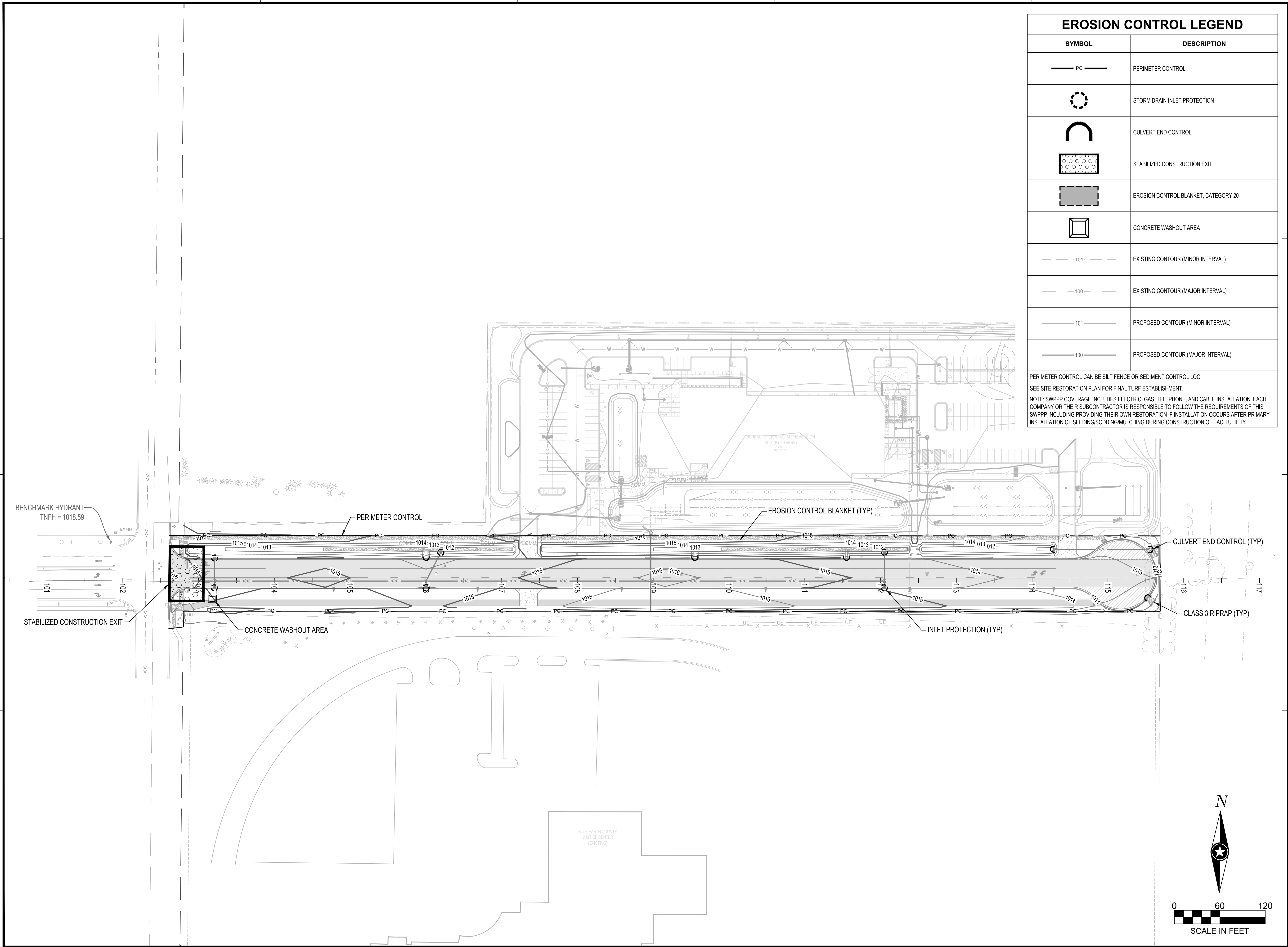
TITLE

PRE-CONSTRUCTION SWPPP

SHEET

9

OF 31



EROSION CONTROL LEGEND

SYMBOL	DESCRIPTION
— PC —	PERIMETER CONTROL
⊙	STORM DRAIN INLET PROTECTION
⌒	CULVERT END CONTROL
◻ (stippled)	STABILIZED CONSTRUCTION EXIT
▨	EROSION CONTROL BLANKET, CATEGORY 20
◻ (solid)	CONCRETE WASHOUT AREA
— 101 —	EXISTING CONTOUR (MINOR INTERVAL)
— 100 —	EXISTING CONTOUR (MAJOR INTERVAL)
— 101 —	PROPOSED CONTOUR (MINOR INTERVAL)
— 100 —	PROPOSED CONTOUR (MAJOR INTERVAL)

PERIMETER CONTROL CAN BE SILT FENCE OR SEDIMENT CONTROL LOG.
SEE SITE RESTORATION PLAN FOR FINAL TURF ESTABLISHMENT.
NOTE: SWPPP COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS SWPPP INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SODDING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.



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KYLE J. RENNEKE
KJR
DATE: 06/27/25 LIC. NO. 52626

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PROJECT

CITY OF MANKATO

BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

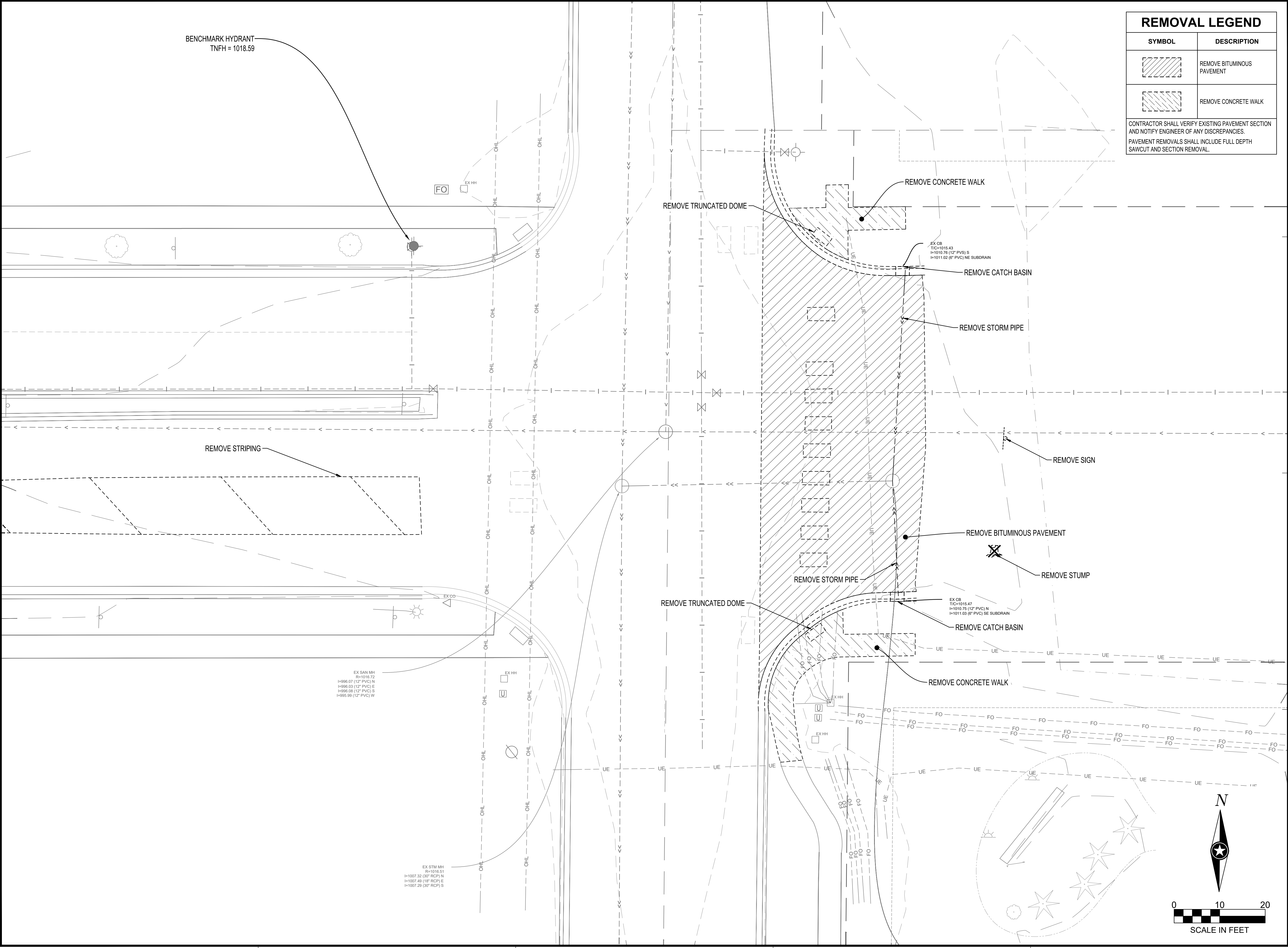
PROJECT NO.	25-32569
FILE NAME	32569-C1-SWPPP
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

SWPPP

SHEET

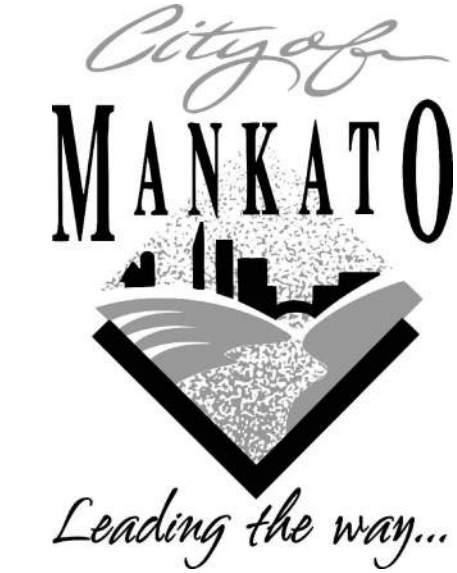
10 OF 31



REMOVAL LEGEND

SYMBOL	DESCRIPTION
	REMOVE BITUMINOUS PAVEMENT
	REMOVE CONCRETE WALK

CONTRACTOR SHALL VERIFY EXISTING PAVEMENT SECTION AND NOTIFY ENGINEER OF ANY DISCREPANCIES.
PAVEMENT REMOVALS SHALL INCLUDE FULL DEPTH SAWCUT AND SECTION REMOVAL.



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Kyle Renneke
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PROJECT

CITY OF MANKATO

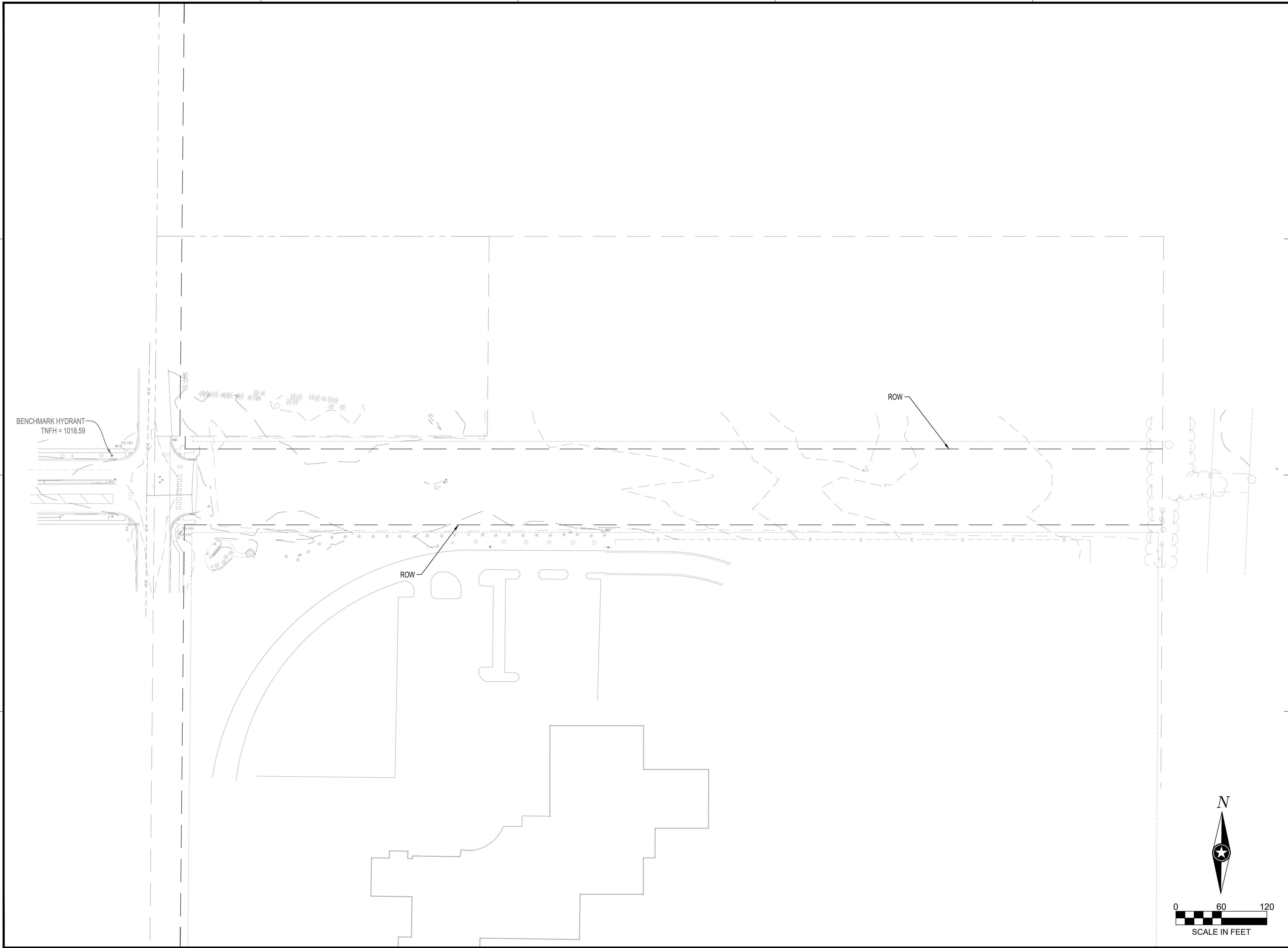
BASSETT DRIVE EXTENSION

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C2-EXIST
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

EXISTING SITE AND REMOVAL PLAN



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Kyle Renneke
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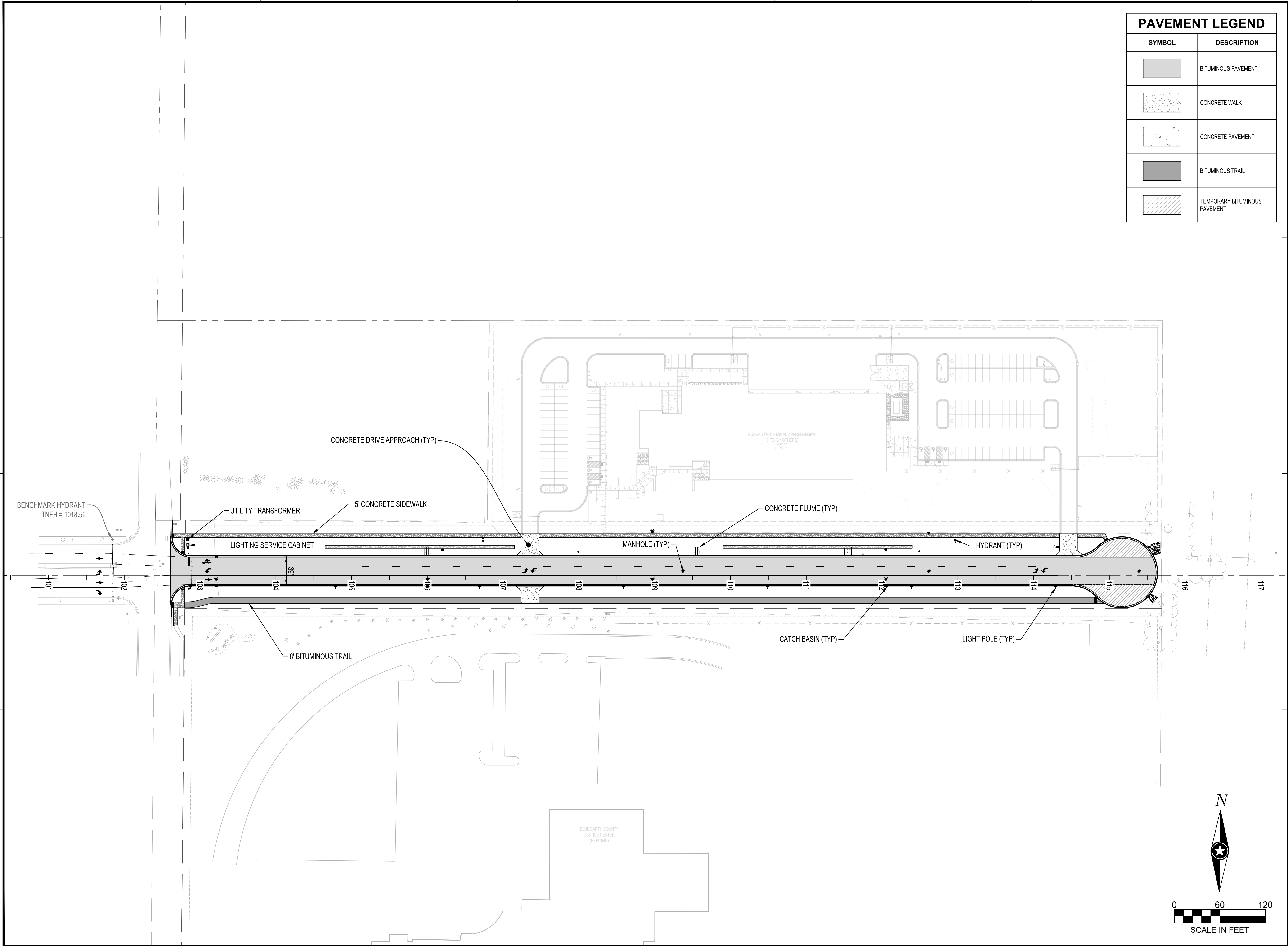
PROJECT
CITY OF MANKATO
BASSETT DRIVE EXTENSION
MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO. 25-32569
FILE NAME 32569-C2-EXIST-OVERALL
DRAWN BY BDC
DESIGNED BY BDC
REVIEWED BY KJR
ORIGINAL ISSUE DATE 06/27/2025
CLIENT PROJECT NO. -

TITLE
OVERALL EXISTING SITE

SHEET
12 OF 31



PAVEMENT LEGEND	
SYMBOL	DESCRIPTION
	BITUMINOUS PAVEMENT
	CONCRETE WALK
	CONCRETE PAVEMENT
	BITUMINOUS TRAIL
	TEMPORARY BITUMINOUS PAVEMENT



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PROJECT

CITY OF MANKATO

BASSETT DRIVE EXTENSION

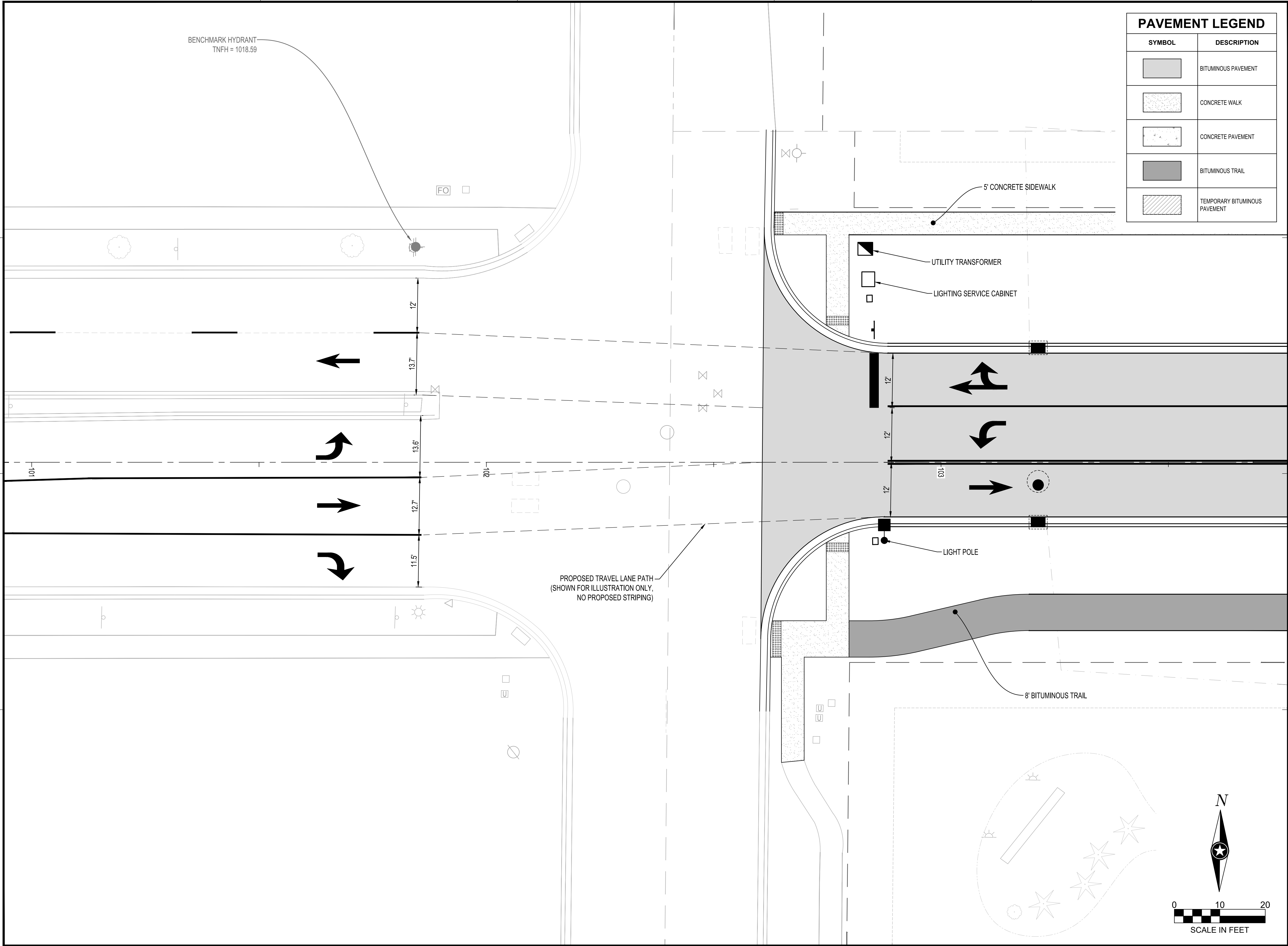
MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C3-SITE
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

OVERALL SITE PLAN



PAVEMENT LEGEND	
SYMBOL	DESCRIPTION
	BITUMINOUS PAVEMENT
	CONCRETE WALK
	CONCRETE PAVEMENT
	BITUMINOUS TRAIL
	TEMPORARY BITUMINOUS PAVEMENT



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PROJECT

CITY OF MANKATO

BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C3-SITE
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

INTERSECTION PLAN

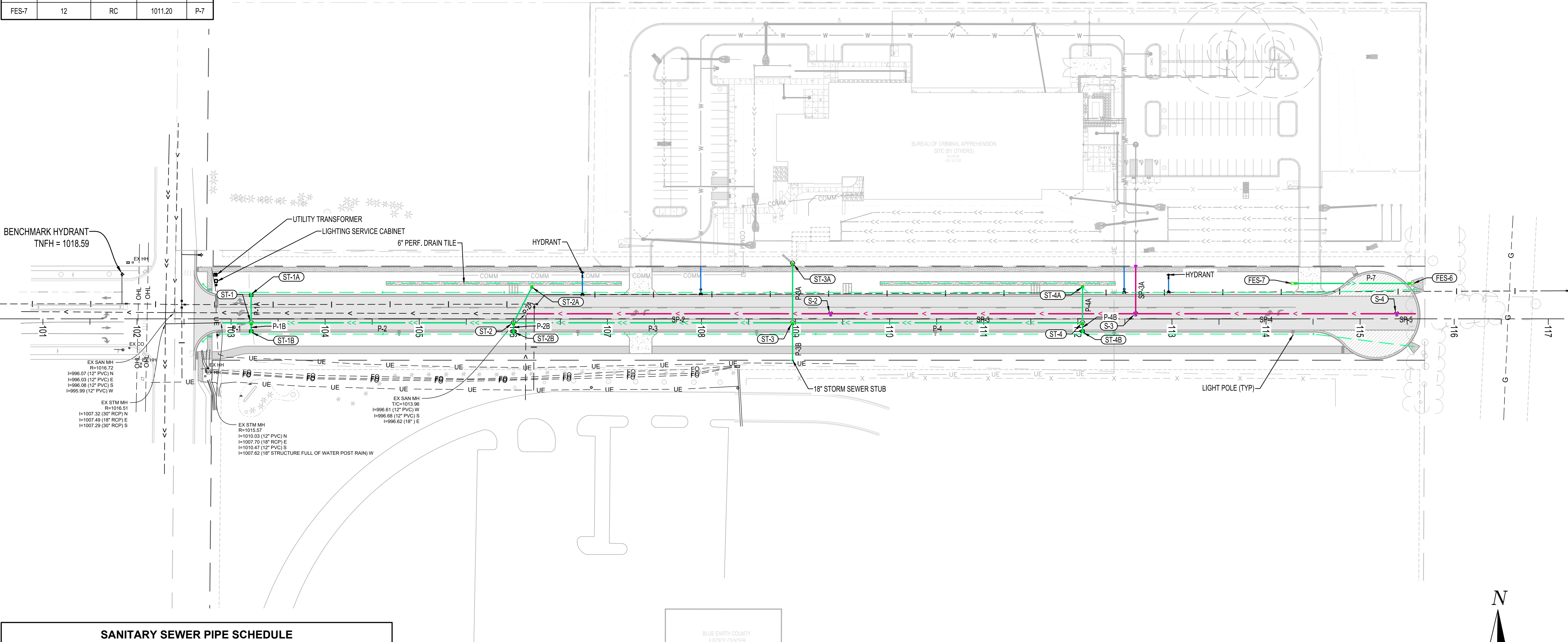
STORM DRAIN PIPE SCHEDULE									
PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE (IN)	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
P-1	ST-1	1007.81	EX MH-1	1007.70	24	RCP	RCP	0.35%	32
P-1A	ST-1A	1010.51	ST-1	1010.03	12	PP	PP	1.58%	30
P-1B	ST-1B	1010.58	ST-1	1010.47	12	PP	PP	1.10%	10
P-2	ST-2	1008.90	ST-1	1007.81	24	RCP	RCP	0.39%	279
P-2A	ST-2A	1009.44	ST-2	1009.09	15	PP	PP	0.82%	42
P-2B	ST-2B	1009.43	ST-2	1009.09	12	PP	PP	3.40%	10
P-3	ST-3	1010.13	ST-2	1009.10	18	RCP	RCP	0.35%	297
P-3A	ST-3A	1010.83	ST-3	1010.33	15	PP	PP	0.79%	63
P-3B	ST-73	1010.73	ST-3	1010.33	15	PP	PP	1.00%	40
P-4	ST-4	1011.26	ST-3	1010.33	18	RCP	RCP	0.30%	308
P-4A	ST-4A	1011.68	ST-4	1011.26	15	PP	PP	1.10%	38
P-4B	ST-4B	1011.46	ST-4	1011.26	12	PP	PP	2.00%	10
P-7	FES-7	1011.20	FES-6	1010.80	12	RCP	RCP	0.30%	130

STORM DRAIN APRON SCHEDULE				
APRON NO.	APRON SIZE (IN)	APRON MATERIAL	INVERT ELEVATION	PIPE NO.
FES-6	12	RC	1010.80	P-7
FES-7	12	RC	1011.20	P-7

STORM DRAIN STRUCTURE SCHEDULE								
STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	STRUCTURE HEIGHT (LN FT)	* TOP OF CASTING ELEVATION	OUTLET INVERT	OUTLET PIPE
ST-1	MnDOT 4020	48 Ø	RC	MNDOT 700-7 W/ 715 COVER	6.63	1014.44	1007.81	P-1
ST-1A	MANKATO STD CB NO 3	24 Ø	PVC	NEENAH R-3067-V	3.94	1014.45	1010.51	P-1A
ST-1B	MANKATO STD CB NO 3	24 Ø	PVC	NEENAH R-3067-V	4.11	1014.69	1010.58	P-1B
ST-2	MnDOT 4020	48 Ø	RC	MNDOT 700-7 W/ 715 COVER	5.25	1014.14	1008.90	P-2
ST-2A	NYLOPLAST DRAIN BASIN	15 Ø	PVC	NYLOPLAST 1599CGD	4.82	1013.26	1008.44	P-2A
ST-2B	MANKATO STD CB NO 3	24 Ø	PVC	NEENAH R-3067-V	4.97	1014.40	1009.43	P-2B
ST-3	MnDOT 4020	48 Ø	RC	MNDOT 700-7 W/ 715 COVER	5.89	1016.03	1010.13	P-3
ST-3A	MnDOT 4020	48 Ø	RC	MNDOT 700-7 W/ 715 COVER	3.86	1014.69	1010.83	P-3A
ST-4	MnDOT 4020	48 Ø	RC	MNDOT 700-7 W/ 715 COVER	3.44	1014.70	1011.26	P-4
ST-4A	NYLOPLAST DRAIN BASIN	15 Ø	PVC	NYLOPLAST 1599CGD	2.92	1013.60	1010.68	P-4A
ST-4B	MANKATO STD CB NO 3	24 Ø	PVC	NEENAH R-3067-V	3.49	1014.95	1011.46	P-4B

* TOP OF CASTING ELEVATIONS ON CURB STYLE CATCH BASINS - TOP BACK OF CURB BOX, NOT GUTTER ELEVATION

UTILITY LEGEND		
EXISTING		PROPOSED
--- >> ---	STORM DRAIN	--- >> ---
--- > ---	SANITARY SEWER	--- > ---
--- > ---	SANITARY SEWER FORCEMAIN	--- > ---
--- ---	WATER MAIN	--- ---
--- G ---	GAS	--- G ---
--- OE ---	OVERHEAD ELECTRIC	--- OE ---
--- UE ---	UNDERGROUND ELECTRIC	--- UE ---
--- UT ---	UNDERGROUND TELEPHONE	--- UT ---
--- UTV ---	UNDERGROUND TV	
--- OHL ---	OVERHEAD UTILITY	
--- UTL ---	UNDERGROUND UTILITY	
--- FBO ---	FIBER OPTIC	
NOTE: CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES.		



SANITARY SEWER PIPE SCHEDULE									
PIPE NO.	DRAIN FROM	INLET ELEVATION	DRAIN TO	OUTLET ELEVATION	PIPE SIZE	MATERIAL	PIPE CLASS	PIPE GRADE	PIPE LENGTH (FT)
SP-2	S-2	997.42	EX MH-1	996.71	12"	PVC	SDR-35	0.22%	324
SP-3	S-3	998.24	S-2	997.52	12"	PVC	SDR-35	0.22%	324
SP-3A		1005.30	S-3	1004.29	6"	PVC	SDR-35	2.00%	50
SP-4	S-4	998.95	S-3	998.34	12"	PVC	SDR-35	0.22%	277
SP-5		999.09	S-4	999.05	12"	PVC	SDR-35	0.22%	20

SANITARY SEWER STRUCTURE SCHEDULE								
STRUCTURE NO.	STRUCTURE TYPE	STRUCTURE SIZE (IN)	STRUCTURE MATERIAL	CASTING	STRUCTURE HEIGHT (LN FT)	TOP OF CASTING ELEVATION	INVERT ELEVATION	OUTLET PIPE
S-2	MnDOT 4007C	48 Ø	RC	NEENAH R1733 "SANITARY SEWER" STAMP SELF CLEANING PICK HOLES	18.59	1016.01	997.42	SP-2
S-3	MnDOT 4007C	48 Ø	RC	NEENAH R1733 "SANITARY SEWER" STAMP SELF CLEANING PICK HOLES	16.16	1014.39	998.24	SP-3
S-4	MnDOT 4007C	48 Ø	RC	NEENAH R1733 "SANITARY SEWER" STAMP SELF CLEANING PICK HOLES	14.10	1013.05	998.95	SP-4



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PROJECT

CITY OF MANKATO BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C3-UTILITY
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

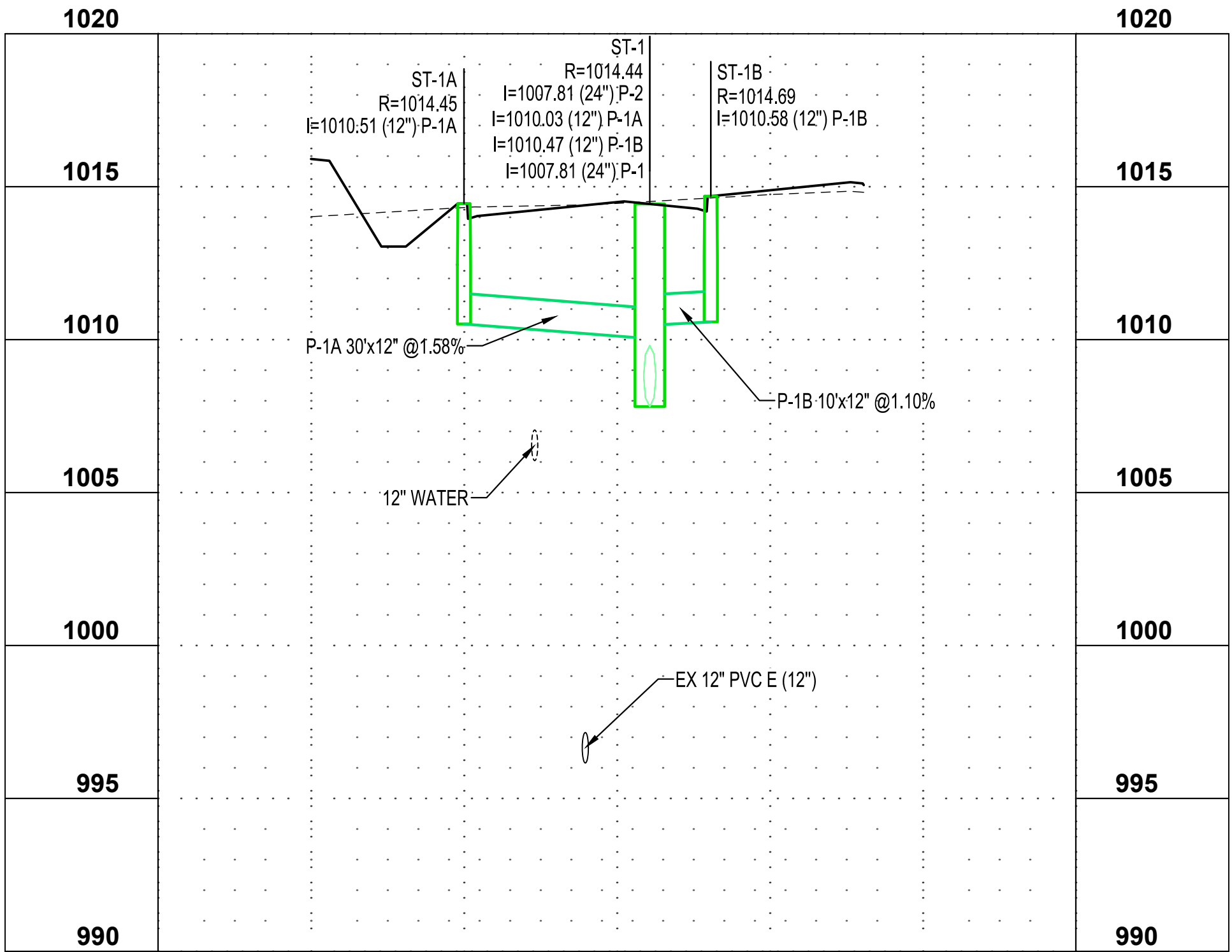
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OVERALL UTILITY PLAN

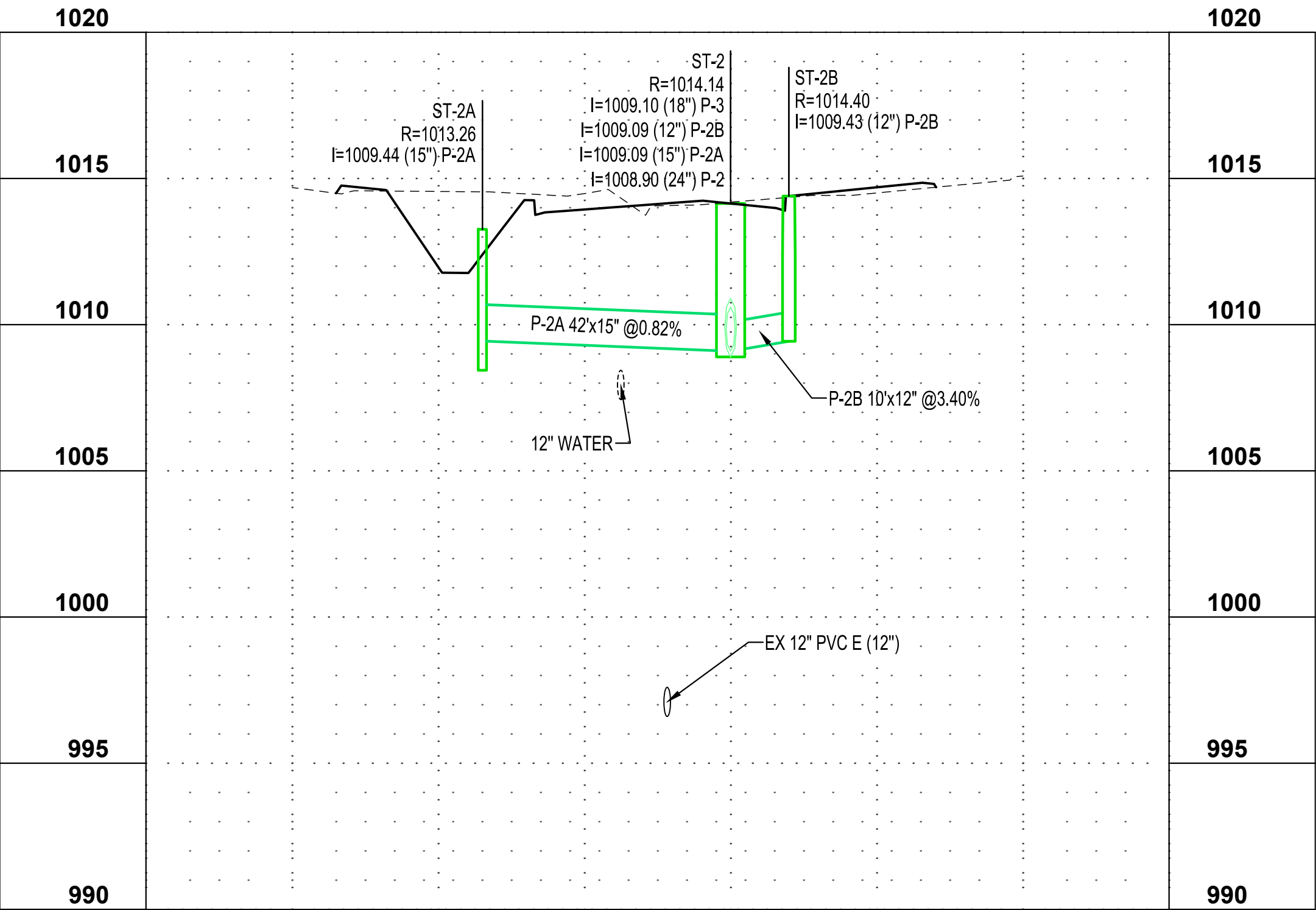
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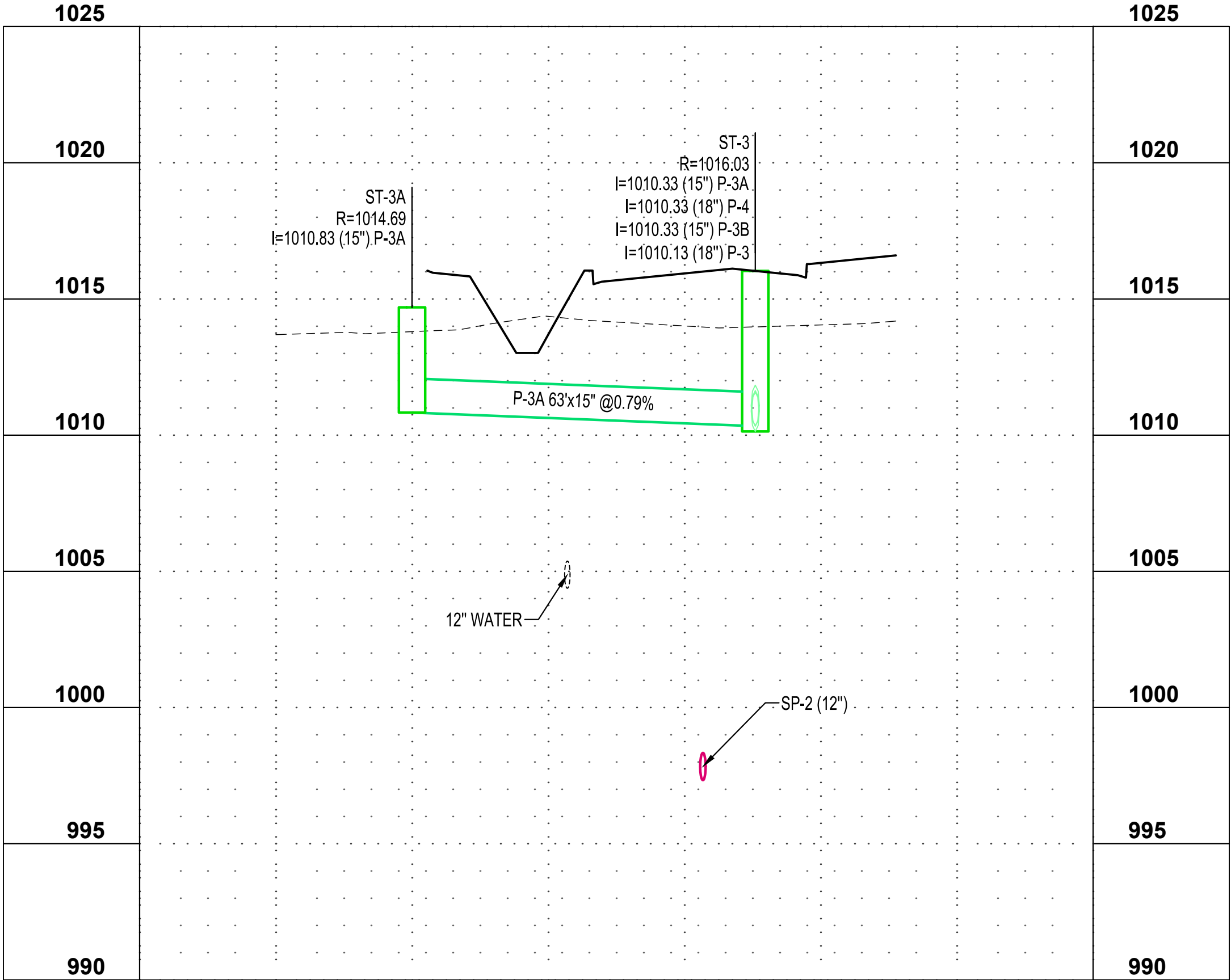
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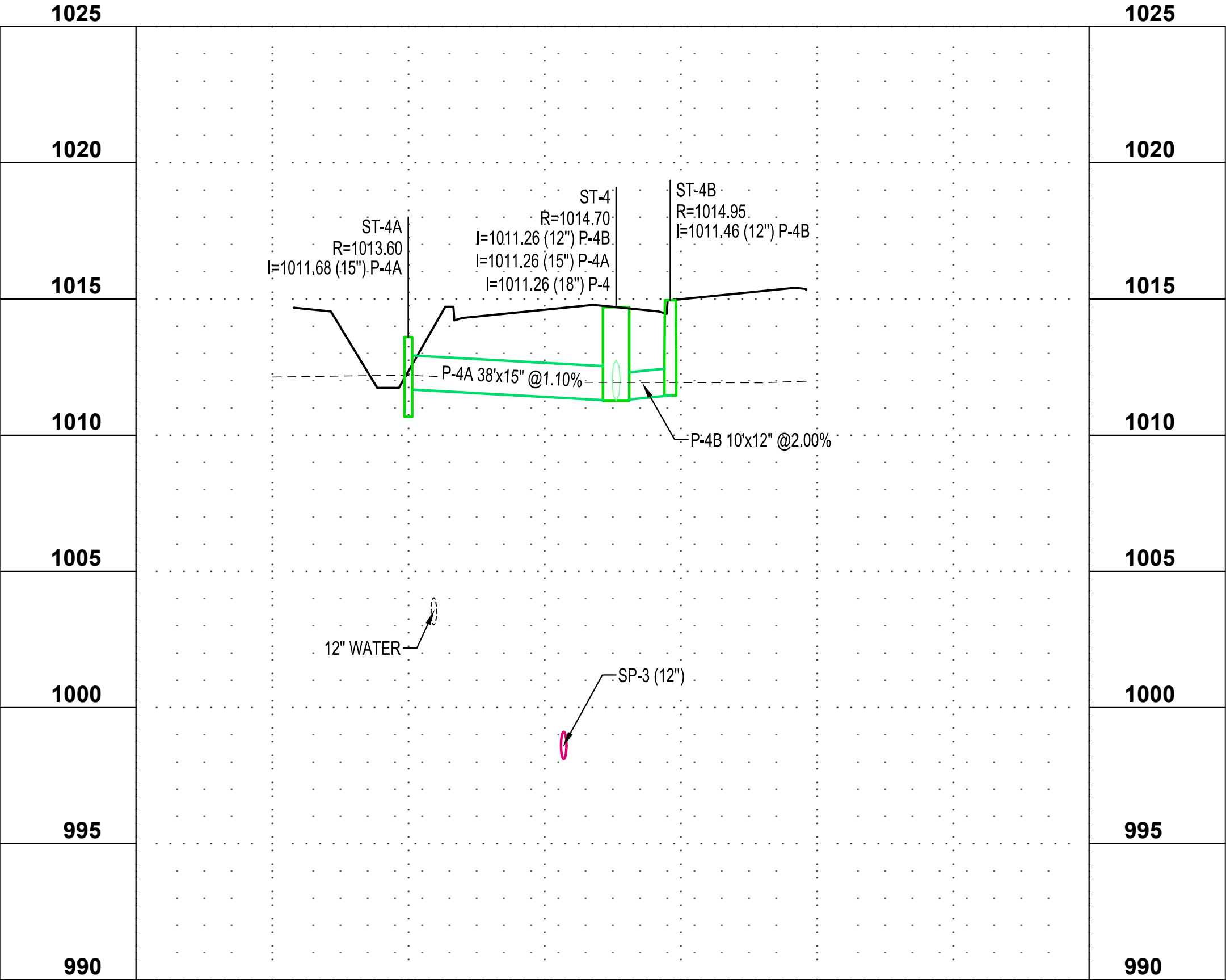
ST-1



ST-2



ST-3



ST-4



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PROJECT

CITY OF MANKATO

BASSETT DRIVE EXTENSION

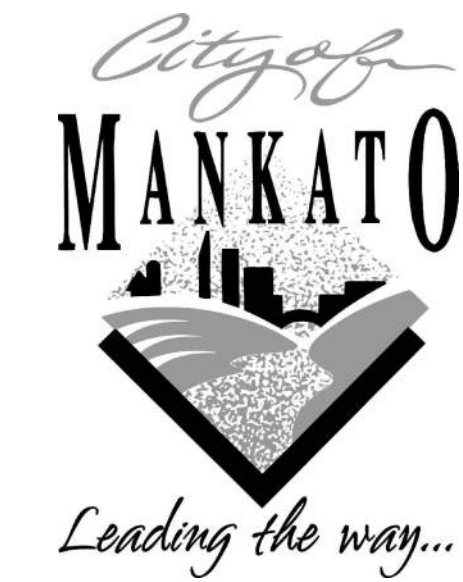
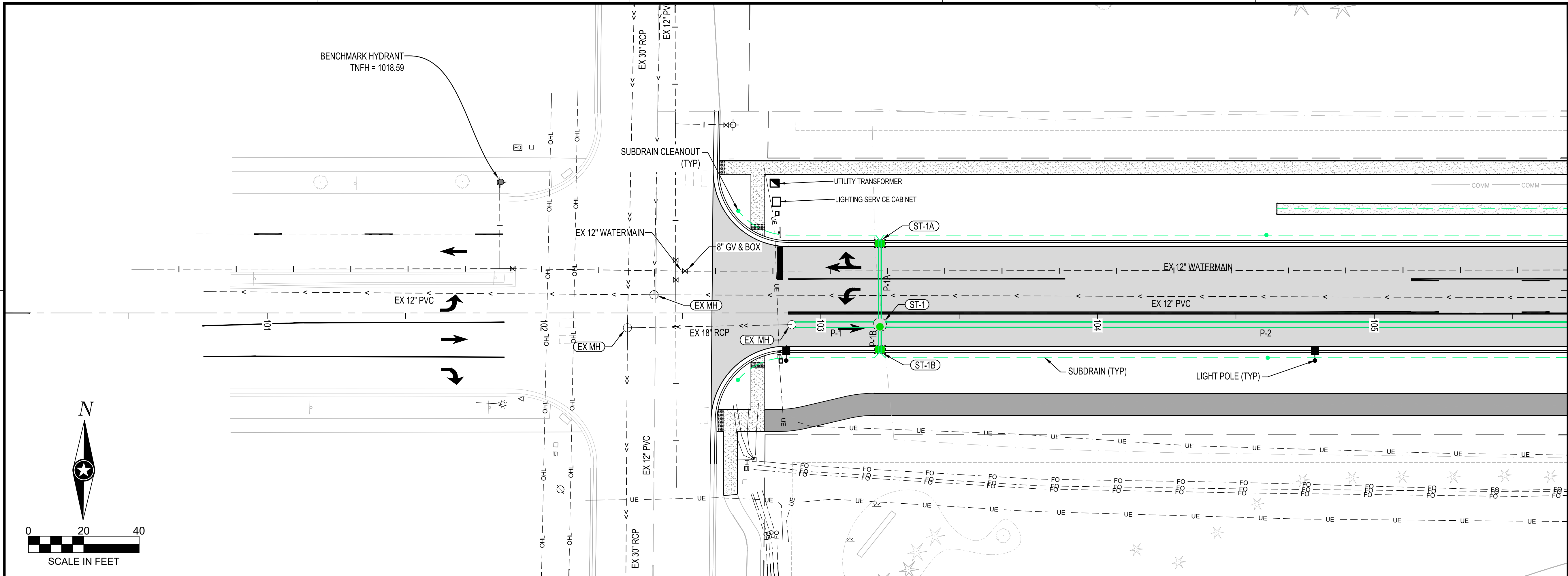
MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C3-UTILITY
DRAWN BY	BDC
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REVIEWED BY	KJR
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CLIENT PROJECT NO.	-

TITLE

UTILITY PROFILES



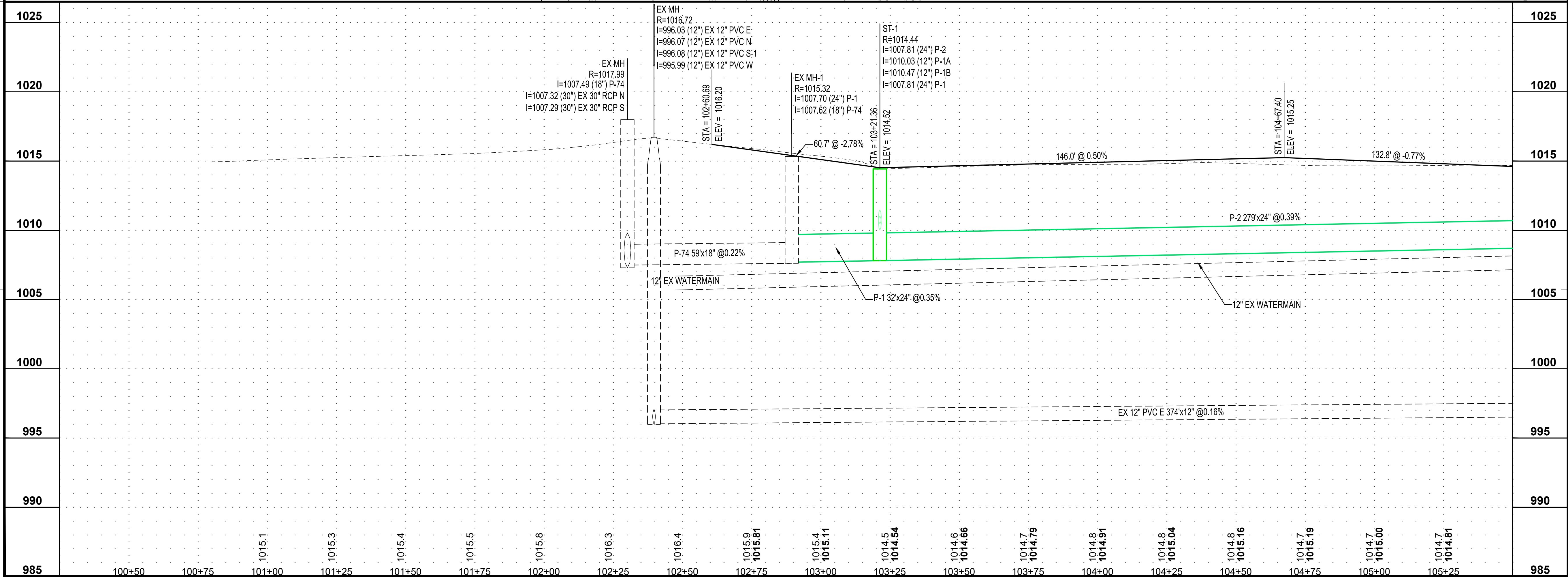
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CITY OF
MANKATO

BASSETT DRIVE
EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.

25-32569

FILE NAME

32569-C3-PROFILES

DRAWN BY

BDC

DESIGNED BY

BDC

REVIEWED BY

KJR

ORIGINAL ISSUE DATE

06/27/2025

CLIENT PROJECT NO.

-

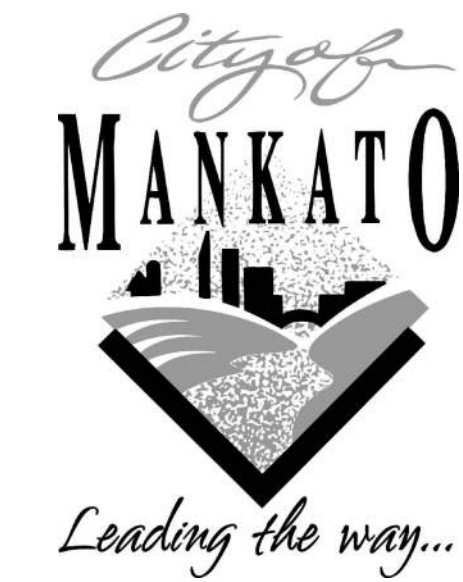
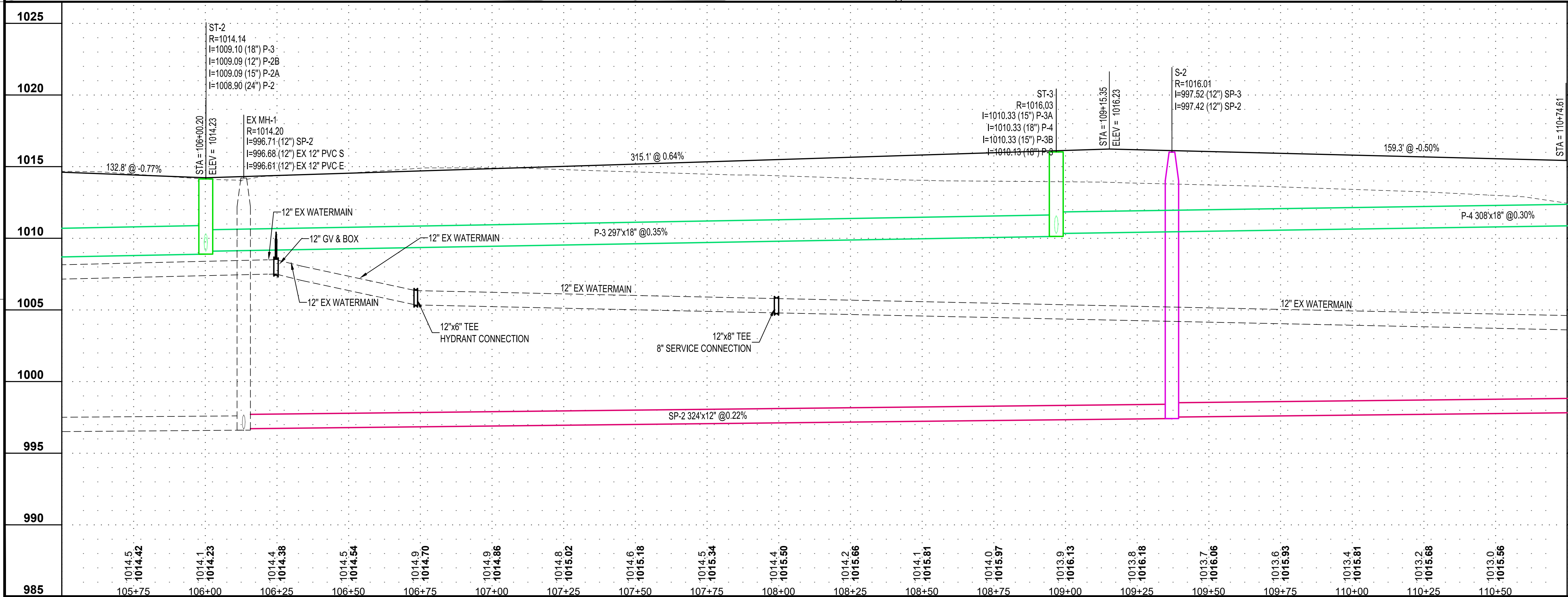
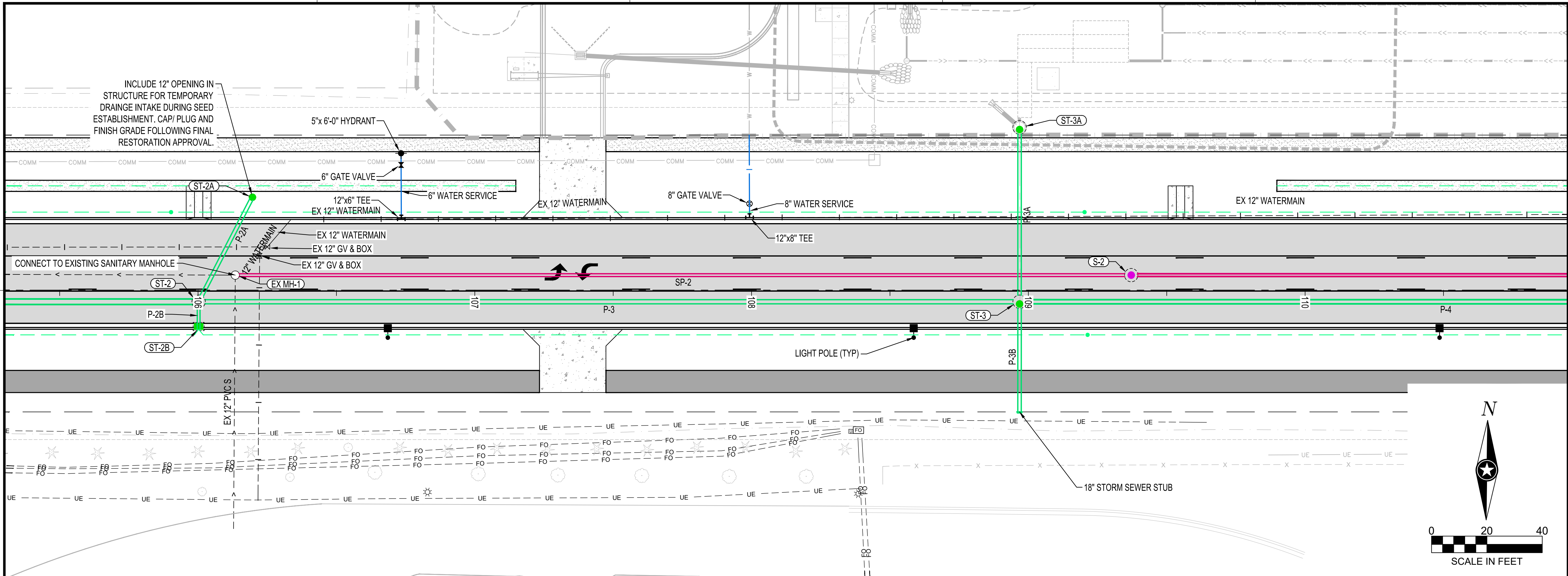
TITLE

PLAN AND PROFILE

SHEET

17

OF 31



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PROJECT
CITY OF MANKATO
BASSETT DRIVE EXTENSION
MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO. 25-32569
FILE NAME 32569-C3-PROFILES
DRAWN BY BDC
DESIGNED BY BDC
REVIEWED BY KJR
ORIGINAL ISSUE DATE 06/27/2025
CLIENT PROJECT NO. -

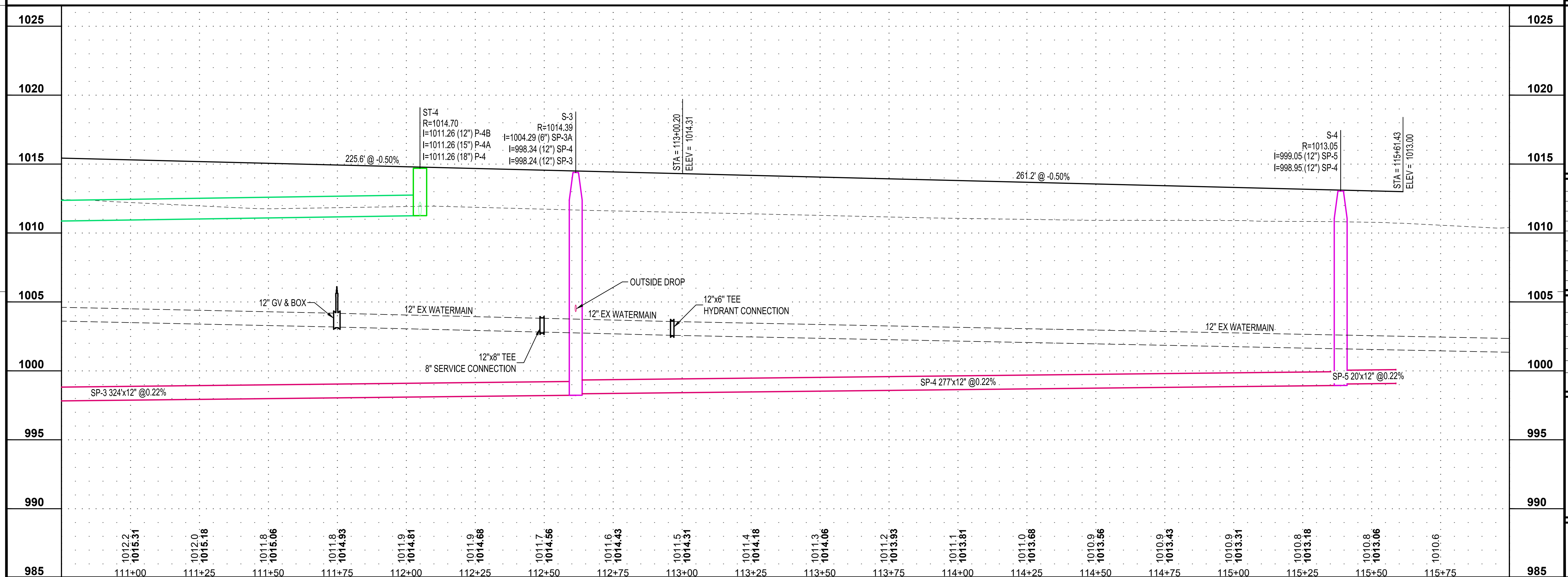
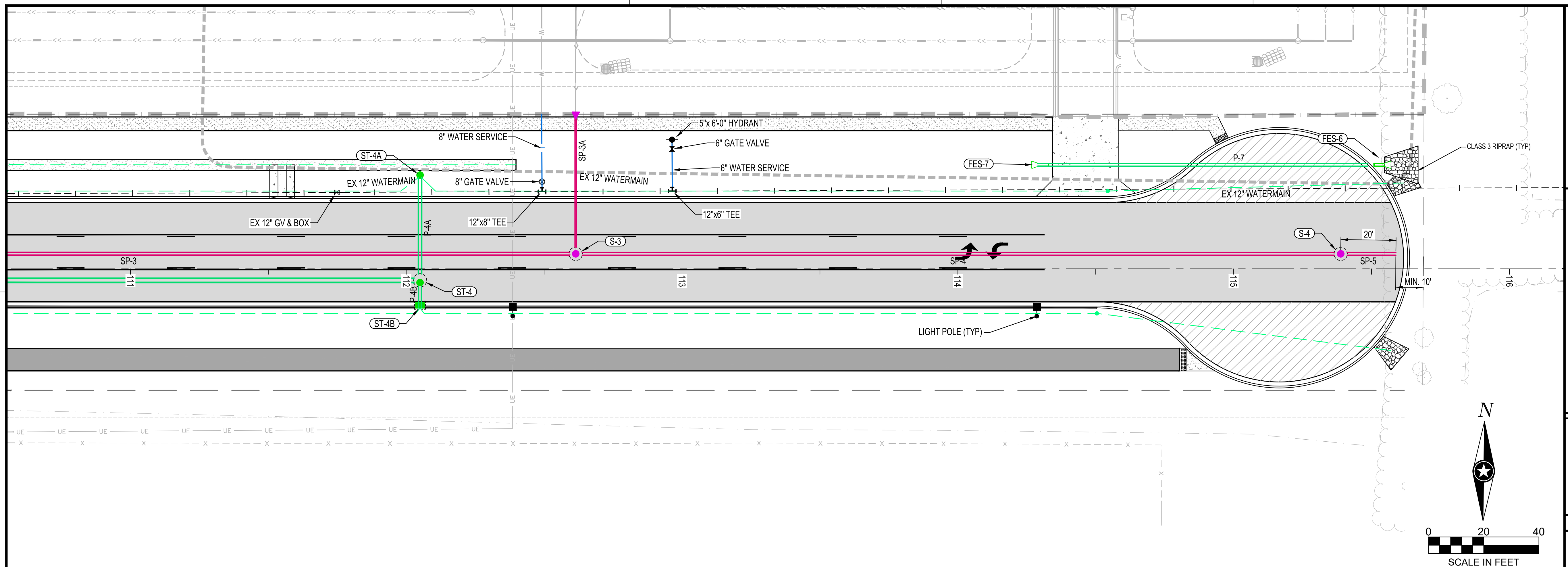
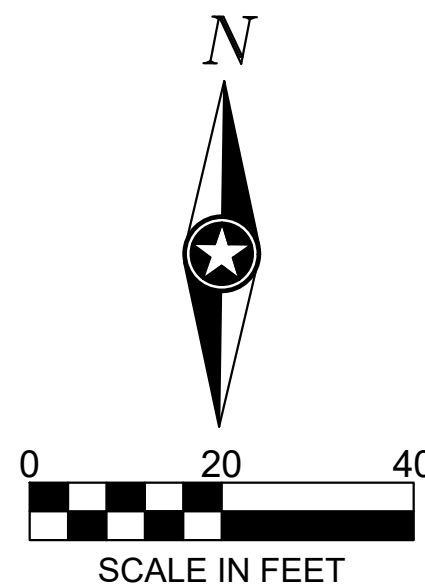
TITLE
PLAN AND PROFILE

SHEET
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PROJECT

**CITY OF
MANKATO**

**BASSETT DRIVE
EXTENSION**

MANKATO MINNESOTA

[illegible]

PROJECT NO.	25-32569
FILE NAME	32569-C3-PROFILES
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

PLAN AND PROFILE

SHEET

19

OF 31

EARTHWORK SUMMARY

A SHRINKAGE FACTOR OF 0% (EMBANKMENT) AND 0% (TOPSOIL) WERE APPLIED TO ALL EXCAVATED MATERIAL WHEN DETERMINING SITE BALANCE.

NO WARRANTY IS MADE OR IMPLIED AS TO THE ACCURACY, SUFFICIENCY, OR RELIABILITY OF THE SHRINKAGE FACTORS.

24" OF TOPSOIL WAS CALCULATED IN ALL TOPSOIL STRIP AREAS. ALL AREAS SHALL BE DRESSED WITH A MINIMUM OF 6" OF TOPSOIL.

ANY EXCESS MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND HAULED FROM THE SITE AT NO ADDITIONAL COST TO THE OWNER.

THE SITE BALANCE PROVIDED ABOVE IS FOR INFORMATIONAL PURPOSES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL QUANTITIES PRIOR TO SUBMITTING A BID FOR THE PROJECT.

EARTHWORK SUMMARY

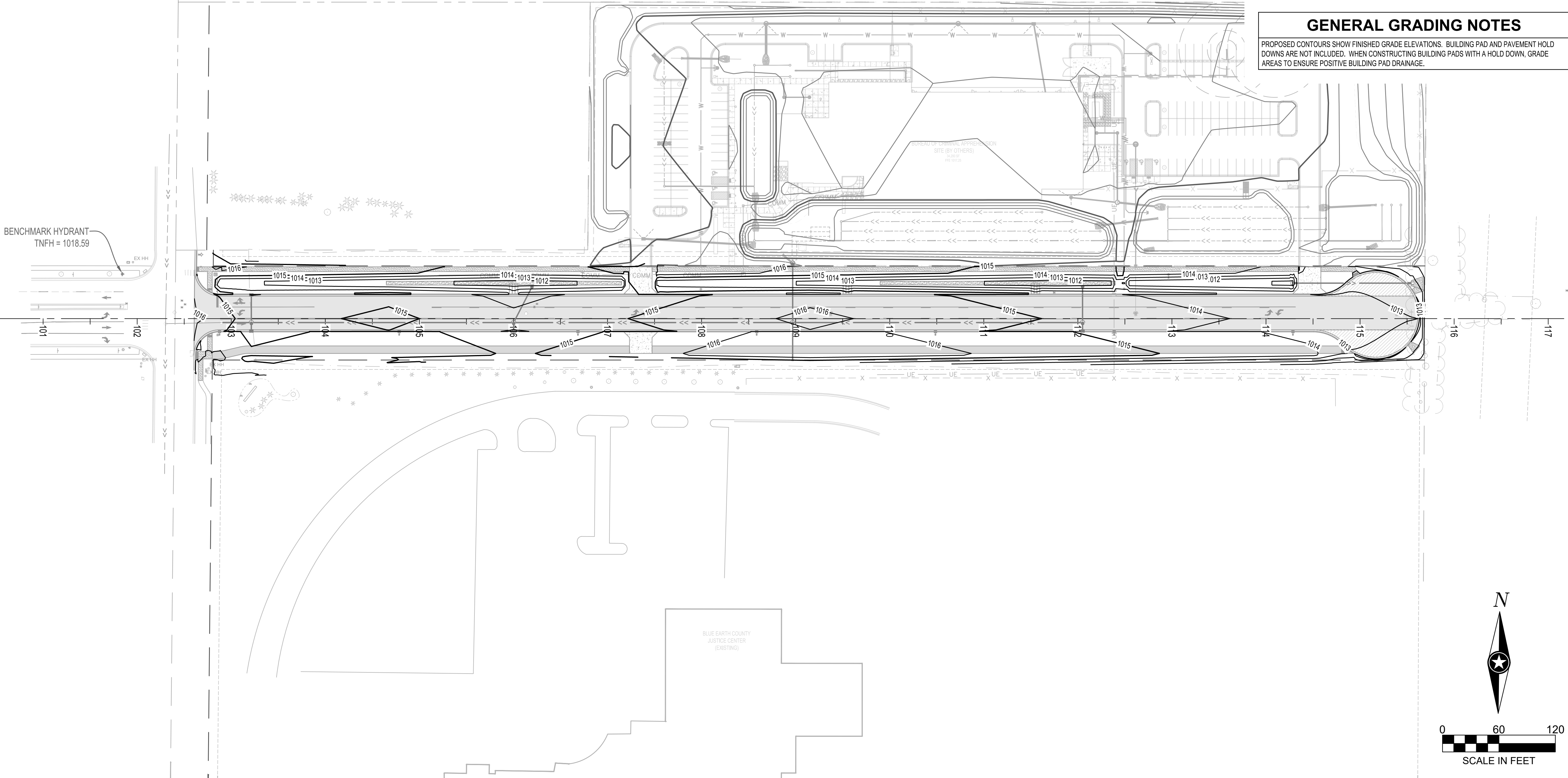
	STRIP TOPSOIL (CUT)	IMPORT/BORROW (FILL)	RESPREAD TOPSOIL (FILL)	NET
ROADWAY	4373 CY	3128 CY	0 CY	
SIDEWALK	554 CY	821 CY	0 CY	
TRAIL	769 CY	1124 CY	0 CY	
NORTH BOULEVARD (SWALE)	543 CY	0 CY	527 CY	
SOUTH BOULEVARD	0 CY	0 CY	1152 CY	
SUBTOTAL TOPSOIL	6239 CY		1679 CY	4560 CY EXPORT
SUBTOTAL BORROW		5072 CY		5072 CY IMPORT

GRADING LEGEND

	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	PROPOSED CONTOUR (MAJOR INTERVAL)
	TOPSOIL STRIP IN AREAS OF FILL (ROADS, PARKING LOTS, AND BUILDING PADS)
	EXISTING SPOT ELEVATION
	PROPOSED SPOT ELEVATION
	PROPOSED TOP BACK OF CURB / TOP OF TURNDOWN WALK SPOT ELEVATION
	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.



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KYLE J. RENNEKE

DATE: 06/27/25 LIC. NO. 52626

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PROJECT

CITY OF
MANKATO

BASSETT DRIVE
EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C4-GRADE-OA
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

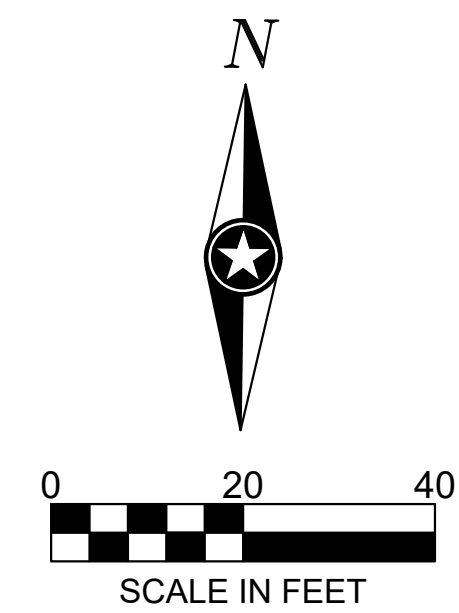
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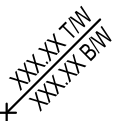
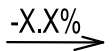
OVERALL GRADING
PLAN

SHEET

20

OF 31



GRADING LEGEND	
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	PROPOSED CONTOUR (MAJOR INTERVAL)
	PROPOSED SPOT ELEVATION
	PROPOSED TOP BACK OF CURB SPOT ELEVATION
	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

PROPOSED CONTOURS SHOW FINISHED GRADE ELEVATIONS. BUILDING PAD AND PAVEMENT HOLD DOWNS ARE NOT INCLUDED. WHEN CONSTRUCTING BUILDING PADS WITH A HOLD DOWN, GRADE AREAS TO ENSURE POSITIVE BUILDING PAD DRAINAGE.

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KYLE J. RENNEKE

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PROJECT

**CITY OF
MANKATO
BASSETT DRIVE
EXTENSION**

MANKATO MINNESOTA

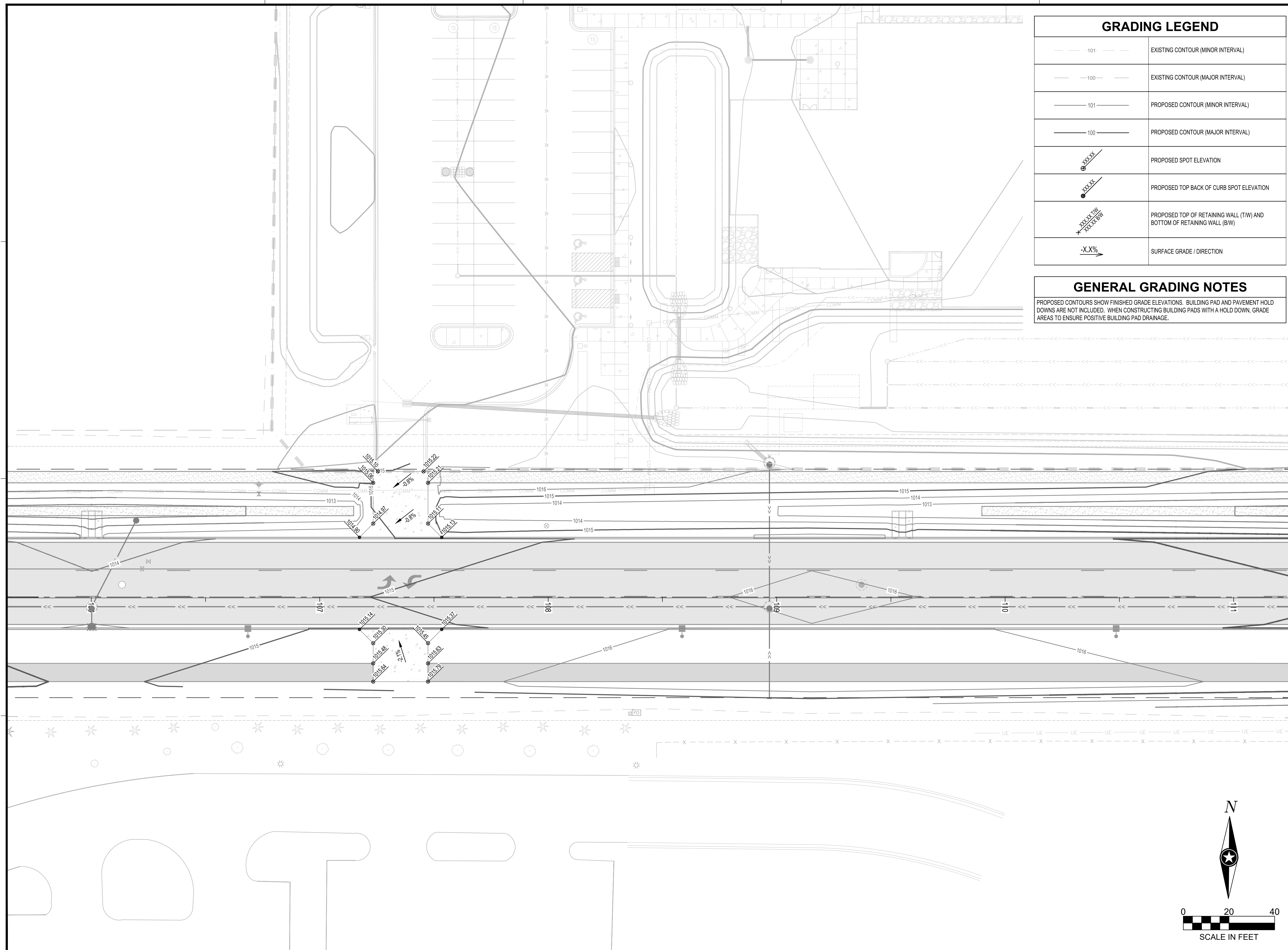
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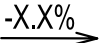
PROJECT NO.	25-32569
FILE NAME	32569-C4-GRADE
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

DETAILED GRADING PLAN

SHEET **21** OF 31



GRADING LEGEND	
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	PROPOSED CONTOUR (MAJOR INTERVAL)
	PROPOSED SPOT ELEVATION
	PROPOSED TOP BACK OF CURB SPOT ELEVATION
	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
	SURFACE GRADE / DIRECTION

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KYLE, J. RENNEKE

DATE 06/27/25 LIC. NO. 52626

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PROJECT

**CITY OF
MANKATO**

BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

[illegible]

PROJECT NO.	25-32569
FILE NAME	32569-C4-GRAD
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

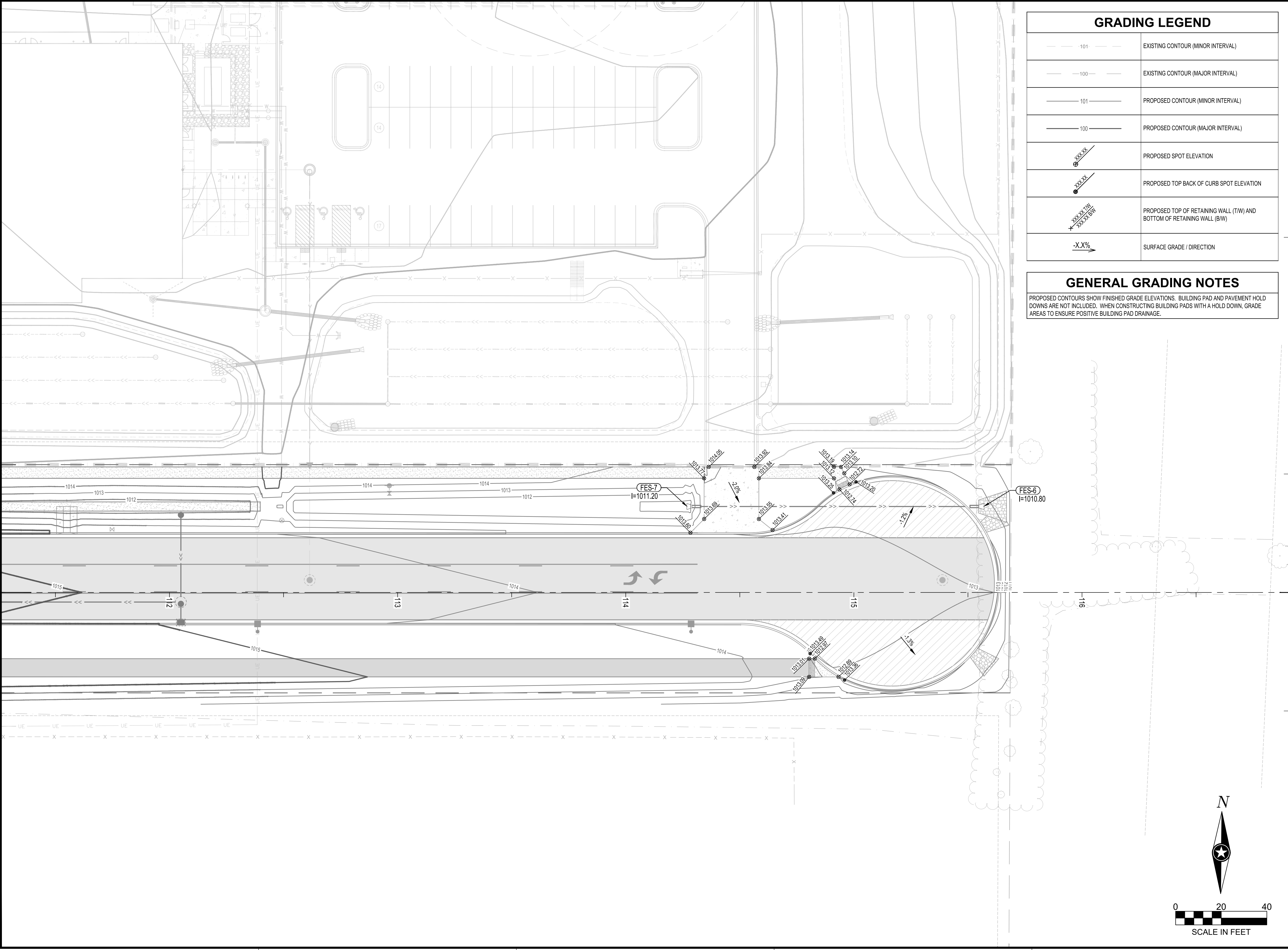
TITLE

DETAILED GRADING PLAN

SHEET

22

OF 31



GRADING LEGEND	
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	PROPOSED CONTOUR (MAJOR INTERVAL)
	PROPOSED SPOT ELEVATION
	PROPOSED TOP BACK OF CURB SPOT ELEVATION
	PROPOSED TOP OF RETAINING WALL (T/W) AND BOTTOM OF RETAINING WALL (B/W)
	SURFACE GRADE / DIRECTION

GENERAL GRADING NOTES

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PROJECT

CITY OF MANKATO

BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C4-GRADE
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

DETAILED GRADING PLAN

SHEET

23 OF 31



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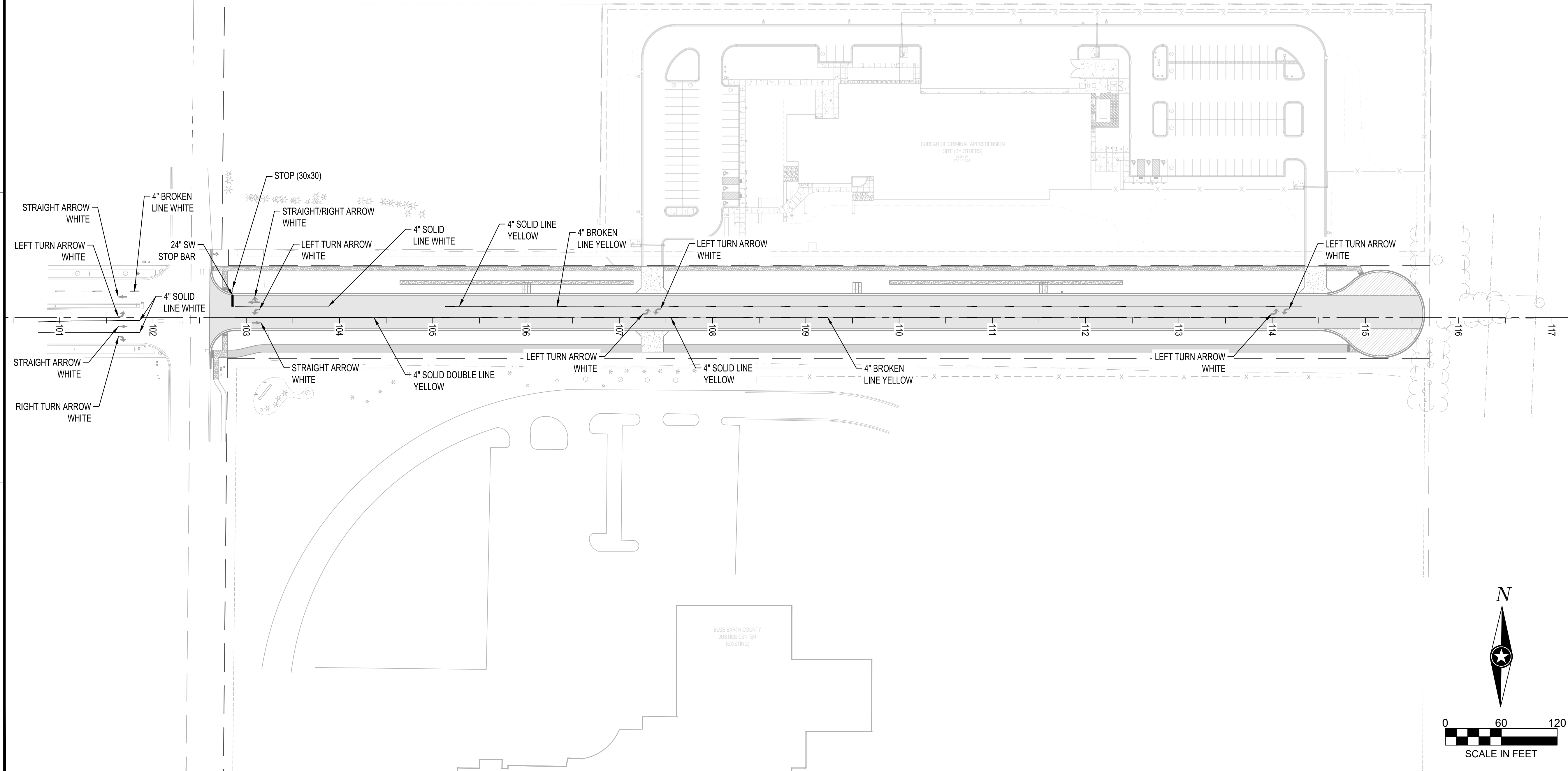
PROJECT
CITY OF MANKATO
BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

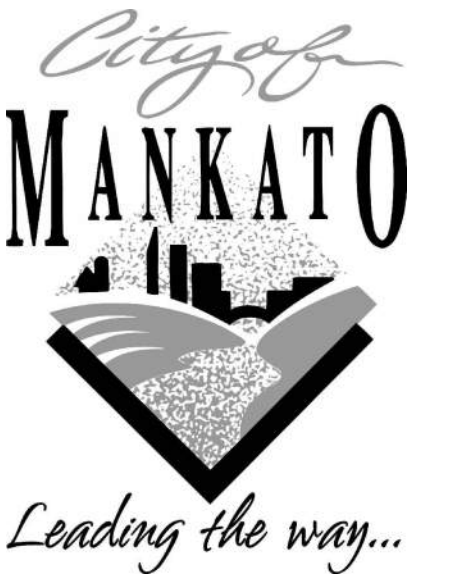
REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C6-STRIPING
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE
PAVEMENT MARKING PLAN



SECTION VIEW LEGEND	
NOTE: AS VIEWED IN THE DIRECTION OF INCREASING STATION	
---	EXISTING GROUND
---	PROPOSED GROUND
---	PROPOSED GROUND (FUTURE)
1000.0 1000.00	XXXX - EXISTING GROUND € XXXXX - PROPOSED GROUND €



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PROJECT

**CITY OF
MANKATO**

BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

[illegible]

PROJECT NO.	25-32569
FILE NAME	32569-C3-X-SECTIONS
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

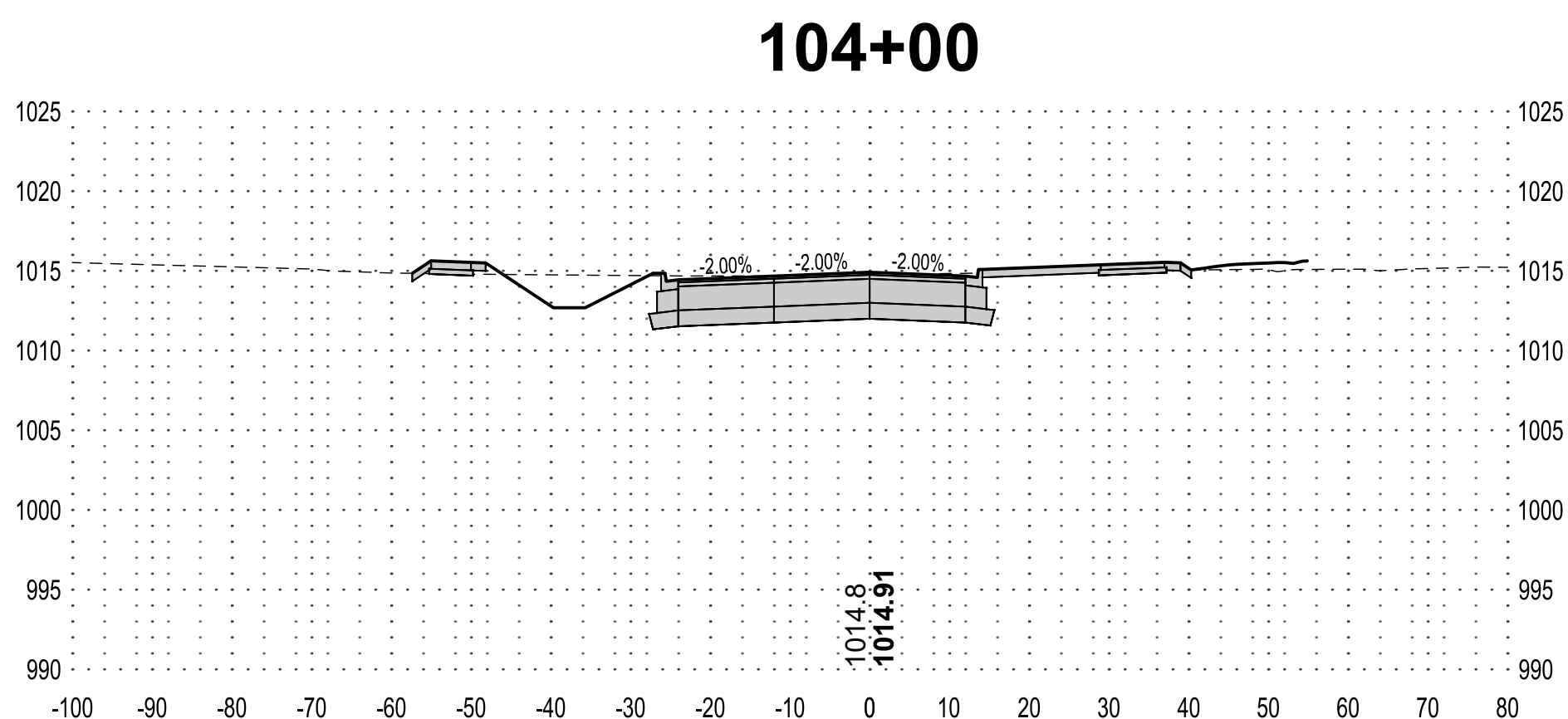
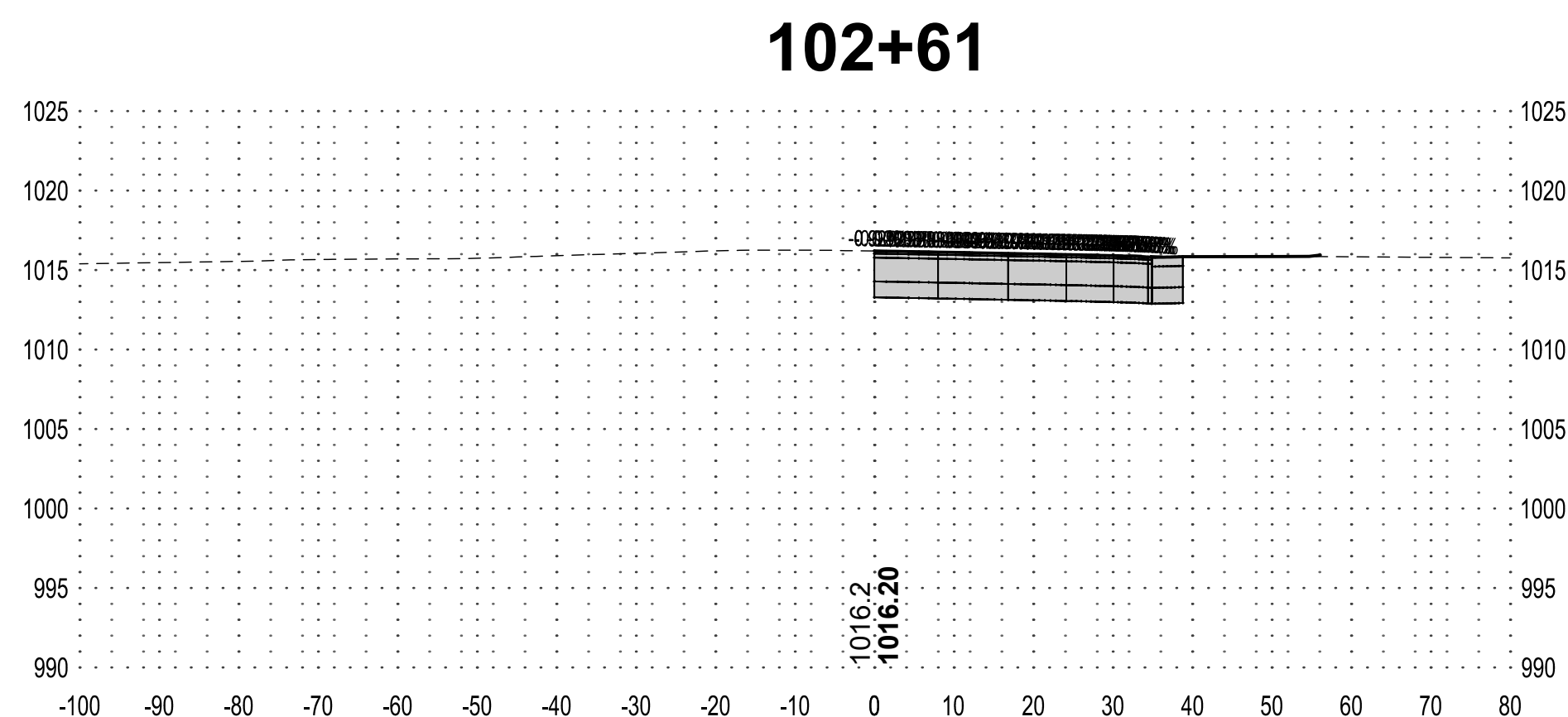
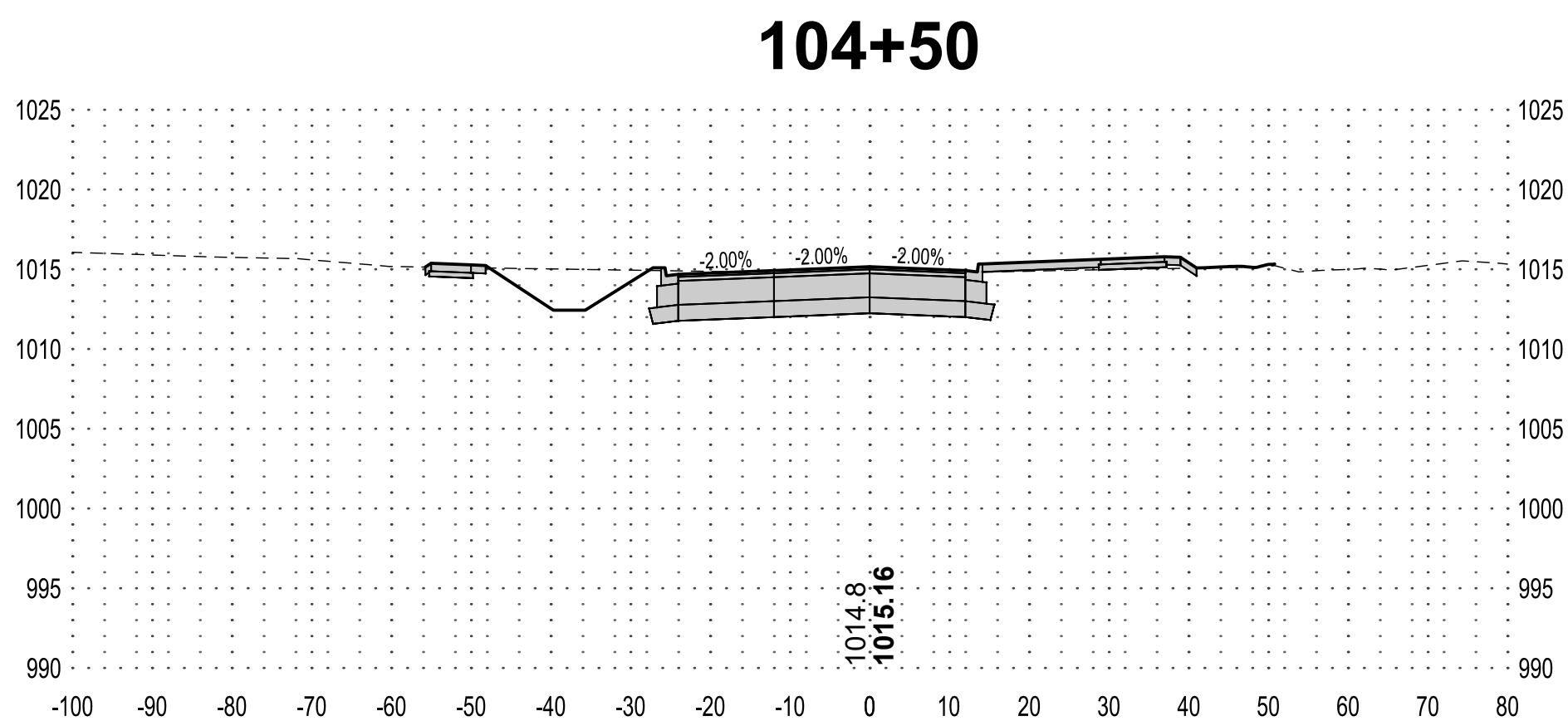
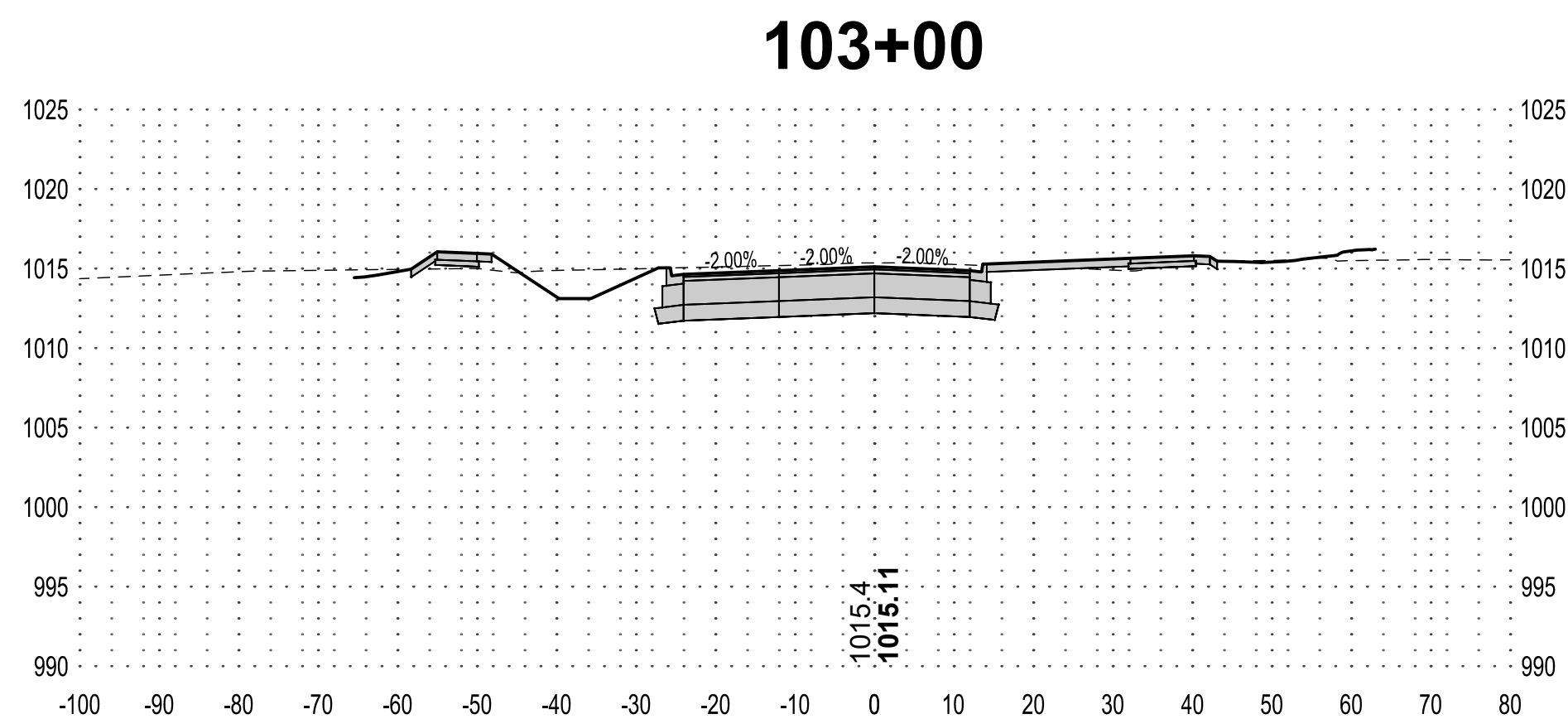
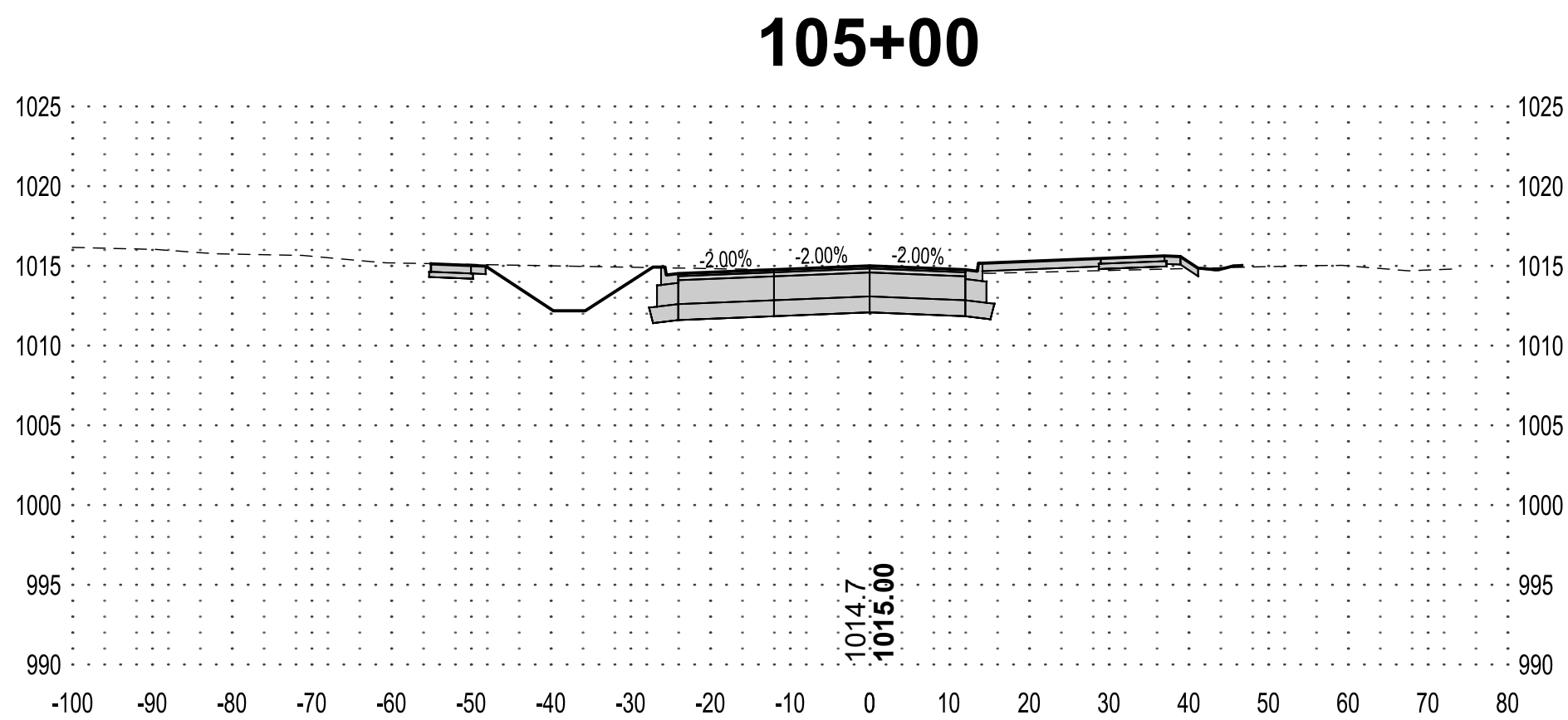
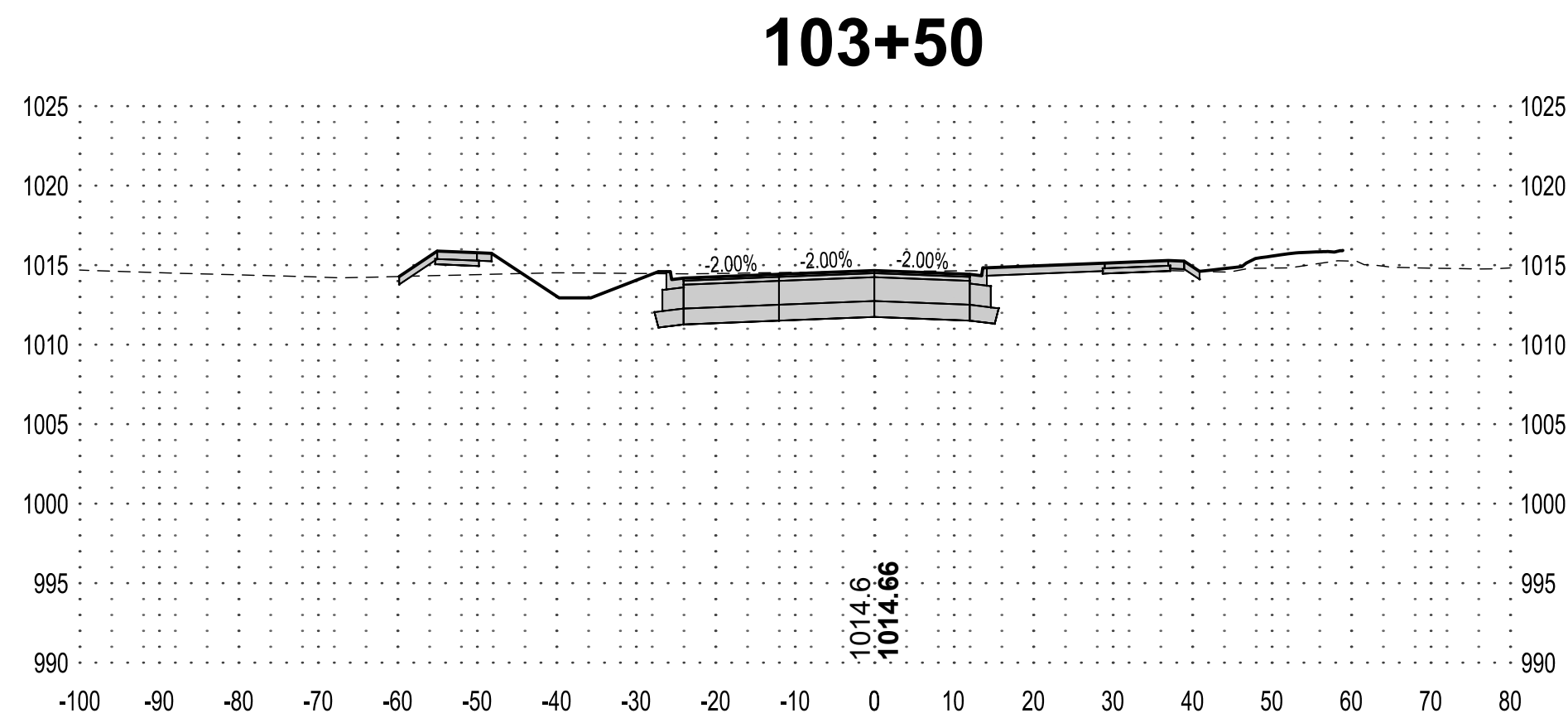
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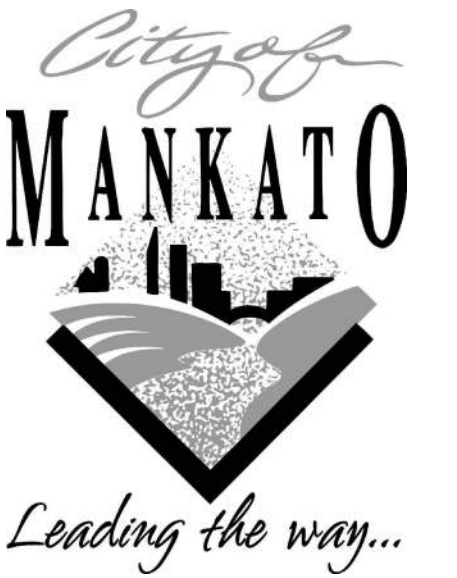
SHEET

25

DF 31



SECTION VIEW LEGEND	
NOTE: AS VIEWED IN THE DIRECTION OF INCREASING STATION	
	EXISTING GROUND
	PROPOSED GROUND
	PROPOSED GROUND (FUTURE)
1000.0 1000.00	XXXX - EXISTING GROUND € XXXXX - PROPOSED GROUND €



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KYLE J. RENNEKE

DATE 06/27/25 HQ NO 52626

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PROJECT

**CITY OF
MANKATO**

BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

[illegible]

PROJECT NO.	25-32569
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FILE NAME	32569-C3-X-SECTIONS
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DRAWN BY	BDC
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DESIGNED BY	BDC
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REVIEWED BY KJR

CLIENT PROJECT NO. -

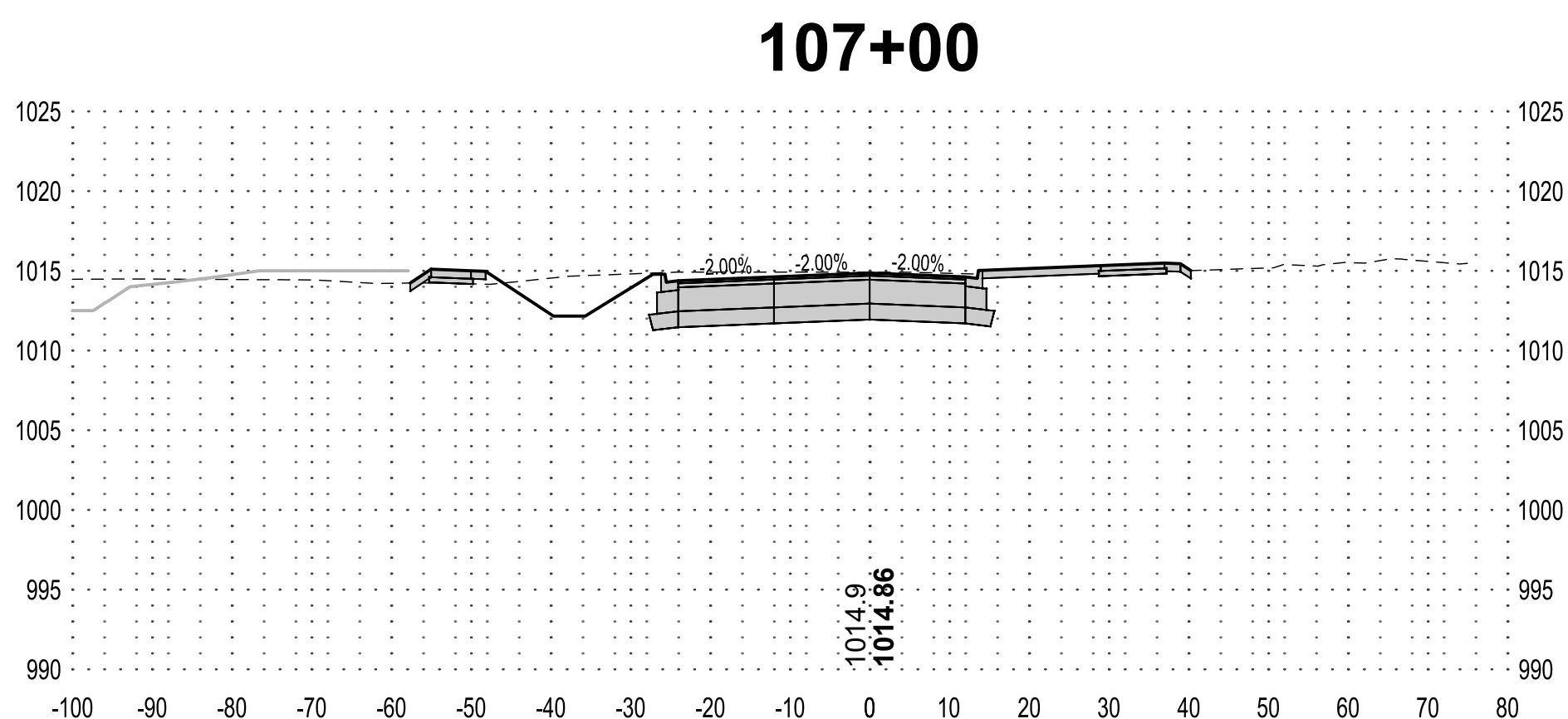
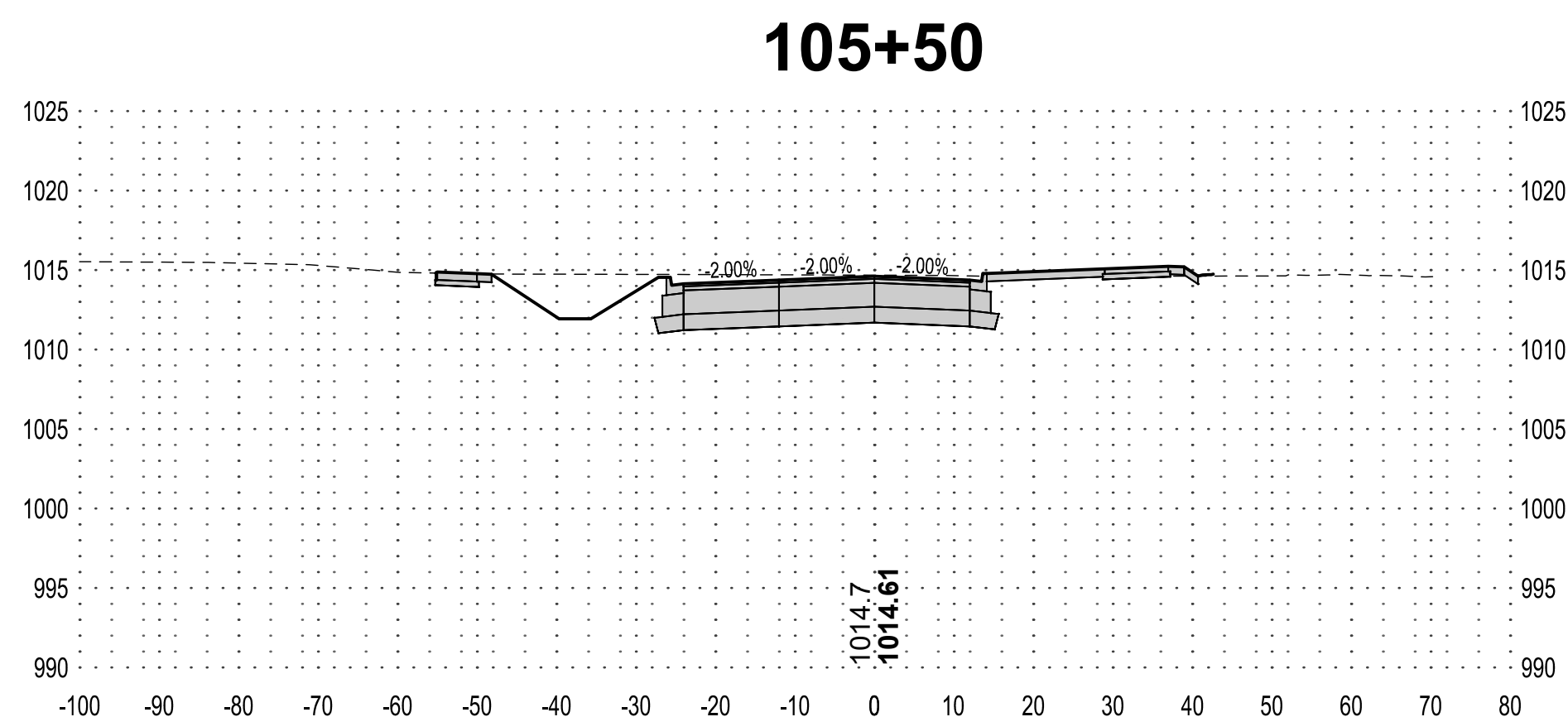
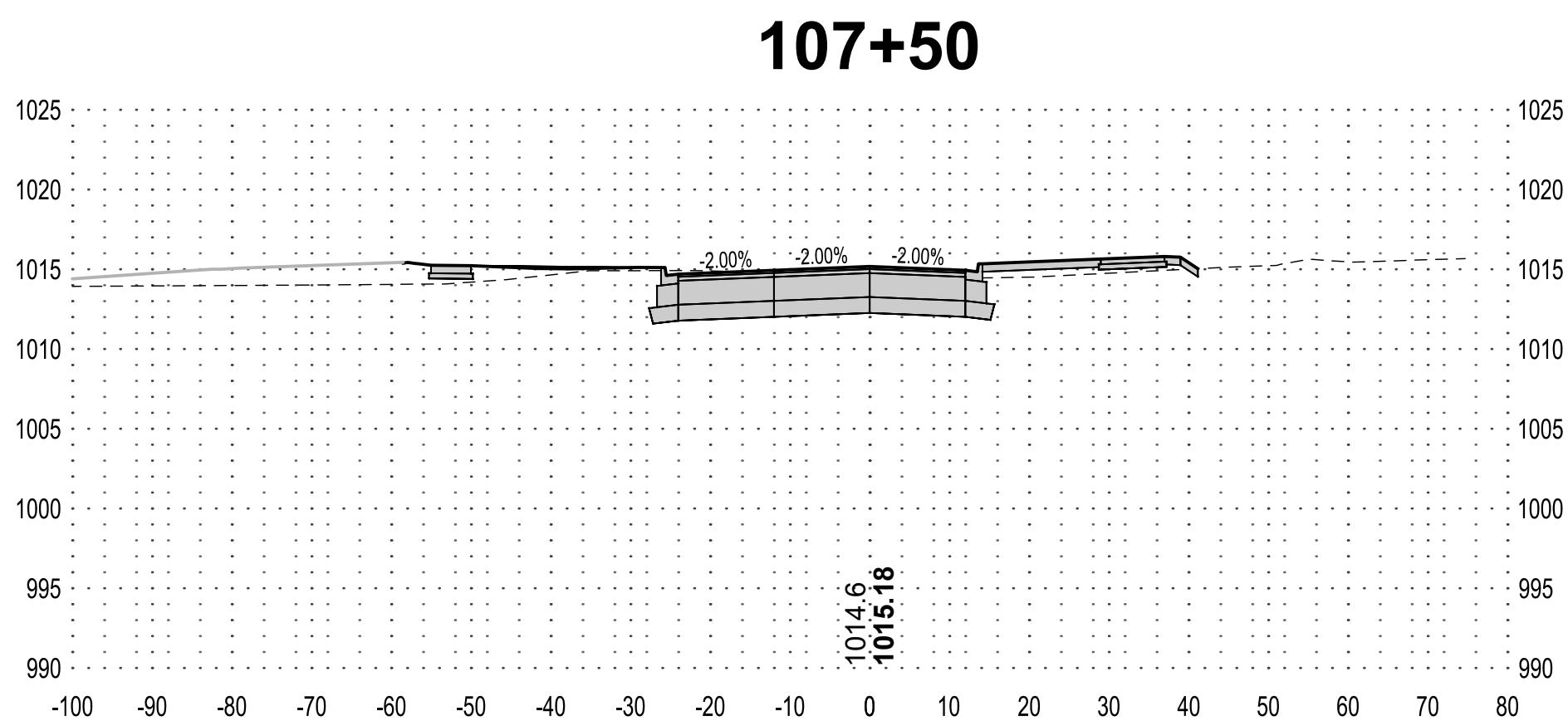
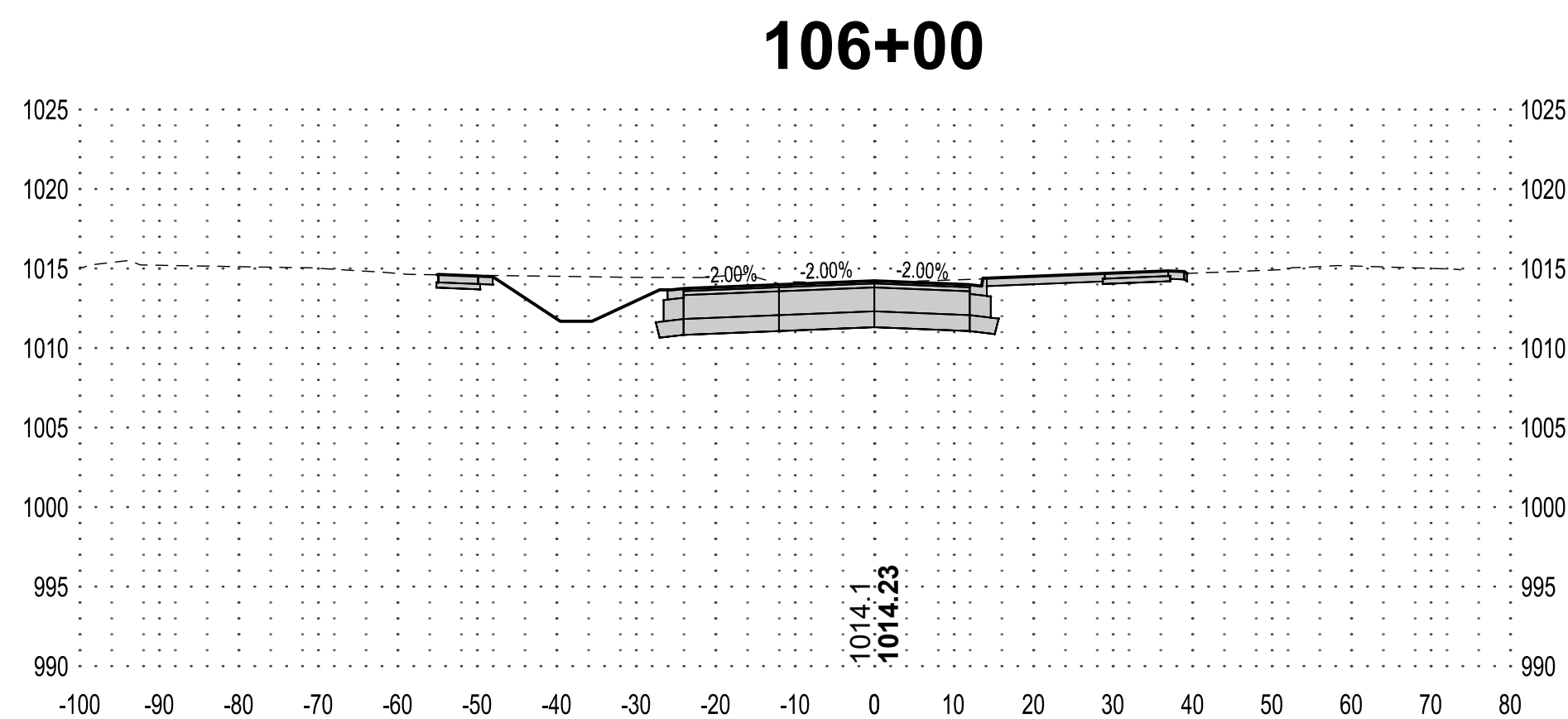
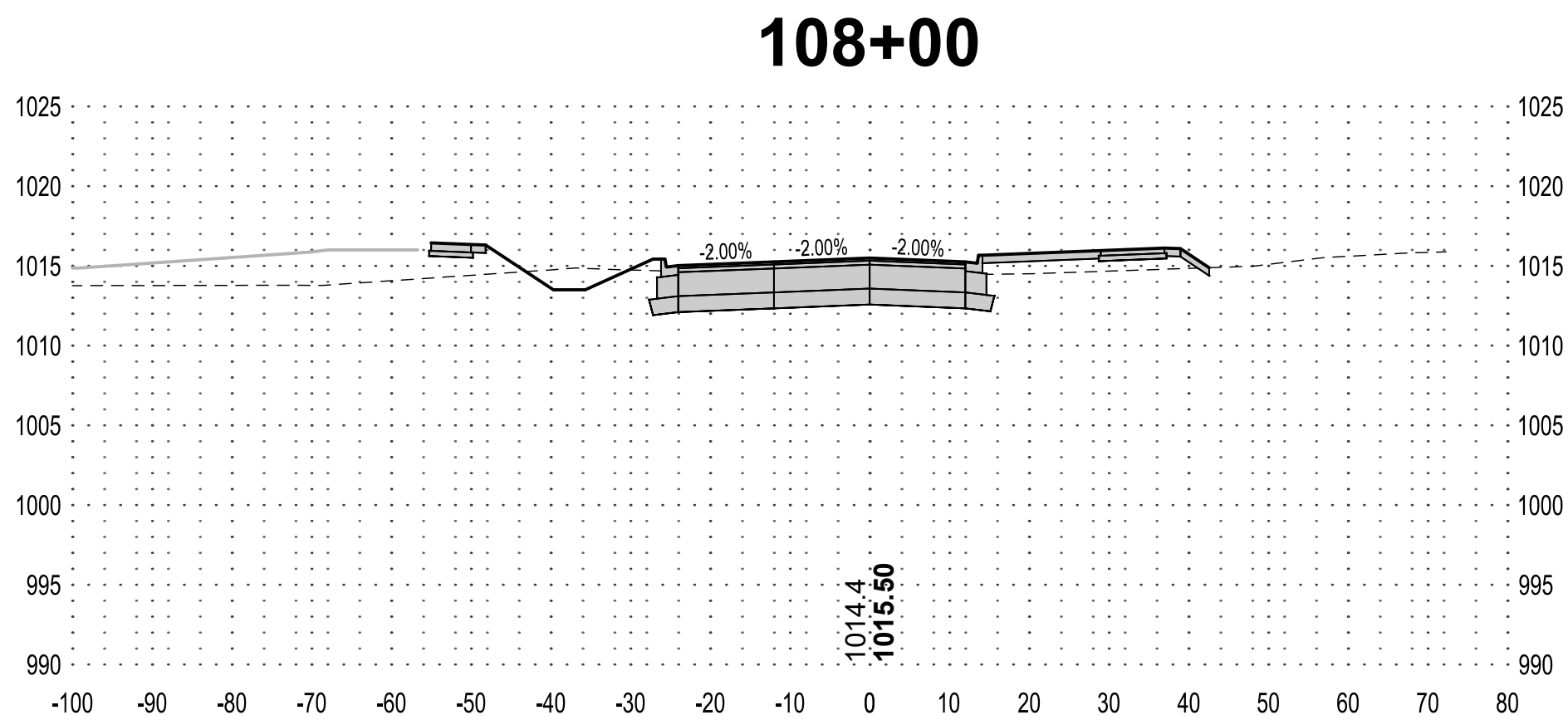
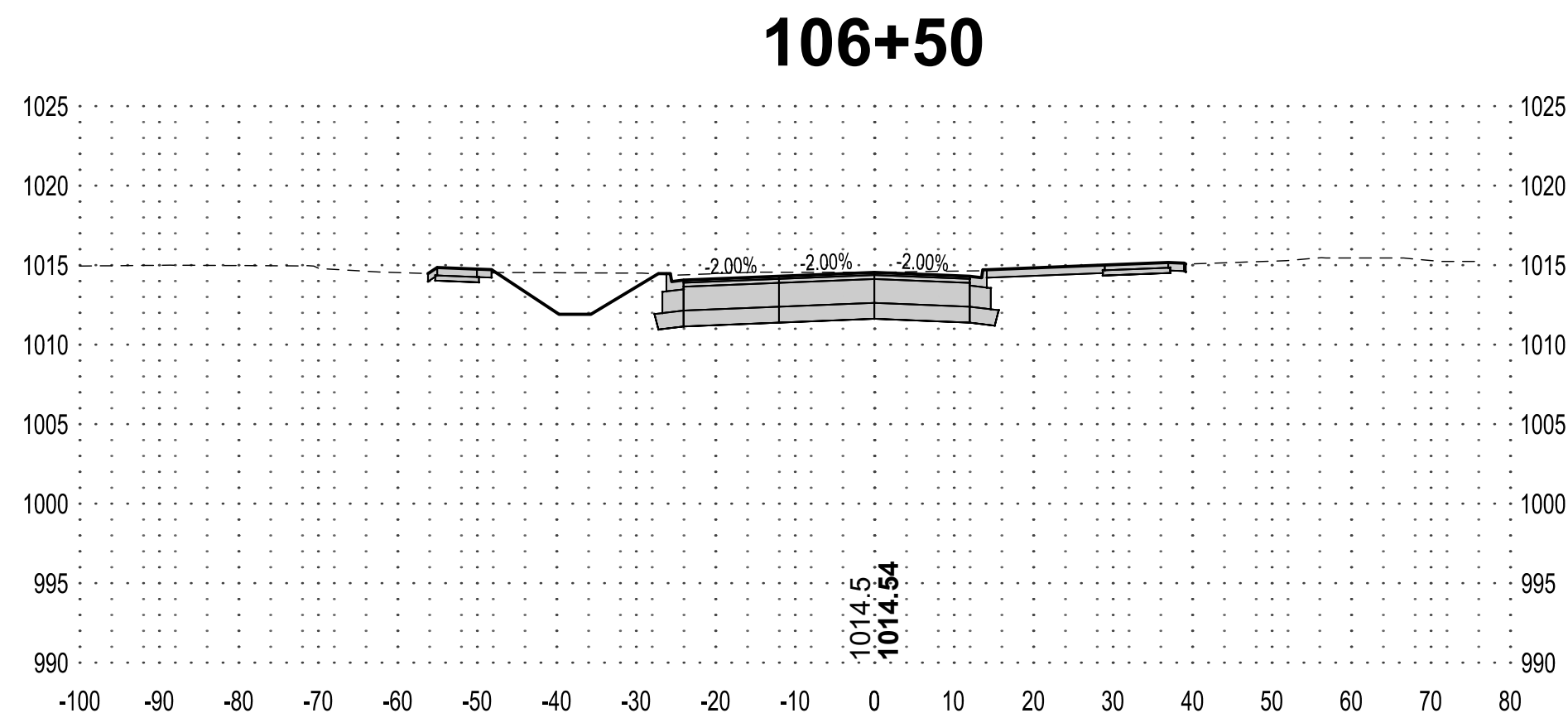
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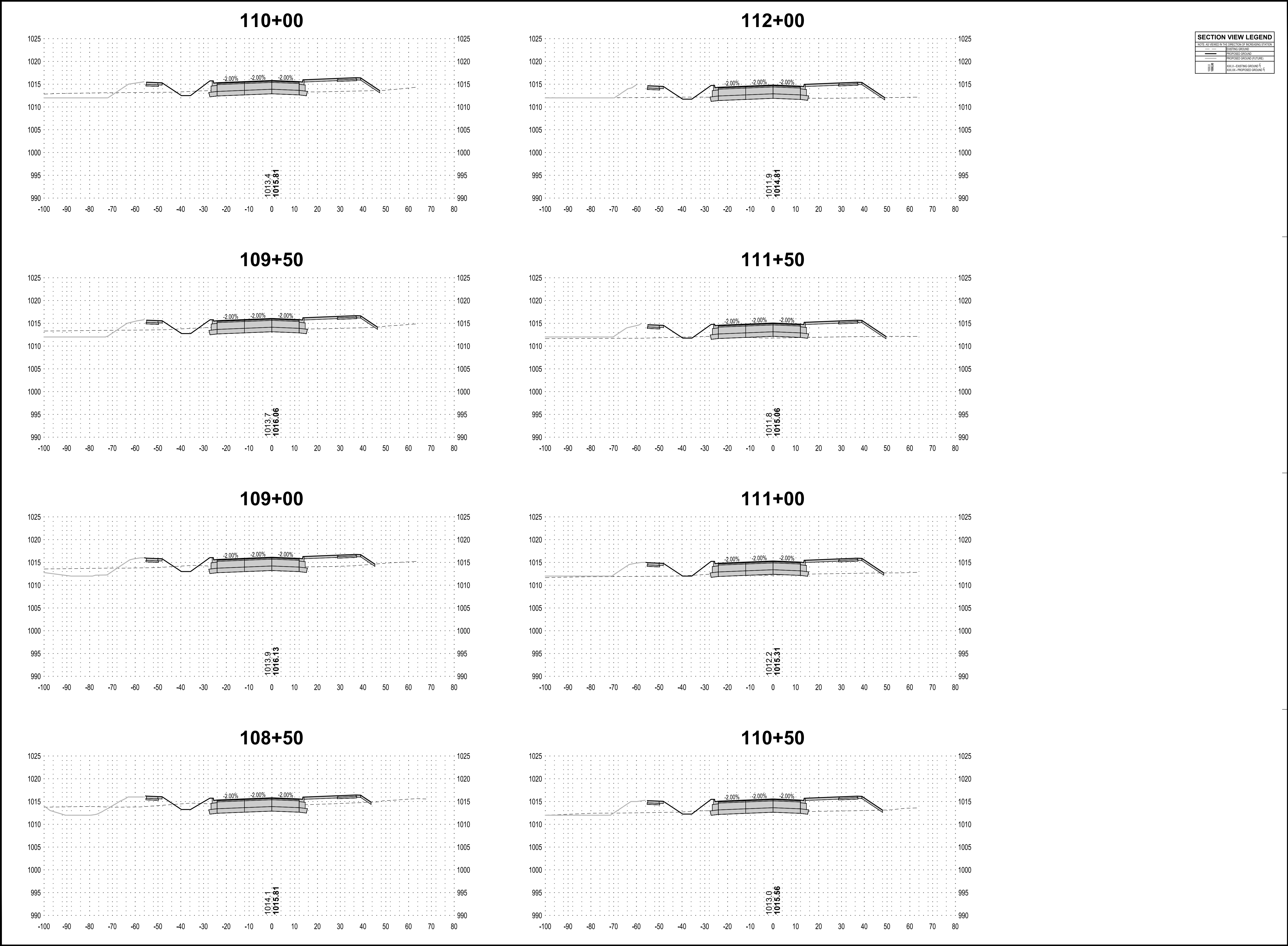
CROSS SECTIONS

SHEET

25

DF 31





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PROJECT

CITY OF
MANKATO

BASSETT DRIVE
EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

PROJECT NO.	25-32569
FILE NAME	32569-C3-X-SECTIONS
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TITLE

CROSS SECTIONS

SHEET

SECTION VIEW LEGEND	
NOTE: AS VIEWED IN THE DIRECTION OF INCREASING STATION	
	EXISTING GROUND
	PROPOSED GROUND
	PROPOSED GROUND (FUTURE)
	XX/XX - EXISTING GROUND E XX/XX - PROPOSED GROUND E



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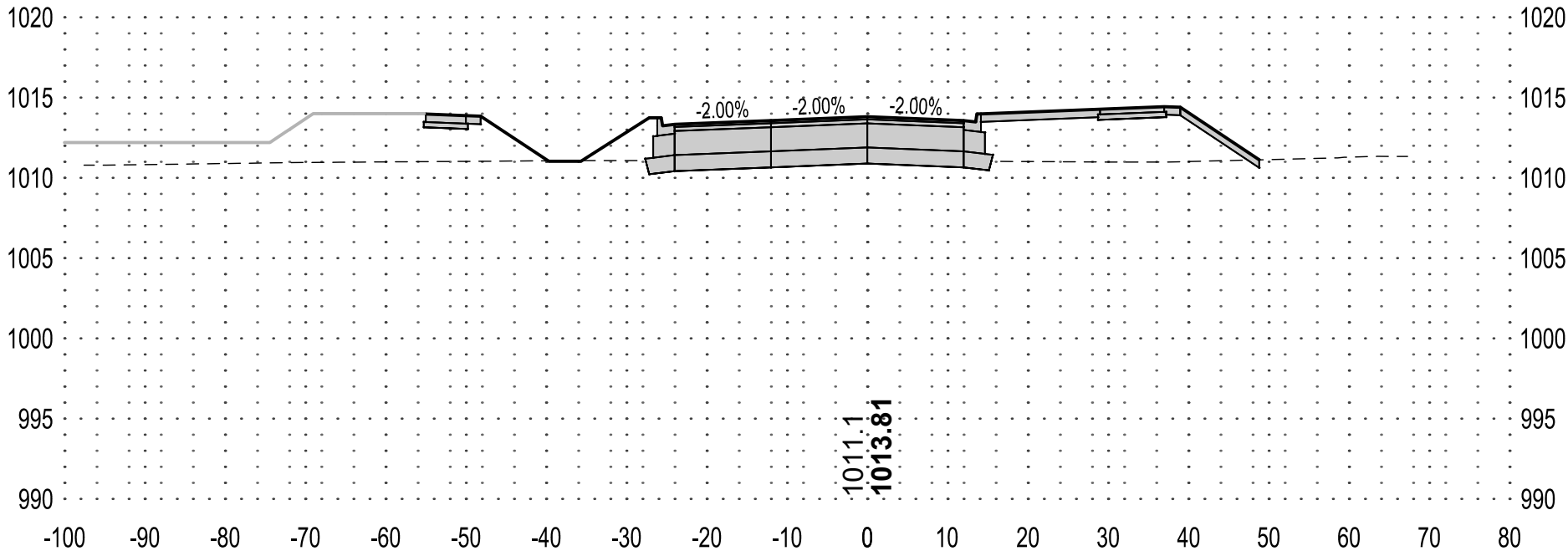
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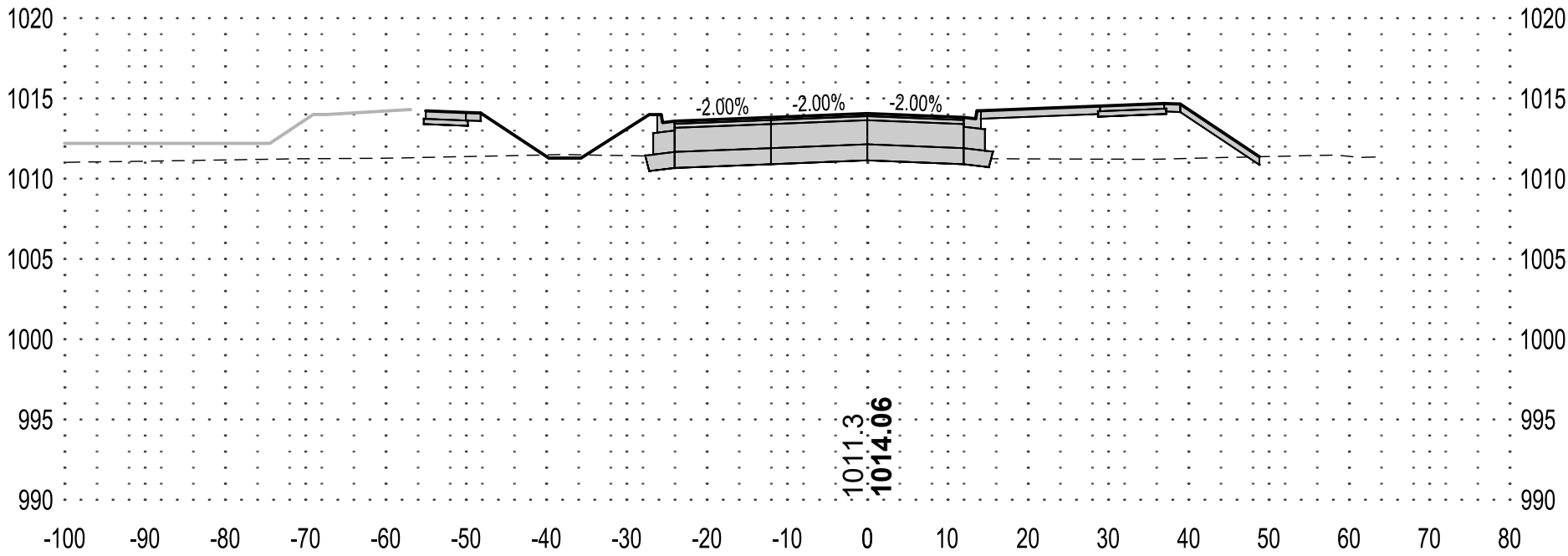
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OF 31

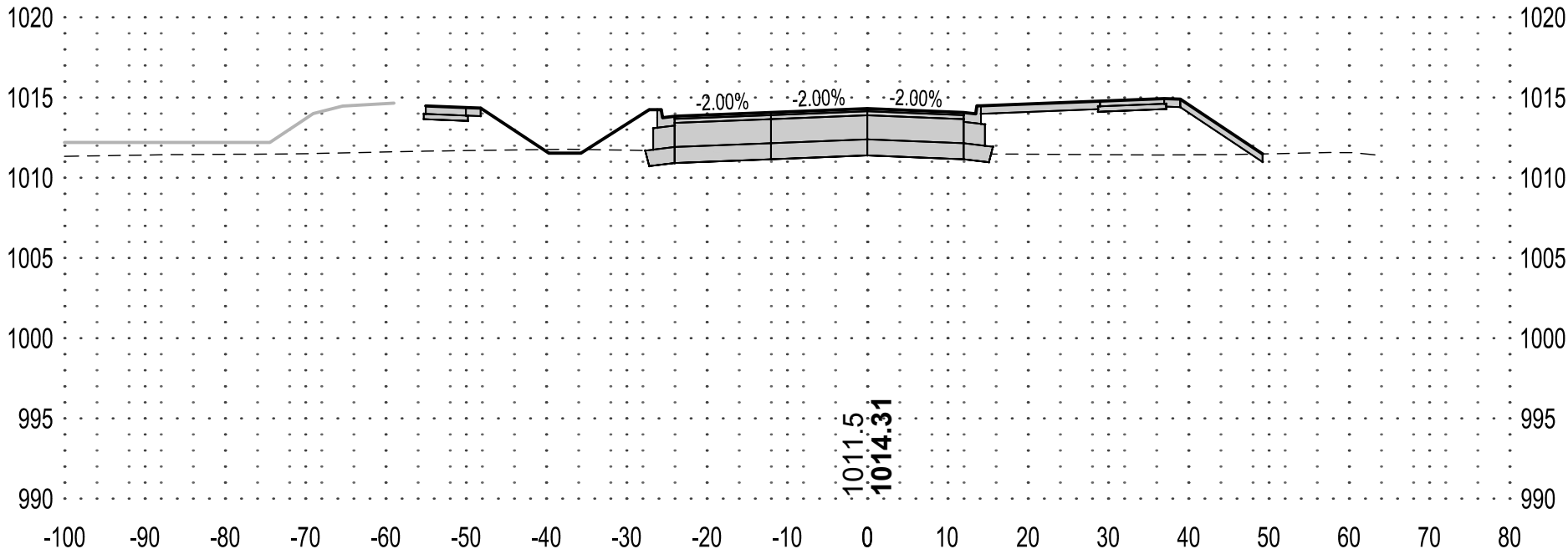
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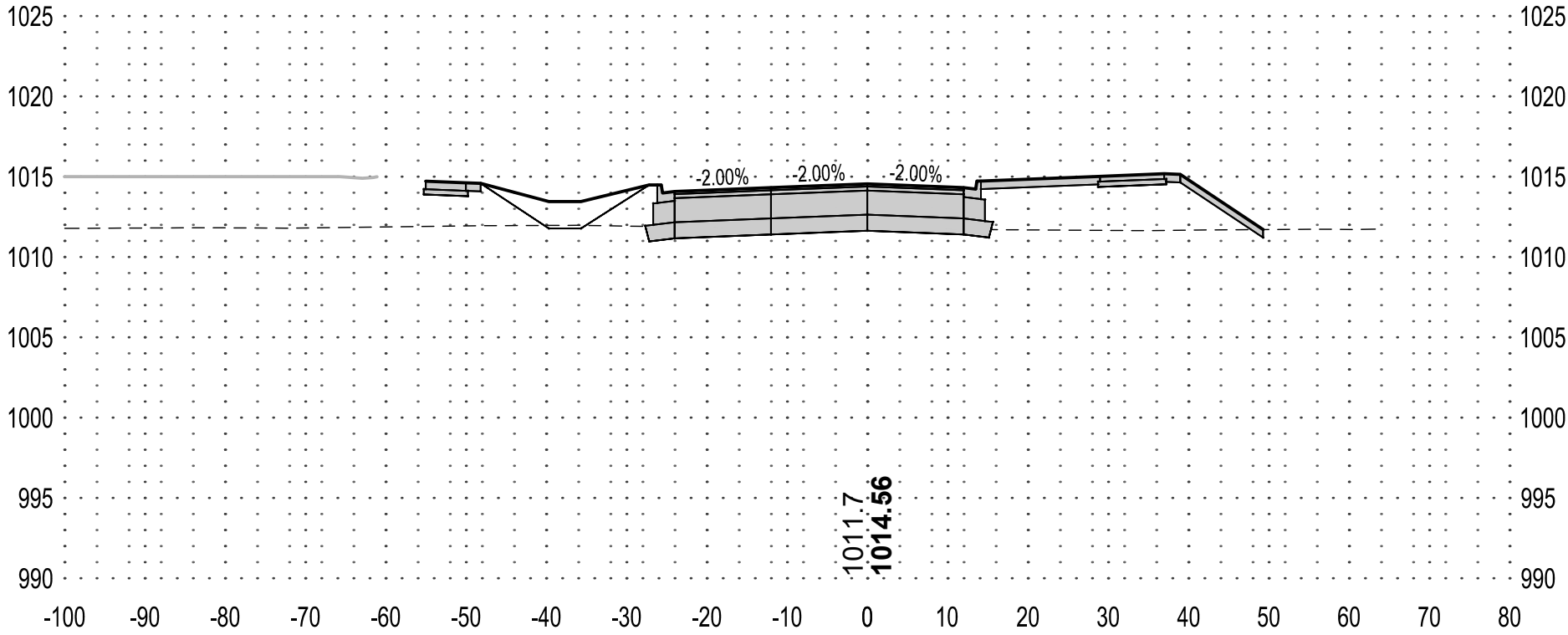
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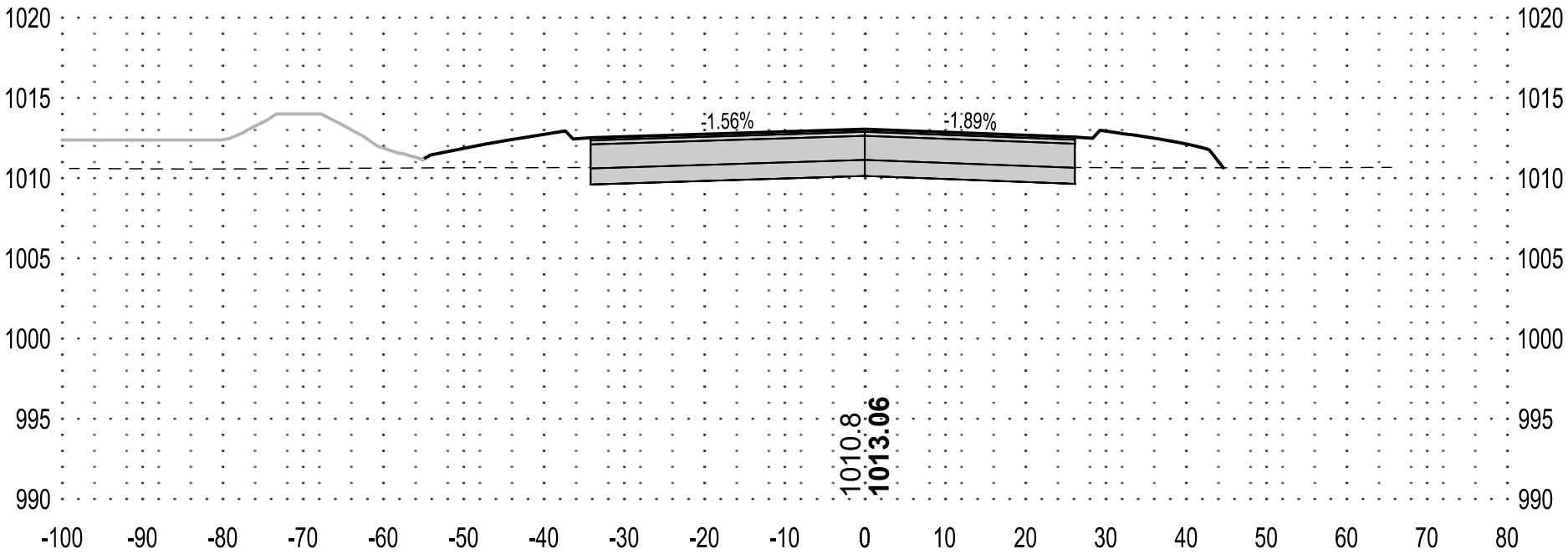
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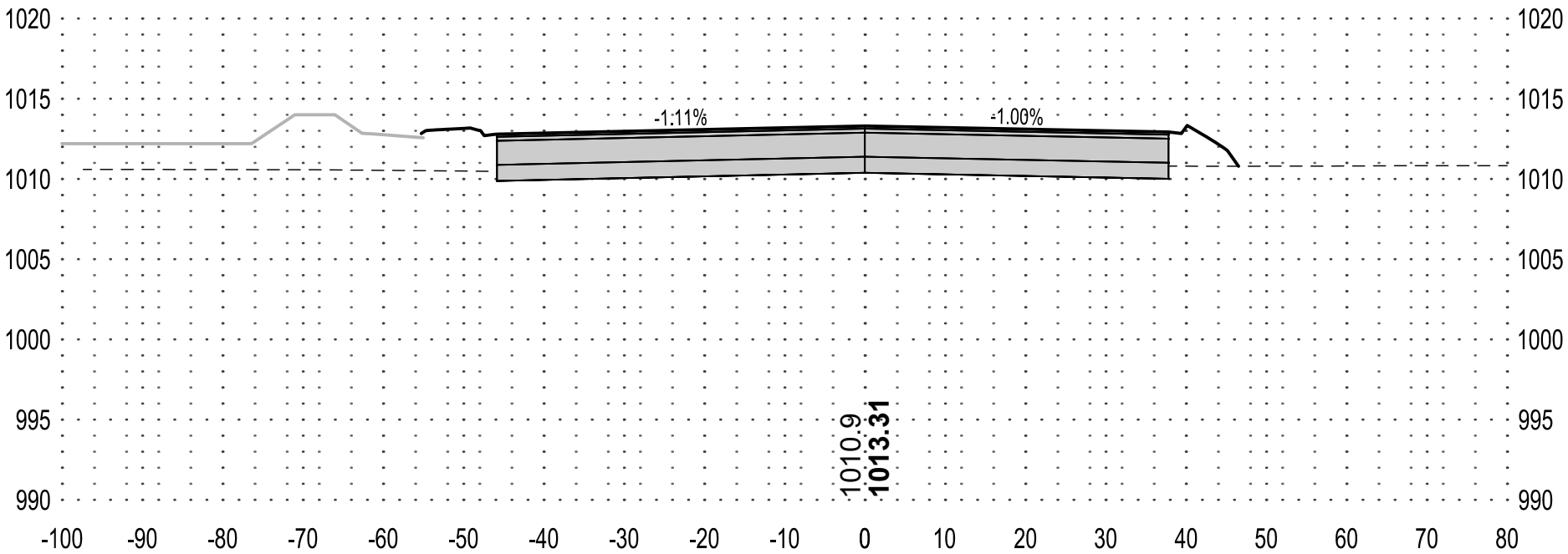
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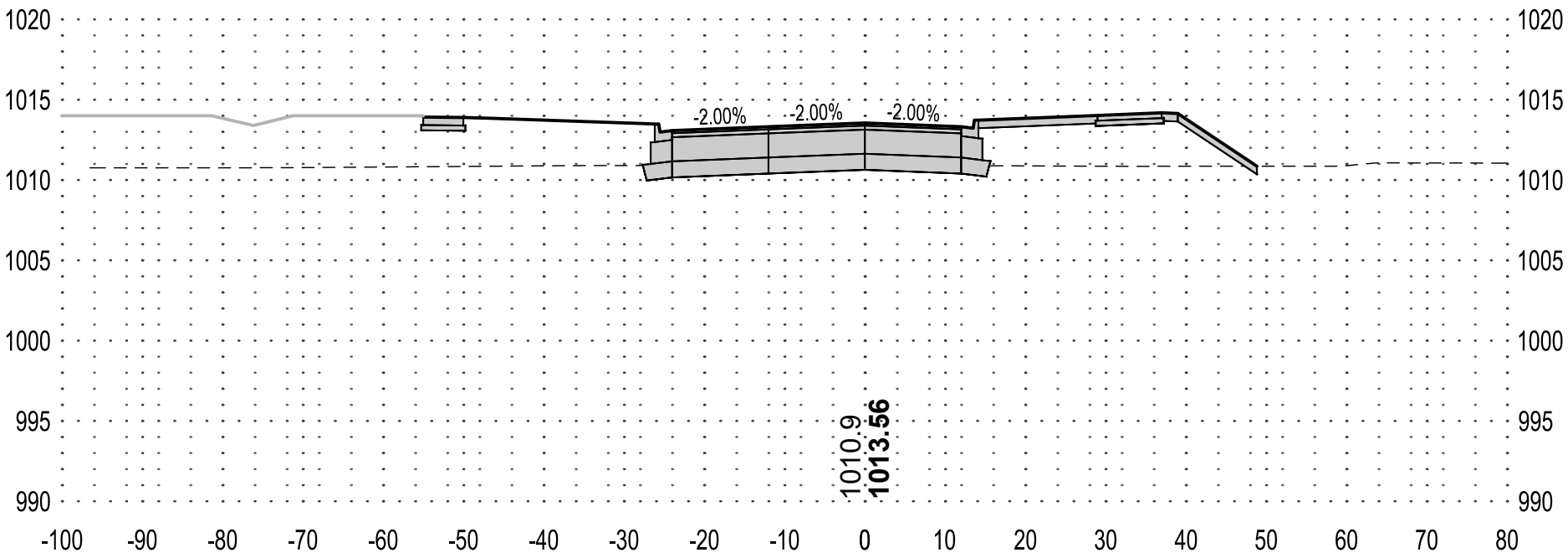
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115+00



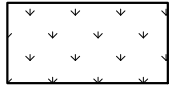
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PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT
SHRUBS					
	SO	11	SWAMP WHITE OAK/QUERCUS BICOLOR	2" CAL.	B.B.
	AE	9	ACCOLADE ELM/ULMUS 'MORTON'	2" CAL.	B.B.
	SM	10	SUGAR MAPLE	2" CAL.	B.B.
	G	9	GINKGO	2" CAL.	B.B.
	AM	15	AUTUMN BLAZE MAPLE	2" CAL.	B.B.
	KC	10	EXPRESSO KENTUCKY COFFEE TREE	2" CAL.	B.B.

TURF RESTORATION LEGEND

SYMBOL	ITEM NO.	DESCRIPTION	UNITS	QUANTITY
	2575.505	SEED, MIXTURE MNDOT SOUTHERN BOULEVARD (25-131)	AC	1.3
		EROSION CONTROL BLANKET, CATEGORY 30	AC	0.62

THE QUANTITIES SHOWN ARE TOTAL FOR THE ENTIRE PROJECT NOT SPECIFIC TO THIS SHEET.

*SHALL MEET MNDOT SPECIFICATION 3876. SEED SHALL BE PLACED IN ACCORDANCE WITH MNDOT 2575.

**SOD SHALL MEET MNDOT SPECIFICATION 3878.2A LAWN AND BOULEVARD SOD. SOD SHALL BE PLACED IN ACCORDANCE WITH MNDOT 2575.

MULCH: HARDWOOD MULCH SHALL BE PLACED IN 3" MINIMUM DEPTHS. REFER TO PLANTING PLAN FOR DETAILS

TEMPORARY EROSION CONTROL MEASURES, INCLUDING PERIMETER CONTROL AND INLET PROTECTION MUST BE MAINTAINED UNTIL FINAL STABILIZATION MEASURES ARE IN PLACE AND APPROVED BY THE OWNERS REPRESENTATIVE. REFER TO THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR ADDITIONAL INFORMATION.



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KYLE J. RENNEKE

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PROJECT

CITY OF MANKATO
BASSETT DRIVE EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE		
DATE	DESCRIPTION	BY

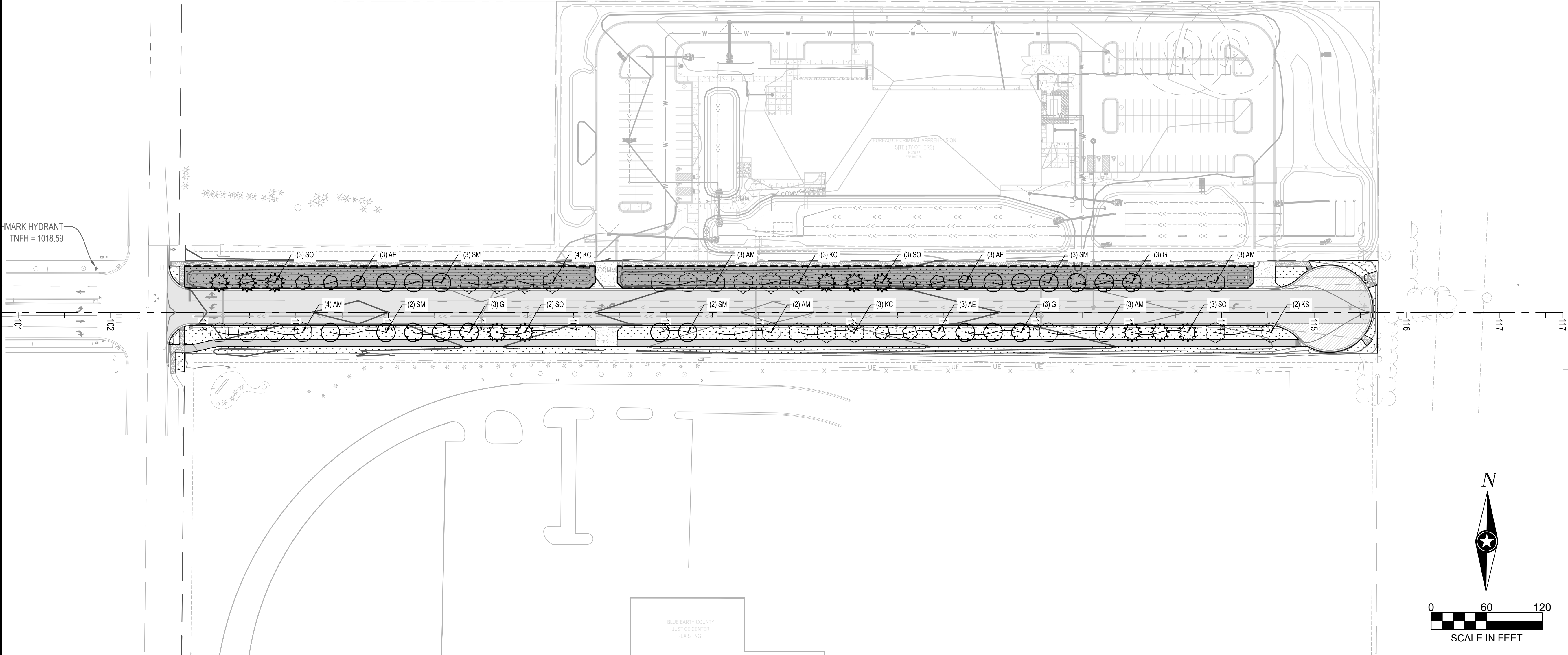
PROJECT NO.	25-32569
FILE NAME	32569-C5-LAND
DRAWN BY	BDC
DESIGNED BY	BDC
REVIEWED BY	KJR
ORIGINAL ISSUE DATE	06/27/2025
CLIENT PROJECT NO.	-

TURF RESTORATION AND PLANTING PLAN

SHEET

29

OF 31



Provide light fixtures as shown on Fixture Schedule. Substitutions shall have prior approval by the Project Engineer before bid date. Being listed as an acceptable Manufacturer in no way relieves the Contractors obligation to provide all equipment and features in accordance with these specifications.

LIGHT FIXTURE SCHEDULE

TYPE	STYLE	MANUFACTURER/MODEL NUMBER	LAMPS	REMARKS
Z1-Z7	FIXTURE-SINGLE TYPE R3	AMERICA ELECTRIC LIGHTING AUTOBAHN #ATBM P30 MVOLT R3 HSS P7	118W LED	
	NON-BREAKAWAY POLE	MILLERBERND #16-SD4-6-350-R STAINLESS STEEL W/ 15-INCH BOLT CIRCLE W/ FROST FINISH		INCLUDE 120V RECEPTACLE OUTLET AT 20 FOOT MOUNTING HEIGHT, SWEEP ARM 2-INCH SLIP FITTER, AND WIRE HOLDER. PROVIDE WITH CITY OF MANKATO LIGHT BASE DESIGN STEEL (E) STANDARD PLATE #2650A

KEY NOTES

- 1 PROVIDE NEW 100 AMP LIGHTING SERVICE CABINET. MANKATO STANDARD PLATE 2660A. COORDINATE WITH UTILITY FOR NEW SERVICE.
- 2 POLE LIGHT FIXTURE (TYPICAL). PROVIDE WITH POLE BASE DESIGN E MANKATO STANDARD PLATE 2650A. SEE LIGHT FIXTURE SCHEDULE AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 3 PROPOSED LOCATION OF UTILITY TRANSFORMER. UTILITY TO SPLICE EXISTING UNDERGROUND PRIMARY. COORDINATE ALL UTILITY OUTAGES WITH NEIGHBORING PROPERTIES FOR UTILITY SPLICING.
- 4 PROPOSED LOCATION OF HANDHOLE. SEE SPECIFICATIONS FOR REQUIREMENTS. PROVIDE (2) 1-1/2" CONDUITS FOR FUTURE USE FROM LIGHTING SERVICE CABINET TO HANDHOLE.



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ALEX A. GREGOR

DATE 06/27/24 LIC. NO. 59905

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PROJECT

CITY OF
MANKATO

BASSETT DRIVE
EXTENSION

MANKATO MINNESOTA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO. 25-32569

FILE NAME 32569-E2-LIGHT

DRAWN BY BDC

DESIGNED BY AAG

REVIEWED BY AAG

ORIGINAL ISSUE DATE 06/27/2025

CLIENT PROJECT NO. -

TITLE

LIGHTING PLAN

SHEET

30

OF 31

BENCHMARK HYDRANT
TNFH = 1018.59

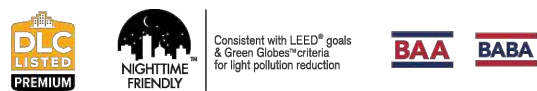
BUREAU OF CRIMINAL APPREHENSION
SITE (BY OTHERS)
UNSAFE
PERMITTED

BLUE EARTH COUNTY
JUSTICE CENTER
(EXISTING)

N



0 60 120
SCALE IN FEET



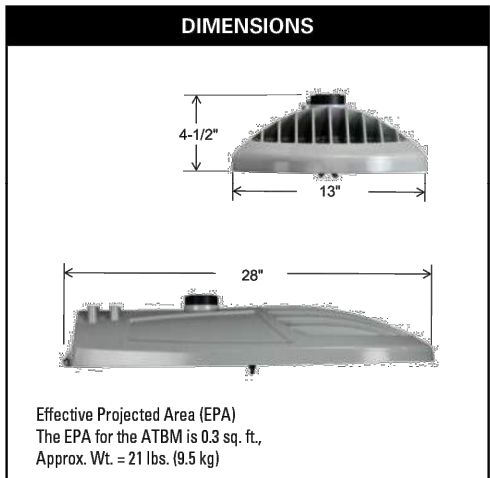
Autobahn Series ATBM Roadway

PRODUCT OVERVIEW



Applications:

Residential streets
Parking lots
High speed roadways



STANDARDS

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/DLC to confirm which versions are qualified.

Color temperature of a 3000K must be specified for International Dark-Sky Association certification.

Rated for -40°C to 40°C ambient
CSA Certified to U.S. and Canadian standards
Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

GOVERNMENT PROCUREMENT — BAA — Buy America(n) Act: Product with the BAA option qualifies as a domestic product under the Buy America Act as implemented in the FAR and DFARS. Product with the BAA option also qualifies as manufactured in the United States under the definitions of the Buy America Act.

BABA — Build America Buy America: Product with the BAA option also qualifies as produced in the United States under the definitions of the Buy America Act.

Please refer to www.aaculightbrands.com/buy-america for additional information.

Roadway Lighting

ATBM

Note: Specifications subject to change without notice.



ORDERING INFORMATION

Series	Lumen Package	Voltage	Optics	Mounting
ATBM Autobahn LED Roadway	P05 9,700 Lumens P10 11,000 Lumens P20 12,800 Lumens P30 15,500 Lumens P40 17,400 Lumens P50 18,700 Lumens P60 20,000 Lumens P70 21,500 Lumens	MVOLT Multi-volt, 120-277V 347 347V 480 480V	R2 Roadway Type II R3 Roadway Type III R4 Roadway Type IV R5 Roadway Type V	(Blank) 2 Bolt Mounting 4B 4 Bolt Mounting
Options				
Color Temperature (CCT)				
(Blank) 4000K CCT, 70 CRI Min.				
27K 2700K CCT, 70 CRI Min.				
3K 3000K CCT, 70 CRI Min.				
5K 5000K CCT, 70 CRI Min.				
Paint				
(Blank) Grey				
BK Black				
DB Bronze				
DDB Dark Bronze				
GI Graphite				
WH White				
Surge Protector				
(Blank) Standard 20kV/10kA SPD				
MP MOV Pack				
Miscellaneous Options				
HSS House Side Shield				
NL NEMA Label Indicating Wattage				
XL Not CSA Certified — No Terminal Block Cover				
VR Dual Optix visual comfort				
BAA Buy America(n) Act and/or Build America Buy America Qualified				
Controls Options				
(Blank) 3 Pin NEMA Photocontrol Receptacle				
P7 7 Pin Photocontrol Receptacle (diminable driver included)¹				
3K 3000K CCT, 70 CRI Min.				
NR No Photocontrol Receptacle				
AO Field Adjustable Output				
PCSS Solid-State Lighting Photocontrol¹				
PCLL Solid-State Long Life Photocontrol				
PCCC Solid-State Long Life Photocontrol with remote control on/off¹				
SH Shorting Cap				
Packages				
(Blank) Standard Pack				
JP Job Pack (36/pallet)				
Accessories				
ATBMHSS House Side Shield				
ATBMLTS Light Respo Shield				
RKATBMVOLTSPD ATBM Acuity SPD, MVOLT				
RKATBMVOLTSPD ATBM Acuity SPD, 347/480V				
RKATBMVOLTMP ATBM MOV Pack, MVOLT				
RKATBMVOLTMP ATBM MOV Pack, 347/480V				
Universal Arms (Steel)				
UMR-XX 8" Horizontal Arm for Square Pole, Painted to match Fixture				
UMS-XX 8" Horizontal Arm for Round Pole, Galvanized				
UMR-GALV 8" Horizontal Arm for Round Pole, Galvanized				
UMS-GALV 8" Horizontal Arm for Square Pole, Galvanized				
Notes:				
1 Dimmable driver included.				
2 This option requires RFD				
3 MVOLT only				



Warranty Five-year limited warranty. This is the only warranty provided and no other statements in this specification shall create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.aaculightbrands.com/support/learn/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

ATBM

Autobahn Series ATBM Roadway

PERFORMANCE PACKAGE															
Performance Package	Distribution	Input Watts	3K (3000K CCT, 70 CRI)				4K/5K (4000K/5000K CCT, 70 CRI)				LLD @ 25°C				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	75k Hours	100k Hours	
P05	R2	68	9,386	138	1	0	2	8,718	143	1	0	2	0.93	0.86	0.83
	R3		9,386	138	1	0	3	8,689	142	1	0	3			
	R4		9,690	132	1	0	3	9,340	137	1	0	3			
	R5		10,334	152	3	0	2	10,089	157	3	0	2			
P10	R2	81	10,636	131	2	0	3	11,299	138	2	0	3	0.93	0.86	0.83
	R3		10,636	132	2	0	3	11,302	140	2	0	3			
	R4		10,391	128	2	0	4	10,994	136	2	0	4			
	R5		11,304	142	3	0	2	12,096	149	3	0	2			
P20	R2	94	12,073	128	2	0	3	12,874	137	2	0	3	0.93	0.86	0.83
	R3		12,065	128	2	0	3	12,818	136	2	0	3			
	R4		11,946	127	2	0	4	12,520	133	2	0	4			
	R5		13,085	139	4	0	2	13,776	147	4	0	2			
P30	R2	118	14,637	124	2	0	3	15,514	131	2	0	3	0.93	0.86	0.83
	R3		14,631	124	2	0	3	15,463	131	2	0	3			
	R4		14,317	121	2	0	4	15,151	129	2	0	5			
	R5		15,735	134	4	0	2	16,685	141	4	0	2			
P40	R2	135	16,233	120	2	0	3	17,453	125	2	0	3	0.93	0.86	0.83
	R3		16,402	121	2	0	3	17,367	125	2	0	3			
	R4		15,311	118	2	0	5	17,038	126	2	0	5			
	R5		17,927	139	4	0	2	18,999	138	4	0	2			
P50	R2	152	17,541	115	2	0	3	18,748	123	2	0	3	0.93	0.86	0.83
	R3		17,677	116	2	0	4	18,712	123	2	0	4			
	R4		17,156	113	2	0	5	18,346	120	2	0	5			
	R5		19,008	125	4	0	2	20,088	132	4	0	2			
P60	R2	168	18,770	112	2	0	3	20,095	120	3	0	3	0.93	0.86	0.83
	R3		18,836	112	2	0	4	20,084	120	3	0	4			
	R4		18,369	109	2	0	5	19,648	117	2	0	5			
	R5		20,350	121	4	0	2	21,503	128	4	0	2			
P70	R2	190	20,190	106	3	0	3	21,565	114	3	0	3	0.93	0.86	0.83
	R3		20,142	106	3	0	4	21,504	113	3	0	4			
	R4		19,460	103	3	0	5	21,004	111	3	0	5			
	R5		21,988	116	4	0	2	23,076	121	4	0	2			

Note: Individual fixture performance may vary. Specifications subject to change without notice.



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ATBM

Autobahn Series ATBM Roadway

PERFORMANCE PACKAGE															
ATBM with DualOptix	Distribution	Input Watts	3000K					4000K/5000K					LDD @ 25 °C		
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	50k Hours	75k Hours	100k Hours
P05	R2 with VR	68	8,333	122	2	3	3	8,609	127	2	3	3	0.93	0.86	0.83
	R3 with VR		8,296	122	2	3	3	8,581	126	2	3	3			
	R4 with VR		7,985	117	2	3	4	8,272	122	2	3	4			
	R5 with VR		9,154	125	3	3	3	9,468	129	3	3	3			
	R6 with VR		9,621	116	2	3	3	10,009	124	2	3	3			
P10	R2 with VR	81	9,456	117	2	3	4	10,012	124	2	3	4	0.93	0.86	0.83
	R3 with VR		9,204	114	2	3	4	9,738	120	2	3	4			
	R4 with VR		10,151	126	3	3	3	10,706	132	3	3	3			
	R5 with VR		10,684	114	2	3	4	11,464	121	2	3	4			
	R6 with VR		10,687	114	2	3	4	11,364	121	2	3	4			
P20	R2 with VR	94	10,681	113	2	3	5	11,084	118	2	3	5	0.93	0.86	0.83
	R3 with VR		11,581	123	3	3	3	12,263	130	3	3	3			
	R4 with VR		12,960	110	2	3	4	13,242	116	2	3	5			
	R5 with VR		12,960	110	2	3	4	13,242	116	2	3	5			
	R6 with VR		12,960	110	2	3	4	13,242	116	2	3	5			
P30	R2 with VR	118	12,961	107	2	3	5	13,420	114	2	3	5	0.93	0.86	0.83
	R3 with VR		13,674	110	2	3	5	14,760	125	3	3	5			
	R4 with VR		14,379	107	2	3	4	15,495	115	3	3	5			
	R5 with VR		14,529	108	2	3	5	15,384	114	3	3	5			
	R6 with VR		14,903	104	2	3	5	15,866	112	3	3	5			
P40	R2 with VR	135	15,009	115	3	3	5	16,471	122	4	3	5	0.93	0.86	0.83
	R3 with VR		15,536	102	3	3	5	16,669	109	3	3	5			
	R4 with VR		15,550	103	3	3	5	16,575	109	4	3	5			
	R5 with VR		15,195	100	3	3	5	16,162	106	3	3	5			
	R6 with VR		16,657	111	4	3	5	17,764	117	4	3	5			
P50	R2 with VR	152	16,626	99	3	3	5	17,800	106	3	3	5	0.93	0.86	0.83
	R3 with VR		16,679	99	3	3	5	17,799	106	3	3	5			
	R4 with VR		16,271	97	3	3	5	17,654	104	3	3	5			
	R5 with VR		18,028	107	4	3	5	19,049	113	4	3	5			
	R6 with VR		17,684	98	3	3	5	18,952	102	3	3	5			
P60	R2 with VR	168	17,842	94	3	3	5	19,668	100	3	3	5	0.93	0.86	0.83
	R3 with VR		17,415	92	3	3	5	18,623	98	3	3	5			
	R4 with VR		19,473	103	4	3	5	20,540	104	3	3	5			
	R5 with VR		17,842	94	3	3	5	19,668	100	3	3	5			
	R6 with VR		17,415	92	3	3	5	18,623	98	3	3	5			