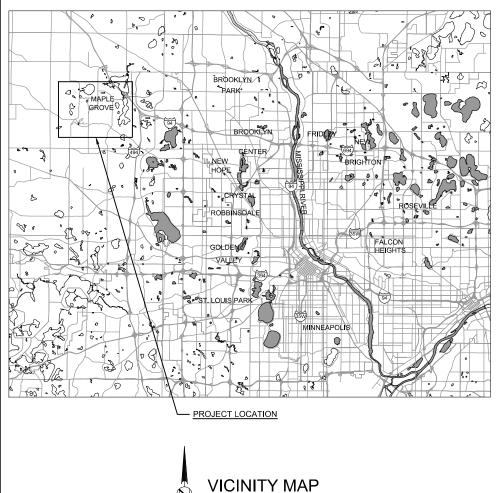
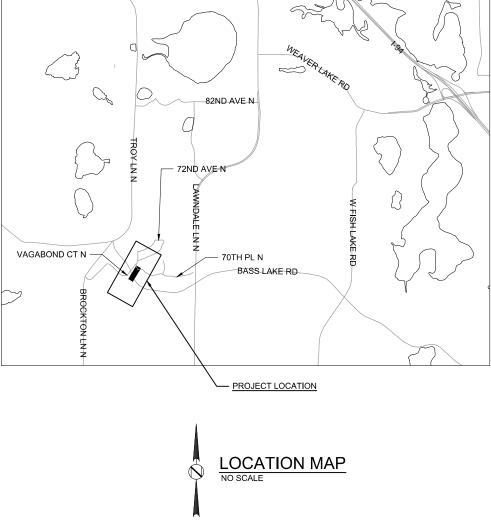
# INTERCEPTOR 900416 BASS LAKE ROAD REPLACEMENT SEGMENT 247001 MCES PROJECT 808622 MCES CONTRACT 21P316



SHEET INDEX						
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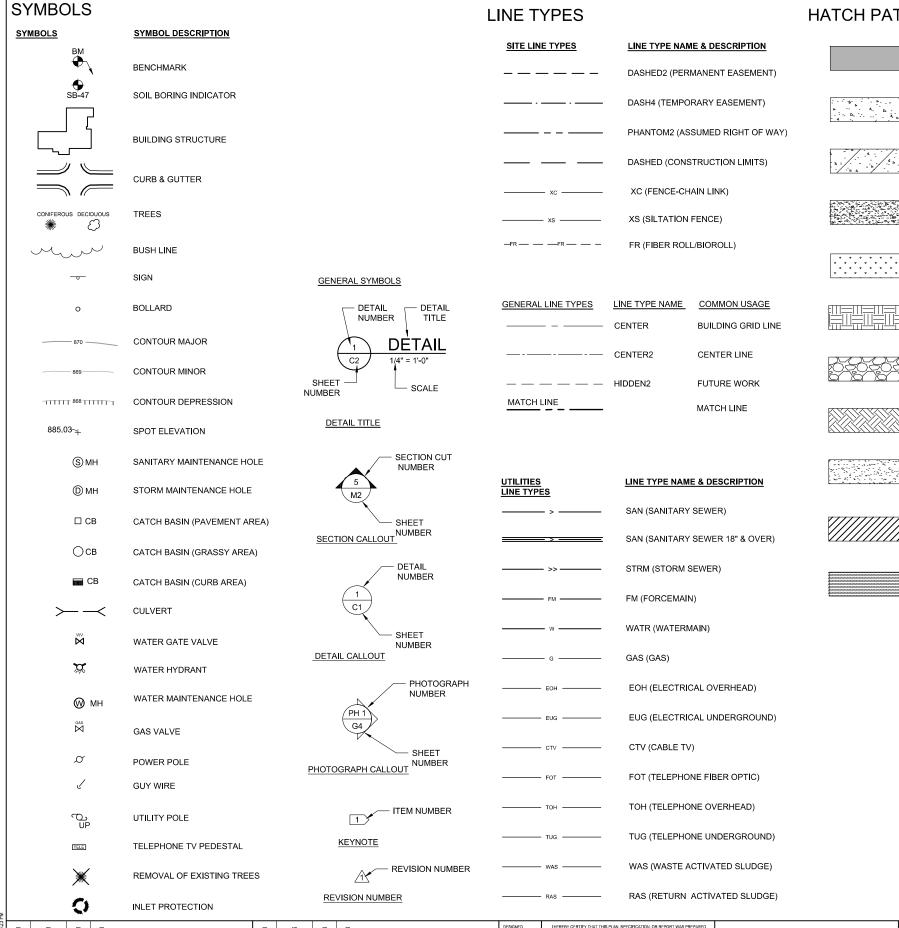


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INTERCEPTOR 900416 BASS LAKE ROAD

TITLE SHEET

GI001



### HATCH PATTERNS

## **GENERAL NOTES:** BITUMINOUS PAVEMENT

CONCRETE PAVEMENT

CONCRETE GROUT

VEGETATION

AGGREGATE FILL

COMPACTED FILL

SAND

REMOVAL

**OBJECT HATCH** 

GRADE

AGGREGATE PAVEMENT

LOCATIONS OF EXISTING PROPERTY LINES, ABOVE GRADE STRUCTURES, SUBSURFACE STRUCTURES, AND SOIL CONDITIONS ARE BASED ON BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. ACCURACY IS NOT GUARANTEED. CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND DIMENSIONS OF ALL PERTINENT EXISTING ITEMS PRIOR TO CONSTRUCTION

ALL CONSTRUCTION ACTIVITIES ARE TO BE CONFINED TO CONSTRUCTION LIMITS, EXISTING RIGHT OF WAY, AND EASEMENTS UNLESS OTHERWISE AUTHORIZED BY PROPERTY OWNER AND CAR. CONTRACTOR SHALL PROVIDE ALL SHORING AND PROTECTION AS NECESSARY TO KEEP EXCAVATION LIMITS WITHIN EXISTING RIGHT OF WAY AND FASEMENTS.

CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL (800-252-1166 OR 651-454-0002) AT LEAST 48 HOURS PRIOR TO START OF ANY EXCAVATION ACTIVITIES

HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES AS SHOWN ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY AND RECORD THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD AND RECORD ANY CHANGES

CONTRACTOR SHALL CONTACT UTILITY OWNERS AND/OR PERFORM EXPLORATORY EXCAVATIONS TO DETERMINE THE EXACT LOCATIONS OF UNDERGROUND UTILITIES, FACILITIES AND OTHER ITEMS AS NECESSARY. IF ITEMS NEED RELOCATION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SUBMIT A PLAN FOR APPROVAL WELL IN ADVANCE OF RELOCATING ANY ITEMS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS, INCLUDING APPROVAL AND COORDINATION, WITH FACILITY OWNER FOR RELOCATION OF AN ITEM

CONTRACTOR SHALL SUPPORT ALL EXISTING UTILITY PIPING AND CONDUIT EXPOSED DURING CONSTRUCTION BY MEANS ACCEPTABLE TO UTILITY OWNER AND CAR. THE CONTRACTOR SHALL PROTECT ANY EXISTING THRUST BLOCKS ENCOUNTERED THAT MAY BE RESTRAINING EXISTING UTILITIES AND SHALL NOT UNDERMINE THEM

7. VERIFY AND DOCUMENT LOCATIONS AND SIZES OF ALL ACTIVE EXISTING SERVICES AND LATERALS. REESTABLISH EXISTING ACTIVE SERVICE CONNECTIONS AND LATERALS UPON COMPLETION OF

8. ALL TRAFFIC CONTROL SHALL BE PER MNMUTCD, LATEST EDITION

SCREENED (LIGHT) DELINEATION SHOWN ON SHEETS DENOTES EXISTING FACILITIES. NON SCREENED (BOLD) DELINEATION IS PROPOSED WORK TO BE COMPLETED UNDER THIS CONTRACT

## **SANITARY SEWER NOTES:**

- 1. ALL STATIONS SHOWN ARE TAKEN OFF THE CENTERLINE OF THE EXISTING SEWER INTERCEPTOR
- 2. PIPE LENGTHS FOR GRAVITY SEWER ARE BASED ON THE HORIZONTAL DISTANCE BETWEEN CENTERS OF MANHOLES ALONG THE CENTERLINE OF THE PIPING
- 3. ALL BACKFILL FOR SEWER EXCAVATIONS SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM
- 4. PLAN AND PROFILE SHEETS ARE BASED ON RECORD DOCUMENTS FROM PREVIOUS PROJECTS AND PRE-CONSTRUCTION SURVEY, GROUND SURFACE CONTOURS AND EXACT LOCATIONS OF PIPE MAY

## **UTILITY CONTACT INFORMATION:**

PURSUANT TO THE REQUIREMENTS OF M.S. 216D.04, THE STATE ONE CALL NOTIFICATION CENTER WAS CONTACTED ON 04/16/2020 (TICKET NO. 201070976). SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL C. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-.2, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA." THIS INFORMATION MAY NOT BE RELIED ON AS WARRANTING THE ACTUAL PRESENCE, CHARACTERISTICS, OR LOCATION OF THE UNDERGROUND FACILITIES, AND DOES NOT RELIVE ANY PERSON FROM COMPLYING W/ STATE NOTIFICATION AND LOCATION. NOT ALL SANITARY SEWER SERVICES AND WATER SERVICES ARE SHOWN

GOPHER STATE ONE CALL LOCATE REQUESTS: CALL 811 OR 651-454-0002 OR 800-252-1166

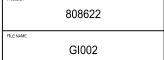
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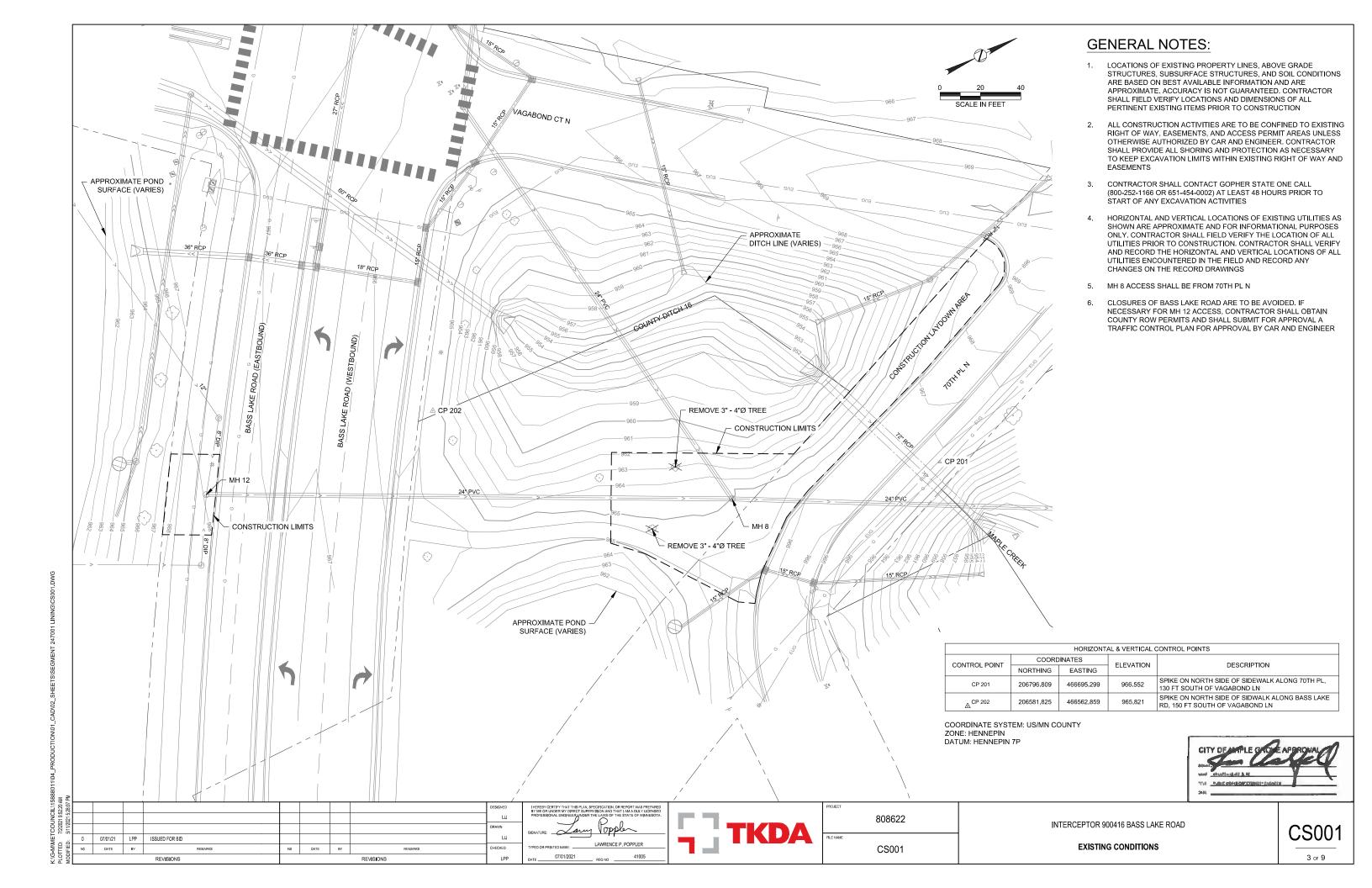


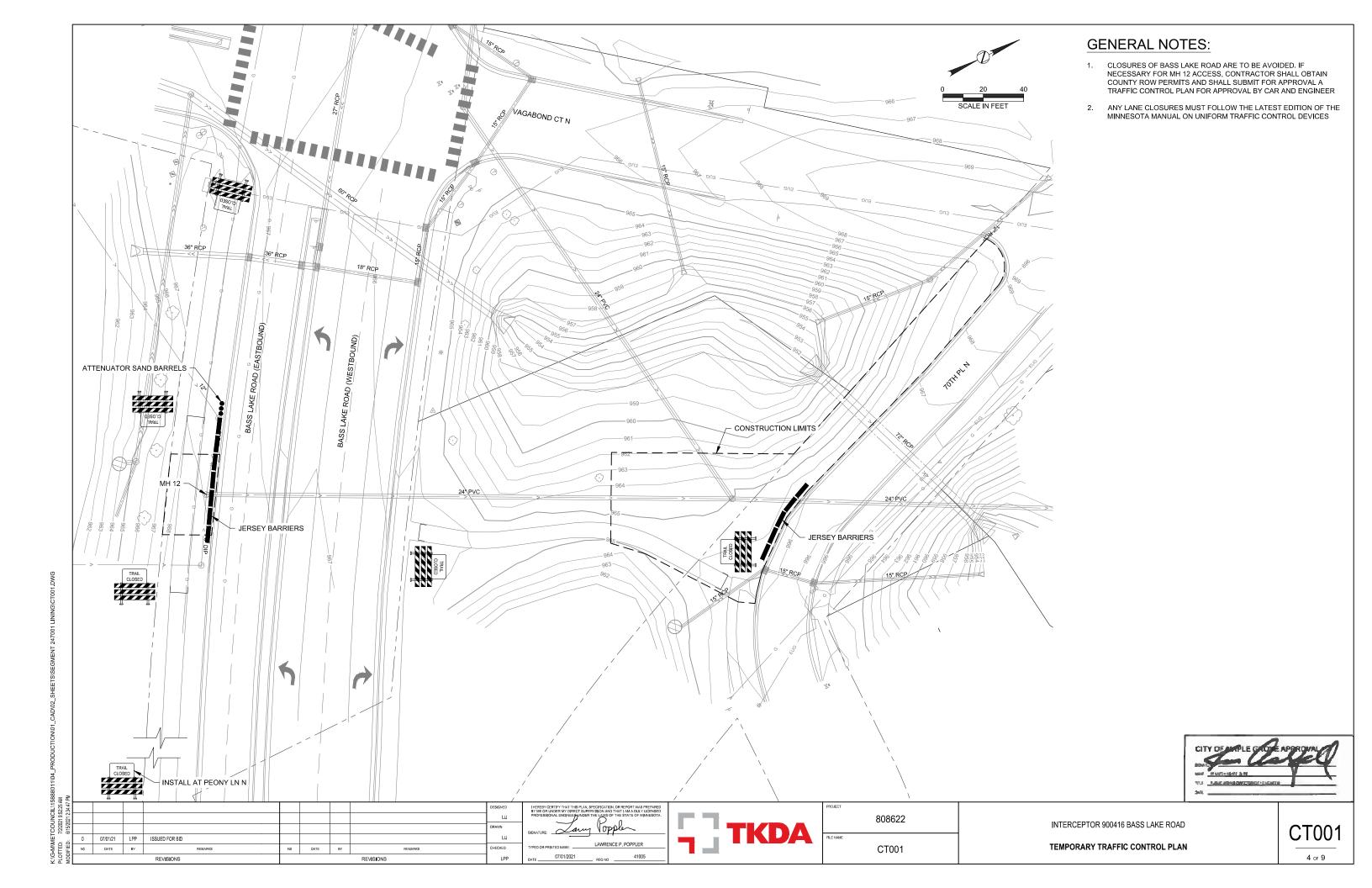


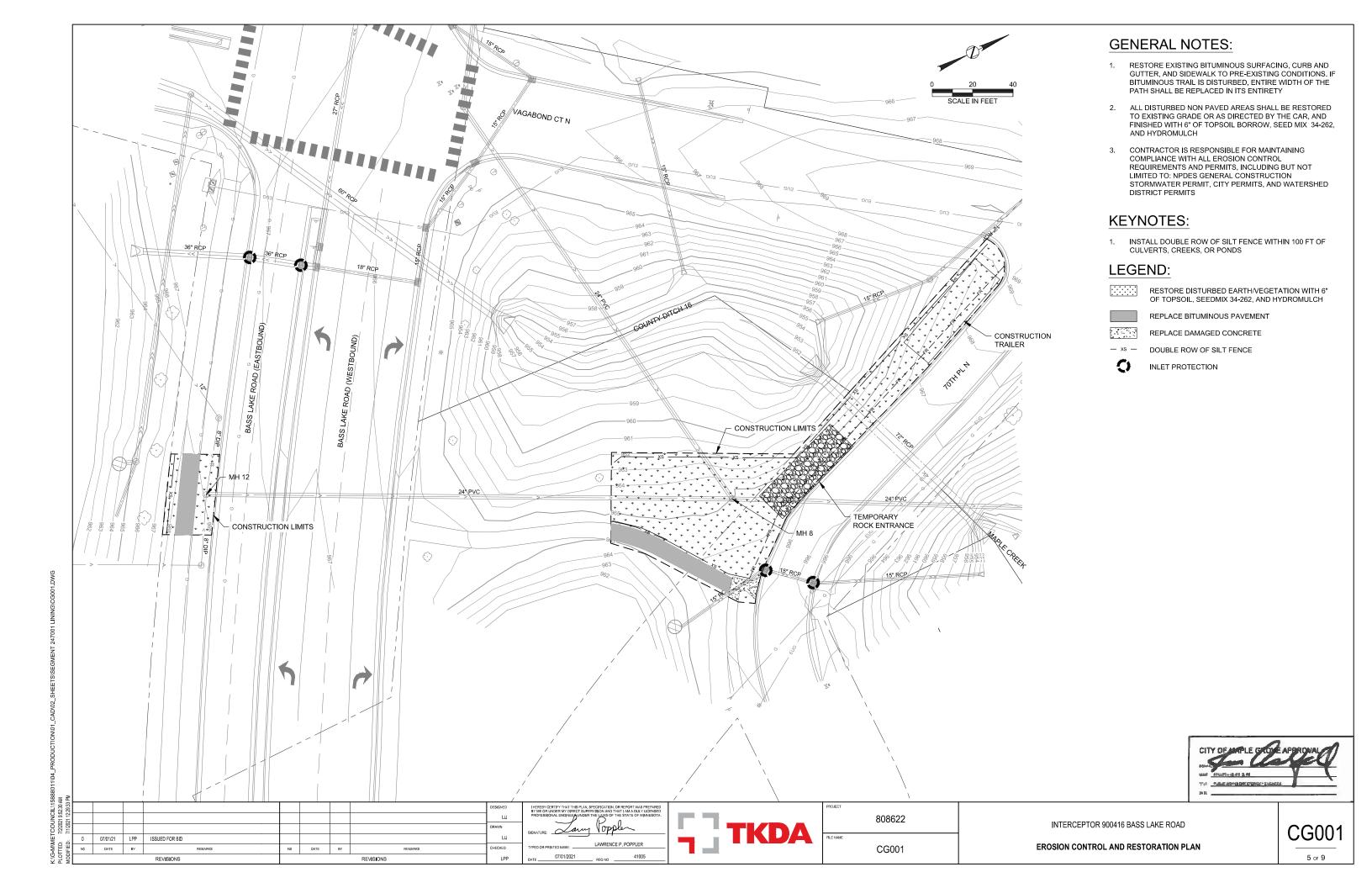
INTERCEPTOR 900416 BASS LAKE ROAD

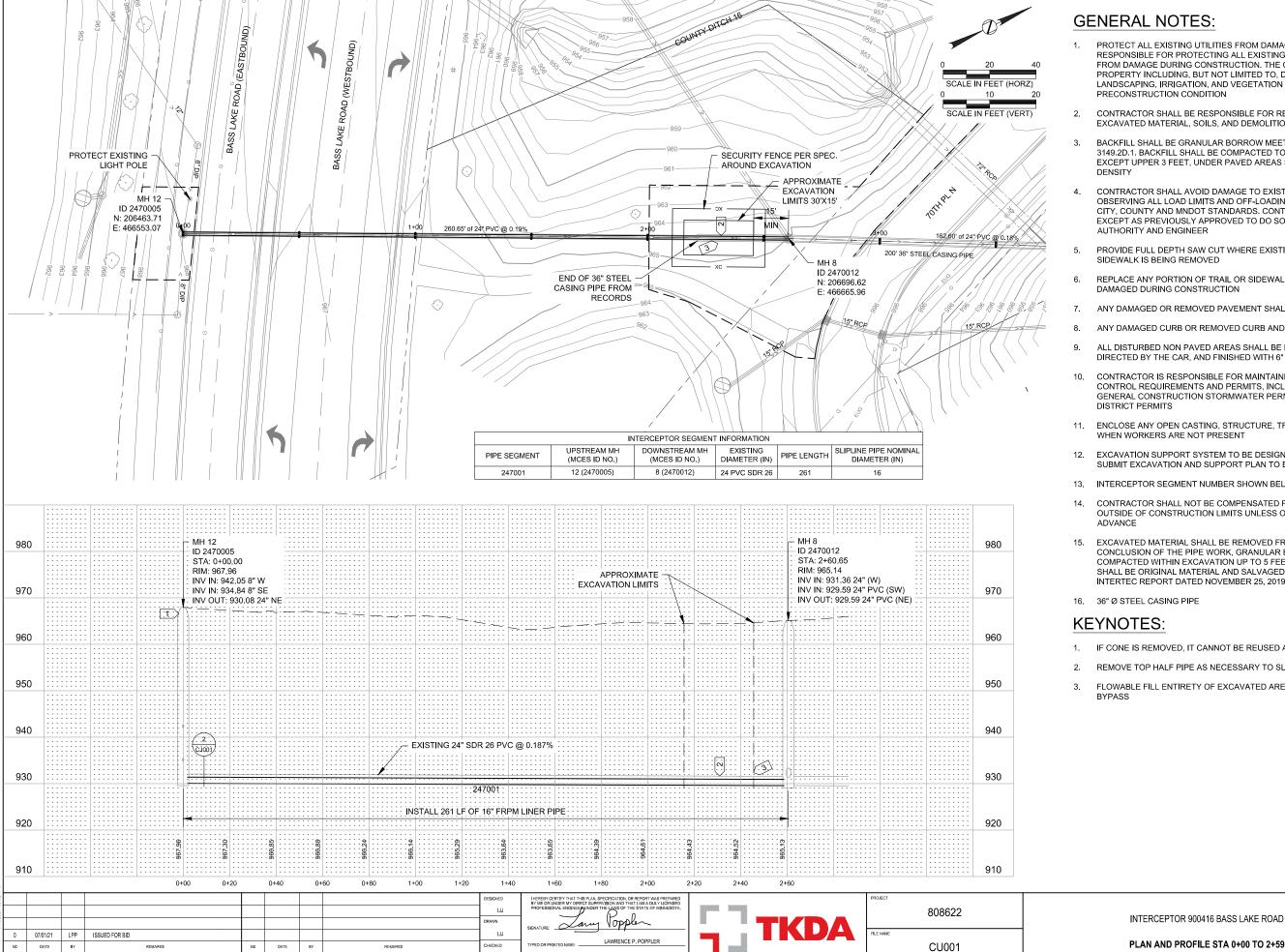
**LEGEND AND GENERAL NOTES** 











07/01/2021

- PROTECT ALL EXISTING UTILITIES FROM DAMAGE. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING ITEMS, UTILITIES AND STRUCTURES FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE ALL PROPERTY INCLUDING, BUT NOT LIMITED TO, DRAINAGE SWALES, GRADING LANDSCAPING, IRRIGATION, AND VEGETATION DISTURBED BY CONTRACT ACTIVITIES TO
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL EXCESS EXCAVATED MATERIAL, SOILS, AND DEMOLITION DEBRIS TO AN OFF-SITE LOCATION
- BACKFILL SHALL BE GRANULAR BORROW MEETING THE REQUIREMENTS OF MNDOT 3149.2D.1. BACKFILL SHALL BE COMPACTED TO 95% MODIFIED PROCTOR DENSITY EXCEPT UPPER 3 FEET, UNDER PAVED AREAS SHALL BE 100% MODIFIED PROCTOR
- CONTRACTOR SHALL AVOID DAMAGE TO EXISTING ROADWAYS AND PAVEMENT BY OBSERVING ALL LOAD LIMITS AND OFF-LOADING OF EQUIPMENT IN ACCORDANCE WITH CITY, COUNTY AND MNDOT STANDARDS. CONTRACTOR SHALL NOT DISTURB TRAFFIC EXCEPT AS PREVIOUSLY APPROVED TO DO SO BY THE APPLICABLE ROADWAY
- PROVIDE FULL DEPTH SAW CUT WHERE EXISTING PAVEMENT, CURB, TRAIL OR
- REPLACE ANY PORTION OF TRAIL OR SIDEWALK, AT FULL DEPTH WIDTH, WHICH IS
- ANY DAMAGED OR REMOVED PAVEMENT SHALL BE REPLACED IN KIND
- ANY DAMAGED CURB OR REMOVED CURB AND GUTTER SHALL BE IN KIND
- ALL DISTURBED NON PAVED AREAS SHALL BE RESTORED TO EXISTING GRADE OR AS DIRECTED BY THE CAR, AND FINISHED WITH 6" OF TOPSOIL BORROW AND SEED
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH ALL EROSION CONTROL REQUIREMENTS AND PERMITS, INCLUDING BUT NOT LIMITED TO: NPDES GENERAL CONSTRUCTION STORMWATER PERMIT, CITY PERMITS, AND WATERSHED
- 11. ENCLOSE ANY OPEN CASTING, STRUCTURE, TRENCH, HOLE, ETC. WITH SAFETY FENCING
- EXCAVATION SUPPORT SYSTEM TO BE DESIGNED AND INSTALLED BY CONTRACTOR. SUBMIT EXCAVATION AND SUPPORT PLAN TO ENGINEER PRIOR TO BEGINNING WORK
- 13. INTERCEPTOR SEGMENT NUMBER SHOWN BELOW PROFILE OF PIPE
- CONTRACTOR SHALL NOT BE COMPENSATED FOR REPLACEMENT OF PAVED SURFACES OUTSIDE OF CONSTRUCTION LIMITS UNLESS OTHERWISE APPROVED BY CAR IN
- 15. EXCAVATED MATERIAL SHALL BE REMOVED FROM THE PROJECT LIMITS. AT THE CONCLUSION OF THE PIPE WORK, GRANULAR BORROW SHALL BE PLACED AND COMPACTED WITHIN EXCAVATION UP TO 5 FEET BELOW GRADE. THE UPPER 5 FEET SHALL BE ORIGINAL MATERIAL AND SALVAGED TOPSOIL. PLEASE REVIEW BRAUN INTERTEC REPORT DATED NOVEMBER 25, 2019 FOR DETAILS
- 1. IF CONE IS REMOVED, IT CANNOT BE REUSED AND MUST BE REPLACED, SEE 1/CJ003
- REMOVE TOP HALF PIPE AS NECESSARY TO SLIPLINE A 16" FRPM PIPE
- FLOWABLE FILL ENTIRETY OF EXCAVATED AREA FLOOR TO CONTAIN POTENTIAL

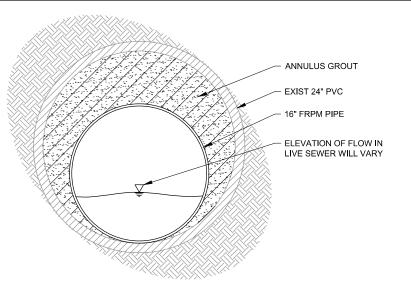


PLAN AND PROFILE STA 0+00 TO 2+59

CU00

#### NOTES:

- INSTALL BULKHEADS TO CONTAIN AND PREVENT WASHING OUT OF ANNULUS GROUT
- 2. GROUTING OPERATIONS SHALL BE DONE IN A MANNER THAT PREVENTS THE SLIPLINE PIPE FROM FLOATING OR DAMAGE TO EITHER THE HOST PIPE OR SLIPLINE PIPE. ENSURE GROUT PRESSURES DO NOT EXCEED MANUFACTURES RECOMMENDATIONS
- 3. CONTRACTOR CAN USE A VARIETY OF METHODS TO PREVENT SLIPLINE PIPE FROM FLOATING AS APPROVED BY CAR. COMPENSATION FOR THESE METHODS ARE INCLUDED IN THE PIPE GROUT BID ITEM



ORIGINAL CONDITION OF 24" PVC

## NOTES:

- GROUT ANNULAR SPACE PER DETAIL 1/CJ001
- 2. MAX DEFLECTION LOCATED AT APPROXIMATELY STA. 0+09
- 3. PIPE DEFLECTION ALONG PIPE SEGMENT DISPLAYED IN PROJECT MANUAL





EXISTING 24" PVC

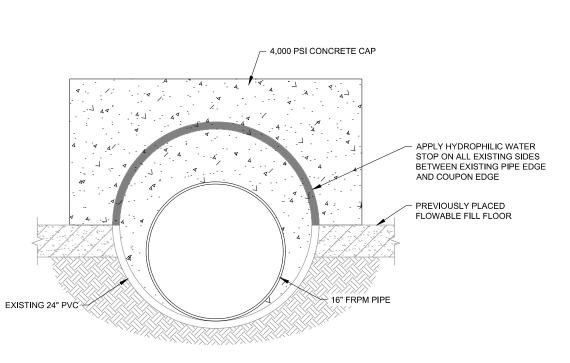
DEFLECTED PIPE

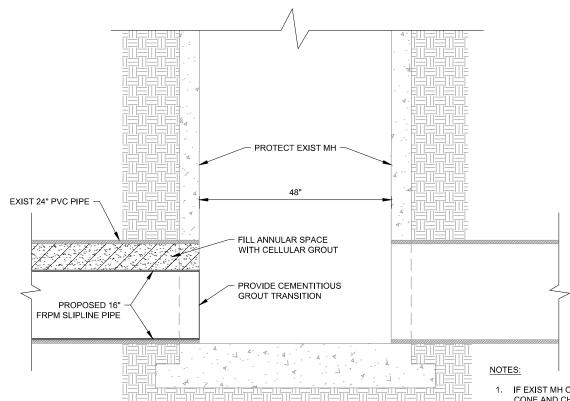
16" FRPM PIPE

5.2313

MAX DEFLECTION

PIPE SECTION - STA. 0+09 MAXIMUM DEFLECTION
NO SCALE

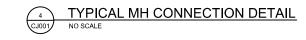




IF EXIST MH CONE IS REMOVED REPLACE
CONE AND CHIMNEY, MH CASTING CAN BE
SALVAGED AND REUSED

2. PROVIDE TRANSITION FROM SLIPLINE PIPE LIPS TO EXISTING FLOW CHANNEL IN MH WITH CEMENTITIOUS GROUT TRANSITION TO BE FROM INVERT TO SPRINGLINE AT BOTH ENDS OF SLIPLINE PIPE







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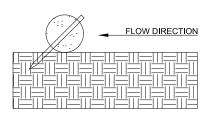


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INTERCEPTOR 900416 BASS LAKE ROAD

SLIPLINE DETAILS

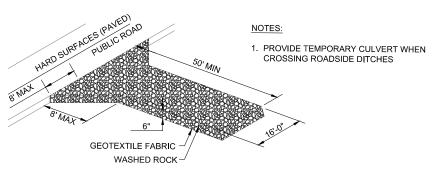




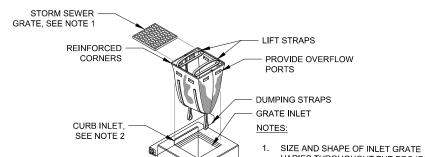
#### NOTES:

- 1. PLACE BIOROLLS IN ACCORDANCE WITH MNDOT 3897F
- 2. PLACE BIOROLLS IN 2" DEEP TRENCH
- 3. STAKE INTO THE GROUND WITH WOOD
- 4. WOOD STAKES ARE A MINIMUM 0.5"X2"X16" LONG PLACED EVERY 2' UNLESS OTHERWISE PRECLUDED TO PAVED SURFACE OR ROCK
- 5. WOOD STAKES DRIVEN THROUGH BACK HALF OF BIOROLL AT AN APPROXIMATE 45 DEG ANGLE WITH TOP OF STAKE POINTING UPSTREAM
- 6. WHEN MORE THAN 1 BIOROLL LOG IS NEEDED, OVERLAP ENDS A MINIMUM OF

## SEDIMENT CONTROL LOG (BIOROLL)



## TEMPORARY ROCK CONSTRUCTION ENTRANCE CJ002



- VARIES THROUGHOUT THE PROJECT
- PROTECT CURB INLETS WITH APPROVED DEVICE DESIGNED TO CONFORM TO SHAPE OF CURB AND



ISSUED FOR BID

07/01/21 LPP

## INLET PROTECTION SEDIMENT FILTER SACK

NO DATE

07/01/2021



808622

CJ002

NOTES:

2 ACRES MAXIMUM DRAINAGE AREA PER FENCE SEGMENT

600' MAXIMUM LENGTH

TURN ENDS UPSLOPE TO

PREVENT FLOW BYPASS

COMPACTED SUBGRADE

6"x6" EARTH FILL OR PLOWED IN MINIMUM IN 6" FABRIC

1. WHEN DISTANCE EXCEEDS 150' OR DRAINAGE AREA EXCEEDS 2 ACRES,

PRE-ASSEMBLED SILTATION FENCE PLACED ON CONTOUR

960

MAXIMUM 7'-6" ON CENTER SPACING OF POSTS

PRE-ASSEMBLED SILTATION FENCE - 1 1/2"x1 1/2"x4'-0" WOOD POSTS MINIMUM 1'-6" EMBEDMENT

MINIMUM 6" BURY

SILTATION FENCE

USE HEAVY DUTY SILTATION FENCE WITHOUT BALE BACKING

INTERCEPTOR 900416 BASS LAKE ROAD

**EROSION CONTROL DETAILS** 

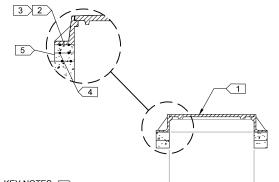
CJ002

#### **GENERAL NOTES:**

- EACH JOINT BETWEEN MAINTENANCE HOLE BARREL SECTIONS OR CONE SECTIONS SHALL HAVE A STANDARD GASKET OF NEW
- RESTORATION SHALL BE PER SPECIFICATION SECTION 02900

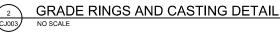
#### KEY NOTES:

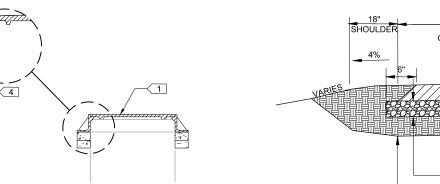
- MH FRAME, COVER, AND GRADE RINGS PER DETAIL 4/CJ1
- 3/8 " FULL BED OF MORTAR. LEVELING TO MATCH GRADE SHALL BE ACCOMPLISHED WITH MORTAR BED
- WRAP EACH EXPOSED JOINT WITH WATERPROOF MEMBRANE
- NEW MAINTENANCE HOLE CONE SECTION
- MAINTENANCE HOLE RISER SECTION (12" MINIMUM) AS NEEDED
- EXISTING STRUCTURE



#### KEY NOTES:

- MH FRAME AND COVER. NEENAH R-1733. PROVIDE SOLID LID WITH TWO CONCEALED PICK HOLES AND 3/4" RAISED LETTERS READING "INTERCEPTOR SANITARY SEWER" FOR MCES MHS. COVER SHALL BE WATER TIGHT WITH FOUR BOLTS AND A SEAL
- ADJUSTING RING. RINGS TO PROVIDE LOAD TRANSFER AS REQUIRED TO MAINTAIN MH LOAD RATING. 2 RINGS MAX
- HDPE OR EPP ADJUSTING RINGS. SEE SPECIFICATIONS
- SEALANT SHALL BE APPLIED PER ADJUSTING RING MANUFACTURER DIRECTIONS. SEE SPECIFICATIONS
- EXTERNAL WRAP. INFI-SHIELD UNIBAND OR APPROVED EQUAL





GRADE TO DRAIN 2. SCREEN AND TAMP EDGES OF WEARING 2% . TRAIL SECTION TO BE AS SHOWN ABOVE OR TO MATCH EXISTING, WHICHEVER IS THICKER . TAMP TRAIL EDGES AT 45° BEVEL 5. SLOPE OF BITUMINOUS TRAIL SHALL BE MINIMUM OF 1% TO A MAXIMUM OF 25 TO THE DOWNHILL EDGE 2.5"- MNDOT TYPE PS 9.5 WEARING COURSE MIX, SPWEA230B - 6"- CLASS 5 GRAVEL BASE, 100% CRUSHED - APPROVED SUBGRADE, COMPACTED TO 95%

STANDARD PROCTOR DENSITY

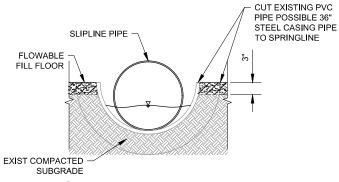
VARIES

**GENERAL NOTES:** 

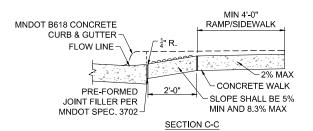
NOTIFY CAR AND CITY IF ORGANIC OR POOR

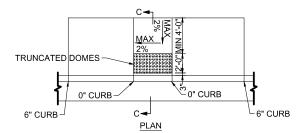
SUBGRADE SOILS ARE ENCOUNTERED





JACKING PIT SECTION NO SCALE

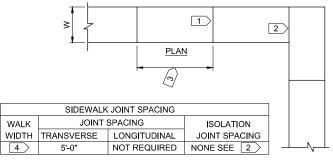


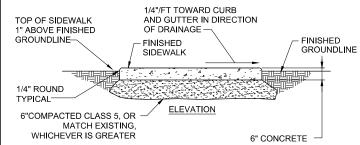






MH CASTING AND CONE SECTION

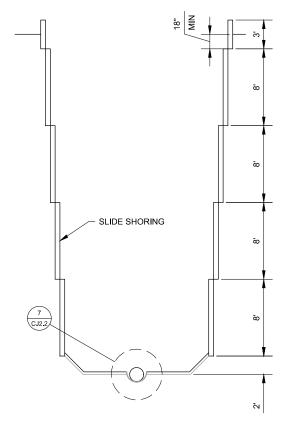




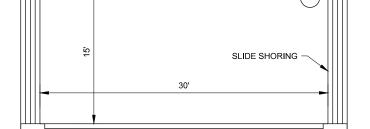
#### KEY NOTES:

- 1. CONTRACTION JOINTS FORMED OR SAW CUT 1/3 OF SLAB DEPTH
- 2. PROVIDE ISOLATION JOINTS AT ALL LOCATIONS WHERE WALKS ABUT CONCRETE CURB AND GUTTER, BUILDINGS, RETAINING WALLS OR OTHER STRUCTURES OR SIDEWALKS AT RIGHT ANGLES
- MAKE JOINT SPACING UNIFORM BETWEEN JOINTS **BUT NOT GREATER THAN 10'**
- 4. MATCH EXISTING WIDTH, 5' MIN

## CONCRETE SIDEWALK



ANTICIPATED PIT SHORING SECTION



DEWATERING SUMP

#### NOTES:

- 1. DESIGN IS BASED ON SOIL INFORMATION PROVIDED BY PROJECT SOIL
- 2. EXCAVATION SHALL BE DEWATERED TO THE BOTTOM OF THE EXCAVATION
- 3. EXCAVATION SHALL BE VISUALLY EXAMINED DAILY BY COMPETENT
- IF SLOUGHING, SEEPAGE THROUGH SLOPE OR TENSION CRACKS ARE OBSERVED ON THE SLOPE OR NEAR THE TOP OF SLOPE, EVACUATE ALL PERSONNEL FROM THE EXCAVATION AND CONTACT PEM IMMEDIATELY
- PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES
- CONTRACTOR SHALL SUBMIT FOR APPROVAL AN EXCAVATION PLAN SIGNED BY A REGISTERED ENGINEER OF MN PRIOR TO WORK

ANTICIPATED PIT SHORING PLAN

07/01/21 LPP ISSUED FOR BID DATE

07/01/2021



808622 CJ003

INTERCEPTOR 900416 BASS LAKE ROAD

**MISCELLANEOUS DETAILS** 

CJ003