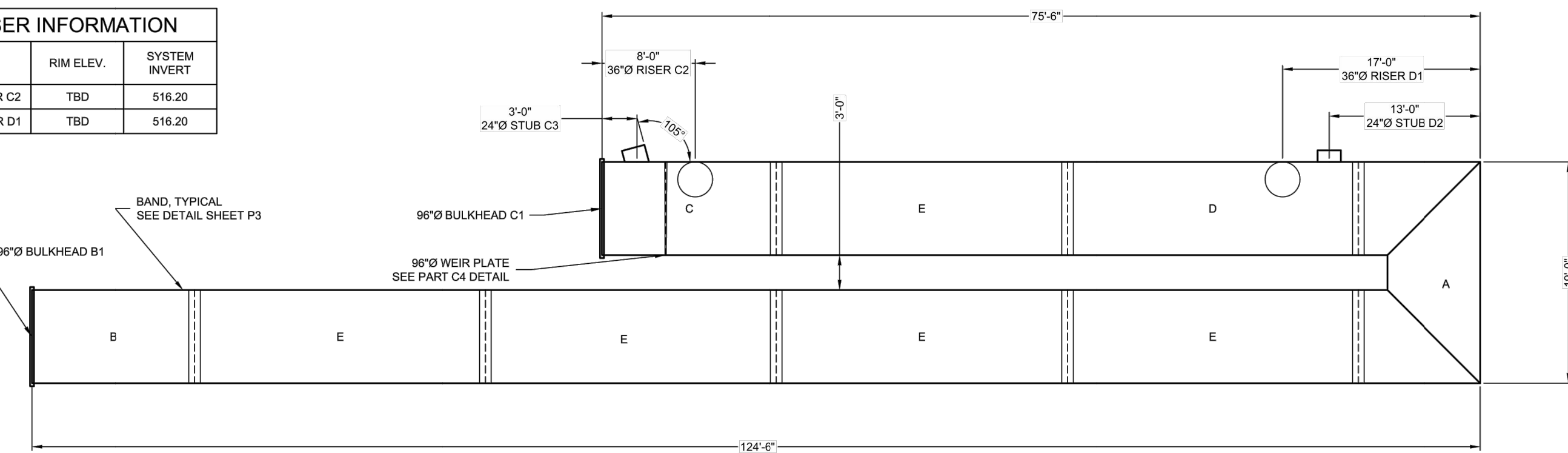


STUB INFORMATION		
PIECE	STUB INVERT	SYSTEM INVERT
24"Ø STUB C3	516.20	516.20
24"Ø STUB D2	516.20	516.20

RISER INFORMATION		
PIECE	RIM ELEV.	SYSTEM INVERT
36"Ø RISER C2	TBD	516.20
36"Ø RISER D1	TBD	516.20



THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (S) PAGES, INCLUDING THE FOLLOWING:

- PIPE STORAGE = 10,204 CF
- MAINLINE PIPE GAGE = 14
- WALL TYPE = SOLID
- DIAMETER = 96"
- FINISH = ALT2
- CORRUGATION = 5x1

CUSTOMER _____ DATE _____

ASSEMBLY
SCALE: 1" = 10'
PIPE STORAGE: 10,204 CF
LOADING: H20
PIPE INV. = 516.20±

- NOTES**
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE.
 - ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD (EOR) PRIOR TO RELEASING FOR FABRICATION.
 - ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
 - ALL RISERS AND STUBS ARE 2 1/2" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
 - RISERS TO BE FIELD TRIMMED TO GRADE AS REQUIRED, BY CONTRACTOR.
 - QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
 - ALL ACCESS CASTINGS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT SUPPLIED BY CONTECH.

MARK	DATE	REVISION DESCRIPTION	BY

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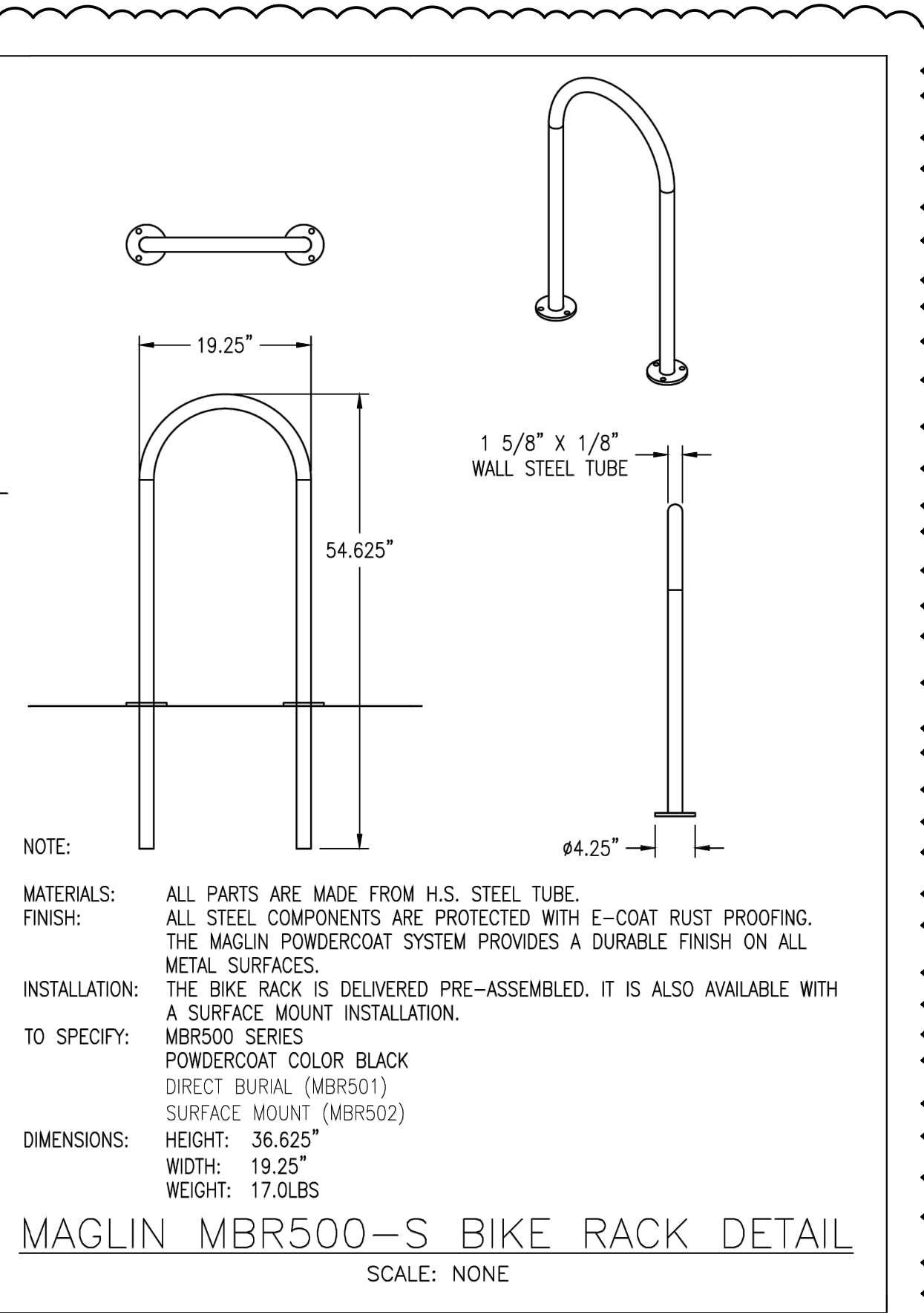
96"Ø UNDERGROUND DETENTION SYSTEM - 699563-020
TEXAS ROADHOUSE - OFALLON
OFALLON, MO
SITE DESIGNATION: UNDERGROUND DETENTION

PROJECT NO.	REV. NO.	DATE
699563	020	2/22/2022

DESIGNED	DRAWN
CEU	CEU

CHECKED	APPROVED
TNB	CEU

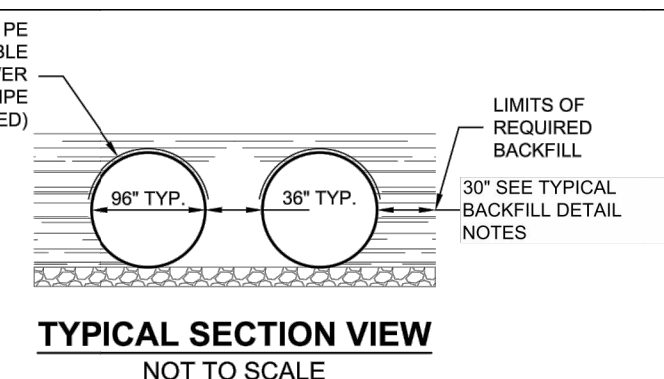
SHEET NO.	OF
P1	5



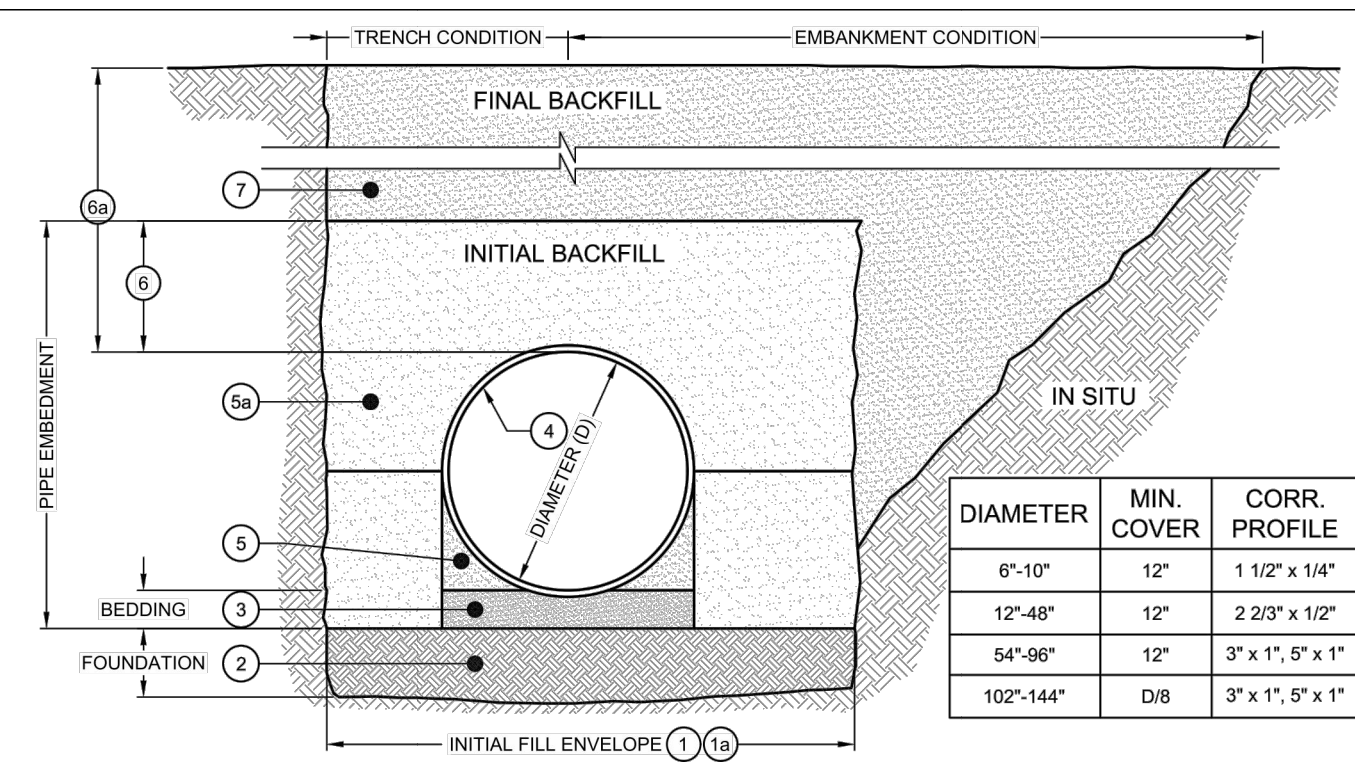
- NOTE:**
- MATERIALS:** ALL PARTS ARE MADE FROM H.S. STEEL TUBE.
FINISH: ALL STEEL COMPONENTS ARE PROTECTED WITH E-COAT RUST PROOFING. THE MAGLIN POWDERCOAT SYSTEM PROVIDES A DURABLE FINISH ON ALL METAL SURFACES.
- INSTALLATION:** THE BIKE RACK IS DELIVERED PRE-ASSEMBLED. IT IS ALSO AVAILABLE WITH A SURFACE MOUNT INSTALLATION.
- TO SPECIFY:** MBR500 SERIES
POWDERCOAT COLOR BLACK
DIRECT BURIAL (MBR501)
SURFACE MOUNT (MBR502)
- DIMENSIONS:** HEIGHT: 36.625"
WIDTH: 19.25"
WEIGHT: 17.0LBS

MAGLIN MBR500-S BIKE RACK DETAIL
SCALE: NONE

NOTE: BIKE RACKS ARE TO BE PROVIDED ACCORDING TO THE BUILDING CIVIL AND LANDSCAPE PLANS PROVIDED BY GREENBERG FARROW. DETAIL IS SHOWN FOR REFERENCE ONLY.



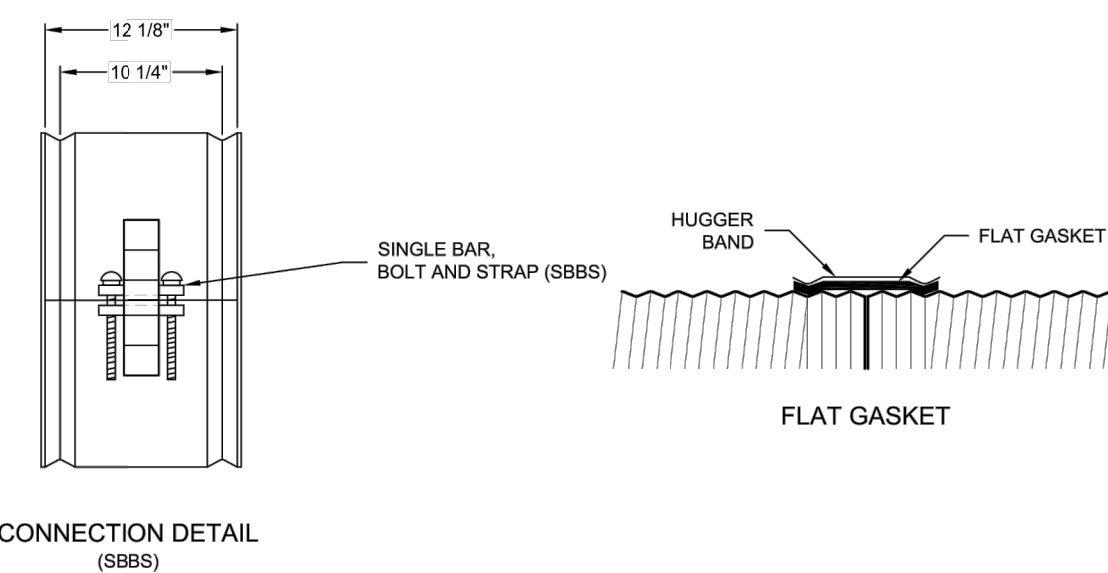
NOTE: IF SALTING AGENTS FOR SNOW AND ICE REMOVAL ARE USED ON OR NEAR THE PROJECT, A GEOMEMBRANE BARRIER IS RECOMMENDED WITH THE SYSTEM. THE GEOMEMBRANE LINER IS INTENDED TO HELP PROTECT THE SYSTEM FROM THE POTENTIAL ADVERSE EFFECTS THAT MAY RESULT FROM A CHANGE IN THE SURROUNDING ENVIRONMENT OVER A PERIOD OF TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL INFORMATION.



- BACKFILL REQUIREMENTS FOLLOW THE GUIDELINES OF AASHTO LRFD BRIDGE DESIGN (SEC 12) AND CONSTRUCTION (SEC 26)**
- MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE MINIMUM TRENCH WIDTH (12.6.6.1):
PIPE ≤ 12": D + 16"
PIPE > 12": L + 12"
 - MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE (12.6.6.2):
PIPE ≤ 24": 3.0D
PIPE 24" - 144": D + 47"
PIPE > 144": D + 107"
 - THE FOUNDATION UNDER THE PIPE AND SIDE BACKFILL SHALL BE ADEQUATE TO SUPPORT THE LOADS ACTING UPON IT (26.5.2).
 - ENGINEER TO DETERMINE IF BEDDING IS REQUIRED. BEDDING MATERIAL SHALL BE A RELATIVELY LOOSE MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, AND A MINIMUM OF TWICE THE CORRUGATION DEPTH IN THICKNESS, WITH THE MAXIMUM PARTICLE SIZE OF ONE-HALF OF THE CORRUGATION DEPTH (26.5.3).
 - CORRUGATED STEEL PIPE (CSP / HEL-COR).
 - HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION (26.5.4).
 - INITIAL BACKFILL FOR PIPE EMBEDMENT TO MEET AASHTO A-1, A-2 OR A-3 CLASSIFICATION, OR APPROVED EQUAL, COMPACTED TO 90% STANDARD PROCTOR (1.99) MAXIMUM PARTICLE SIZE NOT TO EXCEED 3" (12.4.1.2). ALL LIFTS PLACED IN A CONTROLLED MANNER. IT IS RECOMMENDED THAT LIFTS NOT EXCEED AN 8" UNCOMPACTED LIFT HEIGHT TO PREVENT UNIFORM LOADS, AND THE LESSER OF 1/3 THE DIAMETER OR 24" AS THE MAXIMUM DIFFERENTIAL SIDE-TO-SIDE (26.5.4).
 - INITIAL BACKFILL ABOVE PIPE MAY INCLUDE ROAD BASE MATERIAL (AND RIGID PAVEMENT IF APPLICABLE). SEE TABLE ABOVE.
 - TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT (12.6.6.3).
 - FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD (26.5.4.1).

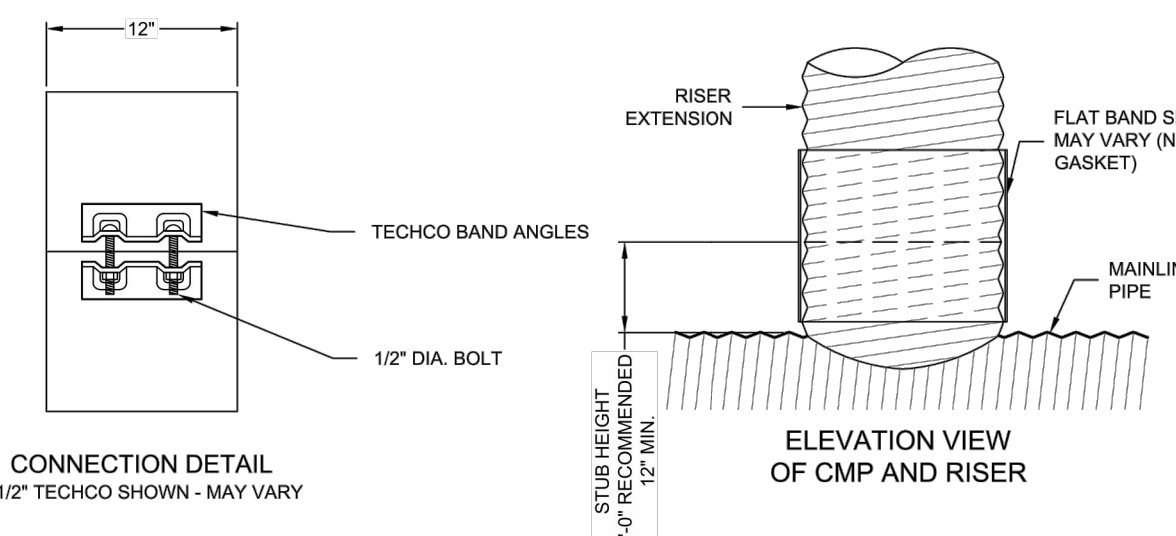
- NOTES:**
- ENGINEER TO DETERMINE IF GEOTEXTILE SHOULD BE USED TO PREVENT SOIL MIGRATION INTO VARYING SOIL TYPES (PROJECT ENGINEER).
 - FOR MULTIPLE BARREL INSTALLATIONS THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE PIPE DIA./2 BUT NO LESS THAN 12" OR 36" FOR PIPE DIAMETERS 72" AND LARGER.
 - CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING (TABLE C12.6.7-1).

TYPICAL BACKFILL DETAIL
NOT TO SCALE



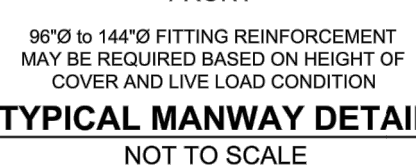
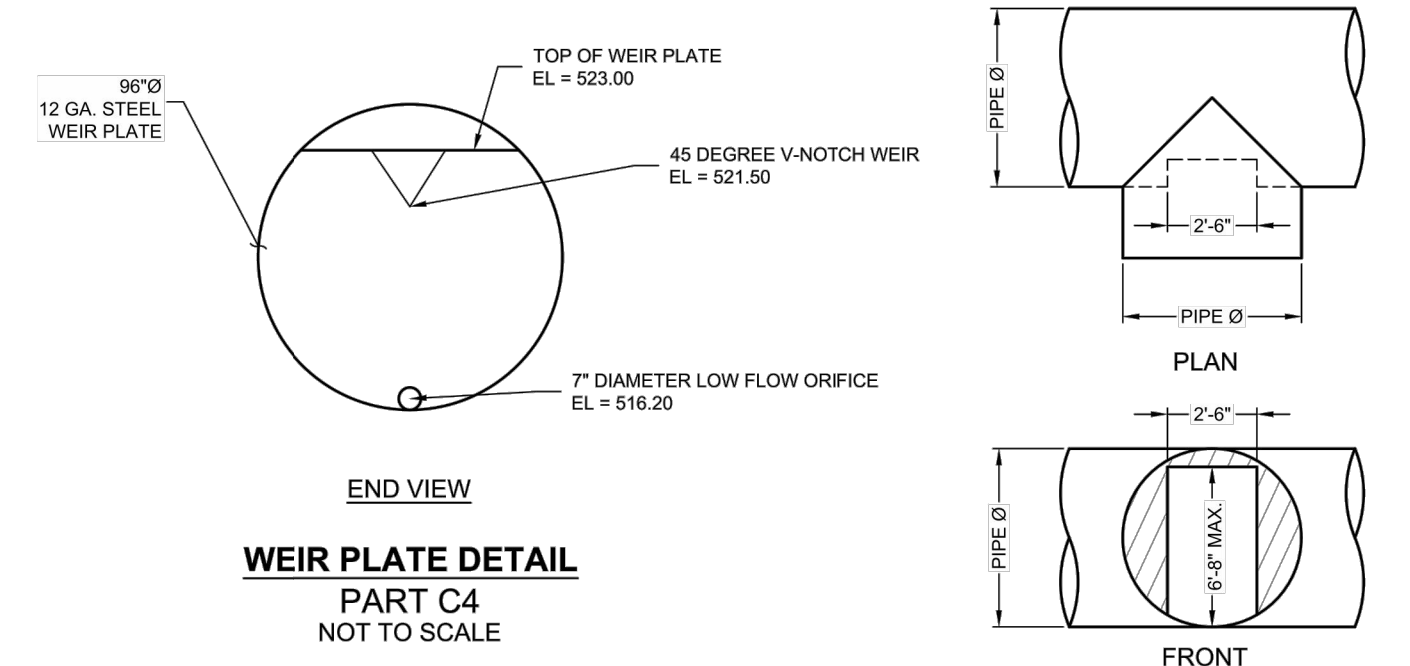
- 2 3/8"x1/2" RE-ROLLED END HEL-COR PIPE**
- GENERAL NOTES:**
- JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
 - BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
 - BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
 - BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
• 12" THRU 48" 1-PIECE
• 54" THRU 96" 2-PIECES
• 102" THRU 144" 3-PIECES
 - BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
 - ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
 - DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
 - ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

H-12 HUGGER BAND DETAIL
NOT TO SCALE



- PLAIN END CMP RISER PIPE**
- GENERAL NOTES:**
- DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.
 - JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
 - BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
 - IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
 - BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
• 12" THRU 48" 1-PIECE
• 54" 2-PIECES
 - ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
 - MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
 - DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE



96"Ø TO 144"Ø FITTING REINFORCEMENT MAY BE REQUIRED BASED ON HEIGHT OF COVER AND LIVE LOAD CONDITION

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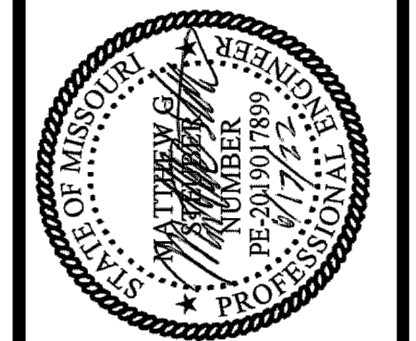
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TNB	CEU

SHEET NO.	OF
P3	5

DATE	NO	REVISION DESCRIPTION
05/12/2022	2	CITY REVIEW COMMENTS #1
02/24/2022	1	GROUNDING AND DRAINAGE UPDATES

DEVELOPER/OWNER:
MOHR CAPITAL LLC
14643 DALLAS PARKWAY SUITE 1000
DALLAS, TX 75254
(214) 801-9860



TEXAS ROADHOUSE IMPROVEMENT PLANS
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21-0154
Sheet Number
C9.3