

ASSEMBLY
SCALE: 1" = 10'
VOLUME: 1,906 C.F.
LOADING: H20/H25
SYSTEM INV = SLOPES .5%

101'-0", Ø54", 2-2/3" X 1/2", 16 GAGE, ALUMINIZED TYPE 2

REINFORCED BULKHEAD WITH 1" STUB INV = 282.36 Ø54" INV = 279.10

Ø30" RISER RIM = 287.54 INV = 279.14

3'-0"

THE UNDERSIGNED HEREBY APPROVES THE ATTACHED (3) PAGES INCLUDING THE FOLLOWING:

- VOLUME = 1,990 CF
- MAINLINE PIPE GAUGE = 16
- WALL TYPE = SOLID
- DIAMETER = 54"
- FINISH = ALT2

CUSTOMER _____ DATE _____

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 PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A886.
- 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.

CONTECH ENGINEERED SOLUTIONS LLC
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PROJECT NO. 482758-020
SHEET NO. P1 OF 3

CONSTRUCTION LOADING DIAGRAM
SCALE: N.T.S.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	16-50	50-75	75-110	110-150
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

MINIMUM COVER (FT)

REINFORCING TABLE

Ø CMP RISER	A	Ø B	REINFORCING	**BEARING PRESSURE (PSF)
24"	Ø 4" 4X4"	26"	#5 @ 12" OCEW #5 @ 12" OC RW	2,410 1,780
30"	Ø 4" 4" X 4"	32"	#5 @ 12" OCEW #5 @ 12" OC RW	2,120 1,530
36"	Ø 5" 5" X 5"	38"	#5 @ 10" OCEW #5 @ 10" OC RW	1,890 1,350
42"	Ø 5" 5" X 5"	44"	#5 @ 10" OCEW #5 @ 9" OC RW	1,720 1,210
48"	Ø 6" 6" X 6"	50"	#5 @ 9" OCEW #5 @ 8" OC RW	1,600 1,100

** ASSUMED SOIL BEARING CAPACITY

ROUND OPTION PLAN VIEW

SQUARE OPTION PLAN VIEW

MANHOLE CAP DETAIL
SCALE: N.T.S.

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FOUNDATION/BEDDING PREPARATION

KEY

- RIGID OR FLEXIBLE PAVEMENT
- GRANULAR ROAD BASE
- 12" MIN. FOR DIAMETERS THROUGH 96" 16" MIN. FOR DIAMETERS FROM 102" AND LARGER MEASURED TO TOP OF RIGID OR BOTTOM OF FLEXIBLE PAVEMENT.
- SELECT GRANULAR FILL PER AASHTO M145 A1, A2 OR A3, OR APPROVED EQUAL PLACED IN 8" LIFTS (COMPACTED TO MIN. 90% STANDARD DENSITY PER AASHTO 199.)
- GRANULAR BEDDING, ROUGHLY SHAPED TO FIT THE BOTTOM OF PIPE, 4" TO 6" IN DEPTH

CONNECTION DETAIL
SINGLE BOLT, BAR AND STRAP

H-12 HUGGER

3/8" THICK 1" MIN. WIDE FLAT NEOPRENE GASKET

FLAT GASKET

BACKFILL DETAIL
SCALE: N.T.S.

H-12 HUGGER BAND DETAIL
SCALE: N.T.S.

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NO.	DESCRIPTION	DATE	APPROVED BY