



MH FLAT TOP w/48"x48" Hatch w/ConBlock-CDA Res

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 5,000 PSI AT 28 DAYS.
3. ADMIXTURE = CONBLOCK CDA RED.
4. HATCH SUPPLIED BY ICAST (HALLIDAY W2S 48"x48").

REINFORCING PER ASTM A615 (GRADE 60).

- TOP SLAB TOP LAYER = #4 BARS AT 12" C.C.E.W.
- TOP SLAB BTM LAYER = #5 BARS AT 6" C.C.E.W.
- RISER/WALLS (As .30)
- BOTTOM SLAB TONGUE = #5 BARS AT 6" C.C.E.W.
- BOTTOM SLAB = #6BARS AT 6" C.C.E.W. (DOUBLE MAT)

PLAN VIEW

SECTION A-A

Weight (Net): 14814 lb
Volume (Net): 3.78cu.yd



Coating (Int):	Seam Up: Flat	Wall Thickness: 13"	Height (Ext): 18"	Weight (Net): 23623 lb
Coating (Ext):	Seam Dn: Groove			Volume (Net): 6.03cu.yd



Weight (Net): 19644 lb
Volume (Net): 5.02cu.yd

Job Number:

25-4665

Job Name:

Buckhorn WTP

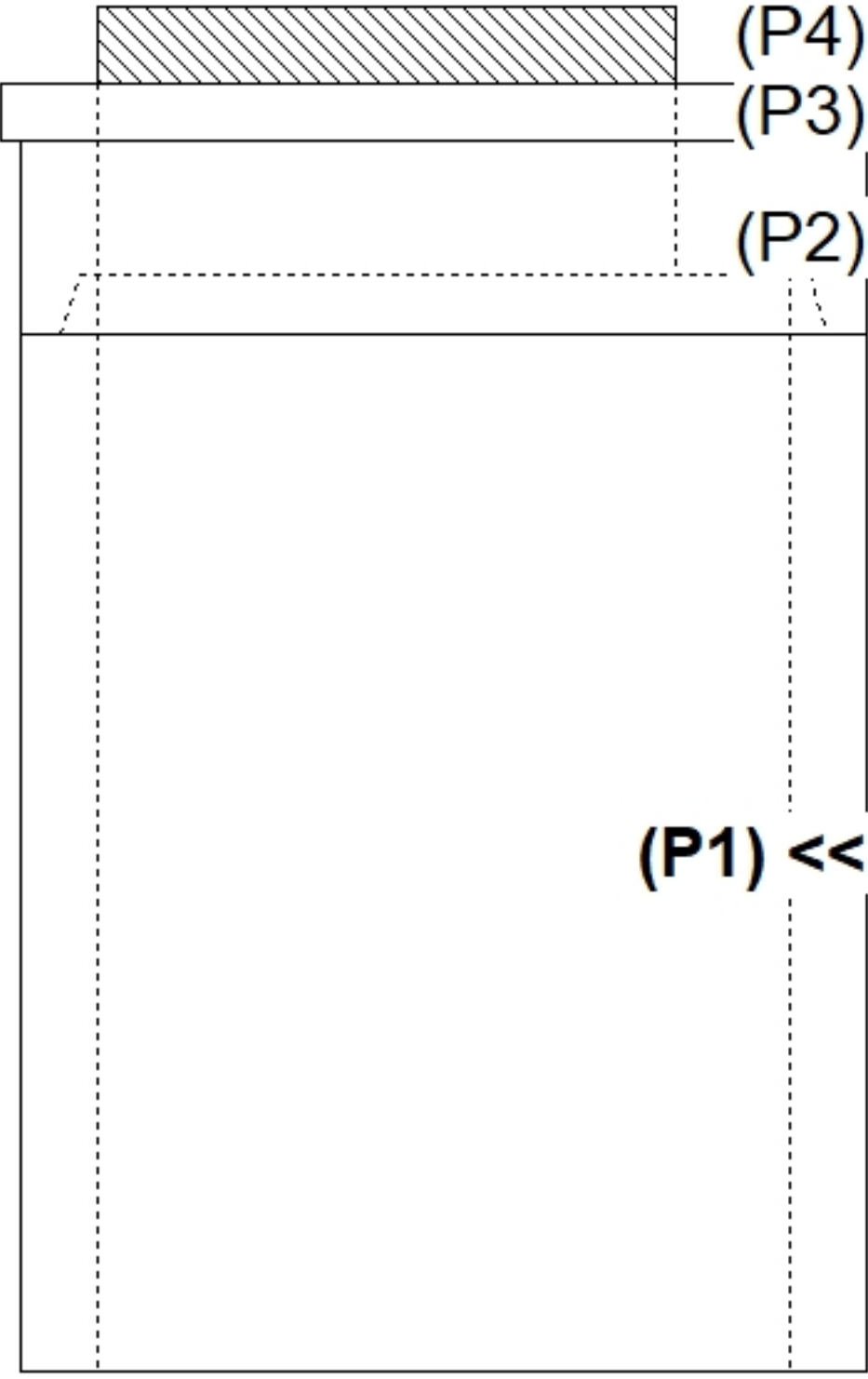
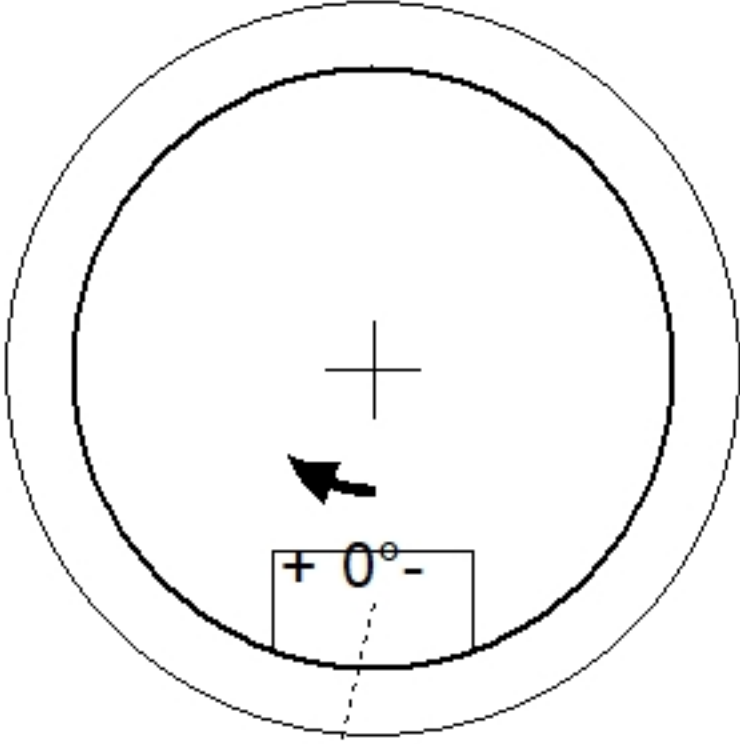
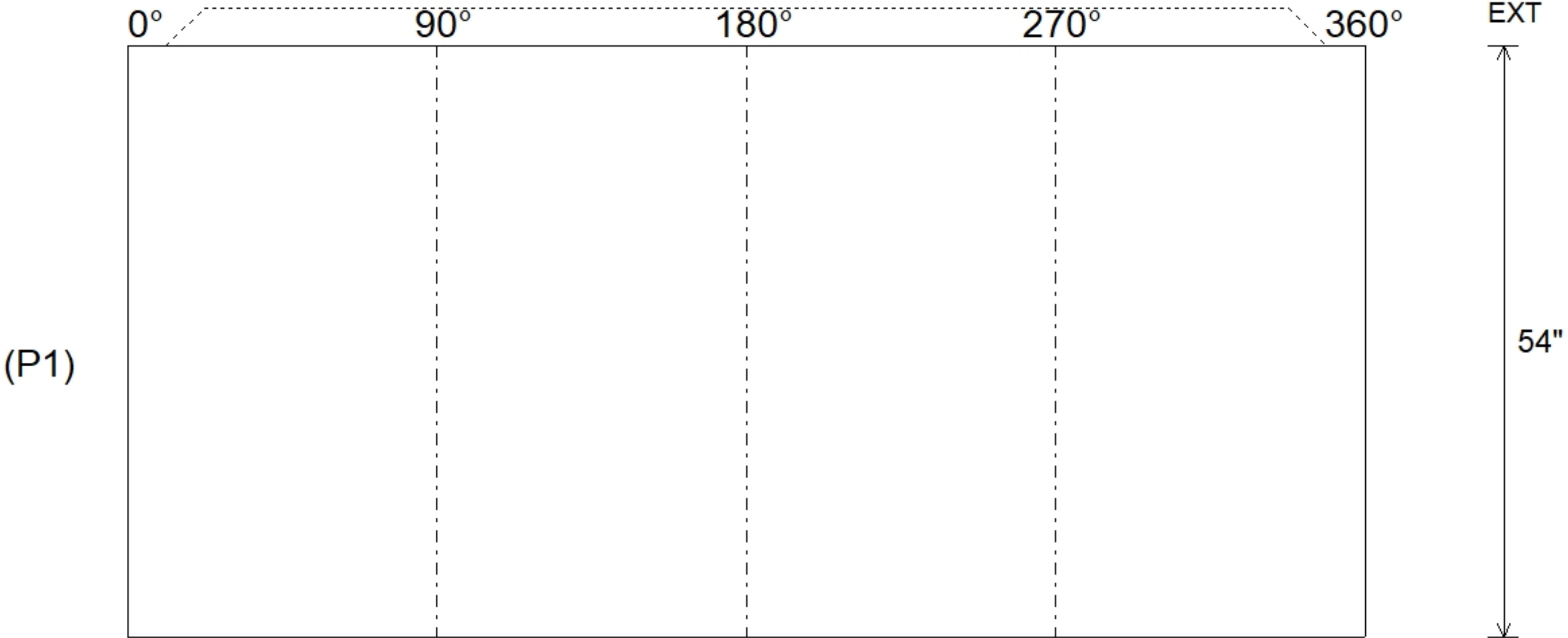
Structure:

54665 (4)

Note:

2 Ea. Halliday W1R 48" x 36"

Hatches & 1 Ea. Halliday W1R 30" x
30" Hatch Supplied By Others To Be
Cast Into Flat Lid

Job Name: 26-3046 903454 2026 Street Reconstruction					Plant: Beaver Dam		Tech: S. Felletter				
Job Location: Elk River, MN					7/17/2026 1:18:37 PM		PC: C. Goff				
Contractor: Contech Engineering Solutions											
Structure ID: Riser Set 4											
P1		MH036RS54			MH RISER T/F						
P4) 30" - CASTING HEIGHT - 4" P3) 30" - GRADE RING F/F - 3" P2) 36" - MH FLAT LID w/30in ECC Hole F/G - 10" P1) 36" - MH RISER T/F - 54" 1) CVSTENCILING 1) 36" - Conseal CS-102 1.00" 5) MH Step ML-10-TDS-NCR - 10"					0 lb 138 lb 683 lb 2278 lb 0 lb 0 lb 0 lb ----- Structure Total: 3099 lb		Structure Notes: . 1. PER ASTM C478 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. 4" CASTING PROVIDED BY OTHERS. 4. CONTECH'S LOGO TO BE STENCILED ONTO THE OUTSIDE OF THE STRUCTURE. . REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W. - RISER/WALLS (As .12)				
Rim: 5.917' Rim to Invert: 0' Slack: 0" Sump: 0" Step Position: 0°											
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (┘)	Offset	
Invert 1											
Invert 2											
Invert 3											
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											
RIGHT-SIDE UP VIEW (int. dimensions)											
		 Step: 0° Horz: 0"									
INSIDE WALL DIMENSIONS											
											
Coating (Int):				Seam Up: Tongue		Wall Thickness: 4"		Height (Int): 54"		Weight (Net): 2278 lb	
Coating (Ext):				Seam Dn: Flat		Floor Height: 0"		Height (Ext): 54"		Volume (Net): 0.58cu.yd	

Job Name: 26-2509 - Airpark Expansion Industrial Subdivision
Job Location: Owensboro, KY 42301
Contractor: Koberstein Contracting, Inc.

Plant: 100

7/20/2026 10:56:23 AM

Tech: Jared - F

PC: A. Chambers



Structure ID: FF-2 ST-CI

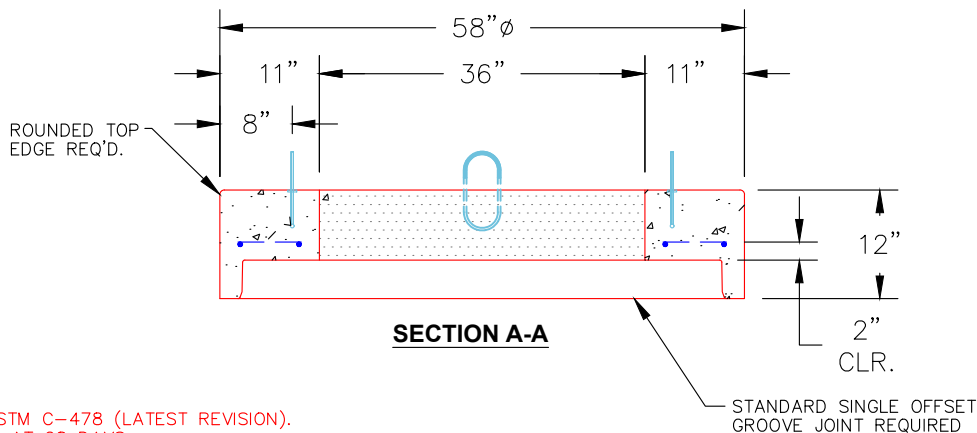
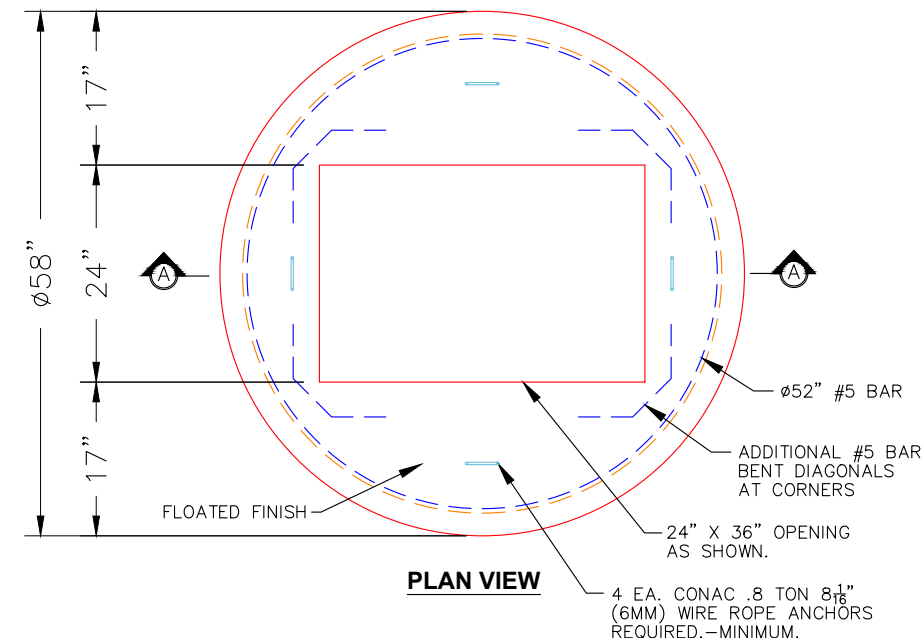
P2 MH048LD12-24X36RECT

MH FLAT TOP w/24"x36" Hole F/G

- P3) 24" x 36" - CASTING HEIGHT - 6"
P2) 48" - MH FLAT TOP w/24"x36" Hole F/G - 12"
P1) 48" - MH BASE T/n - 36"
1) CASTING - HOE 525 SET FLAT GRATE (F/G/H)
1) 48" - Conseal CS-102 1.00"
1) 24" x 36" - Conseal CS-102 1.00"
1) Hole - 26"
3) MH Step ML-10-TDS-NCR - 10"

0 lb
1300 lb
3612 lb
442 lb
0 lb
0 lb
0 lb
0 lb
0 lb
Structure Total: 5354 lb

Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO INVERT CHANNEL.
4. CATING BY ICAST (HOE 525 SET FLAT GRATE (F/G/H)).
REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.



NOTES:

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" O.C. E.W. (GRADE 60).

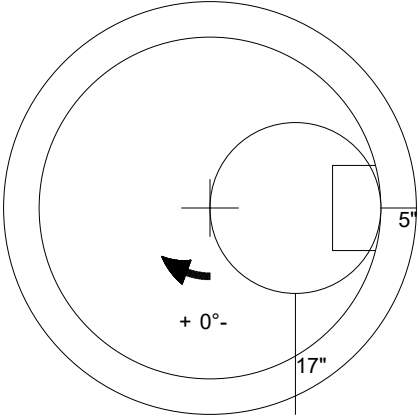
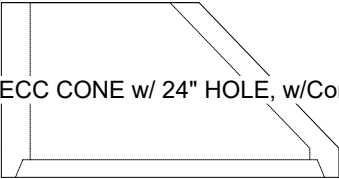
Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Groove

Wall Thickness: 5"

Height (Ext): 12"

Weight (Net): 1300 lb
Volume (Net): 0.46cu.yd

Job Name: 26-2509 - Airpark Expansion Industrial Subdivision		Plant: 100	Tech: Jared - F	
Job Location: Owensboro, KY 42301		7/20/2026 4:21:00 PM	PC: A. Chambers	
Contractor: Koberstein Contracting, Inc.				
Structure ID: MH A-2 SS-MH				
P3 MH048CN30CDARED		ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G		
P5) 24" - CASTING HEIGHT - 7" P4) 24" - GRADE RING w/ConBlock-CDA Red F/F - 4" P3) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30" P2) 48" - MH RISER w/ConBlock-CDA Red T/G - 36" P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 24" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT 1) ADMIXTURE CONBLOCK CDA RED 1) CASTING - HOE MC-315 F/C RWRA 2) 48" - Conseal CS-102 1.00" (Double) 2) 24" - Conseal CS-102 1.00" (Double) 2) Kor-N-Seal2 - S206-18L 1) PSX - 16M NYLO 8) MH Step ML-10-TDS-NCR - 10"		0 lb 270 lb 1961 lb 2515 lb 2703 lb 0 lb 0 lb 1440 lb 0 lb 258 lb 0 lb 0 lb 12 lb 8 lb 0 lb ----- Structure Total: 9167 lb	Structure Notes: 1. PER ASTM C478 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. ADMIXTURE = CONBLOCK CDA RED. 4. CASTING SUPPLIED BY ICAST (HOE MC-315 F/C RWRA). REINFORCING PER ASTM A615 (GRADE 60). - CONE (As .12) - RISER/WALLS (As .12) - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.	
				
48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30" - (P3) 				
Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 5"	Height (Ext): 30"	Weight (Net): 1961 lb Volume (Net): 0.5cu.yd

Job Name: 26-2509 - Airpark Expansion Industrial Subdivision

Job Location: Owensboro, KY 42301

Contractor: Koberstein Contracting, Inc.

Plant: 100

7/20/2026 4:21:14 PM

Tech: Jared - F

PC: A. Chambers



Structure ID: MH A-2 SS-MH

P2 MH048RS36CDARED

MH RISER w/ConBlock-CDA Red T/G

P5) 24" - CASTING HEIGHT - 7"

P4) 24" - GRADE RING w/ConBlock-CDA Red F/F - 4"

P3) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30"

P2) 48" - MH RISER w/ConBlock-CDA Red T/G - 36"

P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 24"

1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212

1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)

1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT

1) ADMIXTURE CONBLOCK CDA RED

1) CASTING - HOE MC-315 F/C RWRA

2) 48" - Conseal CS-102 1.00" (Double)

2) 24" - Conseal CS-102 1.00" (Double)

2) Kor-N-Seal2 - S206-18L

1) PSX - 16M NYLO

8) MH Step ML-10-TDS-NCR - 10"

0 lb

270 lb

1961 lb

2515 lb

2703 lb

0 lb

0 lb

1440 lb

0 lb

258 lb

0 lb

0 lb

12 lb

8 lb

0 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.

2. CONCRETE = 4,000 PSI AT 28 DAYS.

3. ADMIXTURE = CONBLOCK CDA RED.

4. CASTING SUPPLIED BY ICAST (HOE MC-315 F/C RWRA).

REINFORCING PER ASTM A615 (GRADE 60).

- CONE (As .12)

- RISER/WALLS (As .12)

- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 395.5'

Rim to Invert: 8.37'

Slack: 1.44"

Sump: 2"

Structure Total: 9467 lb

Step Position: 270'

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (_)	Offset
Invert 1										
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

(P5)

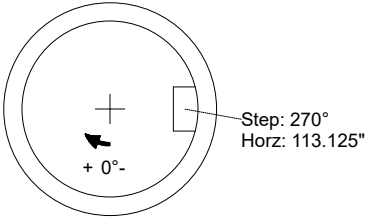
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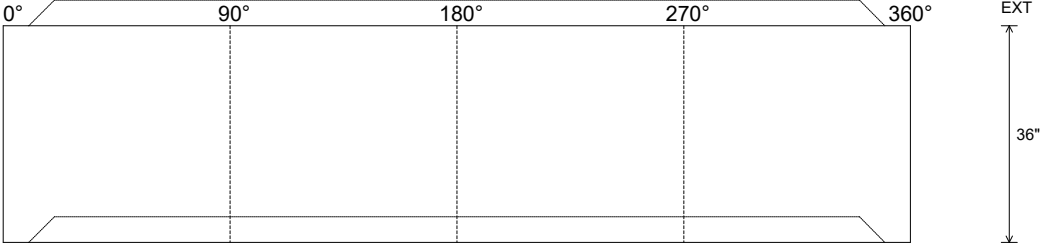
(P2) <<

(P1)

RIGHT-SIDE UP VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: Groove

Wall Thickness: 5"

Floor Height: 0"

Height (Int): 36"

Height (Ext): 36"

Weight (Net): 2515 lb

Volume (Net): 0.64cu.yd

Job Name: 25-1401 Irwin Landing Ph. 1
Job Location: Murfreesboro, TN
Contractor: Bear Construction LLC

Plant: Beaver Dam

6/9/2026 10:40:30 AM

Tech: S. Felletter

PC: Erica Bradley



Structure ID: R52

P2 MH048LD10SP

MH FLAT TOP - TDOT NO 10 (20"x34" Hole) F/F

P3) 20" x 34" - CASTING HEIGHT - 7"
P2) 48" - MH FLAT TOP - TDOT NO 10 (20"x34" Hole) F/F - 10"
P1) 48" - MH BASE Custom Ht F/n - 35"
1) 48" - STORM INVERT CHANNEL - 1/4 HEIGHT
1) CASTING - JBS 3123 MODIFIED SET
1) 48" - SGL 1"x14.5' Butyl (2x)
1) Hole - 26

Structure Total:

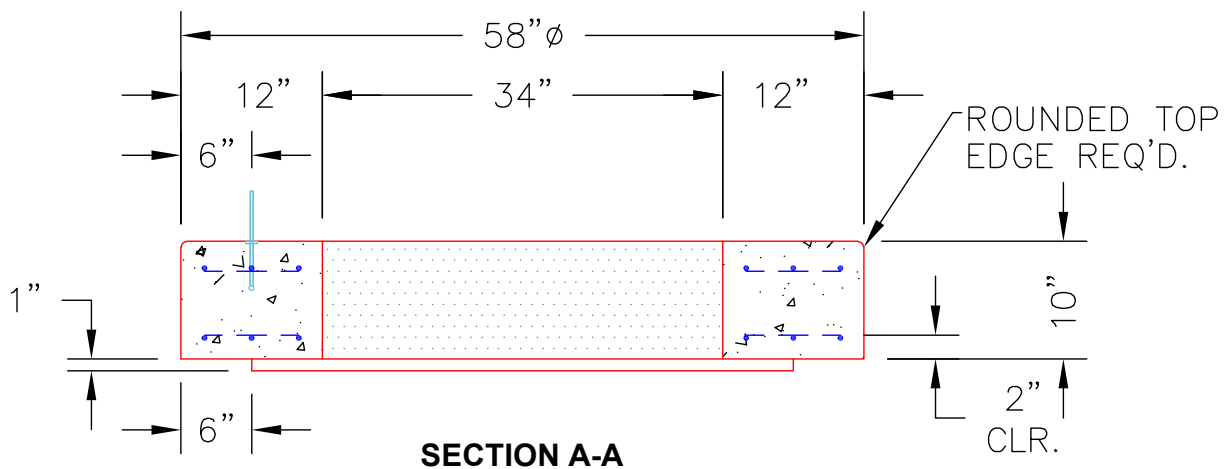
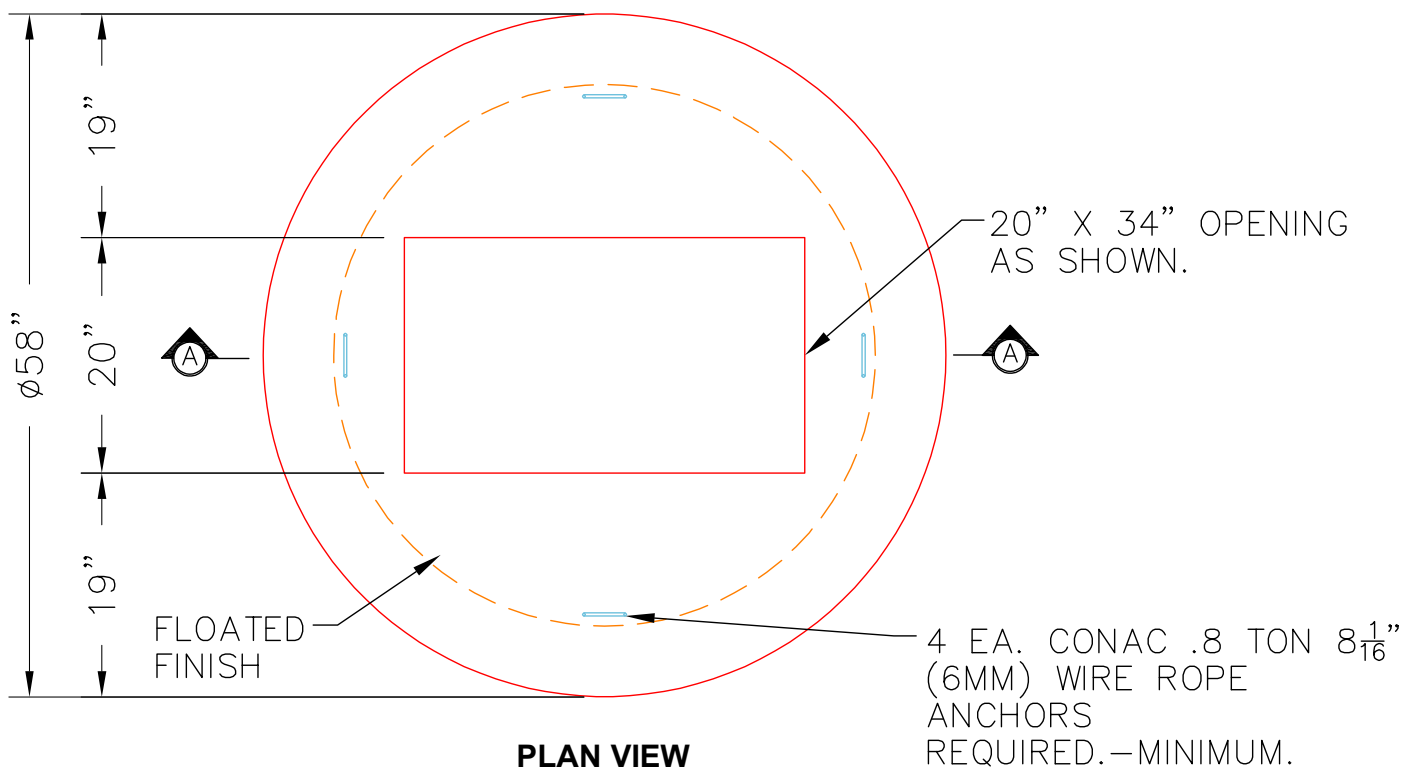
0 lb
1646 lb
3542 lb
1075 lb
250 lb
0 lb
0 lb

6513 lb

Structure Notes:

1. PER TDOT D-CB-10RA / ASTM C478 SPEC'S.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO INVERT CHANNEL.
4. CASTING BY ICAST (JBS-3123 MOD SET).

REINFORCING PER ASTM A615 (GRADE 60).
** PER TDOT STD DRAWING D-CB-10RA **
- TOP SLAB - DBL MAT #5 BARS.
- RISER (As .24)
- FLOOR (As .62) #5 BARS AT 6" C.C.E.W.



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 5"

Height (Ext): 10"

Weight (Net): 1646 lb
Volume (Net): 0.42cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100

7/29/2026 1:59:39 PM

Tech: Jared - F
PC: A. Chambers



Structure ID: 42 SS-MH

P1 MH048BA24X

MH BASE w/XYPEX

- P3) 24" - CASTING HEIGHT - 7"
P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 24"
P1) 48" - MH BASE w/XYPEX - 24"
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-500 NF RED
1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT
1) CASTING - HOE MC-315 F/C RWRA
1) 48" - Conseal CS-102 1.00" (Double)
1) 24" - Conseal CS-102 1.00" (Double)
1) PSX - 16Y NYLO
2) PSX - 8QRS-S NYLO
4) MH Step ML-10-TDS-NCR - 10"

0 lb
1738 lb
2879 lb
0 lb
0 lb
0 lb
1440 lb
258 lb
0 lb
0 lb
8 lb
13 lb
0 lb

Structure Total: 6336 lb

Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-315 F/C RWRA)
4. ADMIXTURE = XYPEX C-500 NF RED.

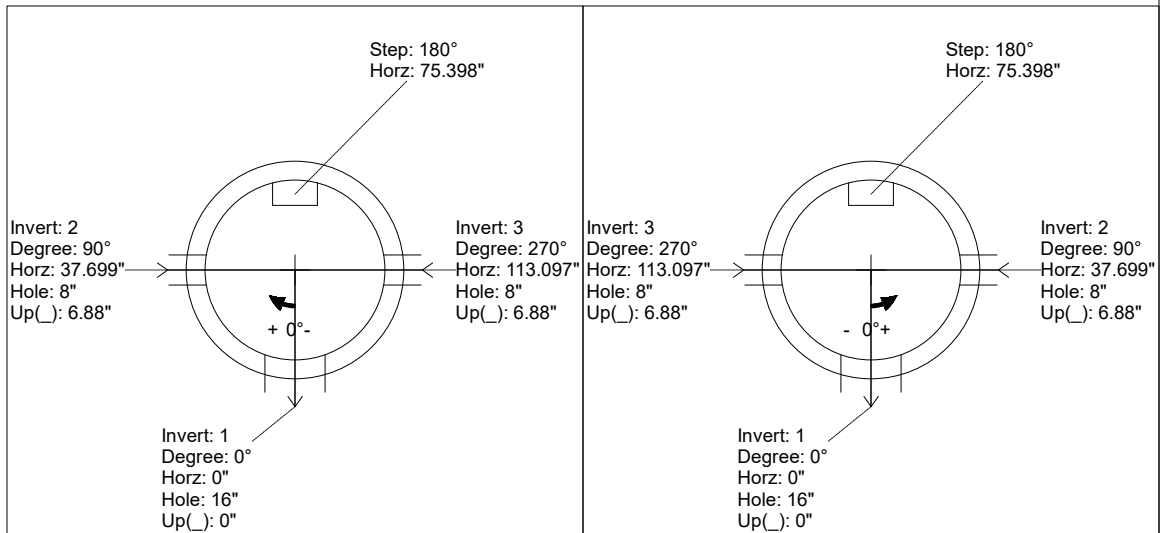
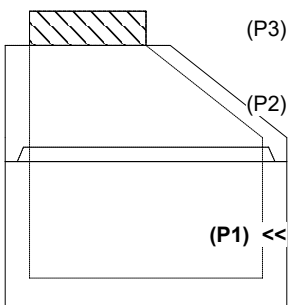
REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 392.94' Rim to Invert: 4.41' Slack: 0.92' Sump: 3' Step Position: 180°

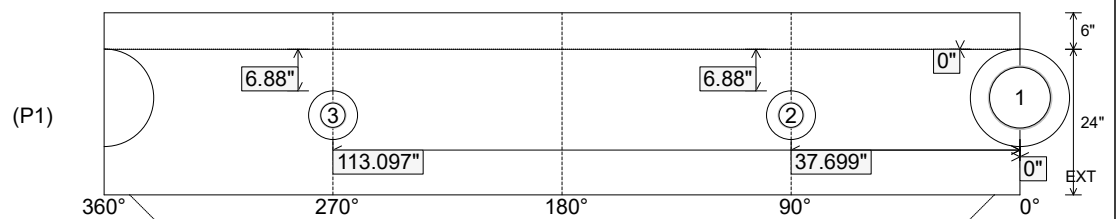
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	388.53'	0°	0"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0"	0"
Invert 2	389.02'	90°	45.553"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	6.88"	0"
Invert 3	389.02'	270°	136.659"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	6.88"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

Height (Int): 24"
Height (Ext): 30"

Weight (Net): 2879 lb
Volume (Net): 0.74cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100

7/29/2026 1:59:39 PM

Tech: Jared - F
PC: A. Chambers



Structure ID: 42 SS-MH

P1 MH048BA24X

MH BASE w/XYPEX

- P3) 24" - CASTING HEIGHT - 7"
P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 24"
P1) 48" - MH BASE w/XYPEX - 24"
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-500 NF RED
1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT
1) CASTING - HOE MC-315 F/C RWRA
1) 48" - Conseal CS-102 1.00" (Double)
1) 24" - Conseal CS-102 1.00" (Double)
1) PSX - 16Y NYLO
2) PSX - 8QRS-S NYLO
4) MH Step ML-10-TDS-NCR - 10"

- 0 lb
1738 lb
2879 lb
0 lb
0 lb
0 lb
1440 lb
258 lb
0 lb
0 lb
8 lb
13 lb
0 lb
- Structure Notes: .
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-315 F/C RWRA)
4. ADMIXTURE = XYPEX C-500 NF RED.
- REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Structure Total: 6336 lb

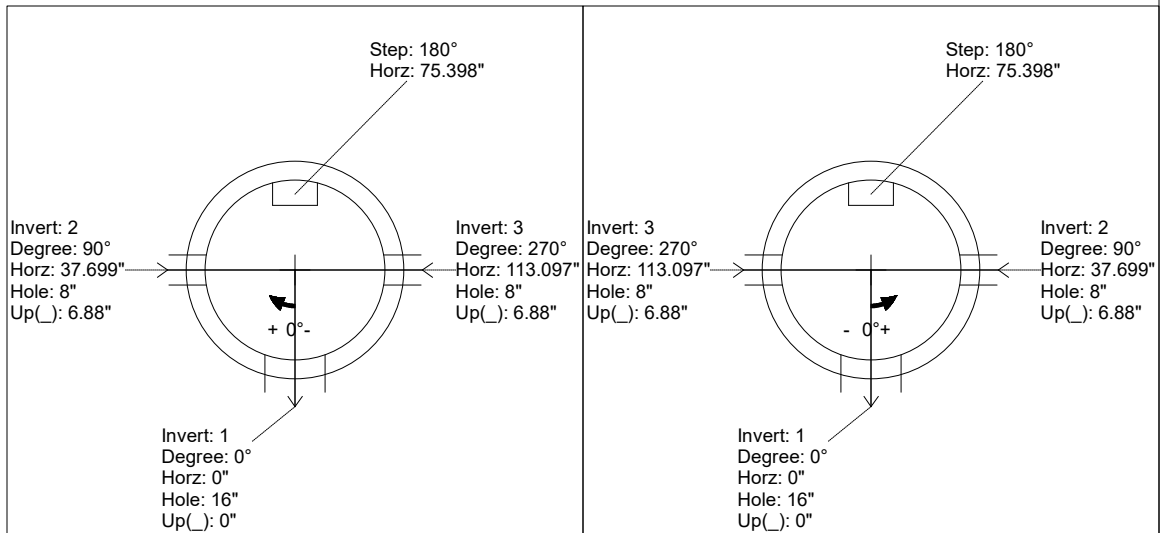
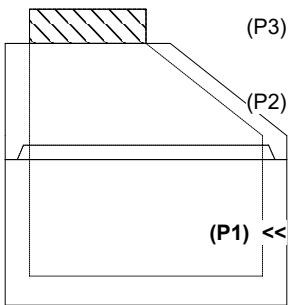
INVERT CHANNEL DRAWING FULL HEIGHT INVERT

Rim: 392.94' Rim to Invert: 4.41' Slack: 0.92' Sump: 3' Step Position: 180°

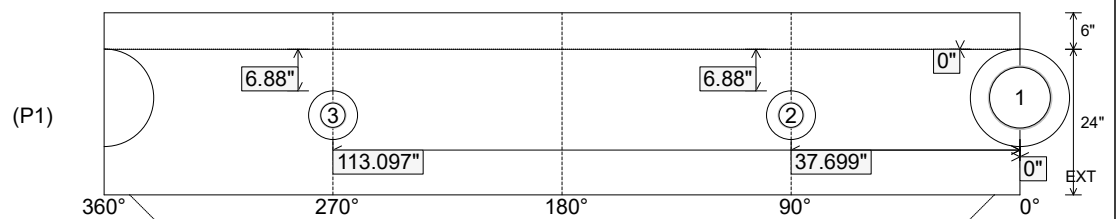
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	388.53'	0°	0"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0"	0"
Invert 2	389.02'	90°	45.553"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	6.88"	0"
Invert 3	389.02'	270°	136.659"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	6.88"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

Height (Int): 24"
Height (Ext): 30"

Weight (Net): 2879 lb
Volume (Net): 0.74cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100

7/29/2026 1:59:40 PM

Tech: Jared - F

PC: A. Chambers



Structure ID: 43 SS-MH

P1 MH048BA18X

MH BASE w/XYPEX

- P3) 24" - CASTING HEIGHT - 7"
P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 30"
P1) 48" - MH BASE w/XYPEX - 18"
1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-500 NF RED
1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT
1) CASTING - HOE MC-315 F/C RWRA
1) 48" - Conseal CS-102 1.00" (Double)
1) 24" - Conseal CS-102 1.00" (Double)
1) PSX - 12-08 NYLO
1) PSX - 8QRS-S NYLO
4) MH Step ML-10-TDS-NCR - 10"

Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-315 F/C RWRA)
4. ADMIXTURE = XYPEX C-500 NF RED.
REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

0 lb
1981 lb
2519 lb
0 lb
0 lb
0 lb
1440 lb
258 lb
0 lb
0 lb
8 lb
6 lb
0 lb

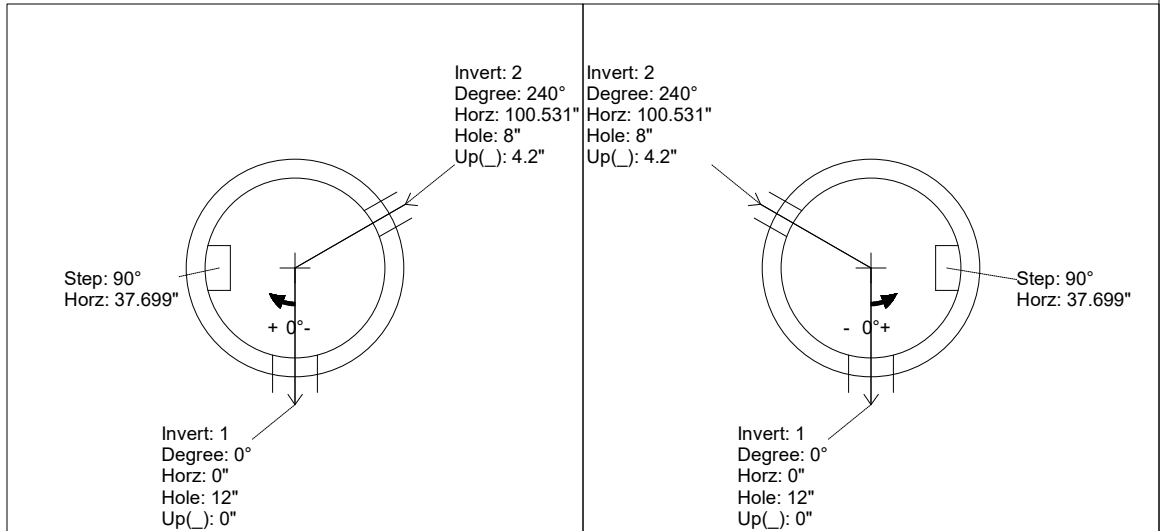
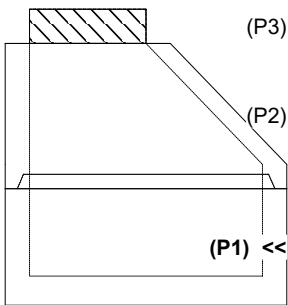
Structure Total: 6212 lb

Rim: 392.62' Rim to Invert: 4.57' Slack: 1.84" Sump: 2" Step Position: 90°

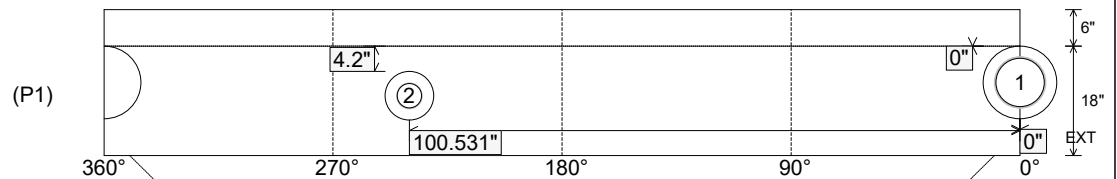
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	388.05'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	388.4'	240°	121.475"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	4.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

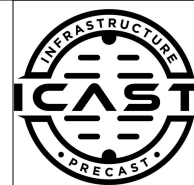
Height (Int): 18"
Height (Ext): 24"

Weight (Net): 2519 lb
Volume (Net): 0.64cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100
7/29/2026 1:59:40 PM

Tech: Jared - F
PC: A. Chambers



Structure ID: 43 SS-MH

P1 MH048BA18X

MH BASE w/XYPEX

- P3) 24" - CASTING HEIGHT - 7"
P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 30"
P1) 48" - MH BASE w/XYPEX - 18"
1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-500 NF RED
1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT
1) CASTING - HOE MC-315 F/C RWRA
1) 48" - Conseal CS-102 1.00" (Double)
1) 24" - Conseal CS-102 1.00" (Double)
1) PSX - 12-08 NYLO
1) PSX - 8QRS-S NYLO
4) MH Step ML-10-TDS-NCR - 10"

- 0 lb
1981 lb
2519 lb
0 lb
0 lb
0 lb
1440 lb
258 lb
0 lb
0 lb
8 lb
6 lb
0 lb

Structure Total: 6212 lb
- Structure Notes:**
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-315 F/C RWRA)
4. ADMIXTURE = XYPEX C-500 NF RED.
REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

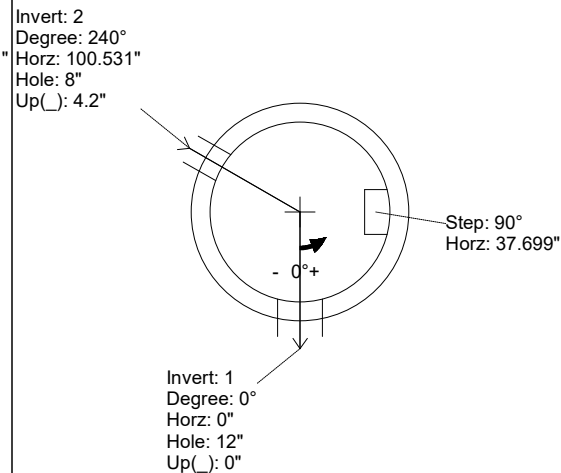
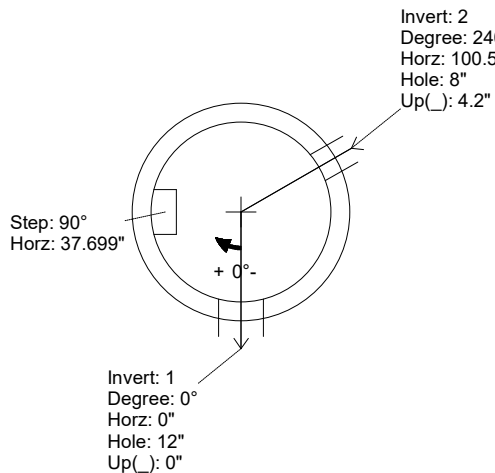
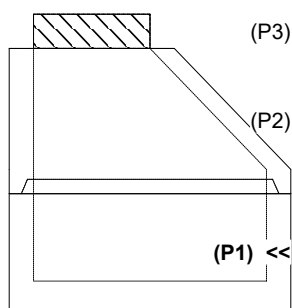
INVERT CHANNEL DRAWING FULL HEIGHT INVERT

Rim: 392.62' Rim to Invert: 4.57' Slack: 1.84" Sump: 2" Step Position: 90°

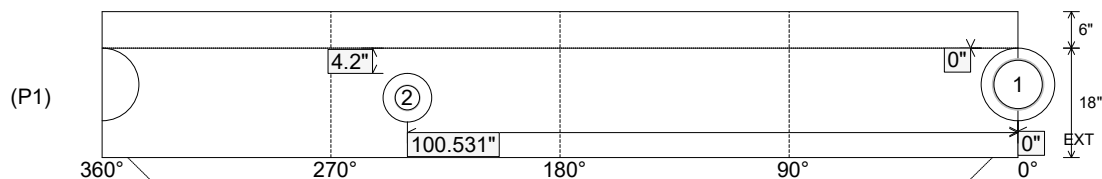
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	388.05'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	388.4'	240°	121.475"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	4.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

Height (Int): 18"
Height (Ext): 24"

Weight (Net): 2519 lb
Volume (Net): 0.64cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100

7/29/2026 1:59:38 PM

Tech: Jared - F
PC: A. Chambers



Structure ID: 41 SS-MH

P1 MH048BA24X

MH BASE w/XYPEX

- P3) 24" - CASTING HEIGHT - 7"
P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 30"
P1) 48" - MH BASE w/XYPEX - 24"
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-500 NF RED
1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT
1) CASTING - HOE MC-315 F/C RWRA
1) 48" - Conseal CS-102 1.00" (Double)
1) 24" - Conseal CS-102 1.00" (Double)
2) PSX - 16Y NYLO
1) PSX - 8QRS-S NYLO
5) MH Step ML-10-TDS-NCR - 10"

0 lb
1981 lb
2814 lb
0 lb
0 lb
0 lb
1440 lb
258 lb
0 lb
0 lb
16 lb
6 lb
0 lb

Structure Total: 6516 lb

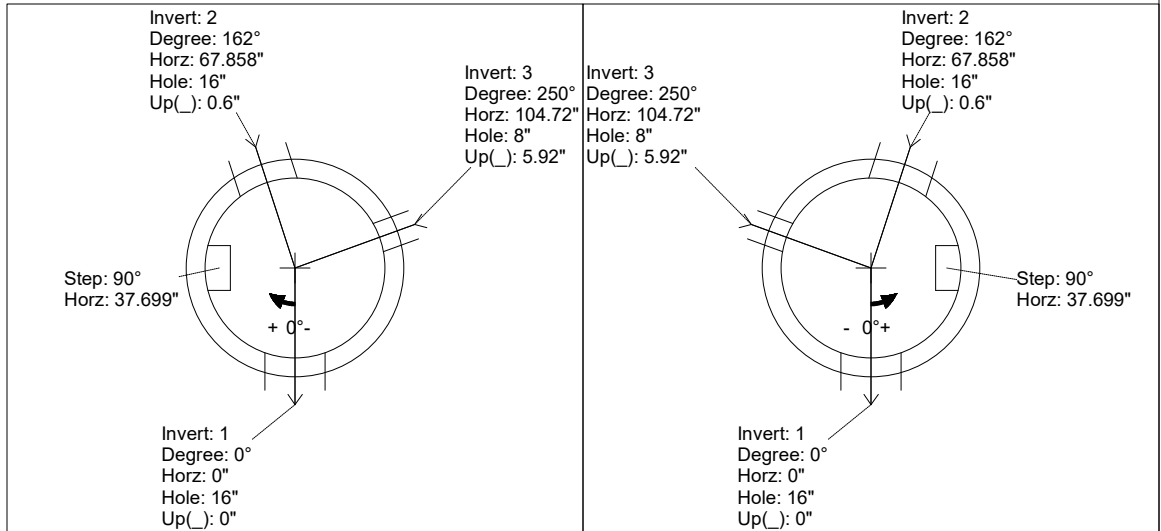
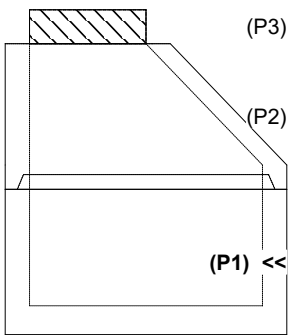
Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-315 F/C RWRA)
4. ADMIXTURE = XYPEX C-500 NF RED.
REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 392.98' Rim to Invert: 4.99' Slack: 1.88' Sump: 3' Step Position: 90°

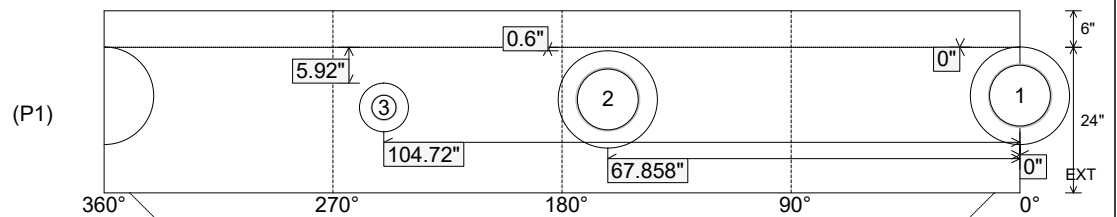
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	387.99'	0°	0"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0"	0"
Invert 2	388.04'	162°	81.996"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0.6"	0"
Invert 3	388.4'	250°	126.536"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	5.92"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

Height (Int): 24"
Height (Ext): 30"

Weight (Net): 2814 lb
Volume (Net): 0.72cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100

7/29/2026 1:59:38 PM

Tech: Jared - F

PC: A. Chambers



Structure ID: 41 SS-MH

P1 MH048BA24X

MH BASE w/XYPEX

- P3) 24" - CASTING HEIGHT - 7"
P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 30"
P1) 48" - MH BASE w/XYPEX - 24"
1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-500 NF RED
1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT
1) CASTING - HOE MC-315 F/C RWRA
1) 48" - Conseal CS-102 1.00" (Double)
1) 24" - Conseal CS-102 1.00" (Double)
2) PSX - 16Y NYLO
1) PSX - 8QRS-S NYLO
5) MH Step ML-10-TDS-NCR - 10"

0 lb
1981 lb
2814 lb
0 lb
0 lb
0 lb
1440 lb
258 lb
0 lb
0 lb
16 lb
6 lb
0 lb

Structure Total: 6516 lb

Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-315 F/C RWRA)
4. ADMIXTURE = XYPEX C-500 NF RED.
REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

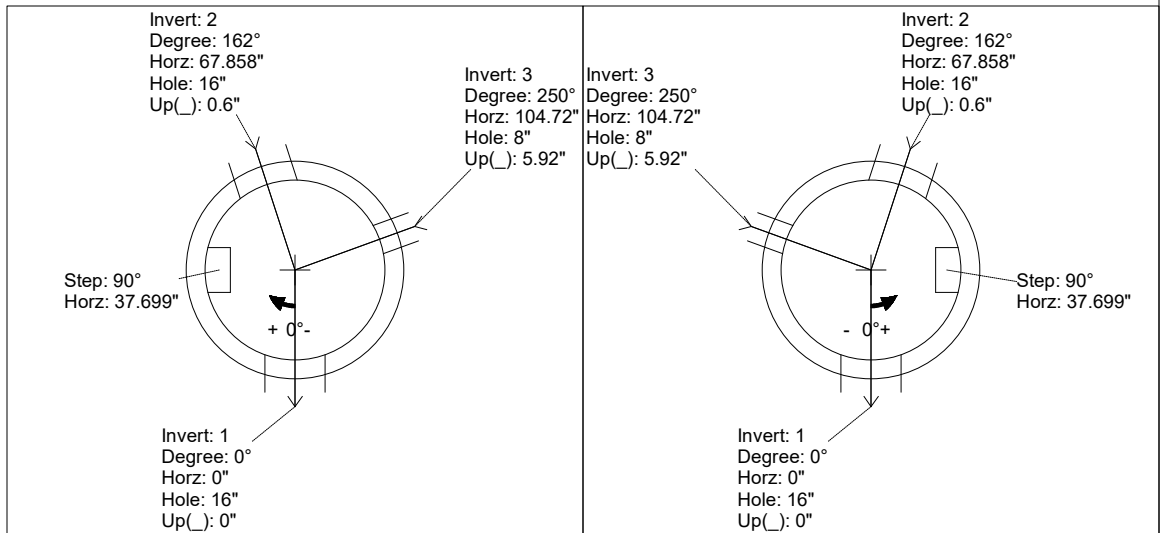
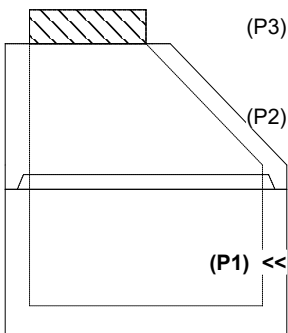
INVERT CHANNEL DRAWING FULL HEIGHT INVERT

Rim: 392.98' Rim to Invert: 4.99' Slack: 1.88' Sump: 3' Step Position: 90°

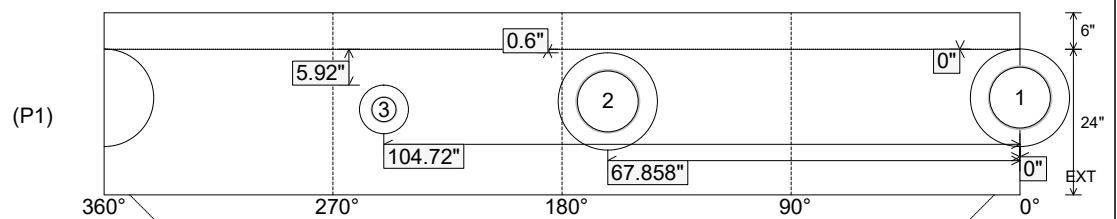
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	387.99'	0°	0"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0"	0"
Invert 2	388.04'	162°	81.996"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0.6"	0"
Invert 3	388.4'	250°	126.536"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	5.92"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

Height (Int): 24"
Height (Ext): 30"

Weight (Net): 2814 lb
Volume (Net): 0.72cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100

7/29/2026 1:59:37 PM

Tech: Jared - F
PC: A. Chambers



Structure ID: 40 SS-MH

P1 MH048BA30X

MH BASE w/XYPEX

- P4) 24" - CASTING HEIGHT - 7"
P3) 24" - XYPEX GRADE RING - 3"
P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 42"
P1) 48" - MH BASE w/XYPEX - 30"

- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-500 NF RED
1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT
1) CASTING - HOE MC-315 F/C RWRA
1) 48" - Conseal CS-102 1.00" (Double)
2) 24" - Conseal CS-102 1.00" (Double)
2) PSX - 16Y NYLO
1) PSX - 12-08 NYLO
6) MH Step ML-10-TDS-NCR - 10"

- 0 lb
202 lb
3116 lb
3207 lb
0 lb
0 lb
0 lb
1440 lb
258 lb
0 lb
0 lb
16 lb
8 lb
0 lb
- Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-315 F/C RWRA)
4. ADMIXTURE = XYPEX C-500 NF RED
REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

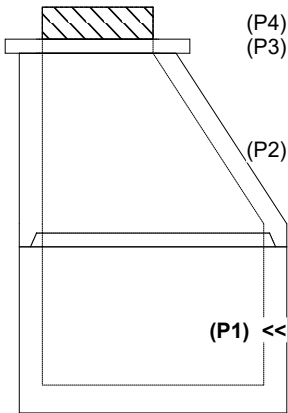
Structure Total: 8247 lb

Rim: 393.84' Rim to Invert: 6.59' Slack: 0.08" Sump: 3" Step Position: 70°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	387.25'	0°	0"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0"	0"
Invert 2	387.29'	140°	70.86"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0.48"	0"
Invert 3	387.29'	242°	122.487"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.48"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



Invert: 2
Degree: 140°
Horz: 58.643"
Hole: 16"
Up(): 0.48"

Invert: 3
Degree: 242°
Horz: 101.369"
Hole: 12"
Up(): 1.48"

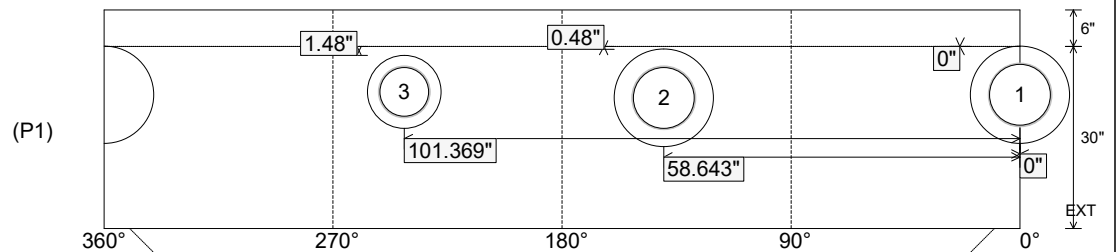
Step: 70°
Degree: 0°
Horz: 29.322"
Hole: 16"
Up(): 0"

Invert: 3
Degree: 242°
Horz: 101.369"
Hole: 12"
Up(): 1.48"

Invert: 2
Degree: 140°
Horz: 58.643"
Hole: 16"
Up(): 0.48"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 16"
Up(): 0"

INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

Height (Int): 30"
Height (Ext): 36"

Weight (Net): 3207 lb
Volume (Net): 0.82cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100

7/29/2026 1:59:37 PM

Tech: Jared - F

PC: A. Chambers



Structure ID: 40 SS-MH

P1 MH048BA30X

MH BASE w/XYPEX

- P4) 24" - CASTING HEIGHT - 7"
P3) 24" - XYPEX GRADE RING - 3"
P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 42"
P1) 48" - MH BASE w/XYPEX - 30"
1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-500 NF RED
1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT
1) CASTING - HOE MC-315 F/C RWRA
1) 48" - Conseal CS-102 1.00" (Double)
2) 24" - Conseal CS-102 1.00" (Double)
2) PSX - 16Y NYLO
1) PSX - 12-08 NYLO
6) MH Step ML-10-TDS-NCR - 10"

- 0 lb
202 lb
3116 lb
3207 lb
0 lb
0 lb
0 lb
1440 lb
258 lb
0 lb
0 lb
16 lb
8 lb
0 lb
- Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-315 F/C RWRA)
4. ADMIXTURE = XYPEX C-500 NF RED
REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

INVERT CHANNEL DRAWING FULL HEIGHT INVERT

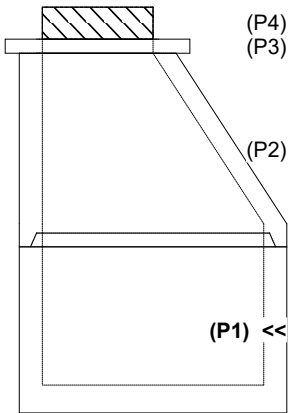
Structure Total: 8247 lb

Rim: 393.84' Rim to Invert: 6.59' Slack: 0.08" Sump: 3" Step Position: 70°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	387.25'	0°	0"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0"	0"
Invert 2	387.29'	140°	70.86"	10" PVC SDR35	10.5"	PSX 16Y NYLO	16"	16.312"	0.48"	0"
Invert 3	387.29'	242°	122.487"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.48"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



Invert: 2
Degree: 140°
Horz: 58.643"
Hole: 16"
Up(): 0.48"

Invert: 3
Degree: 242°
Horz: 101.369"
Hole: 12"
Up(): 1.48"

Invert: 3
Degree: 242°
Horz: 101.369"
Hole: 12"
Up(): 1.48"

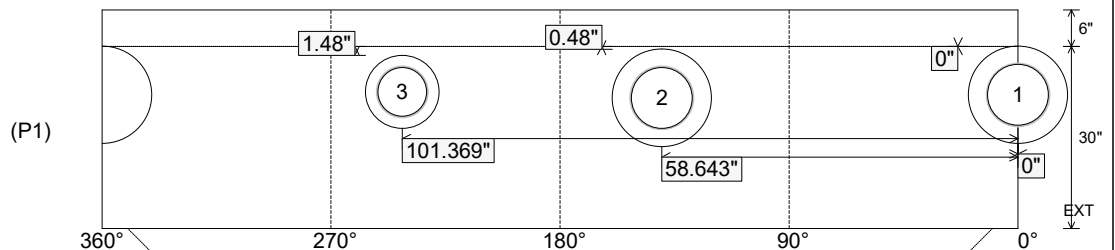
Invert: 2
Degree: 140°
Horz: 58.643"
Hole: 16"
Up(): 0.48"

Step: 70°
Degree: 0°
Horz: 29.322"
Hole: 16"
Up(): 0"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 16"
Up(): 0"

Step: 70°
Horz: 29.322"

INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

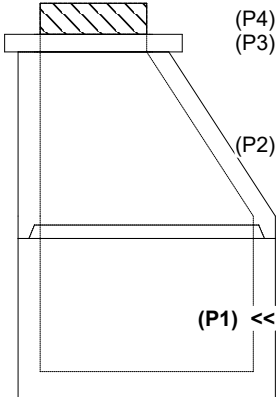
Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

Height (Int): 30"
Height (Ext): 36"

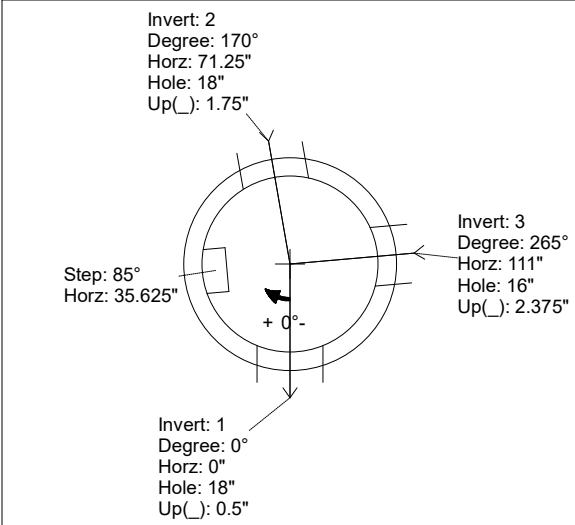
Weight (Net): 3207 lb
Volume (Net): 0.82cu.yd

Job Name: 26-2509 - Airpark Expansion Industrial Subdivision					Plant: 100		Tech: Jared - F			
Job Location: Owensboro, KY 42301					7/20/2026 4:20:48 PM		PC: A. Chambers			
Contractor: Koberstein Contracting, Inc.										
Structure ID: MH A-3 SS-MH										
P1 MH048BA30CDARED					MH BASE w/ConBlock-CDA Red T/n					
P4) 24" - CASTING HEIGHT - 7" P3) 24" - GRADE RING w/ConBlock-CDA Red F/F - 4" P2) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 42" P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 30" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT 1) ADMIXTURE CONBLOCK CDA RED 1) CASTING - HOE MC-315 F/C RWRA 1) 48" - Conseal CS-102 1.00" (Double) 2) 24" - Conseal CS-102 1.00" (Double) 2) Kor-N-Seal2 - S206-18L 1) PSX - 16M NYLO 6) MH Step ML-10-TDS-NCR - 10"					0 lb 270 lb 3116 lb 3122 lb 0 lb 0 lb 1440 lb 0 lb 258 lb 0 lb 0 lb 12 lb 8 lb 0 lb ----- Structure Total: 8227 lb		Structure Notes: 1. PER ASTM C478 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. ADMIXTURE = CONBLOCK CDA RED. 4. CASTING SUPPLIED BY ICAST (HOE MC-315 F/C RWRA). REINFORCING PER ASTM A615 (GRADE 60). - CONE (As .12) - RISER/WALLS (As .12) - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.			
Rim: 394.5' Rim to Invert: 6.87' Slack: 1.44' Sump: 2" Step Position: 85°										
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	387.63'	0°	0"	15" PVC SDR35	15.3"	Kor-N-Seal2 S206-18L	18"	18.451"	0.5"	0"
Invert 2	387.73'	170°	86"	15" PVC SDR35	15.3"	Kor-N-Seal2 S206-18L	18"	18.451"	1.75"	0"
Invert 3	387.83'	265°	134.125"	12" PVC SDR35	12.5"	PSX 16M NYLO	16"	16.312"	2.375"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										



(P4)
(P3)
(P2)
(P1) <<

RIGHT-SIDE UP VIEW (int. dimensions)



Invert: 2
Degree: 170°
Horz: 71.25"
Hole: 18"
Up(): 1.75"

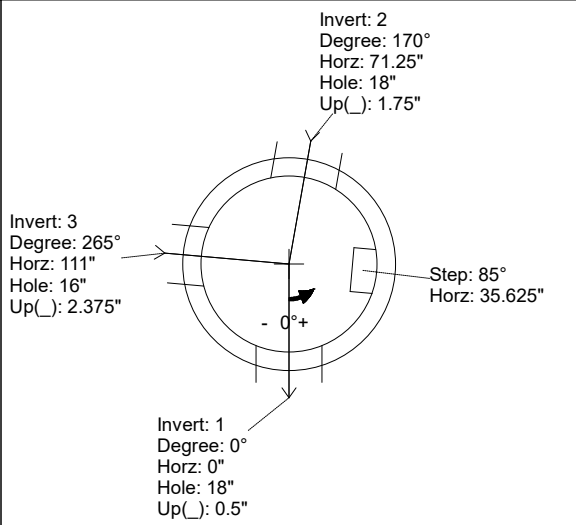
Invert: 3
Degree: 265°
Horz: 111"
Hole: 16"
Up(): 2.375"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 18"
Up(): 0.5"

Step: 85°
Horz: 35.625"

+ 0°-

UPSIDE-DOWN VIEW (int. dimensions)



Invert: 2
Degree: 170°
Horz: 71.25"
Hole: 18"
Up(): 1.75"

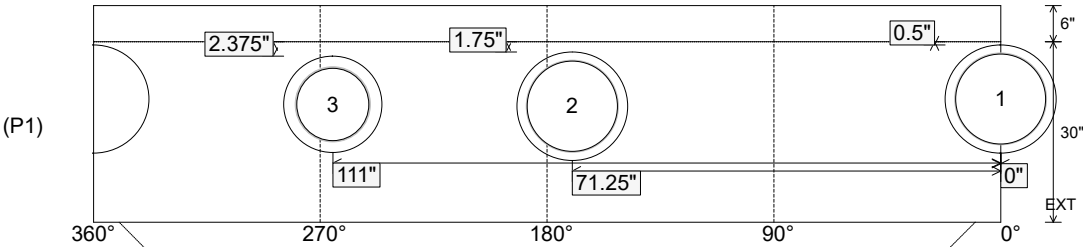
Invert: 3
Degree: 265°
Horz: 111"
Hole: 16"
Up(): 2.375"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 18"
Up(): 0.5"

Step: 85°
Horz: 35.625"

- 0°+

INSIDE WALL DIMENSIONS



(P1)

2.375"

1.75"

0.5"

111"

71.25"

0"

360° 270° 180° 90° 0°

6"

30"

EXT

Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 30" Height (Ext): 36"	Weight (Net): 3122 lb Volume (Net): 0.8cu.yd
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Job Name: 26-2509 - Airpark Expansion Industrial Subdivision

Job Location: Owensboro, KY 42301

Contractor: Koberstein Contracting, Inc.

Plant: 100

7/20/2026 4:20:48 PM

Tech: Jared - F

PC: A. Chambers

Structure ID: MH A-3 SS-MH

P1 MH048BA30CDARED

MH BASE w/ConBlock-CDA Red T/n

P4) 24" - CASTING HEIGHT - 7"

P3) 24" - GRADE RING w/ConBlock-CDA Red F/F - 4"

P2) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 42"

P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 30"

1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212

1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)

1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT

1) ADMIXTURE CONBLOCK CDA RED

1) CASTING - HOE MC-315 F/C RWRA

1) 48" - Conseal CS-102 1.00" (Double)

2) 24" - Conseal CS-102 1.00" (Double)

2) Kor-N-Seal2 - S206-18L

1) PSX - 16M NYLO

6) MH Step ML-10-TDS-NCR - 10"

0 lb

270 lb

3116 lb

3122 lb

0 lb

0 lb

1440 lb

0 lb

258 lb

0 lb

0 lb

12 lb

8 lb

0 lb

8227 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.

2. CONCRETE = 4,000 PSI AT 28 DAYS.

3. ADMIXTURE = CONBLOCK CDA RED.

4. CASTING SUPPLIED BY ICAST (HOE MC-315 F/C RWRA).

REINFORCING PER ASTM A615 (GRADE 60).

- CONE (As .12)

- RISER/WALLS (As .12)

- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Structure Total: 8227 lb

Rim: 394.5'

Rim to Invert: 6.87'

Slack: 1.44"

Sump: 2"

Step Position: 85°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	387.63'	0°	0"	15" PVC SDR35	15.3"	Kor-N-Seal2 S206-18L	18"	18.451"	0.5"	0"
Invert 2	387.73'	170°	86"	15" PVC SDR35	15.3"	Kor-N-Seal2 S206-18L	18"	18.451"	1.75"	0"
Invert 3	387.83'	265°	134.125"	12" PVC SDR35	12.5"	PSX 16M NYLO	16"	16.312"	2.375"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

Invert: 2
Degree: 170°
Horz: 71.25"
Hole: 18"
Up(): 1.75"

Invert: 3
Degree: 265°
Horz: 111"
Hole: 16"
Up(): 2.375"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 18"
Up(): 0.5"

Step: 85°
Horz: 35.625"

+ 0°-

FOR INVERT ONLY

UPSIDE-DOWN VIEW (int. dimensions)

Invert: 2
Degree: 170°
Horz: 71.25"
Hole: 18"
Up(): 1.75"

Invert: 3
Degree: 265°
Horz: 111"
Hole: 16"
Up(): 2.375"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 18"
Up(): 0.5"

Step: 85°
Horz: 35.625"

- 0°+

Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: n/a

Wall Thickness: 5"

Floor Height: 6"

Height (Int): 30"

Height (Ext): 36"

Weight (Net): 3122 lb

Volume (Net): 0.8cu.yd

Job Name: 26-2509 - Airpark Expansion Industrial Subdivision

Job Location: Owensboro, KY 42301

Contractor: Koberstein Contracting, Inc.

Plant: 100

7/20/2026 4:20:48 PM

Tech: Jared - F

PC: A. Chambers

Structure ID: MH A-2 SS-MH

P1 MH048BA24CDARED

MH BASE w/ConBlock-CDA Red T/n

P5) 24" - CASTING HEIGHT - 7"

P4) 24" - GRADE RING w/ConBlock-CDA Red F/F - 4"

P3) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30"

P2) 48" - MH RISER w/ConBlock-CDA Red T/G - 36"

P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 24"

1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212

1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)

1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT

1) ADMIXTURE CONBLOCK CDA RED

1) CASTING - HOE MC-315 F/C RWRA

2) 48" - Conseal CS-102 1.00" (Double)

2) 24" - Conseal CS-102 1.00" (Double)

2) Kor-N-Seal2 - S206-18L

1) PSX - 16M NYLO

8) MH Step ML-10-TDS-NCR - 10"

0 lb

270 lb

1961 lb

2515 lb

2703 lb

0 lb

0 lb

1440 lb

0 lb

258 lb

0 lb

0 lb

12 lb

8 lb

0 lb

9167 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.

2. CONCRETE = 4,000 PSI AT 28 DAYS.

3. ADMIXTURE = CONBLOCK CDA RED.

4. CASTING SUPPLIED BY ICAST (HOE MC-315 F/C RWRA).

REINFORCING PER ASTM A615 (GRADE 60).

- CONE (As .12)

- RISER/WALLS (As .12)

- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 395.5'

Rim to Invert: 8.37'

Slack: 1.44"

Sump: 2"

Structure Total: 9167 lb

Step Position: 270"

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	387.13'	0°	0"	15" PVC SDR35	15.3"	Kor-N-Seal2 S206-18L	18"	18.451"	0.5"	0"
Invert 2	387.33'	90°	45.5"	12" PVC SDR35	12.5"	PSX 16M NYLO	16"	16.312"	2.375"	0"
Invert 3	387.23'	180°	91.125"	15" PVC SDR35	15.3"	Kor-N-Seal2 S206-18L	18"	18.451"	1.75"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

INSIDE WALL DIMENSIONS

Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: n/a

Wall Thickness: 5"

Floor Height: 6"

Height (Int): 24"

Height (Ext): 30"

Weight (Net): 2703 lb

Volume (Net): 0.69cu.yd

Job Name: 26-2509 - Airpark Expansion Industrial Subdivision Job Location: Owensboro, KY 42301 Contractor: Koberstein Contracting, Inc.					Plant: 100		Tech: Jared - F			
					7/20/2026 4:20:48 PM		PC: A. Chambers			
Structure ID: MH A-2 SS-MH										
P1 MH048BA24CDARED					MH BASE w/ConBlock-CDA Red T/n					
P5) 24" - CASTING HEIGHT - 7" P4) 24" - GRADE RING w/ConBlock-CDA Red F/F - 4" P3) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30" P2) 48" - MH RISER w/ConBlock-CDA Red T/G - 36" P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 24" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT 1) ADMIXTURE CONBLOCK CDA RED 1) CASTING - HOE MC-315 F/C RWRA 2) 48" - Conseal CS-102 1.00" (Double) 2) 24" - Conseal CS-102 1.00" (Double) 2) Kor-N-Seal2 - S206-18L 1) PSX - 16M NYLO 8) MH Step ML-10-TDS-NCR - 10"					0 lb 270 lb 1961 lb 2515 lb 2703 lb 0 lb 0 lb 1440 lb 0 lb 258 lb 0 lb 0 lb 12 lb 8 lb 0 lb		Structure Notes: 1. PER ASTM C478 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. ADMIXTURE = CONBLOCK CDA RED. 4. CASTING SUPPLIED BY ICAST (HOE MC-315 F/C RWRA). . REINFORCING PER ASTM A615 (GRADE 60). - CONE (As .12) - RISER/WALLS (As .12) - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.			
Rim: 395.5' Rim to Invert: 8.37' Slack: 1.44" Sump: 2" Structure Total: 9167 lb Step Position: 270										
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	387.13'	0°	0"	15" PVC SDR35	15.3"	Kor-N-Seal2 S206-18L	18"	18.451"	0.5"	0"
Invert 2	387.33'	90°	45.5"	12" PVC SDR35	12.5"	PSX 16M NYLO	16"	16.312"	2.375"	0"
Invert 3	387.23'	180°	91.125"	15" PVC SDR35	15.3"	Kor-N-Seal2 S206-18L	18"	18.451"	1.75"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

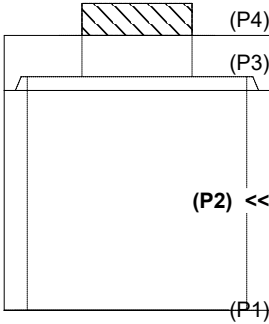
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

INSIDE WALL DIMENSIONS

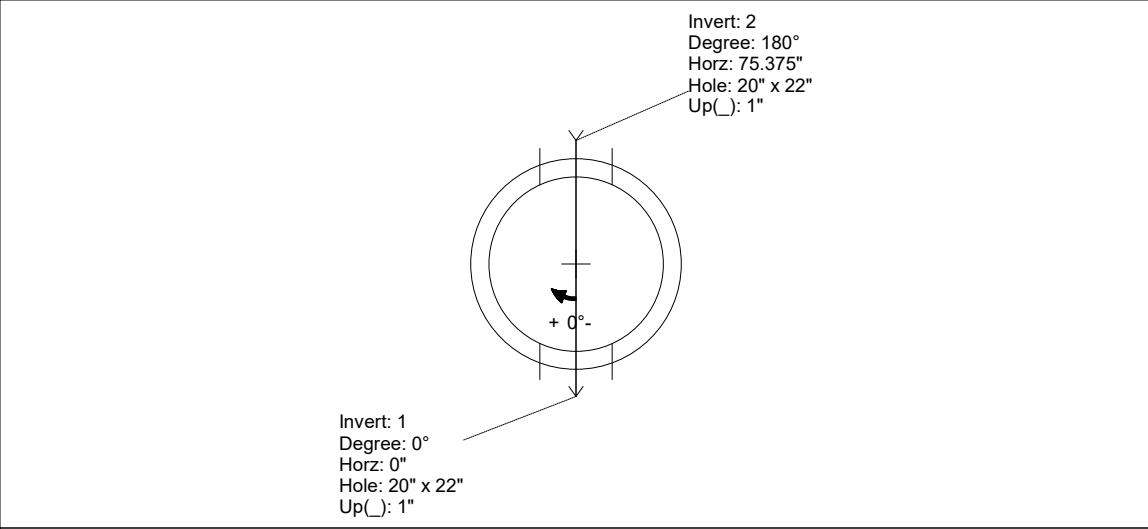
Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 24" Height (Ext): 30"	Weight (Net): 2703 lb Volume (Net): 0.69cu.yd
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Job Name: 26-2805 - ARV Vaults Job Location: Brandenburg, KY Contractor: Twin States Utilities, Inc.					Plant: 100 7/22/2026 5:15:51 PM		Tech: Jared - A PC: Thomas Ryan				
Structure ID: QL1 W-ARV 3											
P2 MH048DHRS48			MH DH RISER T/F								
P4) 24" - CASTING HEIGHT - 7" P3) 48" - MH FLAT TOP w/ 24" Center Hole F/G - 12" P2) 48" - MH DH RISER T/F - 48" P1) 48" - P.I.P. BY OTHERS - BTM SLAB F/n - 0" 1) CASTING - HOE MC-315 F/C Water 2) 48" - Conseal CS-102 1.00" (Double) 1) 24" - Conseal CS-102 1.00" (Double) 2) DOGHOUSE - 20"x22"						0 lb 1580 lb 2998 lb 0 lb 258 lb 0 lb 0 lb 0 lb 0 lb		Structure Notes: 1. HOE MC-315 F/C WATER PROVIDED BY ICAST. 2. PER ASTM C478 SPECIFICATIONS. 3. CONCRETE = 4,000 PSI AT 28 DAYS 4. REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W. - WALLS (As .47) #5 BARS AT 8" C.C.E.W.			
Structure Total:						4836 lb					
Rim: 5.833' Rim to Invert: 5.5' Slack: 2.996" Sump: 3.996" Step Position:											
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset	
Invert 1	0.333'	0°	0"	16" DI	17.5"	DOGHOUSE 20"x22"	20" x 22"	20.629"	1"	0"	
Invert 2	0.333'	180°	91.125"	16" DI	17.5"	DOGHOUSE 20"x22"	20" x 22"	20.629"	1"	0"	
Invert 3											
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											



(P4)
(P3)
(P2) <<
(P1)

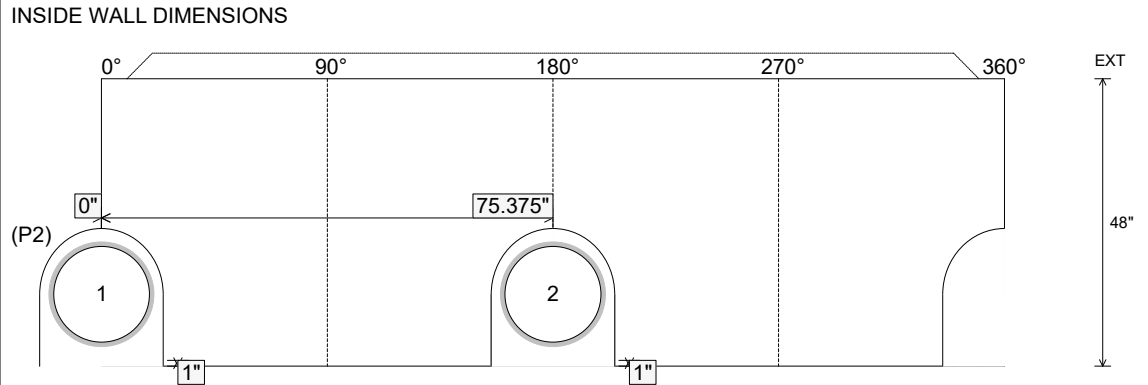
RIGHT-SIDE UP VIEW (int. dimensions)



Invert: 2
Degree: 180°
Horz: 75.375"
Hole: 20" x 22"
Up(): 1"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 20" x 22"
Up(): 1"

INSIDE WALL DIMENSIONS



0° 90° 180° 270° 360°

EXT 48"

75.375"

1"

1"

1"

2

1

(P2)

Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Flat	Wall Thickness: 5" Floor Height: 0"	Height (Int): 48" Height (Ext): 48"	Weight (Net): 2998 lb Volume (Net): 0.77cu.yd
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Job Name: 26-2805 - ARV Vaults
Job Location: Brandenburg, KY
Contractor: Twin States Utilities, Inc.

Plant: 100

7/22/2026 5:15:36 PM

Tech: Jared - A

PC: Thomas Ryan



Structure ID: QL1 W-ARV 2

P3 MH048LD12CC

MH FLAT TOP w/ 24" Center Hole F/G

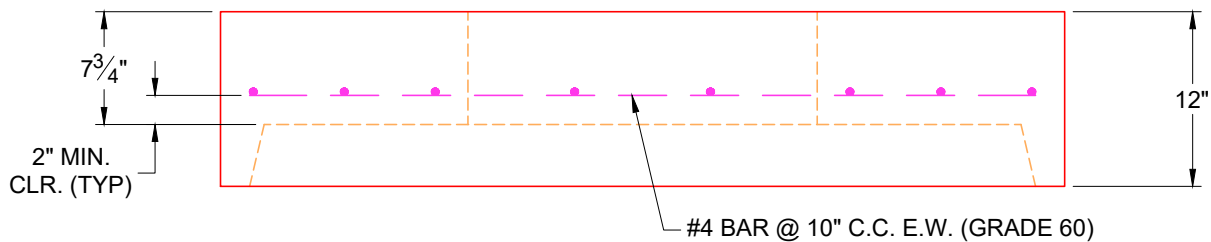
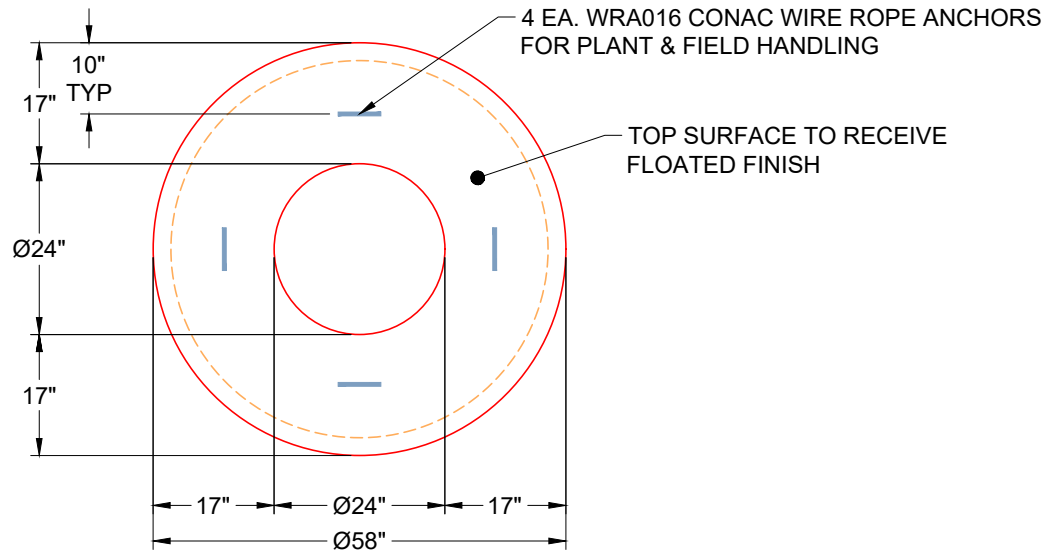
P4) 24" - CASTING HEIGHT - 7"
P3) 48" - MH FLAT TOP w/ 24" Center Hole F/G - 12"
P2) 48" - MH DH RISER Custom Ht T/F - 48"
P1) 48" - P.I.P. BY OTHERS - BTM SLAB F/n - 0"
1) CASTING - HOE MC-315 F/C Water
2) 48" - Con Seal CS-102 1.00" (Double)
1) 24" - Con Seal CS-102 1.00" (Double)
2) DOGHOUSE - 20"x22"

0 lb
1580 lb
2998 lb
0 lb
258 lb
0 lb
0 lb
0 lb
0 lb

Structure Total: 4836 lb

Structure Notes:

1. HOE MC-315 F/C WATER PROVIDED BY ICAST.
2. PER ASTM C478 SPECIFICATIONS.
3. CONCRETE = 4,000 PSI AT 28 DAYS
4. REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - WALLS (As .47) #5 BARS AT 8" C.C.E.W.



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Groove

Wall Thickness: 5"

Height (Ext): 12"

Weight (Net): 1580 lb
Volume (Net): 0.39cu.yd

Job Name: 26-2805 - ARV Vaults
Job Location: Brandenburg, KY
Contractor: Twin States Utilities, Inc.

Plant: 100

7/22/2026 5:15:36 PM

Tech: Jared - A

PC: Thomas Ryan



Structure ID: QL1 W-ARV 1

P3 MH048LD12CC

MH FLAT TOP w/ 24" Center Hole F/G

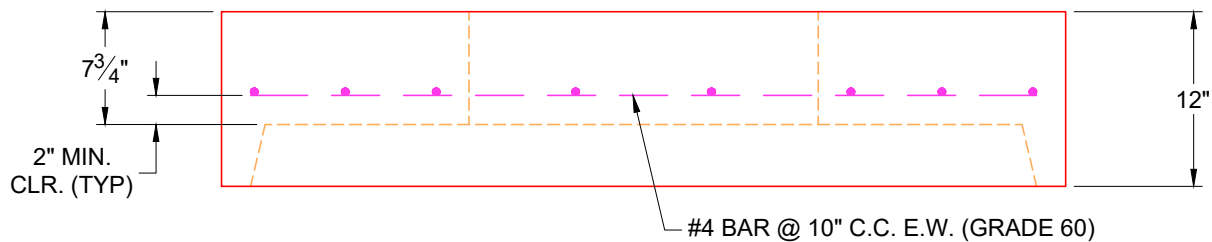
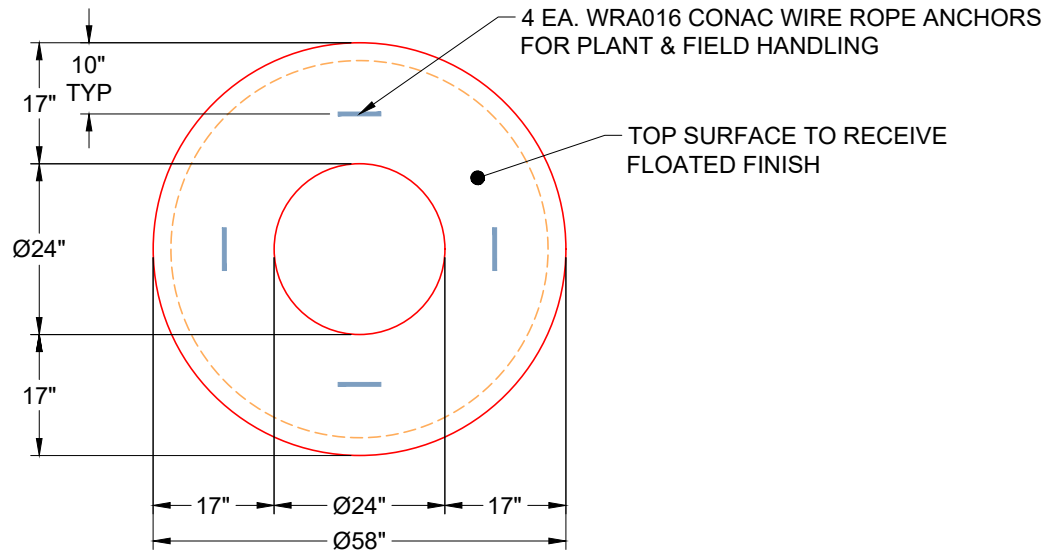
P4) 24" - CASTING HEIGHT - 7"
P3) 48" - MH FLAT TOP w/ 24" Center Hole F/G - 12"
P2) 48" - MH DH RISER T/F - 48"
P1) 48" - P.I.P. BY OTHERS - BTM SLAB F/n - 0"
1) CASTING - HOE MC-315 F/C Water
2) 48" - Conseal CS-102 1.00" (Double)
1) 24" - Conseal CS-102 1.00" (Double)
2) DOGHOUSE - 20"x22"

0 lb
1580 lb
2998 lb
0 lb
258 lb
0 lb
0 lb
0 lb
0 lb

Structure Total: 4836 lb

Structure Notes:

1. HOE MC-315 F/C WATER PROVIDED BY ICAST.
2. PER ASTM C478 SPECIFICATIONS.
3. CONCRETE = 4,000 PSI AT 28 DAYS
4. REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - WALLS (As .47) #5 BARS AT 8" C.C.E.W.



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Groove

Wall Thickness: 5"

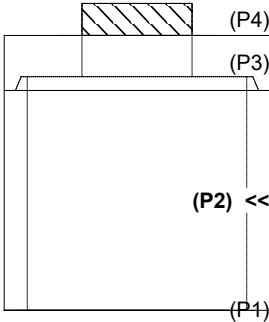
Height (Ext): 12"

Weight (Net): 1580 lb
Volume (Net): 0.39cu.yd

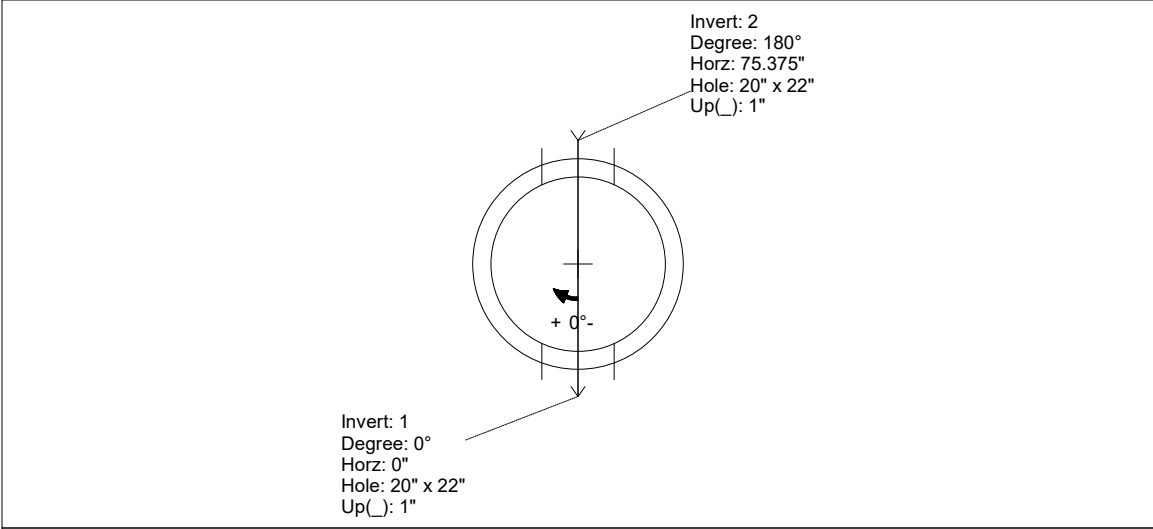


Weight (Net): 4051 lb
Volume (Net): 1.03cu.yd

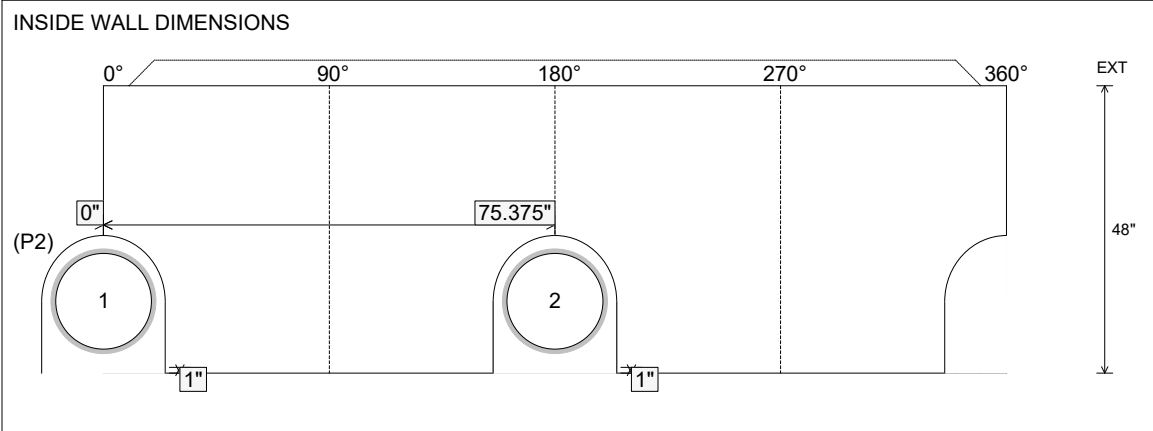
Job Name: 26-2805 - ARV Vaults Job Location: Brandenburg, KY Contractor: Twin States Utilities, Inc.					Plant: 100 7/22/2026 5:15:50 PM		Tech: Jared - A PC: Thomas Ryan				
Structure ID: QL1 W-ARV 2											
P2		MH048DHVF		MH DH RISER Custom Ht T/F							
P4) 24" - CASTING HEIGHT - 7" P3) 48" - MH FLAT TOP w/ 24" Center Hole F/G - 12" P2) 48" - MH DH RISER Custom Ht T/F - 48" P1) 48" - P.I.P. BY OTHERS - BTM SLAB F/n - 0" 1) CASTING - HOE MC-315 F/C Water 2) 48" - Conseal CS-102 1.00" (Double) 1) 24" - Conseal CS-102 1.00" (Double) 2) DOGHOUSE - 20"x22"					0 lb 1580 lb 2998 lb 0 lb 258 lb 0 lb 0 lb 0 lb 0 lb		Structure Notes: 1. HOE MC-315 F/C WATER PROVIDED BY ICAST. 2. PER ASTM C478 SPECIFICATIONS. 3. CONCRETE = 4,000 PSI AT 28 DAYS 4. REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W. - WALLS (As .47) #5 BARS AT 8" C.C.E.W.				
Structure Total:					4836 lb						
Rim: 5.833' Rim to Invert: 5.5' Slack: 2.996" Sump: 3.996" Step Position:											
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (_)	Offset	
Invert 1	0.333'	0°	0"	16" DI	17.5"	DOGHOUSE 20"x22"	20" x 22"	20.629"	1"	0"	
Invert 2	0.333'	180°	91.125"	16" DI	17.5"	DOGHOUSE 20"x22"	20" x 22"	20.629"	1"	0"	
Invert 3											
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											



RIGHT-SIDE UP VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Flat	Wall Thickness: 5" Floor Height: 0"	Height (Int): 48" Height (Ext): 48"	Weight (Net): 2998 lb Volume (Net): 0.77cu.yd
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Job Name: 26-2018 - Hancock County Middle School Addition
 Job Location: Lewisport, KY
 Contractor: Mechanical Consultants Inc

Plant: 100

7/23/2026 5:01:32 PM

Tech: Jared - F

PC: T. Lewis



Structure ID: MH 6 SS-MH

P1 MH048BA36CDARED

MH BASE w/ConBlock-CDA Red T/n

P3) 24" - CASTING HEIGHT - 7"
 P2) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 42"

P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 36"

1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212

1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)

1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT

1) ADMIXTURE CONBLOCK CDA RED

1) CASTING - HOE MC-375-SS F/C Self-Sealing Sanitary

1) 48" - Conseal CS-102 1.00" (Double)

1) 24" - Conseal CS-102 1.00" (Double)

2) PSX - 12-08 NYLO

7) MH Step ML-10-TDS-NCR - 10"

0 lb

3116 lb

3749 lb

0 lb

0 lb

1440 lb

0 lb

271 lb

0 lb

0 lb

16 lb

0 lb

Structure Total: 8593 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.

2. CONCRETE = 4,000 PSI AT 28 DAYS.

3. ADMIXTURE = CONBLOCK CDA RED.

4. CASTING BY ICAST (HOE MC-375-SS F/C SELF-SEALING SANITARY).

REINFORCING PER ASTM A615 (GRADE 60).

- CONE (As .12)

- RISER/WALLS (As .12)

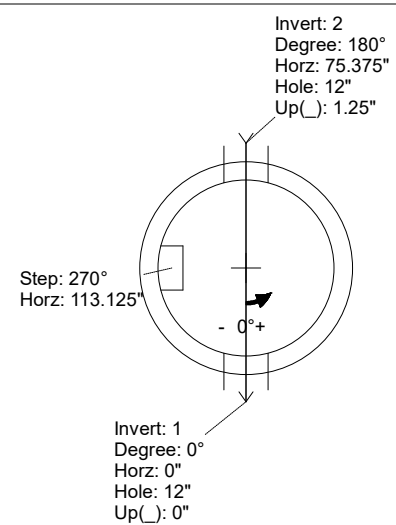
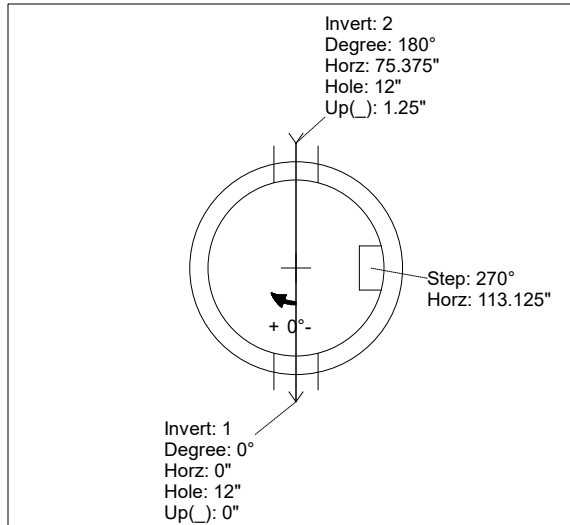
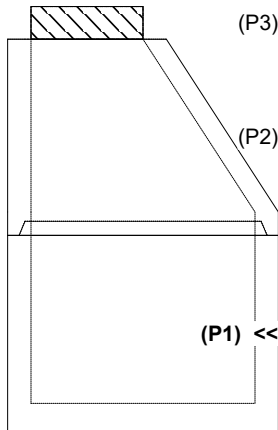
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 412' Rim to Invert: 7' Slack: 1" Sump: 2" Step Position: 270°

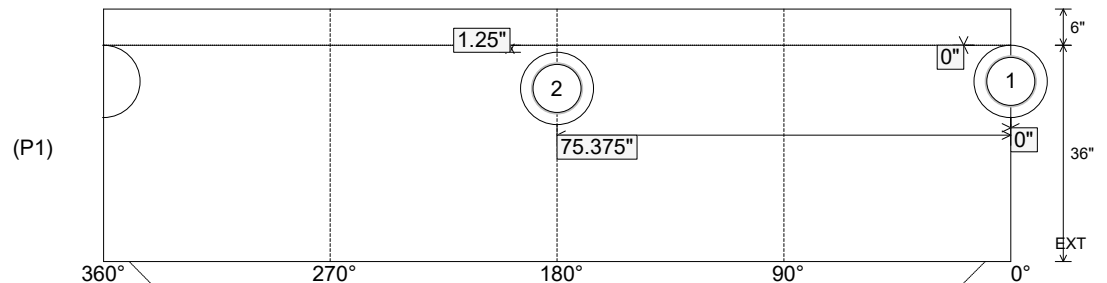
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	405'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	405.1'	180°	91.125"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Tongue
 Seam Dn: n/a

Wall Thickness: 5"
 Floor Height: 6"

Height (Int): 36"
 Height (Ext): 42"

Weight (Net): 3749 lb
 Volume (Net): 0.96cu.yd

Job Name: 26-2018 - Hancock County Middle School Addition
 Job Location: Lewisport, KY
 Contractor: Mechanical Consultants Inc

Plant: 100

7/23/2026 5:01:32 PM

Tech: Jared - F

PC: T. Lewis



Structure ID: MH 6 SS-MH

P1 MH048BA36CDARED

MH BASE w/ConBlock-CDA Red T/n

- P3) 24" - CASTING HEIGHT - 7"
 P2) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 42"
 P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 36"
 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212
 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)

1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT

- 1) ADMIXTURE CONBLOCK CDA RED
 1) CASTING - HOE MC-375-SS F/C Self-Sealing Sanitary
 1) 48" - ConSeal CS-102 1.00" (Double)
 1) 24" - ConSeal CS-102 1.00" (Double)
 2) PSX - 12-08 NYLO
 7) MH Step ML-10-TDS-NCR - 10"

0 lb
 3116 lb
 3749 lb
 0 lb
 0 lb
 1440 lb
 0 lb
 271 lb
 0 lb
 0 lb
 16 lb
 0 lb

 Structure Total: 8593 lb

Structure Notes:

- PER ASTM C478 SPECIFICATIONS.
 - CONCRETE = 4,000 PSI AT 28 DAYS.
 - ADMIXTURE = CONBLOCK CDA RED.
 - CASTING BY ICAST (HOE MC-375-SS F/C SELF-SEALING SANITARY).
- REINFORCING PER ASTM A615 (GRADE 60).
 - CONE (As .12)
 - RISER/WALLS (As .12)
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Structure Total:

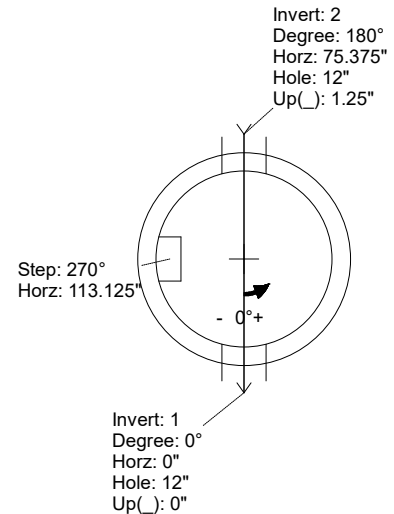
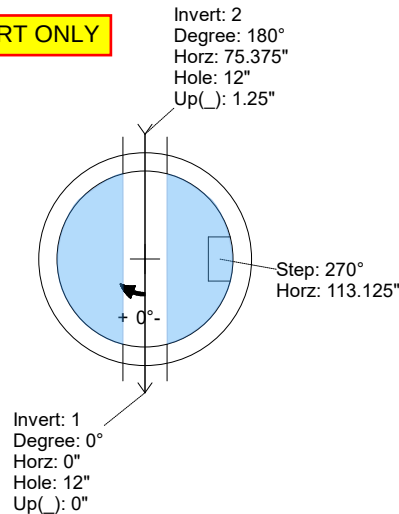
Rim: 412' Rim to Invert: 7' Slack: 1" Sump: 2" Step Position: 270°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	405'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	405.1'	180°	91.125"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

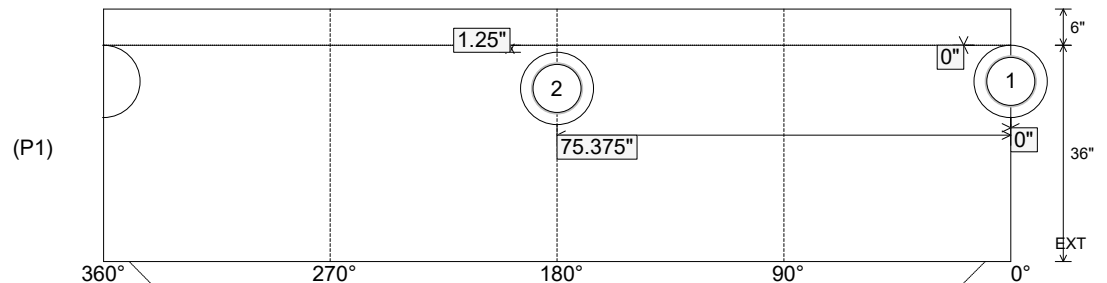
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

FOR INVERT ONLY



INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Tongue
 Seam Dn: n/a

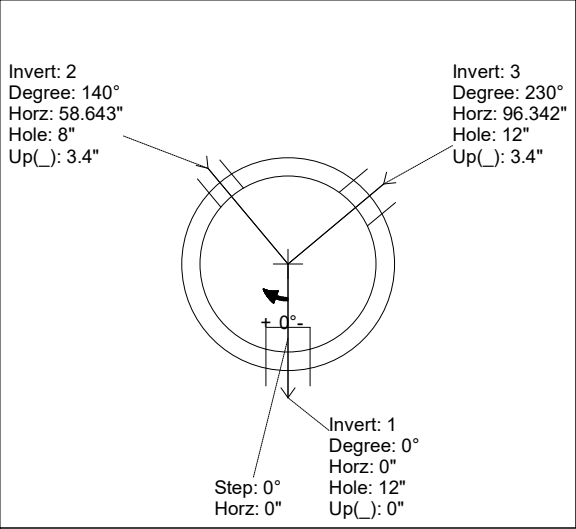
Wall Thickness: 5"
 Floor Height: 6"

Height (Int): 36"
 Height (Ext): 42"

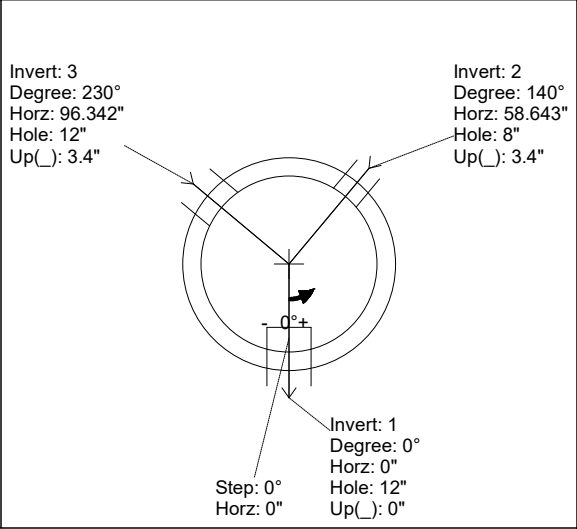
Weight (Net): 3749 lb
 Volume (Net): 0.96cu.yd

Job Name: 25-4288 - Project Wave Job Location: Franklin, KY 42134 Contractor: Cumberland Pipeline LLC					Plant: 100 7/10/2026 8:12:55 AM		Tech: Jared - A PC: Erica Bradley			
Structure ID: 94										
P1 MH048BA24X MH BASE w/XYPEX										
P4) 24" - CASTING HEIGHT - 7" P3) 48" - ECC XYPEX CONE w/ 24" HOLE - 30" P2) 48" - MH RISER w/XYPEX - 60" P1) 48" - MH BASE w/XYPEX - 24" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT 1) CASTING - JBS 1150 F/C SANITARY 2) 48" - Conseal CS-102 1.00" (Double) 1) 24" - Conseal CS-102 1.00" (Double) 1) PSX - 12-06 NYLO 1) PSX - 8QRS-S NYLO 1) PSX - 12-08 NYLO 10) MH Step ML-10-TDS-NCR - 10"					0 lb 1981 lb 4192 lb 2890 lb 0 lb 0 lb 1440 lb 250 lb 0 lb 0 lb 8 lb 6 lb 8 lb 0 lb		Structure Notes: 1. PER ASTM C-478 SPECIFICATIONS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: PER ASTM A615 4. INVERT CHANNEL REQUIRED 5. STEPS AT 0 DEGREES 6. JBS 1150 FRAME & COVER "SANITARY" SUPPLIED BY ICAST			
Rim: 720.44' Rim to Invert: 9.99' Slack: 1.88" Sump: 3" Step Position: 0°					Structure Total: 10775 lb					
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	710.45'	0°	0"	6" DI	6.875"	PSX 12-06 NYLO	12"	12.129"	0"	0"
Invert 2	710.65'	140°	70.86"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	3.4"	0"
Invert 3	710.65'	230°	116.413"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	3.4"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

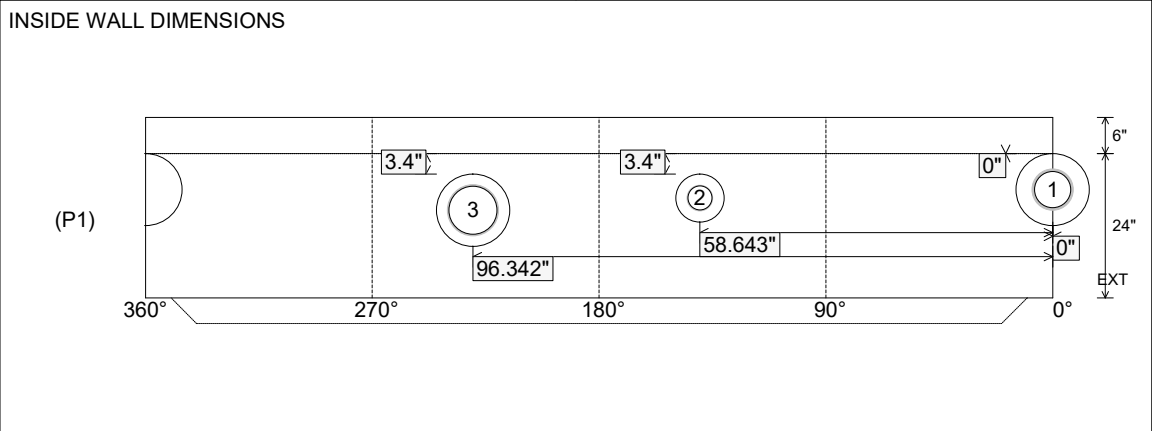
RIGHT-SIDE UP VIEW (int. dimensions)



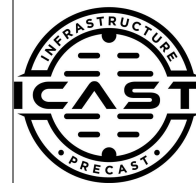
UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS

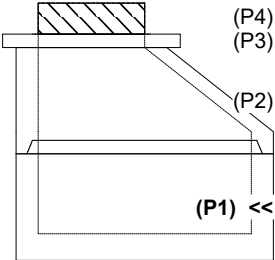


Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 24" Height (Ext): 30"	Weight (Net): 2890 lb Volume (Net): 0.74cu.yd
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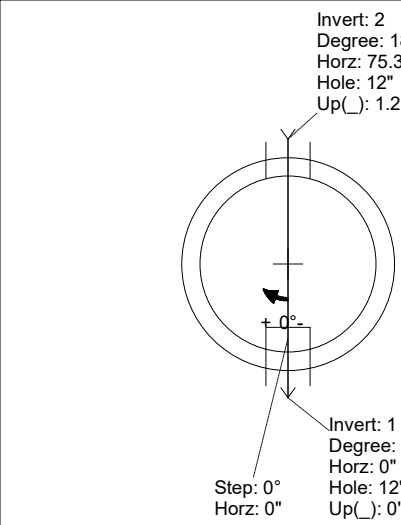


Weight (Net): 2890 lb
Volume (Net): 0.74cu.yd

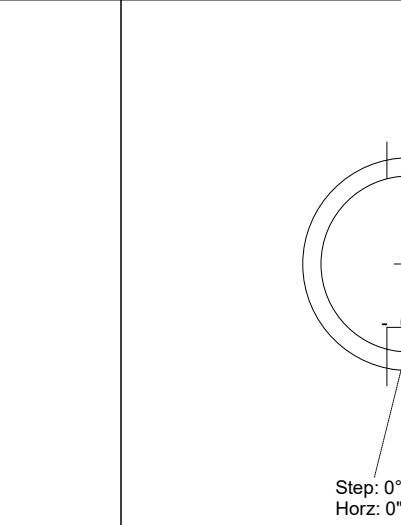
Job Name: 25-4288 - Project Wave Job Location: Franklin, KY 42134 Contractor: Cumberland Pipeline LLC					Plant: 100 7/10/2026 8:12:54 AM		Tech: Jared - A PC: Erica Bradley			
Structure ID: A5.2										
P1 MH048BA18X		MH BASE w/XYPEX								
P4) 24" - CASTING HEIGHT - 7" P3) 24" - XYPEX GRADE RING - 3" P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 24" P1) 48" - MH BASE w/XYPEX - 18" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT 1) CASTING - JBS 1150 F/C SANITARY 1) 48" - Conseal CS-102 1.00" (Double) 2) 24" - Conseal CS-102 1.00" (Double) 2) PSX - 12-08 NYLO 3) MH Step ML-10-TDS-NCR - 10"					0 lb 202 lb 1738 lb 2492 lb 0 lb 0 lb 1440 lb 250 lb 0 lb 0 lb 16 lb 0 lb ----- Structure Total: 6139 lb		Structure Notes: 1. PER ASTM C-478 SPECIFICATIONS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: PER ASTM A615 4. INVERT CHANNEL REQUIRED 5. STEPS AT 0 DEGREES 6. JBS 1150 FRAME & COVER "SANITARY" SUPPLIED BY ICAST			
Rim: 711.39' Rim to Invert: 4.21' Slack: 0.52' Sump: 2' Step Position: 0°										
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	707.18'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	707.28'	180°	91.106"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										



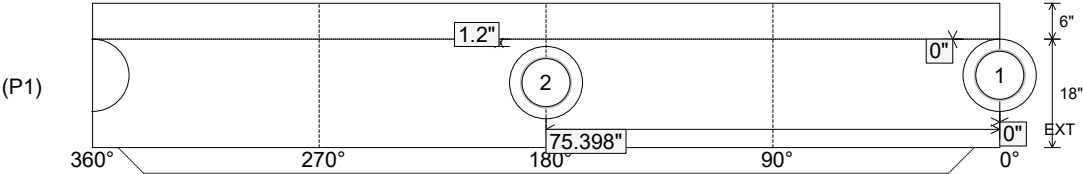
RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)

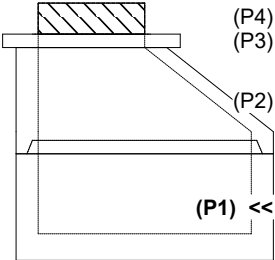


INSIDE WALL DIMENSIONS

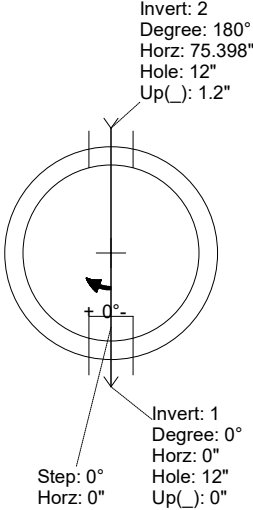


Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 18" Height (Ext): 24"	Weight (Net): 2492 lb Volume (Net): 0.64cu.yd
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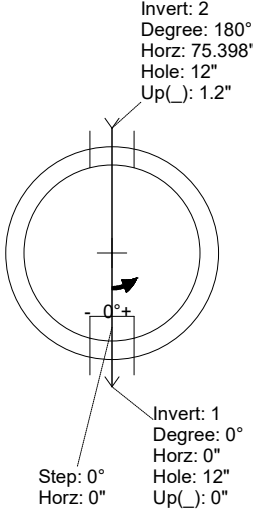
Job Name: 25-4288 - Project Wave Job Location: Franklin, KY 42134 Contractor: Cumberland Pipeline LLC					Plant: 100 7/10/2026 8:12:54 AM		Tech: Jared - A PC: Erica Bradley			
Structure ID: A5.2										
P1 MH048BA18X		MH BASE w/XYPEX								
P4) 24" - CASTING HEIGHT - 7" P3) 24" - XYPEX GRADE RING - 3" P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 24" P1) 48" - MH BASE w/XYPEX - 18" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT 1) CASTING - JBS 1150 F/C SANITARY 1) 48" - Conseal CS-102 1.00" (Double) 2) 24" - Conseal CS-102 1.00" (Double) 2) PSX - 12-08 NYLO 3) MH Step ML-10-TDS-NCR - 10"					0 lb 202 lb 1738 lb 2492 lb 0 lb 0 lb 1440 lb 250 lb 0 lb 0 lb 16 lb 0 lb		Structure Notes: 1. PER ASTM C-478 SPECIFICATIONS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: PER ASTM A615 4. INVERT CHANNEL REQUIRED 5. STEPS AT 0 DEGREES 6. JBS 1150 FRAME & COVER "SANITARY" SUPPLIED BY ICAST			
Structure Total: 6139 lb					INVERT CHANNEL DRAWING FULL HEIGHT INVERT					
Rim: 711.39' Rim to Invert: 4.21' Slack: 0.52' Sump: 2' Step Position: 0°										
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	707.18'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	707.28'	180°	91.106"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										



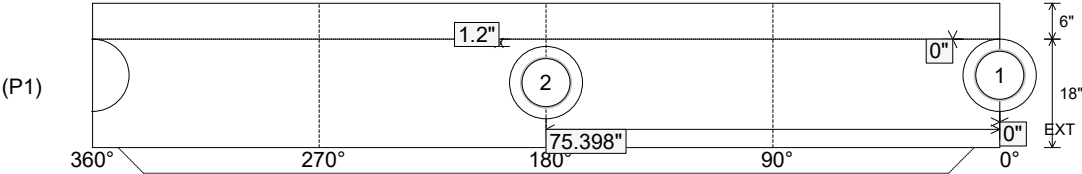
RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)

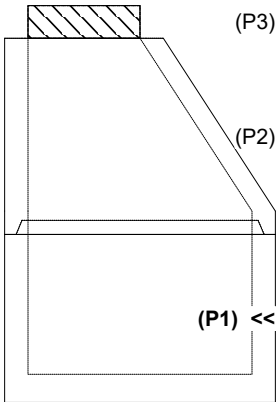


INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 18" Height (Ext): 24"	Weight (Net): 2492 lb Volume (Net): 0.64cu.yd
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Job Name: 25-4288 - Project Wave Job Location: Franklin, KY 42134 Contractor: Cumberland Pipeline LLC				Plant: 100 7/10/2026 8:12:54 AM		Tech: Jared - A PC: Erica Bradley				
Structure ID: A5.1										
P1 MH048BA30X				MH BASE w/XYPEX						
P3) 24" - CASTING HEIGHT - 7" P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 42" P1) 48" - MH BASE w/XYPEX - 30" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT 1) CASTING - JBS 1150 F/C SANITARY 1) 48" - Conseal CS-102 1.00" (Double) 1) 24" - Conseal CS-102 1.00" (Double) 2) PSX - 12-08 NYLO 6) MH Step ML-10-TDS-NCR - 10" Structure Total: 8153 lb						0 lb 3116 lb 3330 lb 0 lb 0 lb 1440 lb 250 lb 0 lb 0 lb 0 lb 16 lb 0 lb		Structure Notes: 1. PER ASTM C-478 SPECIFICATIONS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: PER ASTM A615 4. INVERT CHANNEL REQUIRED 5. STEPS AT 0 DEGREES 6. JBS 1150 FRAME & COVER "SANITARY" SUPPLIED BY ICAST		
Rim: 711.44' Rim to Invert: 6.64' Slack: 2.68' Sump: 2" Step Position: 0°										
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	704.8'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	704.9'	180°	91.106"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

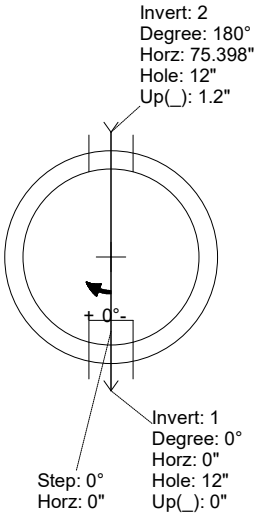


(P3)

(P2)

(P1) <<

RIGHT-SIDE UP VIEW (int. dimensions)

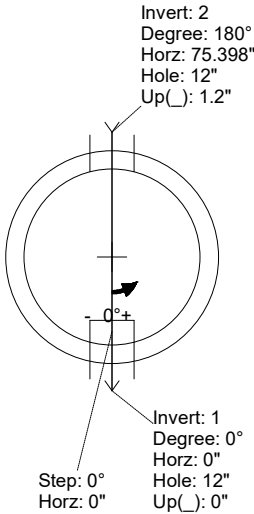


Invert: 2
Degree: 180°
Horz: 75.398"
Hole: 12"
Up(): 1.2"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 12"
Up(): 0"

Step: 0°
Horz: 0"

UPSIDE-DOWN VIEW (int. dimensions)

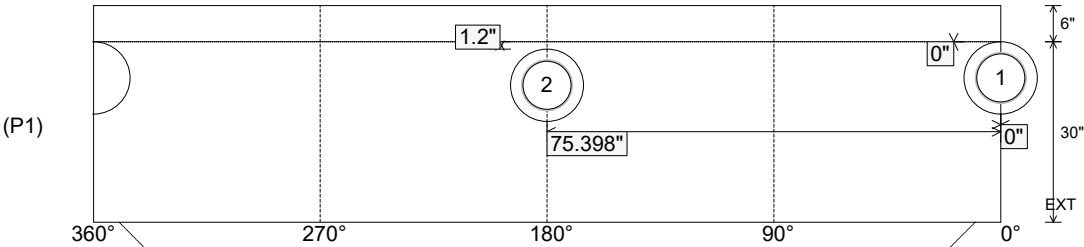


Invert: 2
Degree: 180°
Horz: 75.398"
Hole: 12"
Up(): 1.2"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 12"
Up(): 0"

Step: 0°
Horz: 0"

INSIDE WALL DIMENSIONS



(P1)

1.2"

75.398"

0"

0"

6"

30"

EXT

360° 270° 180° 90° 0°

Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 30" Height (Ext): 36"	Weight (Net): 3330 lb Volume (Net): 0.85cu.yd
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Job Name: 25-4288 - Project Wave

Job Location: Franklin, KY 42134

Contractor: Cumberland Pipeline LLC

Plant: 100

7/10/2026 8:12:54 AM

Tech: Jared - A

PC: Erica Bradley



Structure ID: A5.1

P1 MH048BA30X

MH BASE w/XYPEX

P3) 24" - CASTING HEIGHT - 7"

P2) 48" - ECC XYPEX CONE w/ 24" HOLE - 42"

P1) 48" - MH BASE w/XYPEX - 30"

1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212

1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)

1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT

1) CASTING - JBS 1150 F/C SANITARY

1) 48" - Conseal CS-102 1.00" (Double)

1) 24" - Conseal CS-102 1.00" (Double)

2) PSX - 12-08 NYLO

6) MH Step ML-10-TDS-NCR - 10"

0 lb

3116 lb

3330 lb

0 lb

0 lb

1440 lb

250 lb

0 lb

0 lb

16 lb

0 lb

8153 lb

Structure Total:

8153 lb

Structure Notes:

1. PER ASTM C-478 SPECIFICATIONS

2. CONCRETE: 4,000 PSI AT 28 DAYS

3. REINFORCEMENT: PER ASTM A615

4. INVERT CHANNEL REQUIRED

5. STEPS AT 0 DEGREES

6. JBS 1150 FRAME & COVER "SANITARY" SUPPLIED BY ICAST

INVERT CHANNEL DRAWING

FULL HEIGHT INVERT

Rim: 711.44'

Rim to Invert: 6.64'

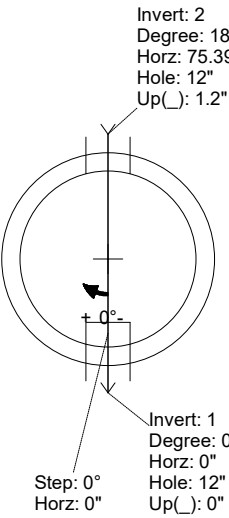
Slack: 2.68"

Sump: 2"

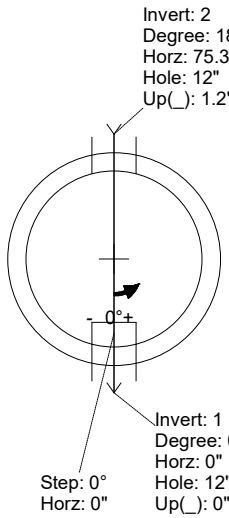
Step Position: 0°

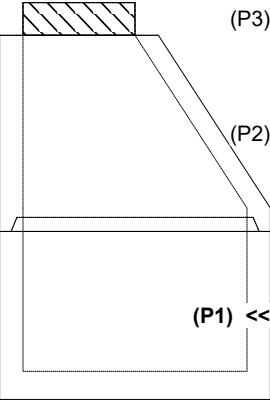
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	704.8'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	704.9'	180°	91.106"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

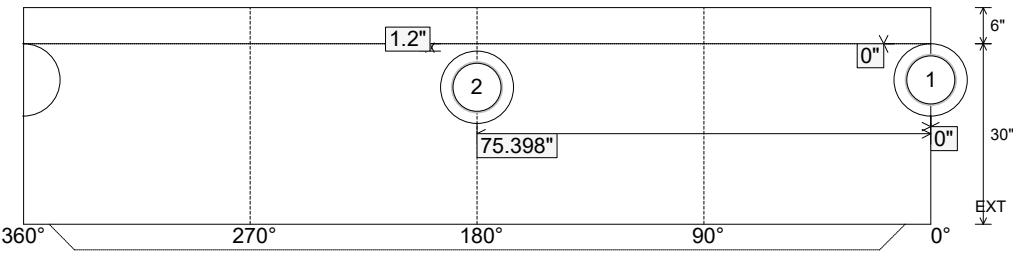


UPSIDE-DOWN VIEW (int. dimensions)





INSIDE WALL DIMENSIONS



Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: n/a

Wall Thickness: 5"

Floor Height: 6"

Height (Int): 30"

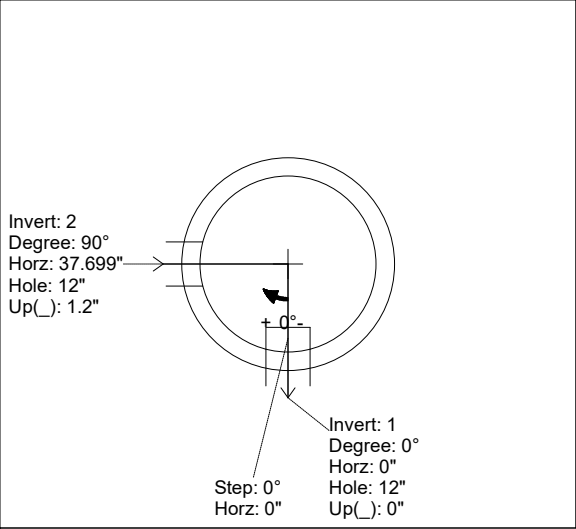
Height (Ext): 36"

Weight (Net): 3330 lb

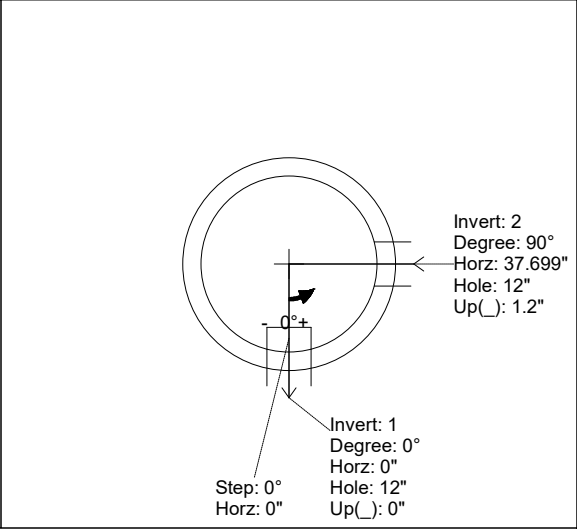
Volume (Net): 0.85cu.yd

Job Name: 25-4288 - Project Wave Job Location: Franklin, KY 42134 Contractor: Cumberland Pipeline LLC					Plant: 100 7/10/2026 8:13:04 AM		Tech: Jared - A PC: Erica Bradley					
Structure ID: A15												
P1 MH048BA24X					MH BASE w/XYPEX							
P5) 24" - CASTING HEIGHT - 7" P4) 48" - ECC XYPEX CONE w/ 24" HOLE - 30" P3) 48" - MH RISER w/XYPEX - 60" P2) 48" - MH RISER w/XYPEX - 60" P1) 48" - MH BASE w/XYPEX - 24" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT 1) CASTING - JBS 1150 F/C SANITARY 3) 48" - Conseal CS-102 1.00" (Double) 1) 24" - Conseal CS-102 1.00" (Double) 2) PSX - 12-06 NYLO 15) MH Step ML-10-TDS-NCR - 10"					0 lb 1981 lb 4192 lb 4192 lb 2911 lb 0 lb 0 lb 1440 lb 250 lb 0 lb 0 lb 16 lb 0 lb Structure Total: 14981 lb		Structure Notes: 1. PER ASTM C-478 SPECIFICATIONS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: PER ASTM A615 4. INVERT CHANNEL REQUIRED 5. STEPS AT 0 DEGREES 6. JBS 1150 FRAME & COVER "SANITARY" SUPPLIED BY ICAST					
Rim: 733' Rim to Invert: 14.87' Slack: 0.44" Sump: 3" Step Position: 0°												
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset		
Invert 1	718.13'	0°	0"	6" PVC SDR35	6.25"	PSX 12-06 NYLO	12"	12.129"	0"	0"		
Invert 2	718.23'	90°	45.553"	6" PVC SDR35	6.25"	PSX 12-06 NYLO	12"	12.129"	1.2"	0"		
Invert 3												
Invert 4												
Invert 5												
Invert 6												
Invert 7												
Invert 8												

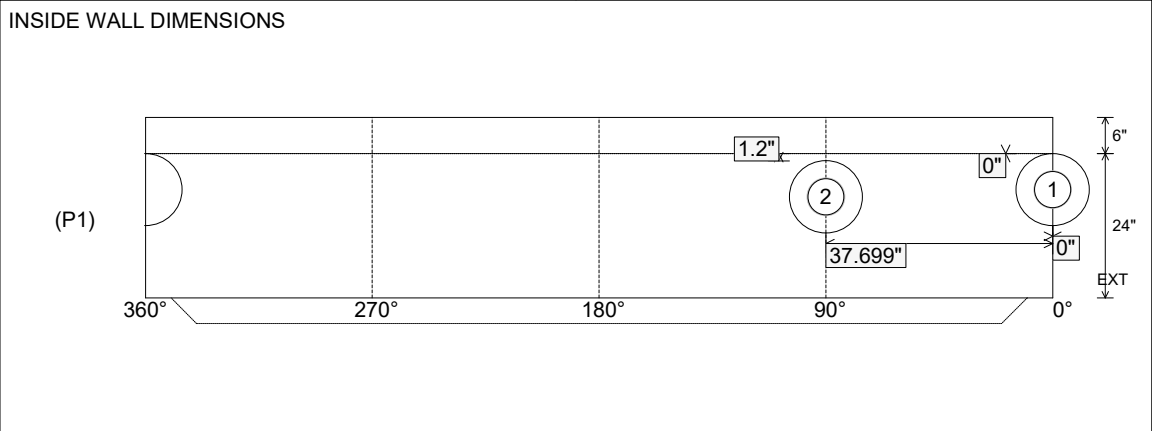
RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 24" Height (Ext): 30"	Weight (Net): 2911 lb Volume (Net): 0.74cu.yd
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Job Name: 25-4288 - Project Wave

Job Location: Franklin, KY 42134

Contractor: Cumberland Pipeline LLC

Plant: 100

7/10/2026 8:13:04 AM

Tech: Jared - A

PC: Erica Bradley



Structure ID: A15

P1 MH048BA24X

MH BASE w/XYPEX

P5) 24" - CASTING HEIGHT - 7"

P4) 48" - ECC XYPEX CONE w/ 24" HOLE - 30"

P3) 48" - MH RISER w/XYPEX - 60"

P2) 48" - MH RISER w/XYPEX - 60"

P1) 48" - MH BASE w/XYPEX - 24"

1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212

1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)

1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT

1) CASTING - JBS 1150 F/C SANITARY

3) 48" - Conseal CS-102 1.00" (Double)

1) 24" - Conseal CS-102 1.00" (Double)

2) PSX - 12-06 NYLO

15) MH Step ML-10-TDS-NCR - 10"

0 lb

1981 lb

4192 lb

4192 lb

2911 lb

0 lb

0 lb

1440 lb

250 lb

0 lb

0 lb

16 lb

0 lb

14981 lb

Structure Notes:

1. PER ASTM C-478 SPECIFICATIONS

2. CONCRETE: 4,000 PSI AT 28 DAYS

3. REINFORCEMENT: PER ASTM A615

4. INVERT CHANNEL REQUIRED

5. STEPS AT 0 DEGREES

6. JBS 1150 FRAME & COVER "SANITARY" SUPPLIED BY ICAST

INVERT CHANNEL DRAWING

FULL HEIGHT INVERT

Structure Total:

14981 lb

Rim: 733'

Rim to Invert: 14.87'

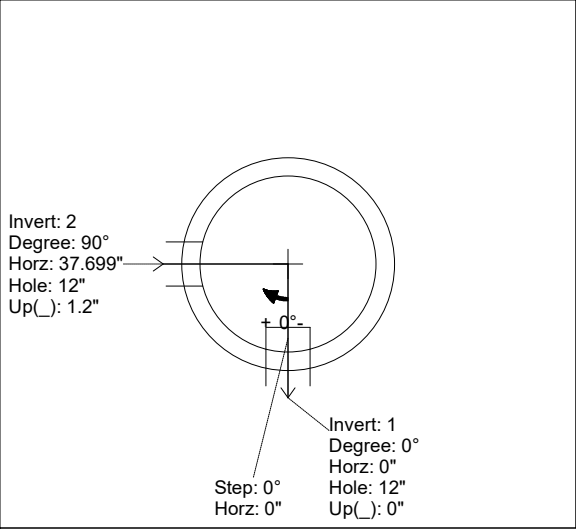
Slack: 0.44"

Sump: 3"

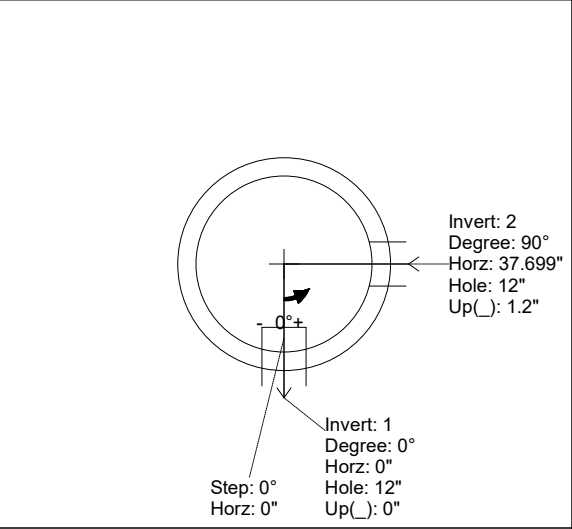
Step Position: 0°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	718.13'	0°	0"	6" PVC SDR35	6.25"	PSX 12-06 NYLO	12"	12.129"	0"	0"
Invert 2	718.23'	90°	45.553"	6" PVC SDR35	6.25"	PSX 12-06 NYLO	12"	12.129"	1.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

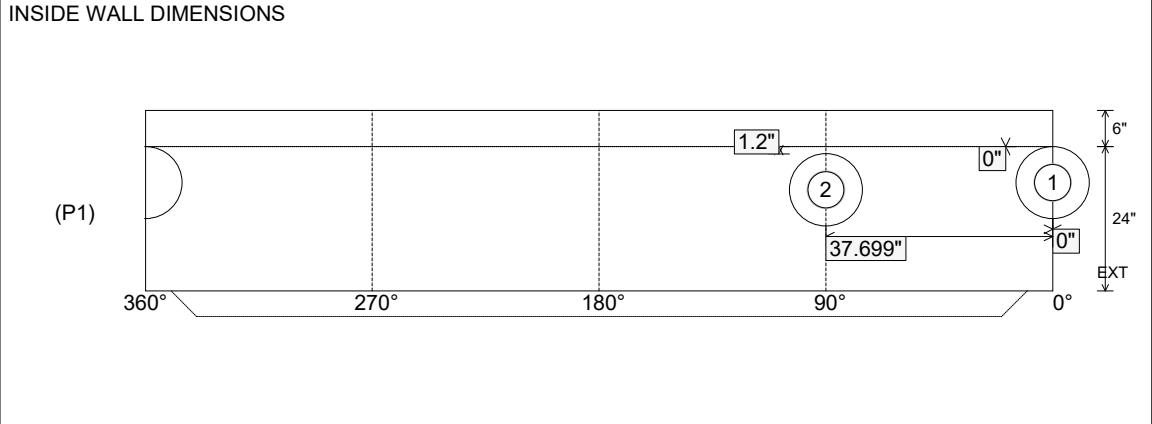
RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: n/a

Wall Thickness: 5"

Floor Height: 6"

Height (Int): 24"

Height (Ext): 30"

Weight (Net): 2911 lb

Volume (Net): 0.74cu.yd

Job Name: 25-1401 Irwin Landing Ph. 1

Job Location: Murfreesboro, TN

Contractor: Bear Construction LLC

Plant: Beaver Dam

6/9/2026 10:46:25 AM

Tech: S. Felletter

PC: Erica Bradley



Structure ID: R49

P2 MH060RS48

MH RISER T/G

P5) 24" - CASTING HEIGHT - 7"

P4) 24" - GRADE RING F/F - 6"

P3) 60" - MH FLAT TOP w/ 24" ECC Hole F/G - 13"

P2) 60" - MH RISER T/G - 48"

P1) 60" - MH BASE T/h - 72"

1) 60" - STORM INVERT CHANNEL - 1/4 HEIGHT

1) CASTING - JBS 1150 F/C STORM

2) 60" - Conseal CS-102 1.00"

2) Hole - 48

10) MH Step ML-10-TDS-NCR - 10"

0 lb

405 lb

2869 lb

5011 lb

8196 lb

1700 lb

250 lb

0 lb

0 lb

0 lb

Structure Total: 18431 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.

2. CONCRETE = 4,000 PSI AT 28 DAYS.

3. CASTING BY ICAST (JBS 1150 F/C "STORM").

REINFORCING PER ASTM A615 (GRADE 60).

- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..

- RISER/WALLS (As .18)

- FLOOR (As .37) #5 BARS AT 10" C.C.E.W.

Rim: 579.59' Rim to Invert: 11.83' Slack: -0.04" Sump: 4" Step Position: 101°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (_)	Offset
Invert 1										
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

(P5)

(P4)

(P3)

(P2) <<

(P1)

RIGHT-SIDE UP VIEW (int. dimensions)

Step: 101°

Horz: 52.883"

+ 0°-

INSIDE WALL DIMENSIONS

0°90°180°270°360°

(P2)

EXT

48"

Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: Groove

Wall Thickness: 6"

Floor Height: 0"

Height (Int): 48"

Height (Ext): 48"

Weight (Net): 5011 lb

Volume (Net): 1.28cu.yd

Job Name: 26-1787 - Kroger Expansion

Job Location: Murray, KY

Contractor: Parker Excavating, LLC.

Plant: 100

7/22/2026 3:25:00 PM

Tech: J. Horsley

PC: J. Jarvis



Structure ID: C5 ST-CI

P1MH060BA48MH BASE T/n

P6) 6" x 36" - CASTING - Curb Back/Hood - 3.50"

P5) 30" x 36" - CASTING - Frame&Grate F/F - 6.50"

P4) 60" - MH FLAT TOP w/30"x36" Hole F/F - 8"

P3) 60" - MH RISER Custom Ht F/G - 60"

P2) 60" - MH RISER T/G - 48"

P1) 60" - MH BASE T/n - 48"

1) CASTING - JBS 2064-V SET (F/G/H)

3) 60" - Conseal CS-102 1.00"

1) Hole - 30

1) Hole - 24

4) Hole - 6

8) MH Step ML-10-TDS-NCR - 10"

0 lb

0 lb

2008 lb

6207 lb

5011 lb

7141 lb

500 lb

0 lb

0 lb

0 lb

0 lb

0 lb

Structure Total: 20867 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.

2. CONCRETE = 4,000 PSI AT 28 DAYS.

3. CASTING BY ICAST (JBS 2064 F/G/H).

REINFORCING PER ASTM A615 (GRADE 60).

- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..

- RISER/WALLS (As .18)

- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 503.99' Rim to Invert: 14.36' Slack: 0.27" Sump: 1.95" Step Position: 111°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	489.63'	0°	0"	24" HP STORM	28"	Hole 30	30"	31.416"	0"	0"
Invert 2	490.13'	222°	139.5"	18" HP STORM	21.4"	Hole 24	24"	24.691"	6.375"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

(P6)

(P5)

(P4)

(P3)

(P2)

(P1) <<

RIGHT-SIDE UP VIEW (int. dimensions)

Step: 111°
Horz: 58.125"

Invert: 2
Degree: 222°
Horz: 116.25"
Hole: 24"
Up(): 6.375"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 30"
Up(): 0"

UPSIDE-DOWN VIEW (int. dimenions)

Step: 111°
Horz: 58.125"

Invert: 2
Degree: 222°
Horz: 116.25"
Hole: 24"
Up(): 6.375"

Invert: 1
Degree: 0°
Horz: 0"
Hole: 30"
Up(): 0"

INSIDE WALL DIMENSIONS

(P1)

6.375"

2

116.25"

360°

270°

180°

90°

0°

8"

48"

0"

EXT

Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: n/a

Wall Thickness: 6"

Floor Height: 8"

Height (Int): 48"

Height (Ext): 56"

Weight (Net): 7141 lb

Volume (Net): 1.82cu.yd

Job Name: 26-1787 - Kroger Expansion
Job Location: Murray, KY
Contractor: Parker Excavating, LLC.

Plant: 100

7/22/2026 3:26:53 PM

Tech: J. Horsley

PC: J. Jarvis



Structure ID: C3 ST-CI

P3 MH060LD08SP

MH FLAT TOP w/30"x36" Hole F/F

- P5) 6" x 36" - CASTING - Curb Back/Hood - 3.50"
P4) 30" x 36" - CASTING - Frame&Grate F/F - 6.50"
P3) 60" - MH FLAT TOP w/30"x36" Hole F/F - 8"
P2) 60" - MH RISER Custom Ht F/G - 43"
P1) 60" - MH BASE Custom Ht T/n - 36"
1) CASTING - JBS 2064-V SET (F/G/H)
1) 60" - Conseal CS-102 1.00"
1) 60" - Conseal CS-231 1.00"
1) Hole - 18
4) Hole - 6
3) MH Step ML-10-TDS-NCR - 10"

0 lb
0 lb
2008 lb
4432 lb
6362 lb
500 lb
0 lb
0 lb
0 lb
0 lb
0 lb

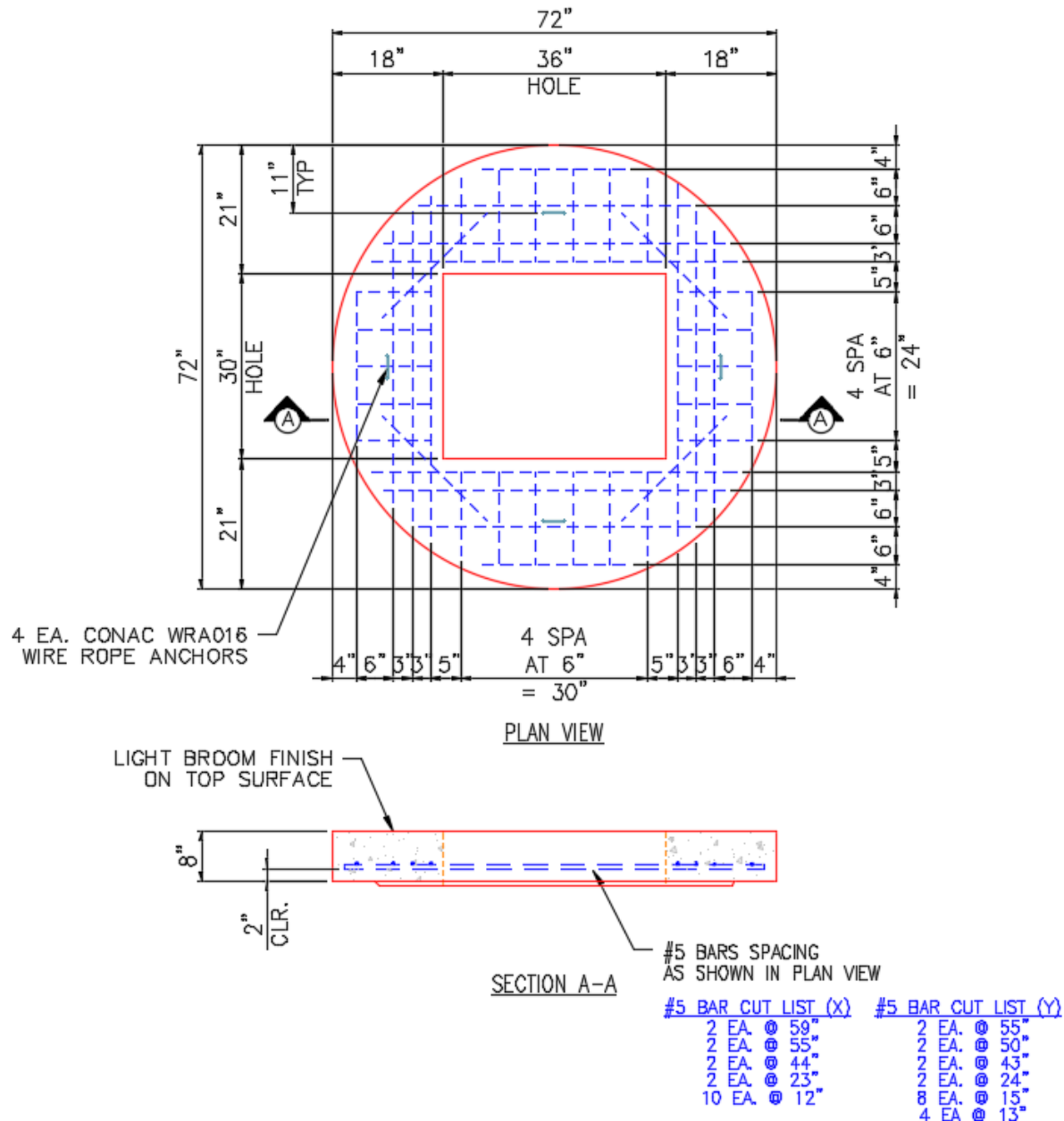
Structure Total: 13302 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (JBS 2064 F/G/H).

REINFORCING PER ASTM A615 (GRADE 60).

- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
- RISER/WALLS (As .18)
- FLOOR (As .37) #5 BARS AT 10" C.C.E.W.



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2008 lb
Volume (Net): 0.51cu.yd

Job Name: 25-3187 - Carter Caves WTP Upgrades Ph 3
Job Location: Olive Hill, KY
Contractor: Walker Principles

Plant: 100

7/6/2026 11:03:32 AM

Tech: J. Horsley

PC: E. Bradley



Structure ID: SCUM WW

P2 MH060RS72S

MH RISER SPECIAL

P4) 60" - MH FLAT TOP w/30"x30" Hatch - 13"
P3) 60" - MH RISER SPECIAL - 18"
P2) 60" - MH RISER SPECIAL - 72"
P1) 60" - MH BASE w/FLANGE (08F/07EF) - 43"
3) JOINT WRAP - 12" WD x 096" MAC WRAP
1) HATCH (Alum.) - HALLIDAY W1S 30"x30"
1) SECONDARY POUR - EXT. FLANGE
3) 60" - Conseal CS-231 1.00" (Double)
1) Z-Lok - C107-3
2) A-Lok - 0225
1) A-Lok - 0150

2455 lb
1879 lb
7442 lb
8388 lb
0 lb
62 lb
0 lb
0 lb
1 lb
2 lb
1 lb

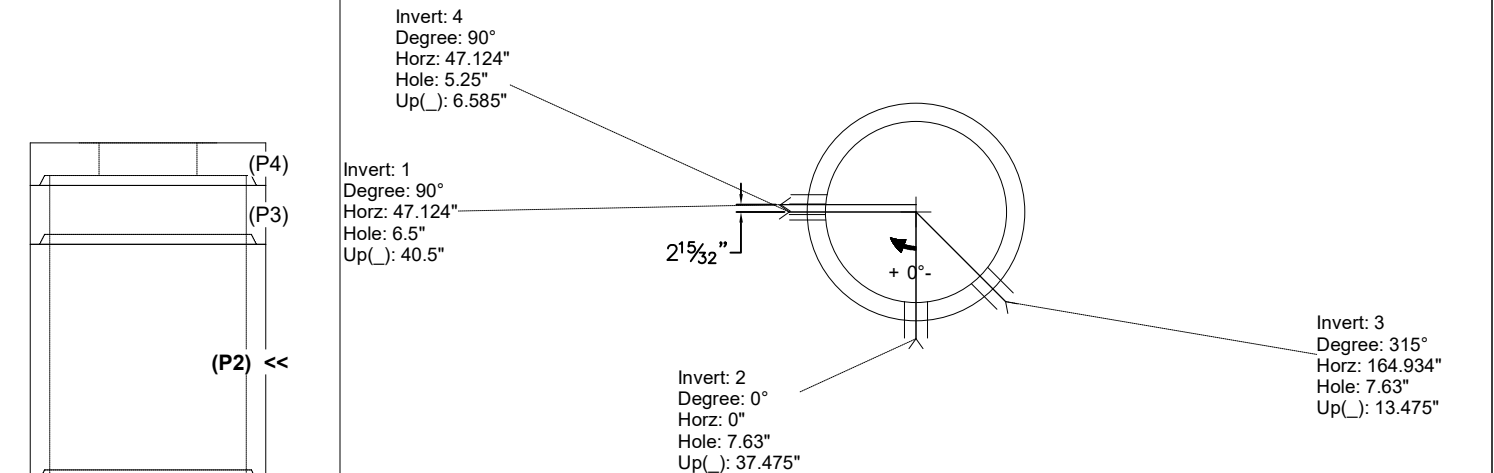
Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,500 PSI AT 28 DAYS.
3. NO STEPS / NO INVERT CHANNEL.
4. HATCH BY ICAST (HALLIDAY W1S 30"x30")
REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
- RISER/WALLS (As .18)
- FLOOR (As .47) #5 BARS AT 8" C.C.E.W.

Structure Total: 20230 lb

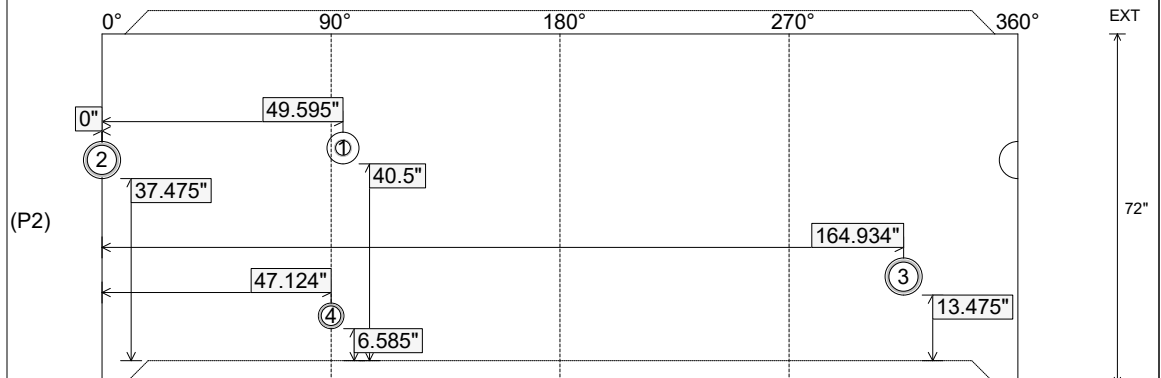
Rim: 890.5' Rim to Invert: 7.59' Slack: 0.04" Sump: 54.96" Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	885.83'	90°	59.019"	3" DI	3.5"	Z-Lok C107-3	6.5"	6.535"	40.5"	2.469"
Invert 2	885.5'	0°	0"	6" DI	6.875"	A-Lok 0225	7.63"	7.651"	37.475"	0"
Invert 3	883.5'	315°	197.92"	6" DI	6.875"	A-Lok 0225	7.63"	7.651"	13.475"	0"
Invert 4	882.91'	90°	56.549"	4" DI	4.75"	A-Lok 0150	5.25"	5.257"	6.585"	0"
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: Groove

Wall Thickness: 6"
Floor Height: 0"

Height (Int): 72"
Height (Ext): 72"

Weight (Net): 7442 lb
Volume (Net): 1.9cu.yd

Job Name: 25-3118 - W6 Ph 2-C Force Main Improvements
Job Location: Fort Mitchell, KY 41017
Contractor: Lykins Contracting

Plant: 100

3/27/2026 11:40:23 AM

Tech: J. Horsley - A

PC: Celina Goff



Structure ID: 2301554

P2 MH060TS15-48ECC

MH Transition Slab 48" Hole T/G

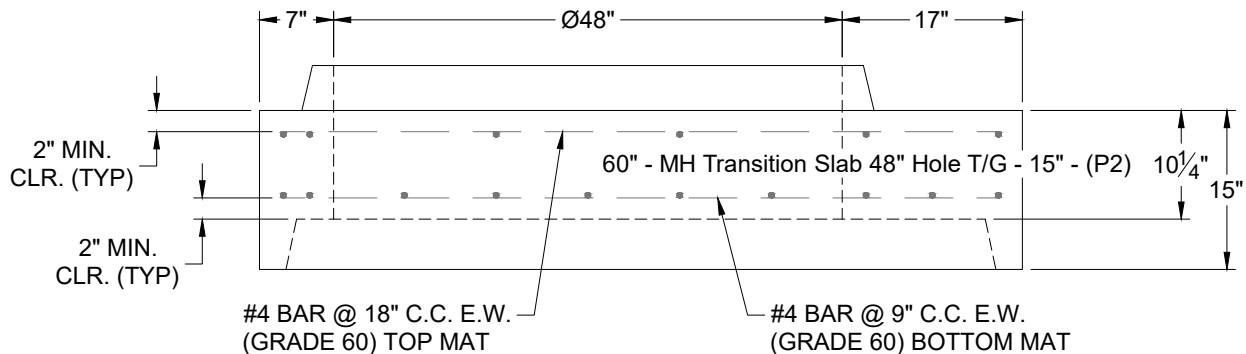
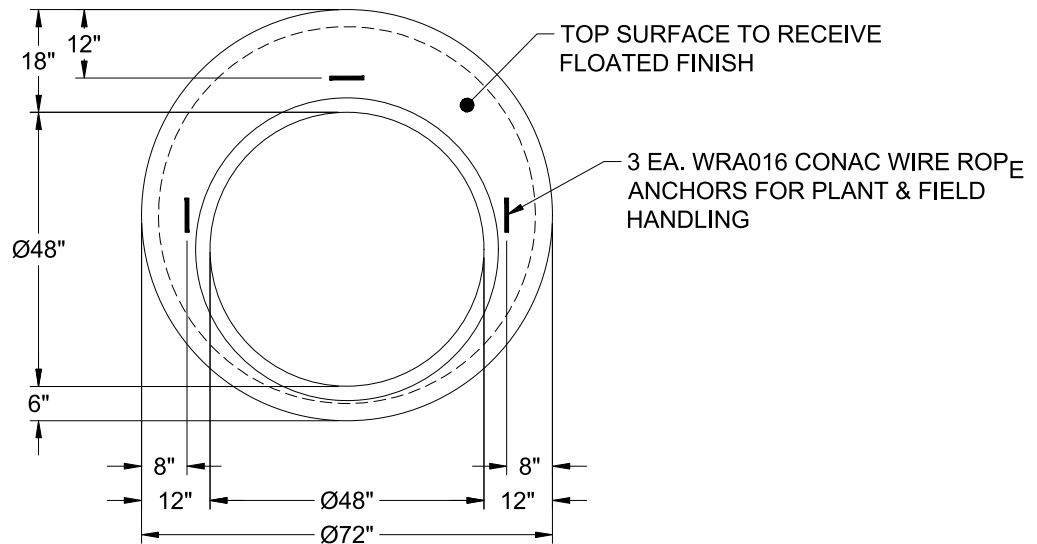
P5) 24" - CASTING HEIGHT - 7"
P4) 48" - CON CONE w/24" HOLE F/G - 24"
P3) 48" - MH RISER T/G - 48"
P2) 60" - MH Transition Slab 48" Hole T/G - 15"
P1) 60" - MH BASE Custom Ht T/n - 69"
1) 60" - MH INVERT CHANNEL - FULL HEIGHT
1) 60" - Conseal CS-102 1.00" (Double)
2) 48" - Conseal CS-102 1.00" (Double)
2) A-Lok - 1235
12) MH Step ML-10-TDS-NCR - 10"

Structure Total:

0 lb
2252 lb
3353 lb
2204 lb
8582 lb
2692 lb
0 lb
0 lb
2 lb
0 lb
19085 lb

Structure Notes:

1. PER ASTM C-478 SPECIFICATIONS
2. CONCRETE: 4,000 PSI AT 28 DAYS
3. REINFORCEMENT - 2" MIN. REBAR CLEARANCE (TYP):
 - TOP MAT: #4 BAR @ 18" C.C. E.W. (GRADE 60)
 - BOTTOM MAT: #4 BAR @ 9" C.C. E.W. (GRADE 60)
4. 7" CASTING SUPPLIED BY OTHERS
5. LIFTERS: 3 EA. WRA016 CONAC WIRE ROPE ANCHORS FOR PLANT & FIELD HANDLING
6. TOP SURFACE TO RECEIVE FLOATED FINISH



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: Groove

Wall Thickness: 6"

Height (Ext): 15"

Weight (Net): 2204 lb
Volume (Net): 0.56cu.yd

Job Name: 26-3009 ADS FedEx Mt. Juliet
Job Location: Mt. Juliet, TN
Contractor: ADS Advanced Drainage Systems, Inc.

Plant: Beaver Dam
7/23/2026 8:35:20 AM

Tech: S. Felletter
PC: T. Ryan



Structure ID: S07

P4 MH096LD10S

MH FLAT TOP w/ 24" Conc. Hole F/F

P5) 24" - CASTING HEIGHT - 7"
P4) 96" - MH FLAT TOP w/ 24" Conc. Hole F/F - 10"
P3) 96" - MH RISER Custom Ht F/G - 57"
P2) 96" - MH RISER T/G - 66"
P1) 96" - MH BASE Custom Ht T/n - 40"
1) ASSEMBLY REQUIRED - BRACKETS ONLY
1) CASTING - HOE MC-375 F/C Storm
3) 96" - Conseal CS-102 1.00"
1) 24" - Conseal CS-102 1.00"
2) Hole - 30

0 lb
8185 lb
13117 lb
16442 lb
16817 lb
0 lb
271 lb
0 lb
0 lb
0 lb

54831 lb

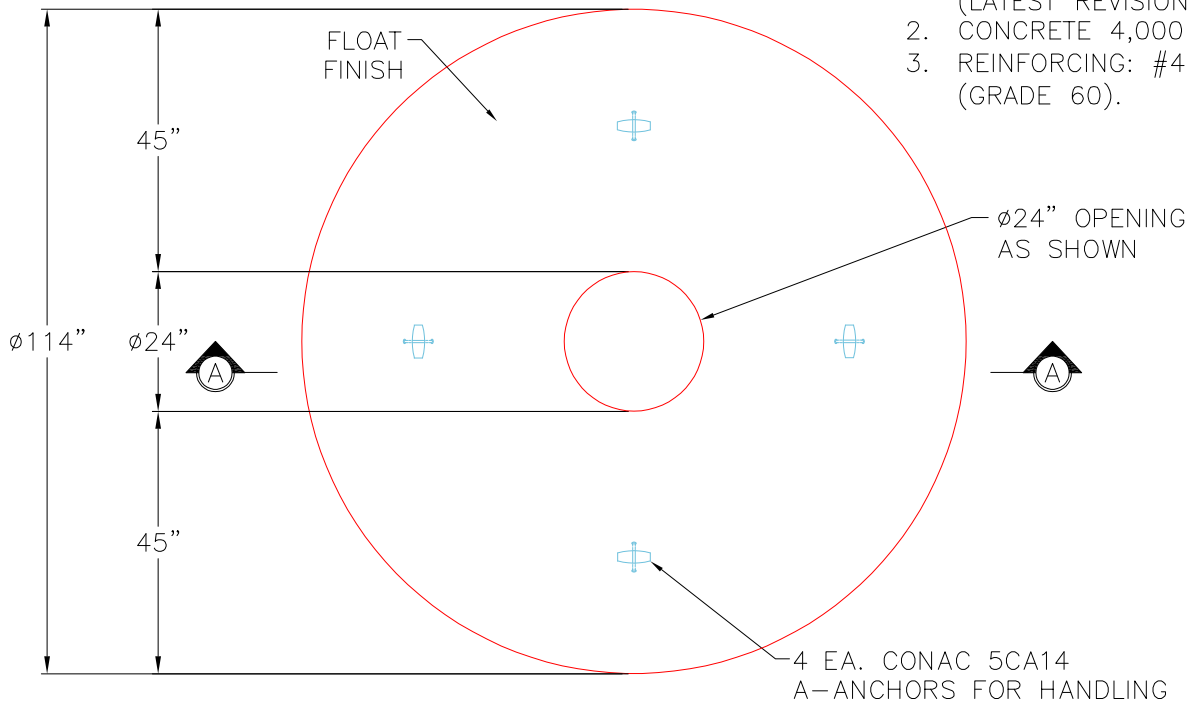
Structure Total:

Structure Notes:
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (HOE MC-375 F/C "STORM").
4. LIFTING ANCHORS TO BE INSTALLED ON THE OUTSIDE OF THE STRUCTURE.
5. ASSEMBLY REQUIRED - BRACKETS ONLY.

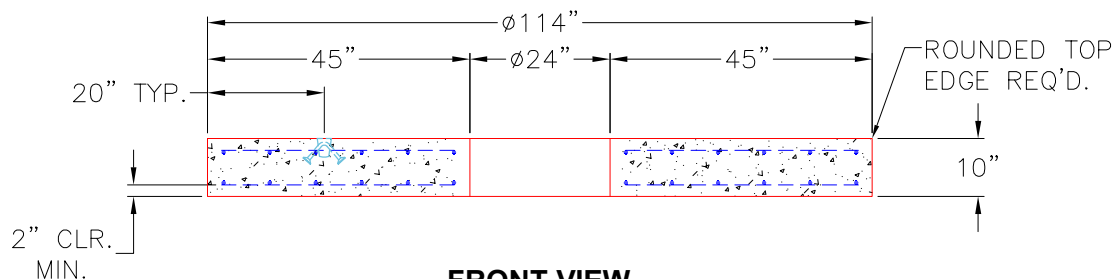
REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
- RISER/WALLS (As .24)
- FLOOR (As .47) #5 BARS AT 8" C.C.E.W.

GENERAL NOTES:

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE 4,000 PSI AT 28 DAYS.
3. REINFORCING: #4 BAR @ 6" C.C.E.W. (GRADE 60).



TOP VIEW



FRONT VIEW

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 9"

Height (Ext): 10"

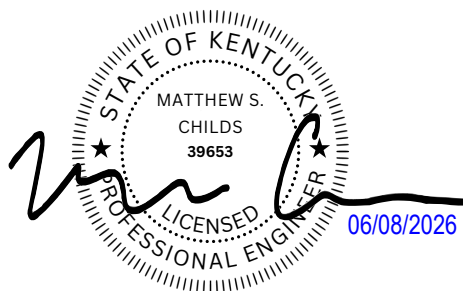
Weight (Net): 8185 lb
Volume (Net): 2.09cu.yd



BOX CULVERT (12W/12F/12T) T/G

Weight (Net): 48363 lb
Volume (Net): 12.35cu.yd

Project: Mooch Road
Product: 14' x 12' Box Culvert
Job: 26-2254
Design No.:
Location: Wilder, KY
Reference #:



MATT CHILDS ENGINEERING, PLLC

Project : City of Wilder
Task : 14x12 15' Fill
Job No. :

Client: ICast
File: 20260605-ICast-CityofWilder-14x12(15'Fill).etcx

Sht ____ of ____
By:MBJ
Ck:
6/5/2026 4:35:08 PM
p. 1 of 2

Spec.: LRFD 9th ed.
Type of Culvert: Precast

Physical Dimensions

Clear Span:	14'-0"
Clear Height:	12'-0"
Top Slab:	1'-0"
Bottom Slab:	1'-0"
Ext. Wall:	1'-0"
Fill Depth:	15.00 ft
Length:	4'-0"
Skew Angle:	0.00 deg
Bottom Slab Support:	Full Slab
Top Haunch, Width:	1'-0"
Top Haunch, Height:	1'-0"
Bottom Haunch, Width:	1'-0"
Bottom Haunch, Height:	1'-0"

Material Properties

Concrete	
Strength, f _c :	5.000 ksi
Density:	0.150 kcf
Elasticity, E _c :	3834 ksi
Type:	Normal wt
Steel	
Yield, f _y :	65 ksi
Allow Stress:	39 ksi
Elasticity, E _s :	29000 ksi
Soil	
Density:	0.120 kcf
Exposure Factor	
Class 2 Exposure	
Reinforcement Covers	
Ext. Cover Top Slab:	1"
Ext. Cover Bottom Slab	1"
Ext. Cover Walls	1"
Int. Cover Walls	1"
Int. Cover Top Slab	1"
Int. Cover Bottom Slab	1"

Controlling Ratings

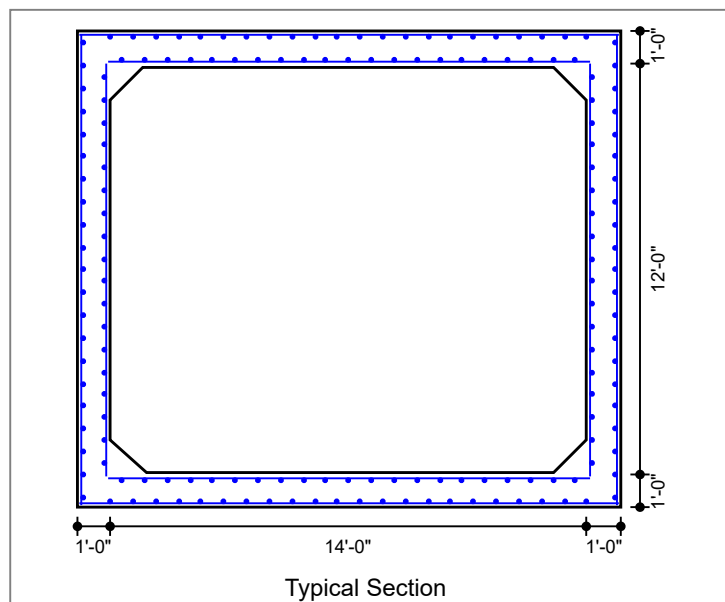
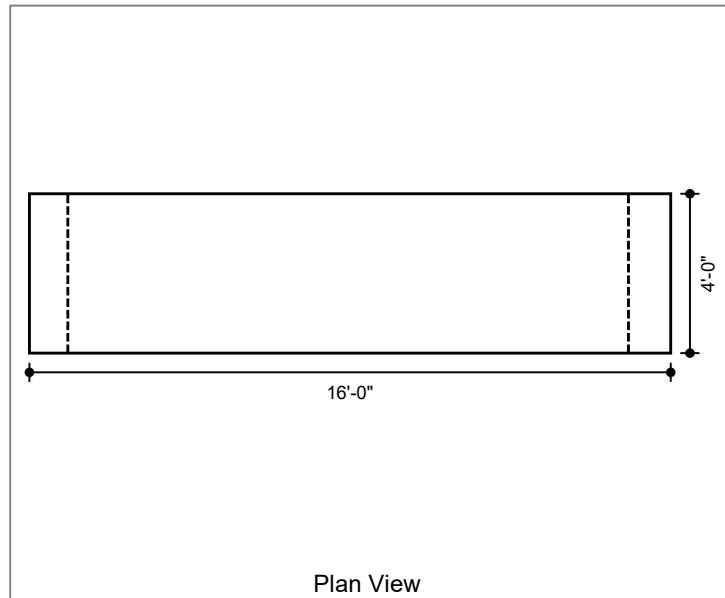
Inventory Rating: 5.85
Operating Rating: 7.59

Loads

Live Load	
Vehicle Names:	HL-93
Traffic Direction:	Parallel
Eq. Height of Soil:	2.00 ft (Calc'd)
Dead Load	
Future Wearing Surface:	0.000 klf
Additional Dead Load:	0.000 klf
Concentrated Loads:	none

Lateral Soil Loads	
Eq. Fluid Press. Max:	60.00 pcf
Eq. Fluid Press. Min:	30.00 pcf

Interior Water Pressure:	yes, head pressure = 0 ft
Exterior Water Pressure:	no



MATT CHILDS ENGINEERING, PLLC

Sht ____ of ____

By:MBJ

Ck:_____

6/5/2026 4:35:09 PM

p. 2 of 2

Project : City of Wilder

Task : 14x12 15' Fill

Job No. :

Client: ICast

File: 20260605-ICast-CityofWilder-14x12(15'Fill).etcx

Concrete Summary

Volume of Concrete: 2.148 cy/ft Total Volume of Concrete: 8.593 cy

Reinforcing Steel Bar Schedule (lb)

Location	Mark	Sheets Included	As Provided
Top Slab(Int)	A100 (AS2)	Top	1.200
Bot Slab(Int)	A200 (AS3)	Bot	1.290
Top Slab(Ext)	A300 (AS7)	Top	0.300
Bot Slab(Ext)	A400 (AS8)	Bot	0.300
Corner(Top)	A1 (AS1)	Top	0.780
Corner(Bot)	A2 (AS1)	Bot	0.780
Wall(Int)	B1 (AS4)	L&R	0.300
Wall(Ext)	B2 (AS1)	L&R	0.780
Longit. Top (Int)	C100 (AS5)	Top	0.150
Longit. Bot (Int)	C200	Bot	0.150
Longit. Top (Ext)	C1 (AS6)	Top	0.150
Longit. Bot (Ext)	C1 (AS6)	Bot	0.150
Longit. Wall (Ext)	C1 (AS6)	L&R	0.150
Longit. Wall (Int)	C1 (AS6)	L&R	0.150

Job Name: 26-2279 - Keenland Trace Unit 14

Job Location: Owensboro, KY

Contractor: Winwater Hartford KY Co.

Plant: 100

7/29/2026 2:14:48 PM

Tech: Jared - F

PC: A. Chambers



Structure ID: I-B10 ST-DCI

P1 BX2472-08BAVF

BOX BASE 8inW, 8inF, Variable Ht

P2) 24" x 72" - CASTING HEIGHT - 6"

P1) 24" x 72" - BOX BASE 8inW, 8inF, Variable Ht - 35"

1) CASTING - HOE 525 DBL SET FLAT GRATE (F/G/H)

1) 24" x 72" - Conseal CS-102 1.00"

1) Hole - 18

0 lb

7437 lb

442 lb

0 lb

0 lb

0 lb

Structure Total: 7879 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.

2. CONCRETE = 4,000 PSI AT 28 DAYS.

3. NO STEPS AND NO INVERT CHANNEL.

4. CASTING BY ICAST (HOE 525 DBL SET FLAT GRATE (F/G/H)).

REINFORCING PER ASTM A615 (GRADE 60).

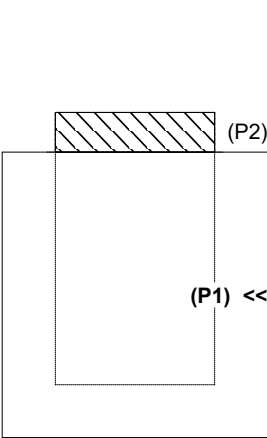
- WALLS (As .12) #5 BARS AT 12" C.C.E.W.

- FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

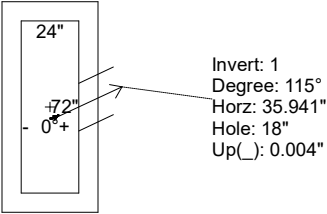
Rim: 392.39' Rim to Invert: 3.26' Slack: 0.124" Sump: 2.004" Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	389.13'	115°	47.671"	12" RCP B WALL	16"	Hole 18	18"	19.861"	0.004"	-5.125"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

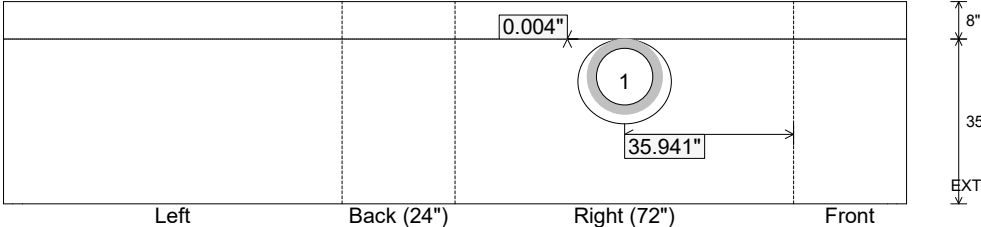
RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):

Coating (Ext):

Seam Up: Flat

Seam Dn: n/a

Wall Thickness: 8"

Floor Height: 8"

Height (Int): 35"

Height (Ext): 43"

Weight (Net): 7437 lb

Volume (Net): 1.9cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
 Job Location: Owensboro, KY
 Contractor: Winwater Hartford KY Co.

Plant: 100
 7/29/2026 1:59:42 PM

Tech: Jared - F
 PC: A. Chambers



Structure ID: I-B8 ST-CI

P1 BX2436-08BVF

BOX BASE 8inW, 8inF, Variable Ht

- P2) 24" x 36" - CASTING HEIGHT - 6"
 P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht - 27"
 1) CASTING - HOE 525 SET FLAT GRATE (F/G/H)
 1) 24" x 36" - Conseal CS-102 1.00"
 2) Hole - 18"

Structure Notes:
 1. PER ASTM C913 SPECIFICATIONS.
 2. CONCRETE = 4,000 PSI AT 28 DAYS.
 3. NO STEPS AND NO INVERT CHANNEL.
 4. CASTING BY ICAST (HOE 525 SET FLAT GRATE (F/G/H)).

REINFORCING PER ASTM A615 (GRADE 60).
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

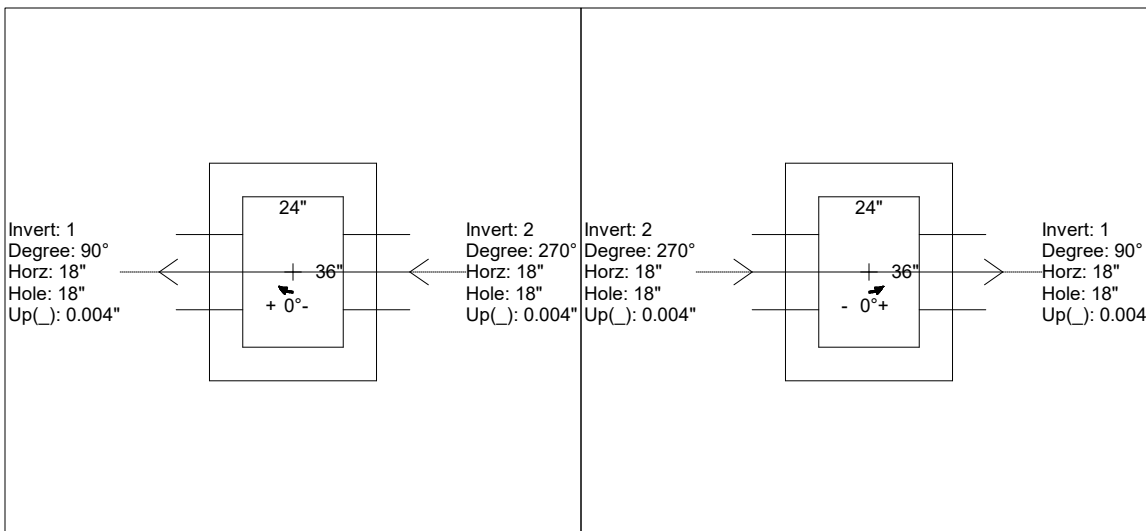
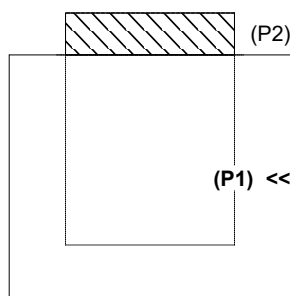
Structure Total: 4252 lb

Rim: 392.28' Rim to Invert: 2.61' Slack: 0.324" Sump: 2.004" Step Position:

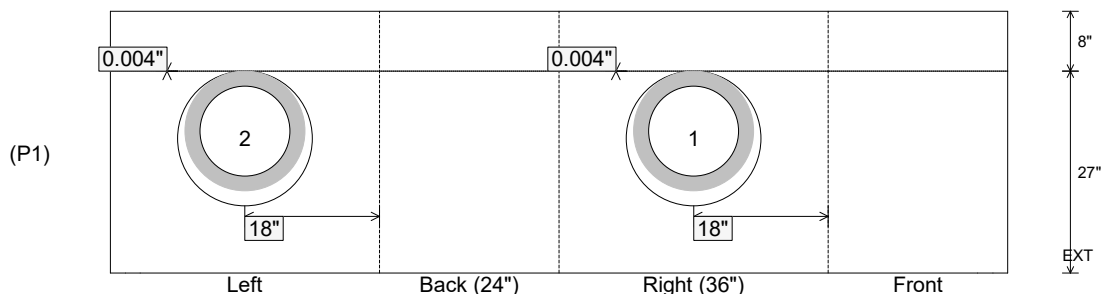
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	389.67'	90°	26"	12" RCP B WALL	16"	Hole 18	18"	18"	0.004"	0"
Invert 2	389.67'	270°	26"	12" RCP B WALL	16"	Hole 18	18"	18"	0.004"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: n/a

Wall Thickness: 8"
 Floor Height: 8"

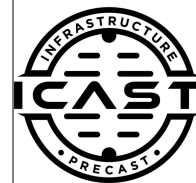
Height (Int): 27"
 Height (Ext): 35"

Weight (Net): 3810 lb
 Volume (Net): 0.97cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100
7/29/2026 1:59:41 PM

Tech: Jared - F
PC: A. Chambers



Structure ID: I-C2 ST-CI

P1 BX2436-08BVF

BOX BASE 8inW, 8inF, Variable Ht

P2) 24" x 36" - CASTING HEIGHT - 6"
P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht - 33"
1) CASTING - HOE 525 SET FLAT GRATE (F/G/H)
1) 24" x 36" - Conseal CS-102 1.00"
1) Hole - 22"

Structure Total: 4950 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS AND NO INVERT CHANNEL.
4. CASTING BY ICAST (HOE 525 SET FLAT GRATE (F/G/H)).

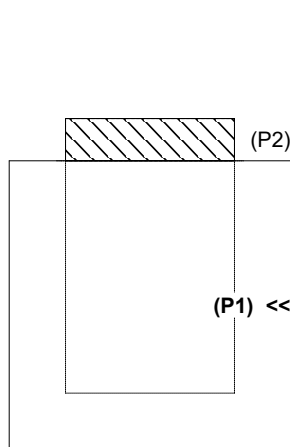
REINFORCING PER ASTM A615 (GRADE 60).
- WALLS (As .12) #5 BARS AT 12" C.C.E.W.
- FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

Rim: 391.76' Rim to Invert: 3.11' Slack: 0.57" Sump: 2.25" Step Position:

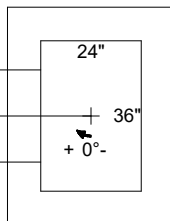
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	388.65'	90°	26"	15" RCP B WALL	19.5"	Hole 22	22"	22"	0"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

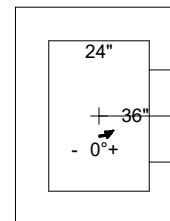
UPSIDE-DOWN VIEW (int. dimensions)



Invert: 1
Degree: 90°
Horz: 18"
Hole: 22"
Up(): 0"

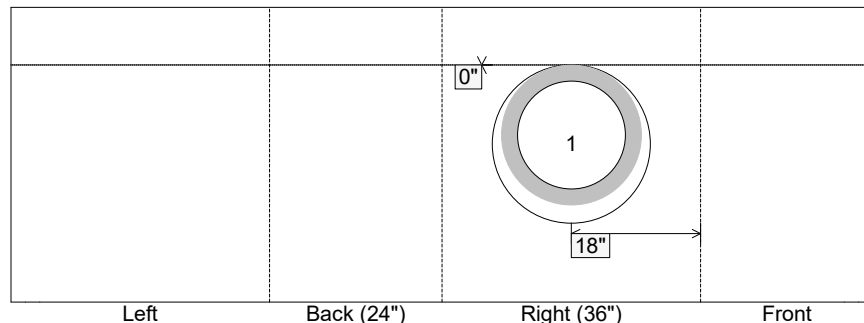


Invert: 1
Degree: 90°
Horz: 18"
Hole: 22"
Up(): 0"



INSIDE WALL DIMENSIONS

(P1)



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: n/a

Wall Thickness: 8"
Floor Height: 8"

Height (Int): 33"
Height (Ext): 41"

Weight (Net): 4508 lb
Volume (Net): 1.15cu.yd

Job Name: 26-2279 - Keenland Trace Unit 14
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100
7/29/2026 1:59:41 PM

Tech: Jared - F
PC: A. Chambers



Structure ID: I-C1 ST-CI

P1 BX2436-08BVF

BOX BASE 8inW, 8inF, Variable Ht

P2) 24" x 36" - CASTING HEIGHT - 6"
P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht - 35"
1) CASTING - HOE 525 SET FLAT GRATE (F/G/H)
1) 24" x 36" - Conseal CS-102 1.00"
2) Hole - 22"

Structure Total: 4899 lb

Structure Notes:
1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS AND NO INVERT CHANNEL.
4. CASTING BY ICAST (HOE 525 SET FLAT GRATE (F/G/H)).

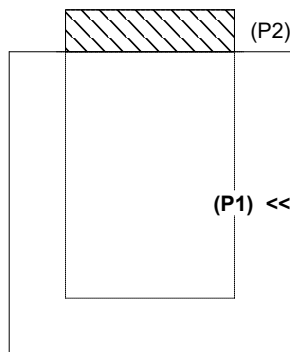
REINFORCING PER ASTM A615 (GRADE 60).
- WALLS (As .12) #5 BARS AT 12" C.C.E.W.
- FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

Rim: 391.76' Rim to Invert: 3.29' Slack: 0.73' Sump: 2.25' Step Position:

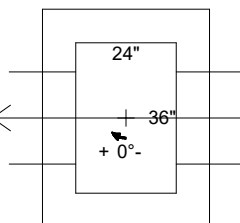
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	388.47'	90°	26"	15" RCP B WALL	19.5"	Hole 22	22"	22"	0"	0"
Invert 2	388.47'	270°	26"	15" RCP B WALL	19.5"	Hole 22	22"	22"	0"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

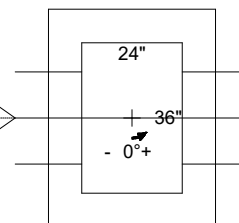


Invert: 1
Degree: 90°
Horz: 18"
Hole: 22"
Up(): 0"



Invert: 2
Degree: 270°
Horz: 18"
Hole: 22"
Up(): 0"

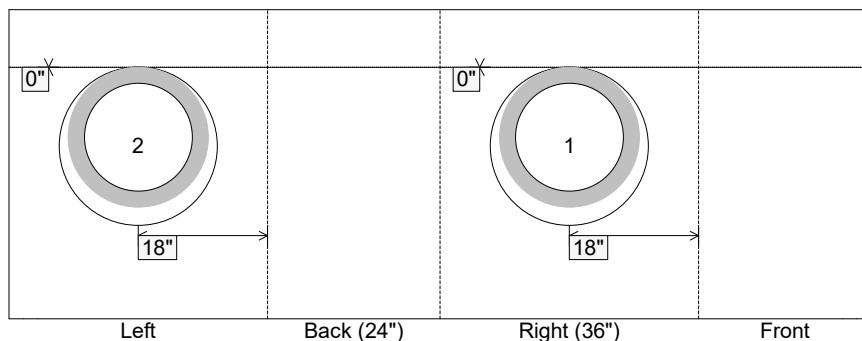
Invert: 2
Degree: 270°
Horz: 18"
Hole: 22"
Up(): 0"



Invert: 1
Degree: 90°
Horz: 18"
Hole: 22"
Up(): 0"

INSIDE WALL DIMENSIONS

(P1)



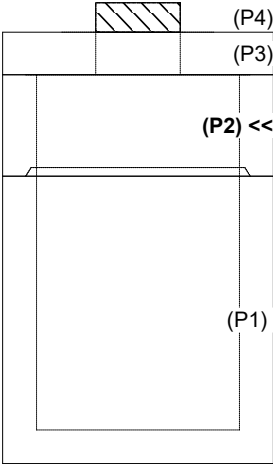
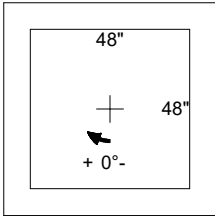
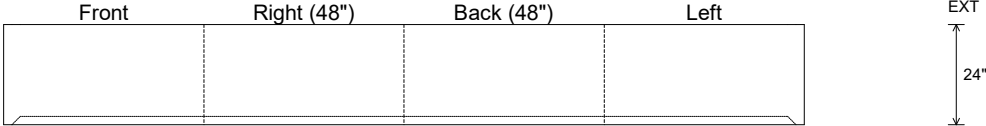
Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: n/a

Wall Thickness: 8"
Floor Height: 8"

Height (Int): 35"
Height (Ext): 43"

Weight (Net): 4457 lb
Volume (Net): 1.14cu.yd

Job Name: 25-1401 Irwin Landing Ph. 1 Job Location: Murfreesboro, TN Contractor: Bear Construction LLC					Plant: Beaver Dam 6/9/2026 10:46:24 AM		Tech: S. Felletter PC: Erica Bradley				
Structure ID: R43											
P2 BX4848-08R24 BOX RISER 8inW F/G											
P4) 20" x 34" - CASTING HEIGHT - 7" P3) 48" x 48" - BX FLAT LID 8"W - TDOT 10SB (20"x34" Hole) F/F - 10" P2) 48" x 48" - BOX RISER 8inW F/G - 24" P1) 48" x 48" - BOX BASE 8inW, 8inF T/n - 60" 1) 48" x 48" - STORM INVERT CHANNEL (FLAT) - 4" THK 1) CASTING - JBS 3123 MODIFIED SET 2) 48" x 48" - SGL 1"x14.5' Butyl (2x) 2) Hole - 46 1) Hole - 26						0 lb 2866 lb 3609 lb 9184 lb 450 lb 250 lb 0 lb 0 lb 0 lb ----- Structure Total: 16359 lb		Structure Notes: 1. PER TDOT D-CB-10SB / ASTM C913 SPEC'S. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. CASTING BY ICAST (JBS-3123 MOD SET). REINFORCING PER ASTM A615 (GRADE 60). ** SEE TDOT STD DRAWING D-CB-10SB ** - TOP SLAB - DBL MAT #5 BARS. - WALLS (As .47) #5 BARS AT 8" C.C.E.W. - FLOOR (As .47) #5 BARS AT 8" C.C.E.W.			
Rim: 569.45' Rim to Invert: 8.15' Slack: 0.8" Sump: 4" Step Position:											
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (_)	Offset	
Invert 1											
Invert 2											
Invert 3											
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											
 RIGHT-SIDE UP VIEW (int. dimensions)  INSIDE WALL DIMENSIONS 											
Coating (Int): Coating (Ext):				Seam Up: Flat Seam Dn: Groove		Wall Thickness: 8" Floor Height: 0"		Height (Int): 24" Height (Ext): 24"		Weight (Net): 3609 lb Volume (Net): 0.92cu.yd	

Job Name: 26-2509 - Airpark Expansion Industrial Subdivision
 Job Location: Owensboro, KY 42301
 Contractor: Koberstein Contracting, Inc.

Plant: 100

7/20/2026 10:55:16 AM

Tech: Jared - F

PC: A. Chambers



Structure ID: AA-2 ST-DCI

P1 BX2472-08BAVF

BOX BASE 8inW, 8inF, Variable Ht F/n

- P2) 24" x 72" - CASTING HEIGHT - 6"
 P1) 24" x 72" - BOX BASE 8inW, 8inF, Variable Ht F/n - 36"
 1) CASTING - HOE 525 DBL SET FLAT GRATE (F/G/H)
 2) 24" x 72" - Conseal CS-102 1.00"
 4) Hole - 32

0 lb
 6831 lb
 442 lb
 0 lb
 0 lb

 Structure Total: 7273 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS AND NO INVERT CHANNEL.
4. CASTING BY ICAST (HOE 525 DBL SET FLAT GRATE (F/G/H)).

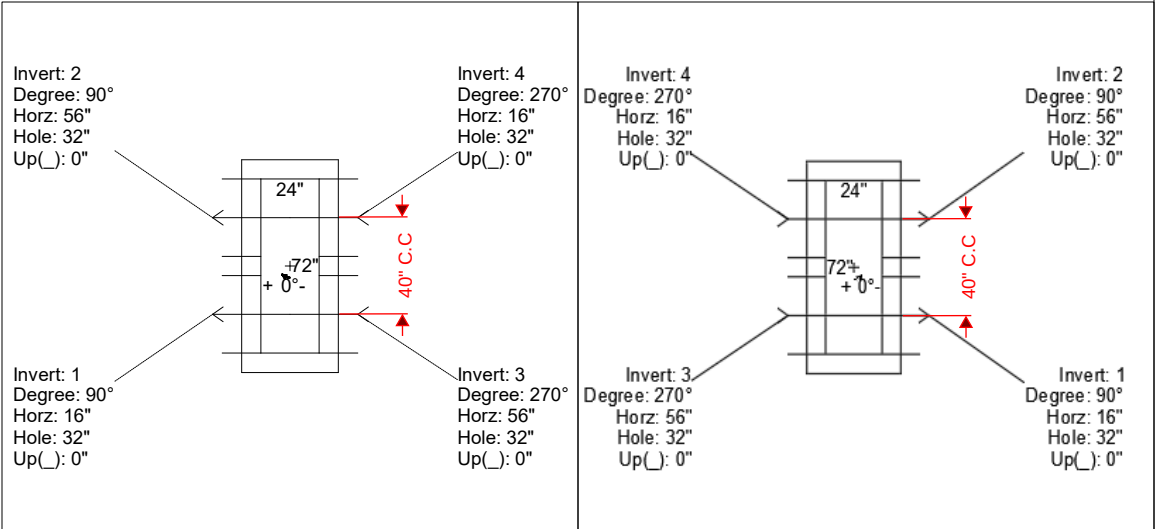
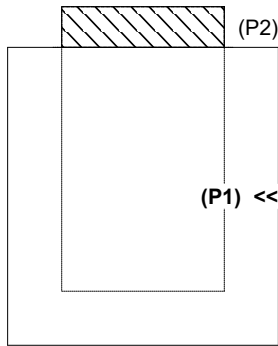
REINFORCING PER ASTM A615 (GRADE 60).
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

Rim: 393.52' Rim to Invert: 3.33' Slack: 0.96" Sump: 3" Step Position:

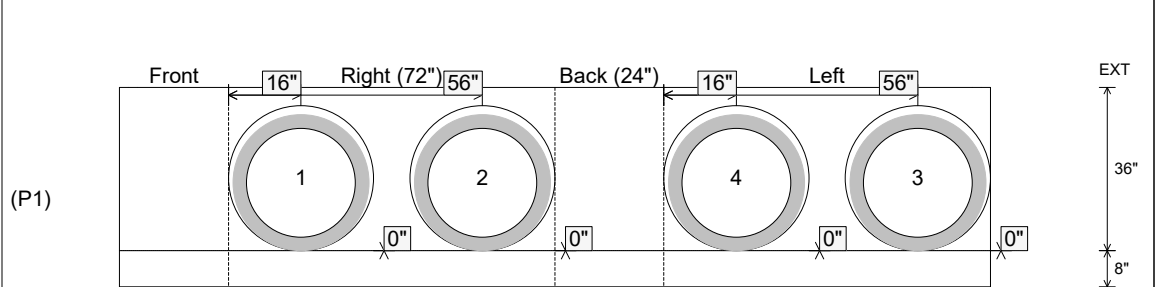
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	390.19'	90°	24"	24" RCP B WALL	30"	Hole 32	32"	32"	0"	-20"
Invert 2	390.19'	90°	64"	24" RCP B WALL	30"	Hole 32	32"	32"	0"	20"
Invert 3	390.19'	270°	64"	24" RCP B WALL	30"	Hole 32	32"	32"	0"	20"
Invert 4	390.19'	270°	24"	24" RCP B WALL	30"	Hole 32	32"	32"	0"	-20"
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Flat
 Seam Dn: n/a

Wall Thickness: 8"
 Floor Height: 8"

Height (Int): 36"
 Height (Ext): 44"

Weight (Net): 6831 lb
 Volume (Net): 1.74cu.yd

Job Name: 24-4208 - KYTC Christian Co. Call 100 (ID 241018)

Job Location: Hopkinsville, KY

Contractor: Scotty's Contracting & Stone, LLC

Plant: Beaver Dam

6/26/2026 7:36:03 AM

Tech: J. Horsley

PC: C. Goff



Structure ID: 224

P1 BX24300808VF

BOX BASE 8inW, 8inF, Variable Ht F/n

P2) 24" x 30" - CASTING HEIGHT - 3.75"

P1) 24" x 30" - BOX BASE 8inW, 8inF, Variable Ht F/n - 32"

1) CASTING - HOE KY-460-11 F/G (DBI 11)

1) 24" x 30" - Conseal CS-102 1.00"

1) Hole - 20

0 lb

4032 lb

421 lb

0 lb

0 lb

Structure Total: 4453 lb

Structure Notes:

** KYTC STATE PROJECT **

STATION: 420+85 RT

1. PER KYTC DBI TYPE 11 / ASTM C-913 SPECS

2. CONCRETE: 4,000 PSI AT 28 DAYS

3. REINFORCEMENT: #5 BAR @ 12" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)

4. HOE KY-460-11 FRAME & GRATE SUPPLIED BY ICAST

Rim: 552.3'

Rim to Invert: 3'

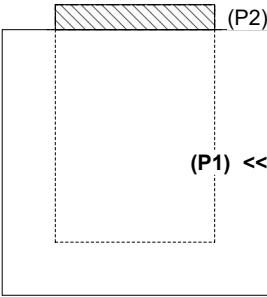
Slack: 0.25"

Sump: 0"

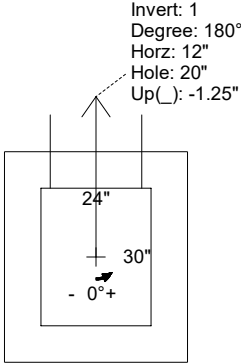
Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	549.3'	180°	20"	15" HDPE	17.6"	Hole 20	20"	20"	-1.25"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

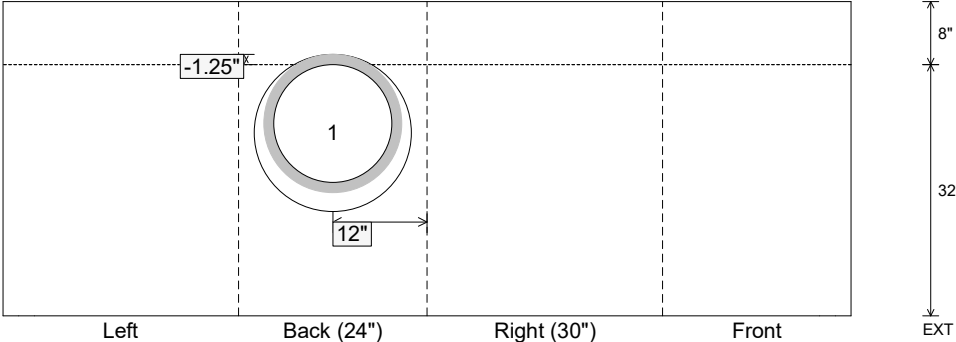
RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):

Coating (Ext):

Seam Up: Flat

Seam Dn: n/a

Wall Thickness: 8"

Floor Height: 8"

Height (Int): 32"

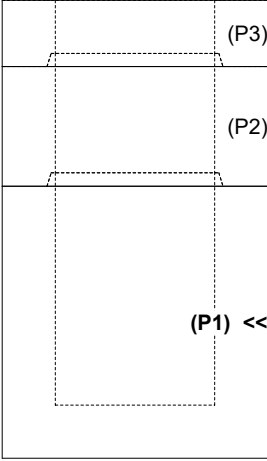
Height (Ext): 40"

Weight (Net): 4032 lb

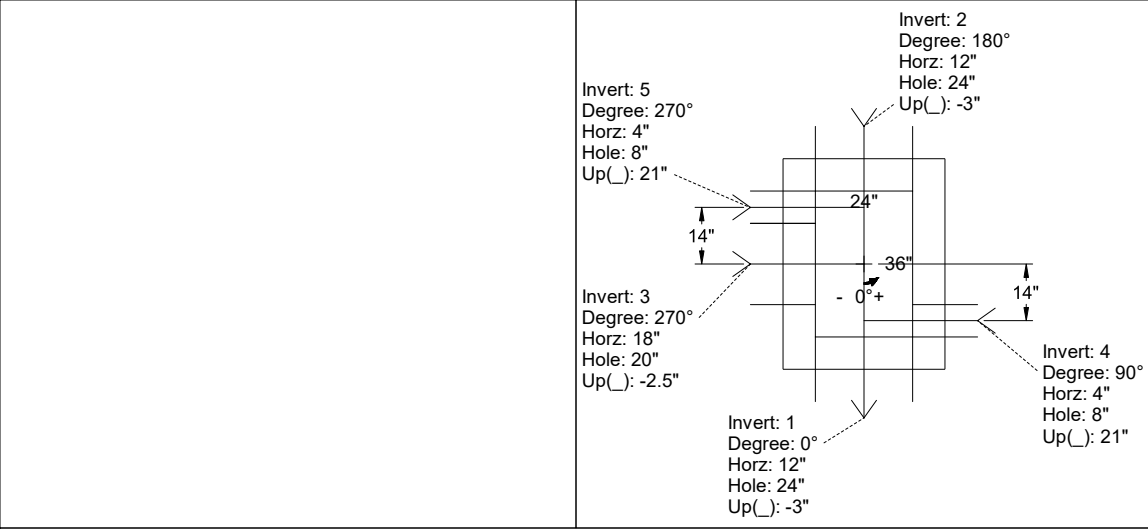
Volume (Net): 1.03cu.yd

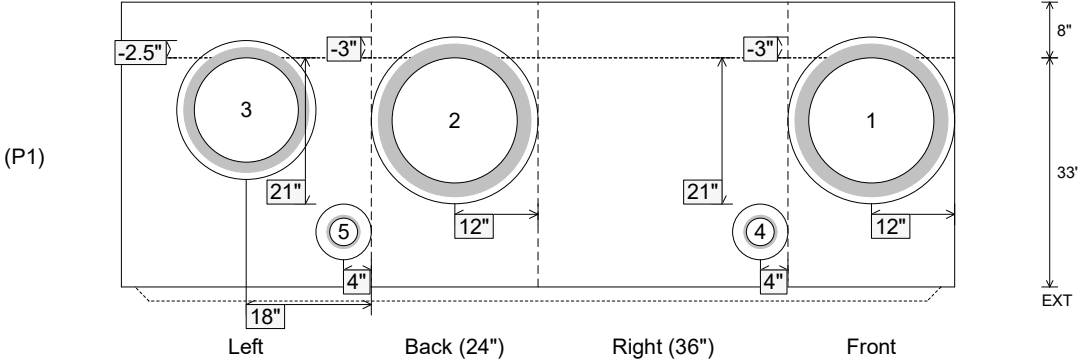
Job Name: 25-3193 - KYTC Kenton Co Call 328 (251320) Job Location: Independence, KY Contractor: Eaton Asphalt					Plant: 100 6/4/2026 4:51:09 PM		Tech: Jared - A PC: J. Jarvis					
Structure ID: 572												
P1		BX2436-08BVF		BOX BASE 8inW, 8inF, Variable Ht T/n								
P3) 24" x 120" - CB INLET KY A 10' TOP LEFT F/G - 10" P2) 24" x 120" - CB INLET KY A 10' BOTTOM LEFT T/G - 18" P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht T/n - 33" 1) CASTING - HOE KY-206 F/C (KY TY1) 1) This Structure Includes a Cast-in Item - KY-206 Frame (Supplied by iCast) 1) 24" x 36" - Conseal CS-102 1.00" 2) Hole - 24 1) Hole - 20 2) Hole - 8					3400 lb 5270 lb 4165 lb 206 lb 0 lb 0 lb 0 lb 0 lb 0 lb		Structure Notes: ** KYTC STATE PROJECT ** 1. PER KYTC CBI TY A / ASTM C-913 SPECS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: #5 BAR @ 12" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP) 4. NO STORM INVERT 5. NO STEPS 6. KY-206 FRAME & COVER "STORM" SUPPLIED BY ICAST - FRAME TO BE CAST INTO TOP PHASE TOP FLANGE SIDE UP 7. INVERTS 4 & 5 OFFSET 14" FROM CENTER OF WALL					
Rim: 860.65'					Rim to Invert: 5.09'		Slack: 0.08"		Sump: 0"		Step Position:	
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset		
Invert 1	855.56'	0°	20"	18" ADS N-12	22"	Hole 24	24"	24"	-3"	0"		
Invert 2	855.56'	180°	20"	18" ADS N-12	22"	Hole 24	24"	24"	-3"	0"		
Invert 3	855.56'	270°	26"	15" ADS N-12	18"	Hole 20	20"	20"	-2.5"	0"		
Invert 4	857.48'	90°	12"	4" HDPE (perf pipe)	4.8"	Hole 8	8"	8"	21"	-14"		
Invert 5	857.48'	270°	12"	4" HDPE (perf pipe)	4.8"	Hole 8	8"	8"	21"	-14"		
Invert 6												
Invert 7												
Invert 8												

RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS					
					
Coating (Int): Coating (Ext):		Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 8" Floor Height: 8"	Height (Int): 33" Height (Ext): 41"	Weight (Net): 4165 lb Volume (Net): 1.06cu.yd

Job Name: 25-3193 - KYTC Kenton Co Call 328 (251320)

Job Location: Independence, KY

Contractor: Eaton Asphalt

Plant: 100

6/4/2026 4:51:07 PM

Tech: Jared - A

PC: J. Jarvis



Structure ID: 571

P1 BX2436-08BVF

BOX BASE 8inW, 8inF, Variable Ht T/n

P3) 24" x 120" - CB INLET KY A 10' TOP LEFT F/G - 10"

P2) 24" x 120" - CB INLET KY A 10' BOTTOM LEFT T/G - 18"

P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht T/n - 33"

1) CASTING - HOE KY-206 F/C (KY TY1)

1) This Structure Includes a Cast-in Item - KY-206 Frame (Supplied by iCast)

1) 24" x 36" - Conseal CS-102 1.00"

2) Hole - 24

1) Hole - 20

2) Hole - 8

3400 lb

5270 lb

3928 lb

206 lb

0 lb

0 lb

0 lb

0 lb

0 lb

Structure Total: 12804 lb

Structure Notes:

** KYTC STATE PROJECT **

1. PER KYTC CBI TY A / ASTM C-913 SPECS

2. CONCRETE: 4,000 PSI AT 28 DAYS

3. REINFORCEMENT: #5 BAR @ 12" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)

4. NO STORM INVERT

5. NO STEPS

6. KY-206 FRAME & COVER "STORM" SUPPLIED BY ICAST - FRAME TO BE CAST INTO TOP PHASE TOP FLANGE SIDE UP

7. INVERT 5 OFFSET 14" FROM CENTER OF WALL

Rim: 859.6'

Rim to Invert: 5.09'

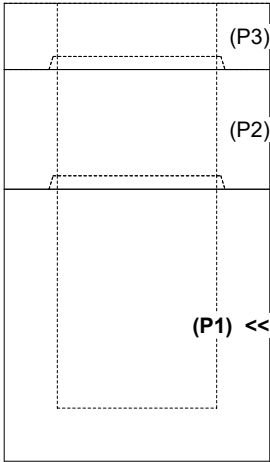
Slack: 0.08"

Sump: 0"

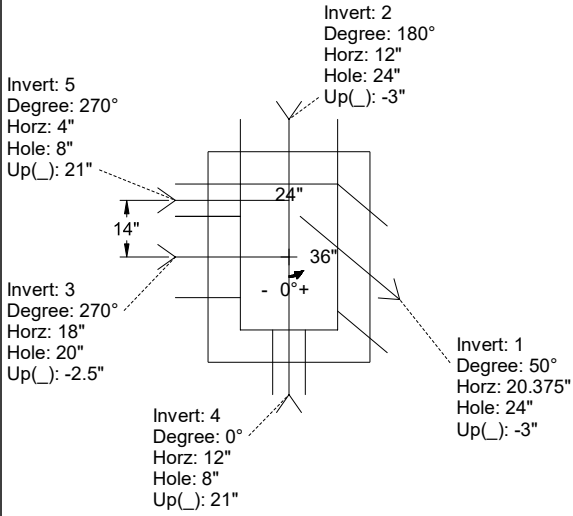
Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	854.51'	50°	21.625"	18" ADS N-12	22"	Hole 24	24"	31.33"	-3"	9.5"
Invert 2	854.51'	180°	20"	18" ADS N-12	22"	Hole 24	24"	24"	-3"	0"
Invert 3	854.51'	270°	26"	15" ADS N-12	18"	Hole 20	20"	20"	-2.5"	0"
Invert 4	856.43'	0°	20"	4" HDPE (perf pipe)	4.8"	Hole 8	8"	8"	21"	0"
Invert 5	856.43'	270°	12"	4" HDPE (perf pipe)	4.8"	Hole 8	8"	8"	21"	-14"
Invert 6										
Invert 7										
Invert 8										

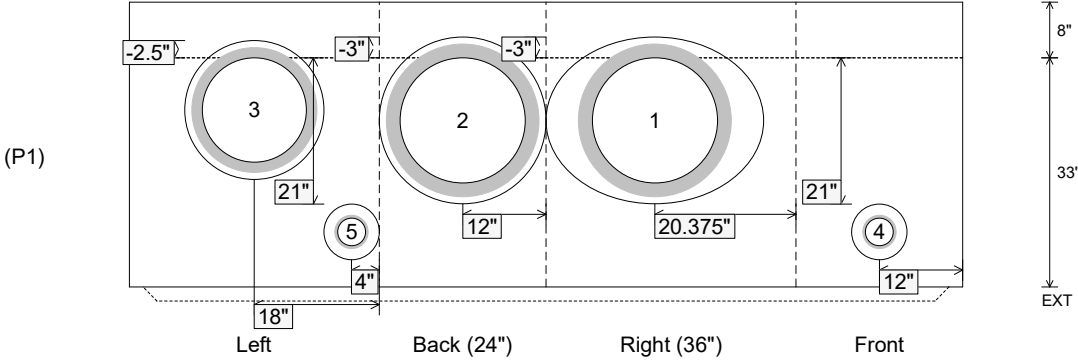
RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: n/a

Wall Thickness: 8"

Floor Height: 8"

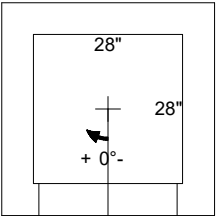
Height (Int): 33"

Height (Ext): 41"

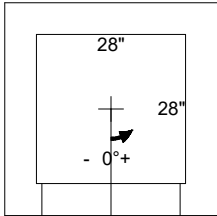
Weight (Net): 3928 lb

Volume (Net): 1cu.yd

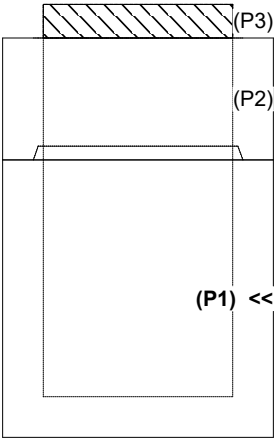
Job Name: 25-1401 Irwin Landing Ph. 1 Job Location: Murfreesboro, TN Contractor: Bear Construction LLC				Plant: Beaver Dam 6/9/2026 10:37:14 AM		Tech: S. Felletter PC: Erica Bradley				
Structure ID: R27A										
P1 BX28280606VH				BOX BASE 6inW, 6inF, Variable Ht T/n						
P3) 28" x 28" - CASTING HEIGHT - 5" P2) 28" x 28" - BOX RISER 6inW, Variable Ht F/G - 18" P1) 28" x 28" - BOX BASE 6inW, 6inF, Variable Ht T/n - 35" 1) 28" x 28" - STORM INVERT CHANNEL (FLAT) - 4" THK 1) CASTING - JBS 3104-V SINGLE SET 2) 28" x 28" - Conseal CS-102 1.00" 1) Hole - 26"				0 lb 1232 lb 2935 lb 450 lb 250 lb 0 lb 0 lb ----- Structure Total: 4867 lb		Structure Notes: . 1. PER ASTM C478 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. CASTING BY ICAST (JBS-3104 SINGLE SET). REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.. - RISER/WALLS (As .12) - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.				
Rim: 577.67' Rim to Invert: 4.67' Slack: 0.54" Sump: 2.5" Step Position:										
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	573'	0°	20"	18" RCP B WALL	23"	Hole 26	26"	26"	0"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										



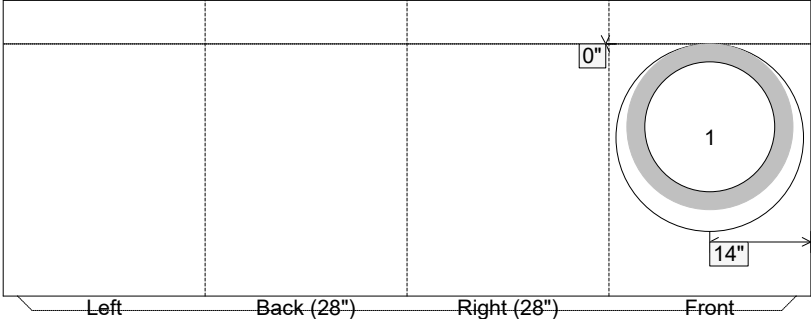
Invert: 1
Degree: 0°
Horz: 14"
Hole: 26"
Up(): 0"



Invert: 1
Degree: 0°
Horz: 14"
Hole: 26"
Up(): 0"



(P1) <<

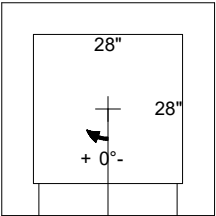


(P1)

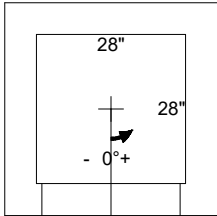
Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 6" Floor Height: 6"	Height (Int): 35" Height (Ext): 41"	Weight (Net): 2935 lb Volume (Net): 0.75cu.yd
----------------------------------	---------------------------------	--	--	--

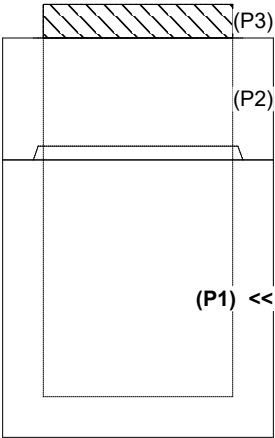
Job Name: 25-1401 Irwin Landing Ph. 1 Job Location: Murfreesboro, TN Contractor: Bear Construction LLC				Plant: Beaver Dam 6/9/2026 10:37:14 AM		Tech: S. Felletter PC: Erica Bradley				
Structure ID: R27A										
P1 BX28280606VH				BOX BASE 6inW, 6inF, Variable Ht T/n						
P3) 28" x 28" - CASTING HEIGHT - 5" P2) 28" x 28" - BOX RISER 6inW, Variable Ht F/G - 18" P1) 28" x 28" - BOX BASE 6inW, 6inF, Variable Ht T/n - 35" 1) 28" x 28" - STORM INVERT CHANNEL (FLAT) - 4" THK 1) CASTING - JBS 3104-V SINGLE SET 2) 28" x 28" - Conseal CS-102 1.00" 1) Hole - 26"				0 lb 1232 lb 2935 lb 450 lb 250 lb 0 lb 0 lb ----- Structure Total: 4867 lb		Structure Notes: . 1. PER ASTM C478 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. CASTING BY ICAST (JBS-3104 SINGLE SET). REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.. - RISER/WALLS (As .12) - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.				
Rim: 577.67' Rim to Invert: 4.67' Slack: 0.54" Sump: 2.5" Step Position:										
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (_)	Offset
Invert 1	573'	0°	20"	18" RCP B WALL	23"	Hole 26	26"	26"	0"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

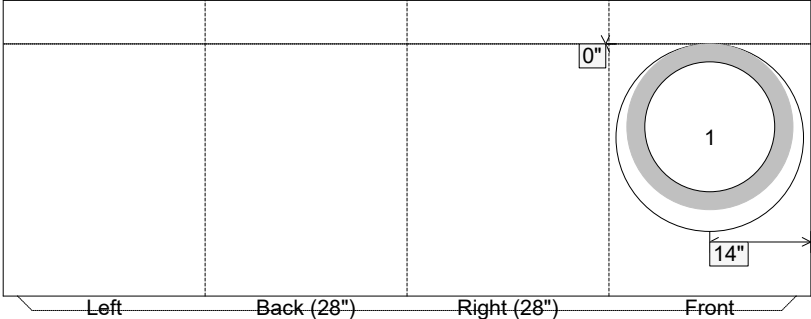


UPSIDE-DOWN VIEW (int. dimenions)





INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 6" Floor Height: 6"	Height (Int): 35" Height (Ext): 41"	Weight (Net): 2935 lb Volume (Net): 0.75cu.yd
----------------------------------	---------------------------------	--	--	--

Job Name: 25-2952 - KYTC Jefferson Co Call 106 (251315)

Job Location: Indiana, KY

Contractor: Louisville Paving and Construction

Plant: 100

6/17/2026 5:40:54 PM

Tech: J. Horsley - A

PC: J. Jarvis



Structure ID: 132

P1 BX1818-06BA24

BOX BASE 6inW, 6inF T/n

P3) 18" x 18" - CASTING HEIGHT - 4"

P2) 18" x 18" - BOX RISER 6inW, Variable Ht F/G - 11"

P1) 18" x 18" - BOX BASE 6inW, 6inF T/n - 24"

2) 18" x 18" - Conseal CS-102 1.00"

2) Hole - 18

0 lb

532 lb

1421 lb

0 lb

0 lb

Structure Total: 1953 lb

Structure Notes:

1. PER MSD YARD DRAIN / ASTM C-913 SPECS

2. CONCRETE: 4,000 PSI AT 28 DAYS

3. REINFORCEMENT: #4 BAR @ 12" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)

4. HOE 165-A FRAME & GRATE SUPPLIED BY OTHERS

Rim: 566.45'

Rim to Invert: 3.25'

Slack: 0"

Sump: 0"

Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	563.2'	270°	15"	12" HDPE	14.5"	Hole 18	18"	18"	-3"	0"
Invert 2	563.2'	90°	15"	12" HDPE	14.5"	Hole 18	18"	18"	-3"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

(P3)

(P2)

(P1) <<

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimenions)

INSIDE WALL DIMENSIONS

1

2

Left

Back (18")

Right (18")

Front

6"

24"

EXT

Coating (Int):

Coating (Ext):

Seam Up: Tongue

Seam Dn: n/a

Wall Thickness: 6"

Floor Height: 6"

Height (Int): 24"

Height (Ext): 30"

Weight (Net): 1421 lb

Volume (Net): 0.36cu.yd



Weight (Net): 5044 lb
Volume (Net): 1.29cu.yd

Job Name: 25-1401 Irwin Landing Ph. 1
Job Location: Murfreesboro, TN
Contractor: Bear Construction LLC

Plant: Beaver Dam

6/9/2026 10:40:26 AM

Tech: S. Felletter

PC: Erica Bradley



Structure ID: R29A

P3 GR28x28x8x3

GRADE RING F/F

P4) 28" x 28" - CASTING HEIGHT - 5"
P3) 28" x 28" - GRADE RING F/F - 3"
P2) 48" - MH FLAT TOP w/28"x28" Hole F/G - 12"
P1) 48" - MH BASE T/n - 42"
1) 48" - STORM INVERT CHANNEL - 1/4 HEIGHT
1) CASTING - JBS 3104-V SINGLE SET
1) 48" - Conseal CS-102 1.00"
2) 28" x 28" - Conseal CS-102 1.00"
2) Hole - 26
3) MH Step ML-10-TDS-NCR - 10"

0 lb
290 lb
1368 lb
3798 lb
1075 lb
250 lb
0 lb
0 lb
0 lb
0 lb

Structure Total: 6781 lb

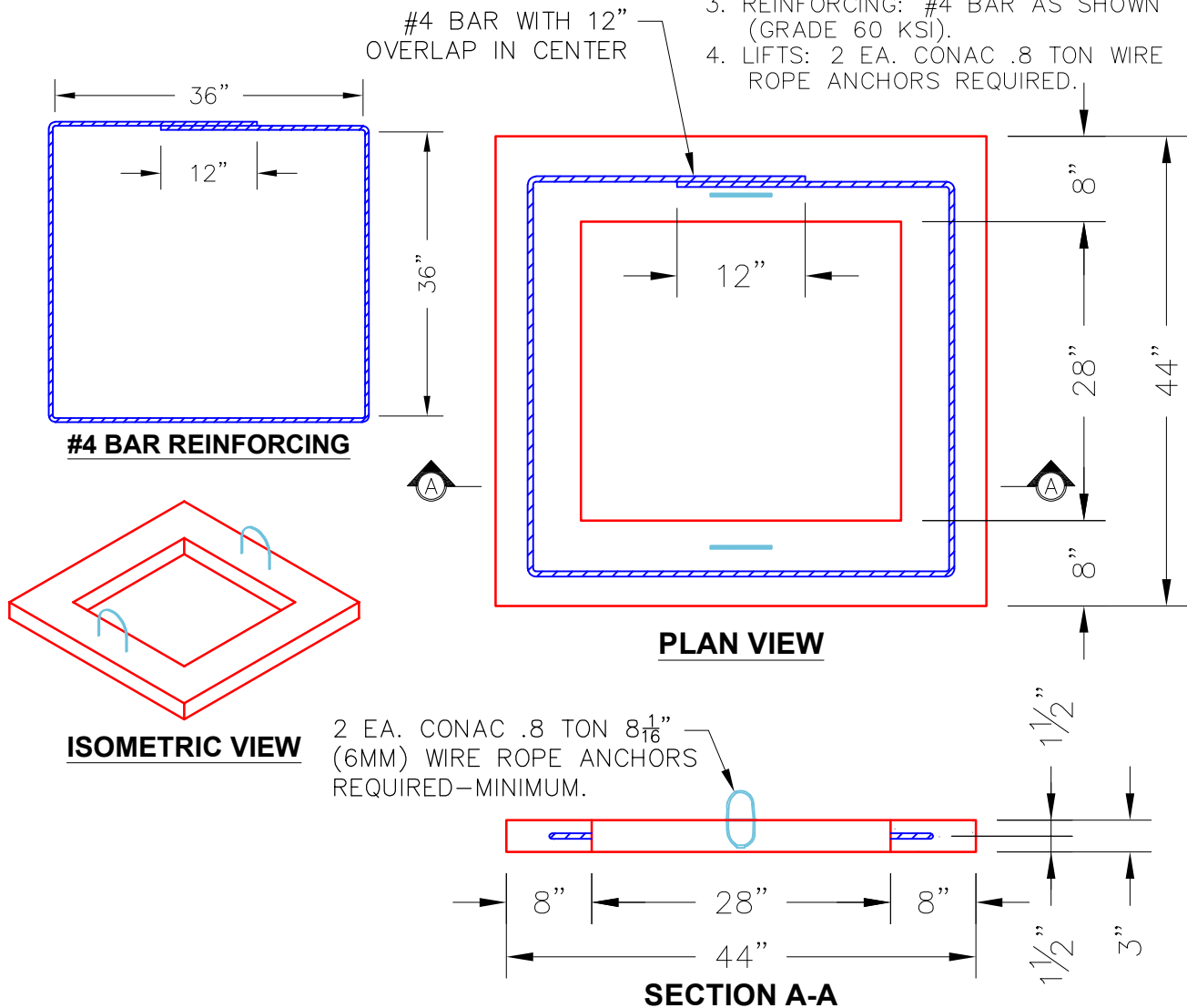
Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING BY ICAST (JBS-3104 SINGLE SET).

REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
- RISER/WALLS (As .12)
- FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

NOTES:

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE = 4,000 PSI @ 28 DAYS.
3. REINFORCING: #4 BAR AS SHOWN (GRADE 60 KSI).
4. LIFTS: 2 EA. CONAC .8 TON WIRE ROPE ANCHORS REQUIRED.



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 8"

Height (Ext): 3"

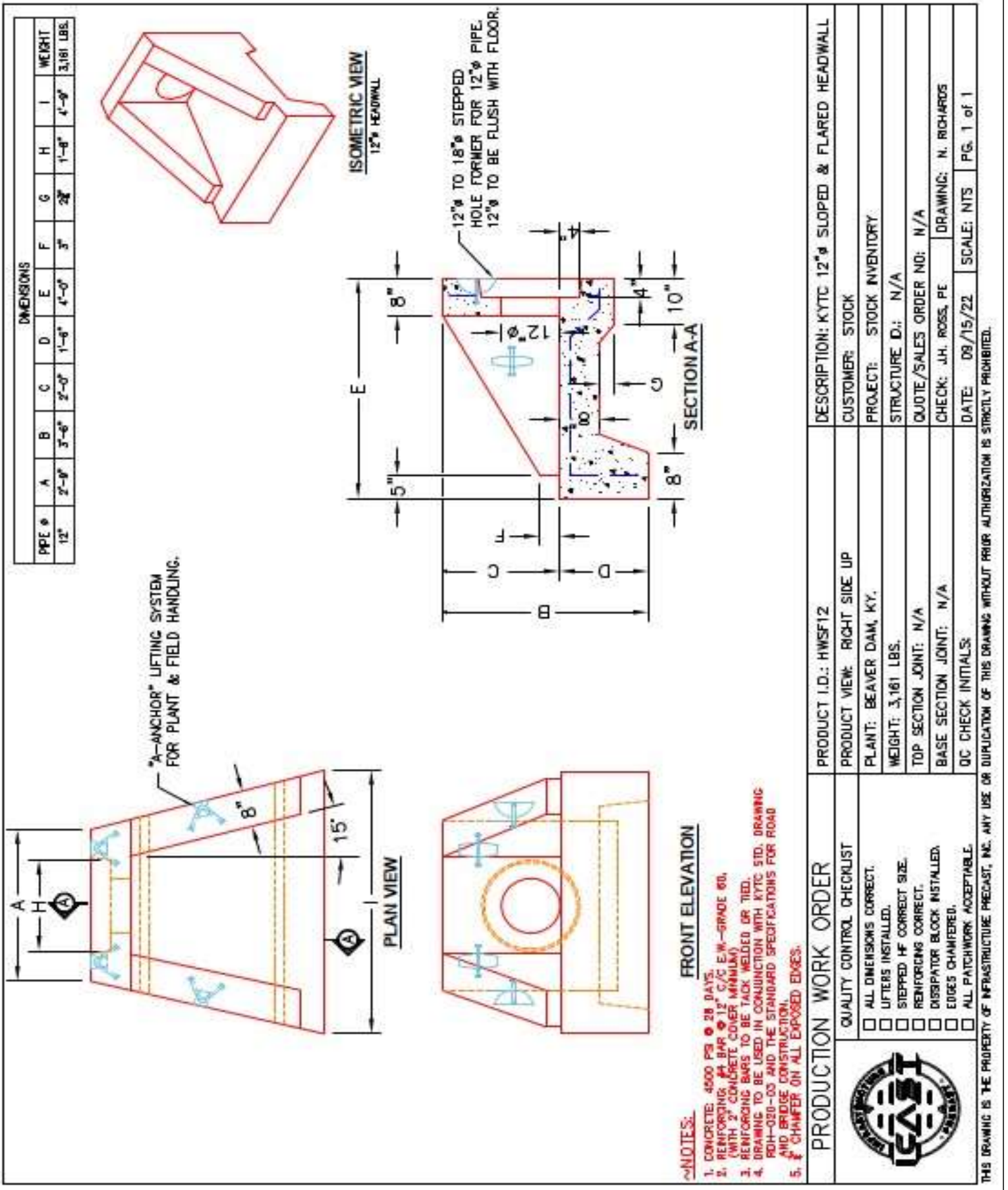
Weight (Net): 290 lb
Volume (Net): 0.07cu.yd



Structure ID: Basin A HW-1 HW

P1 HWSF12

12" - SLOPED & FLARED HEADWALL F/F



Arcadia™ Hydrodynamic Separator Installation Guide

Concrete Manhole Installation

This installation guide is a reference for installing the Arcadia Water Quality unit into a precast concrete structure. These directions assume the manhole base and riser have been assembled, and that the top slab has not been set.

Note: Do not insert the inlet or outlet pipes until after the Arcadia internals have been installed. All pipes should sit flush inside the manhole. If pipes must be inserted in advance, the pipes should not protrude into the structure as they can interfere with installation of the Arcadia Internals.

Content

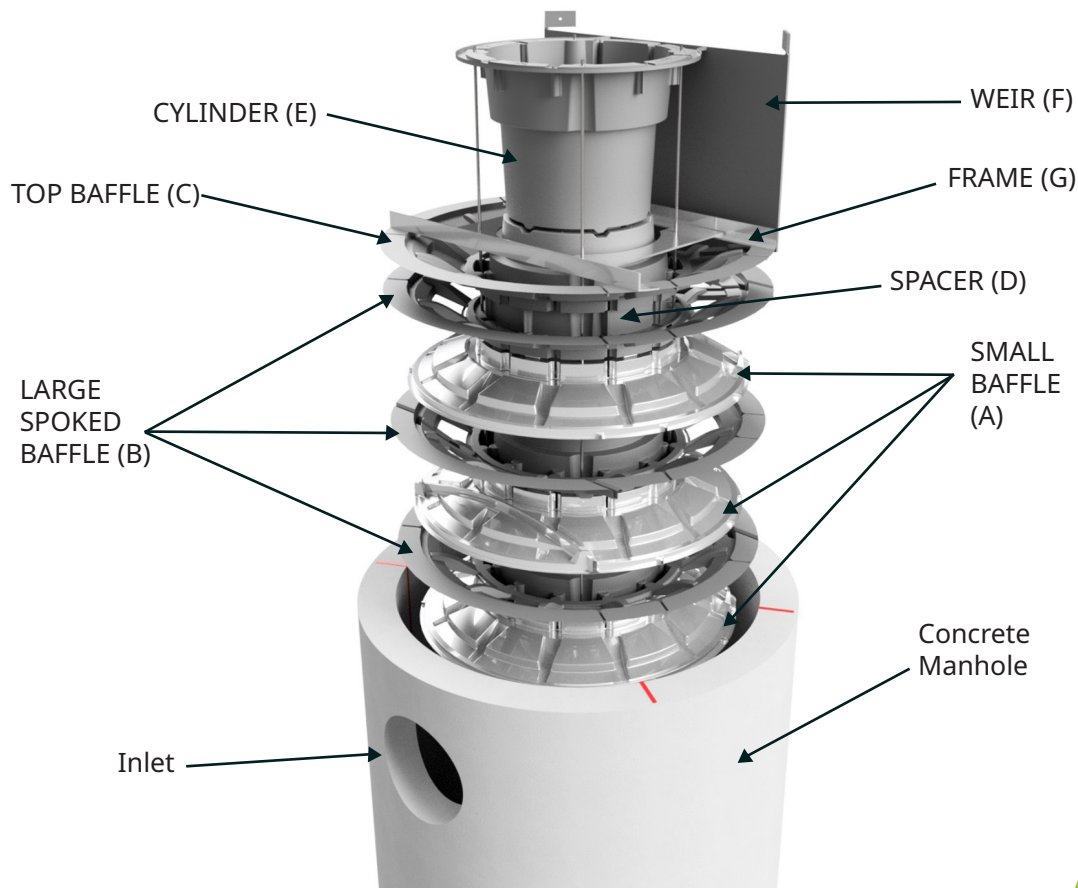
Section 1: Internal Components, Hardware & Tools

Section 2: Assembling Internal Components

Section 3: Mounting Brackets within Concrete Manhole Riser

Section 4: Transporting Assembled Arcadia Internals

Section 5: Installing Arcadia Internals into the Manhole – For Contactor/Jobsite



Section 1: Internal Components, Hardware and Tools



SMALL BAFFLE (A) Qty: 3



**LARGE SPOKED BAFFLE (B)
Qty: 3**



TOP BAFFLE (C) Qty: 1



SPACER (D) Qty: 1



CYLINDER (E) Qty: 1



WEIR (F) Qty: 1



FRAME (G) Qty: 1

Note: To separate baffles in shipping stack, pull from center of each baffle.

Hardware Provided by ADS



**Threaded Rod
(4 long and 4
short) Qty: 8**



**Washers
Qty: 12**



**Nuts
Qty: 12**



**Threaded
Coupling
Qty: 4**



Screws



**Bolts for frame
Assembly**



**Rod Caps
Qty: 4**



**Threadlocker
Capsules
Qty: 2**

Please set aside the following items that will later be delivered to the jobsite along with the assembled Arcadia Unit.

- Small Hardware package marked "Arcadia Installation, For Jobsite Contractor (Not for Precaster)".
- Conseal Roll(s).
- Copy of the Installation Guide

Other Tools Needed

- $\frac{9}{16}$ " (14.28 mm) or $\frac{3}{4}$ " (19.05 mm) Hand Wrench, depending on model size
- Phillips screwdriver or screw gun with Phillips bit
- 4 small hand clamps
- Pair of sawhorses

Section 2: Assembling Internal Components

1. Suggested procedure to facilitate assembly:
 - Utilize a set of sawhorses to support the initial assembly.
 - Set the spacing between the sawhorses (outside distance, see **figure 1**) according to the table below.

Arcadia Model	Spacing in (mm)
AR3	10 (250)
AR4	15 (375)
AR5	17 (425)
AR6	19 (475)
AR8	25 (625)

2. Place one SMALL BAFFLE (A) on the saw horses with the molded word "UP" readable and facing upward."

*Note: Throughout this procedure, as you stack up the baffles, make sure to align the molded word UP for each layer. For each baffle, UP should be readable and aligned with previous layers shown in **figure 2**.*

3. Rotate the baffle as needed to ensure the word UP is aligned with that of the previous baffle, then slide one LARGE SPOKED BAFFLE (B) down the threaded rods until it rests on the previous part, as shown in **figure 3**. Each part mates with the previous part in only one orientation.
4. Place another SMALL BAFFLE (A) on top of the previous part, as shown in **figure 4**. There should now be a total of three (3) baffles in place (two SMALL BAFFLES (A) and one LARGE SPOKED BAFFLE (B)).

Note: The long threaded rods will not reach up to the third baffle yet.

5. One at a time, grasp each of the long threaded rods and feed / pull up through the three baffles until the washer end is tight against the underside of the bottom baffle. Place a hand clamp on each long threaded rod against the top-most baffle to hold it in position, as shown in **figures 5 and 6**.
6. Carefully lower the entire assembly to floor level. If picking up by hand, this is most easily done by grasping two of the long threaded rods in between baffles.
7. Once on the floor, remove all 4 clamps and allow long threaded rods to rest on the floor.

Scan the QR Code
to watch the
Arcadia
installation video



Figure 1

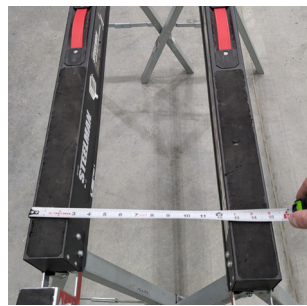


Figure 2



Figure 3



Figure 4



Figure 5

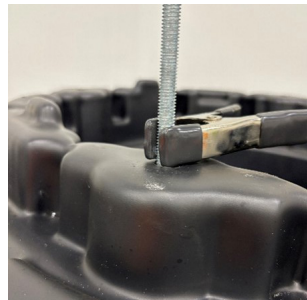


Figure 6



8. Repeat steps 2 & 3 once, then step 2 once more, such that two more LARGE SPOKED BAFFLE (B) and one more SMALL BAFFLE (A) have been added, for a total of six baffles, as shown in **figure 7**.
9. If SPACER (D) is supplied, slide it down the long threaded rods until it rests on the previous part. The SPACER (D) flange should be oriented down, as shown in **figure 8**.

Note: there is no SPACER (D) provided for the 3' (0.9 m) diameter unit (AR3) and the 6' (1.8 m) diameter unit (AR6). For these two sizes, skip this step.

10. Slide TOP BAFFLE (C) down the long threaded rods until it rests on the previous part, as shown in **figure 9**. Each part mates with the previous part in only one orientation. Check that the molded word UP, on the outer edge is readable, facing upward, and aligned with the word UP on the previous part before sliding down the rods into position.
11. Grasping each long threaded rod between baffles, push each rod up until the washer is once again snug at the bottom of the stack, as shown in **figure 10**. Hand snug a washer and nut to each long threaded rod with a wrench.

Note: Recommended to hold the nut with the wrench and turn the threaded rod to snug.

12. **Two people are needed for this step.** Assemble FRAME (G) by bolting the 4 metal pieces with provided short bolts, nuts & washers. As shown in **figure 11 and 12**.
13. Slide FRAME (G) onto the threaded rods until it rests flat on TOP BAFFLE (C). Orient FRAME (G) so that it aligns parallel to the flat portion of TOP BAFFLE (C), as shown in **figure 13**.

Note: Make sure the frame is installed upright, with the angled bends pointing upward, as shown in figure 13.

14. Add another washer and nut to each of the long threaded rods above FRAME (G). Do not screw the nut all the way down. Then, attach a threaded coupling at the top end of each long threaded rod. Screw it down until the top of the coupling is flush with the top of the threaded rod. Leave the nut just below the coupling, as shown in **figure 14**. (This is to facilitate step 17.)

Figure 7



Figure 8

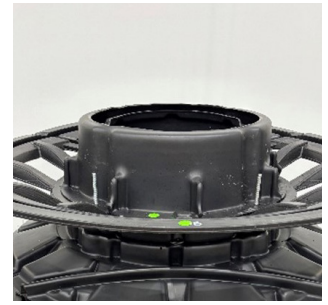


Figure 9



Figure 10



Figure 11



Figure 12

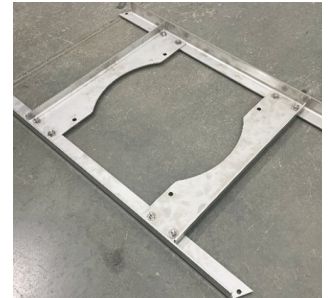


Figure 13

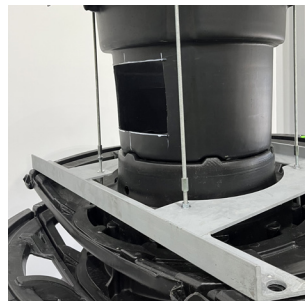


Figure 14



15. Place a washer and nut onto the end of the four short threaded rods, screwing about 3" (75 mm) down. Orient CYLINDER (E) with the flange facing up, feed the rods from the top through the holes in the CYLINDER (E) until the nuts rest on top of the CYLINDER, as shown in **figure 15**.
16. Place CYLINDER (E) assembly on top of TOP BAFFLE (C). Each part mates with the previous part in only one orientation. Check that flat side of the flange of CYLINDER (E) is aligned with the flat side of the TOP BAFFLE (C) as shown in **figure 16**. Attach the bottom end of the 4 short threaded rods to each threaded coupling at the top of the 4 long threaded rods. Hand tighten snug by twisting the long and short threaded rods in opposite directions.
17. Secure CYLINDER (E) onto each of the 4 short threaded rods with a washer and nut at the top. Hand snug with wrench.
18. Slide WEIR (F) into top slot with the curved edge down. Ensure WEIR (F) is centered in the slot. To easily insert WEIR (F), push one end home and secure lower corner of WEIR (F) to TOP BAFFLE (C) with a screw, as shown in **figures 17 and 18**; then push the other end home and secure with screw. For the 8' (2.4 m) diameter unit (AR8), add additional screws into the slot and through the bottom of the weir at approximately the middle, 1/4, and 3/4 positions.
19. Screw down and hand snug the nuts to the steel FRAME (G) with a wrench. Also hand snug the nuts to the top of the CYLINDER (E), and to the top of the TOP BAFFLE (C) if they have loosened. Add a drop of Threadlocker to the rod threads near each nut before final tightening.
20. Secure the top of WEIR (F) with three screws into CYLINDER (E), as shown in **figure 19**.
21. Attach Rod Caps to the top of each threaded rod, on top of the unit.
22. The finished assembly should appear as shown in **figure 20**.

Figure 15



Figure 16



Figure 17



Figure 18



Figure 19



Figure 20



Section 3: Mounting Brackets within Concrete Manhole Riser

Materials provided by ADS

- Mounting Template (Qty: 1)
- Brackets (Qty: 4)
- ¼" (6.35 mm) Diameter 20 thread size,
3 ¼" (82.55 mm) wedge anchors (Qty: 4)

Other Tools Needed

- Drill
 - ¼" (6.35mm) Masonry drill bit
 - Hammer
 - 7/16" (11.11 mm) socket or wrench
 - Masking Tape
 - Rigging
1. Use one of the 3 methods below to locate and mark the elevation and center line for each of the 4 brackets.
 - a. Mounting Template Method:
 1. Position top of template to match the outlet pipe invert elevation.
 2. Align centerline of template with the center of the outlet pipe hole.
 3. Spread template along inner circumference of the manhole wall, maintaining level. Affix with tape as you proceed. Check level as you proceed.
 4. Mark bracket elevations and centerlines at bottom of template.
 5. Remove template.
 - b. Angular Dimensions Method:
 1. From the outlet invert, measure depth A (Table 1) and around B° and C° in each direction to locate the top of each bracket. Mark top of bracket.
 - c. Linear Dimensions Method:
 1. From the outlet invert, measure depth A (Table 2) and around the inside arc B" and C" in each direction to locate the top of each bracket. Mark top of bracket. Crosscheck outlet invert elevations from approved job specific drawings.

Figure 22

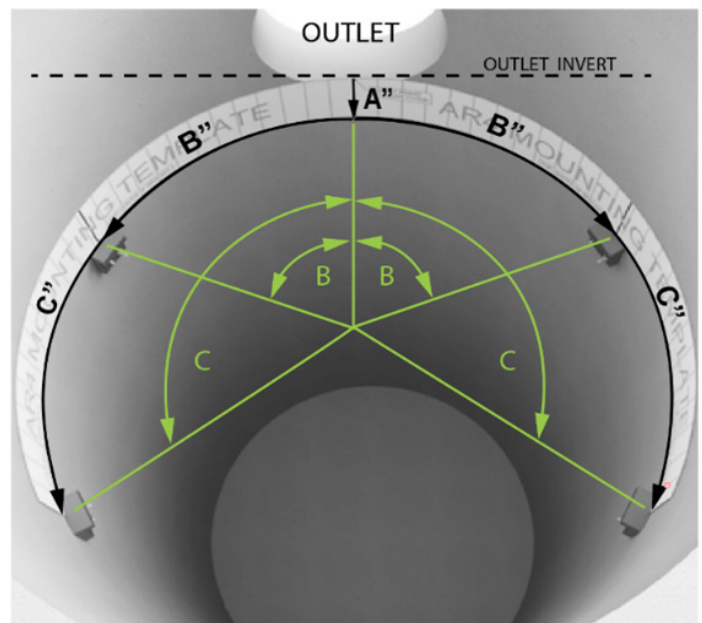


Table 1: Angular Measurements

Arcadia Model	A. Depth from Outlet Invert in (mm)	B. Angle from Outlet Center	C. Angle from Outlet Center
AR3	4 1/2 (114.3)	65°	115°
AR4	5 1/2 (139.7)	60°	120°
AR5	6 (150)	65°	115°
AR6	6 1/2 (165.1)	60°	120°
AR8	8 (200)	60°	120°

Table 2: Linear Measurements

Arcadia Model	A. Depth from Outlet Invert in (mm)	B. Measurement from Outlet Center in (mm)	C. Measurement from Outlet Center in (mm)
AR3	4 1/2 (114.3)	20 3/8 (517.5)	36 1/8 (917.6)
AR4	5 1/2 (139.7)	25 1/8 (638.1)	50 1/4 (1276.3)
AR5	6 (150)	34 (850)	60 1/8 (1527.2)
AR6	6 1/2 (165.1)	37 3/4 (958.8)	75 1/2 (1917.7)
AR8	8 (200)	50 1/4 (1276.3)	100 1/2 (2552.7)

- Hold bracket in position in manhole at locations indicated. Mark anchor holes for each bracket as shown in **figure 23**.
- Drill two 1/4" (6.35 mm) holes per bracket, 2 1/2" (63.5 mm) deep. Diagonal holes are recommended. Extra holes provided if needed as shown in **figure 24**.
- Attach 4 brackets to manhole at positions marked, aligned with top of bracket. Lightly hammer the anchors in place. Tighten the locking nuts to firmly secure brackets to the concrete. Trim any excess anchor that extends beyond the bracket edge as shown in **figure 25**.
- Extend center lines up the manhole wall to the top. Also extend lines across top edge. These center lines will be used by installers at the jobsite to align the unit during installation as shown in **figure 26**.

Note: These center lines are part of the bracket installation and should be made with a suitable marking device that can be easily seen, such as a level and marker, or chalk line.

Figure 23



Figure 24



Figure 25

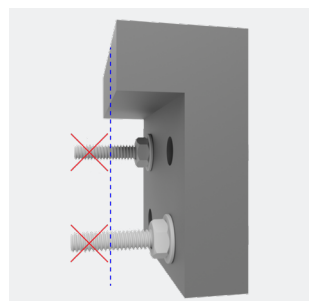
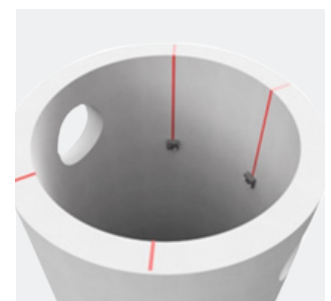


Figure 26



Section 4: Transporting Assembled Arcadia Internals

Placing assembled Arcadia inside concrete manhole riser section; Most common.

1. Choosing a segment of precast concrete manhole riser or base.
 - For transport, choose a riser section that does not contain the mounting brackets, with the following minimum riser depths. This riser section will serve as shipping containment for the internals.
 - The Arcadia internals will be permanently installed onto the mounting brackets at the jobsite. See Section 5.
2. Rigging Arcadia Internals for lifting.
 - Use the stainless-steel frame arms as pick points for straps, chains or other qualified rigging. It is recommended to attach at diagonally opposite arms.
 - Appropriate rigging examples shown in **figures 27 and 28**.
3. Place Arcadia Internals within the riser segment using hoisting equipment.
4. Secure with strapping.
5. Along with the internals, be sure to also deliver the 3 additional items listed in the note below and seen in **figures 29 and 30**.

Minimum Depth Transport Riser Section ft (m)	Arcadia Model
3 (0.9)	AR3
4 (1.2)	AR4, AR5, AR6
5 (1.5)	AR8
6 (1.8)	AR10

Figure 27



Figure 28



Figure 29



Figure 30



Note: Please deliver the following additional items to the jobsite along with the assembled Arcadia unit.

- Small hardware package marked “Arcadia Installation, For Jobsite Contractor (NOT FOR PRECASTER)”
- Con Seal roll(s)
- Copy of the Installation Guide

Transporting without a concrete riser?
Contact ADS for guidance.

Table 4: Arcadia Separator Internals Weight Once Assembled

Arcadia Model	AR3	AR4	AR5	AR6	AR8	AR10
lbs (kg)	82 (37.1)	165 (74.8)	252 (411.3)	356 (161.4)	882 (400)	1306 (592.3)

Section 5: Installing Arcadia Internals into the Manhole

These directions assume the manhole base and riser have not been assembled, and that the top slab has not been set.

Note: Do not insert the inlet or outlet pipes until after the Arcadia internals have been installed. If pipes must be inserted in advance, the pipes should not protrude into the structure as they can interfere with installation of the Arcadia Internals.

Materials provided by ADS

- Arcadia Internals (Qty: 1)
- ¼" (6.35 mm) Diameter 20 thread count, 3 ¼" (82.55 mm) wedge anchors (Qty: 2)
- ⅝" (7.93 mm) Diameter 1 ½" (38.1 mm) hex head lag screws and washers (Qty: 4)
- ¼" (6.35 mm) high speed drill bit for drilling into steel brackets (only for AR8 model)
- Conseal Roll(s)

Other Tools Needed

- Drill
 - ¼" (6.35 mm) Masonry Drill Bit
 - ⅜" (4.76 mm) Multi-Purpose Drill Bit
 - Hammer
 - ⅞" (11.11 mm) socket or wrench
 - Rigging
1. Before assembling the manhole base and riser(s), remove the assembled Arcadia unit from the precast segment that was used for protection during transport, if applicable. Rig the Arcadia internals for overhead lifting. Use the stainless-steel frame arms as pick points for straps, chains or other qualified rigging. It is recommended to attach diagonally to opposite arms. See **figures 31 and 32**. Set the Arcadia unit on level ground.
 2. Locate the concrete riser section with Arcadia Mounting Brackets installed.
 3. Check for bracket centerline markings inside and on top edge of the manhole. If no markings are present, find and extend the centerlines of each bracket along the inside of the riser all the way to the riser top edge as shown. These centerlines will be used to align the unit during installation. See **figure 33**.
 4. Rig Arcadia internals for overhead lifting. Use the stainless-steel frame arms as pick points for straps, chains or other qualified rigging. It is recommended to attach diagonally to opposite arms. See **figures 31 and 32**.

Figure 31



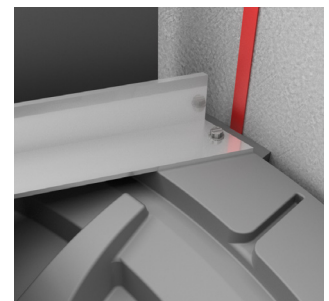
Figure 32



Figure 33



Figure 34



- a. Keep the WEIR (F) centered above the outlet pipe opening. See **figure 35**.
- b. Keep frame arms aligned with bracket centerlines during the entire lowering process. Failure to maintain alignment could result in damage to the unit. See **figure 36**.

5. Lift Arcadia internals at slow speed. Before lowering the unit into the manhole, check for proper alignment with the mounting brackets inside the manhole. Orientation is important throughout the entire installation process.
6. Once aligned, slowly lower Arcadia internals into manhole. Utilize a spotter to guide the alignment of the unit with tagline. Proceed until the stainless-steel frame arms are resting on the pre-installed mounting brackets within the manhole.
7. Affix Arcadia internals with provided lag screws and washers through the holes in the ends of the stainless-steel frame arms, through the top plastic of the unit and into the plastic brackets beneath. First pre-drill each with a 3/16" (4.76 mm) drill bit, or for AR8 use the provided 1/4" (6.35 mm) drill bit into steel brackets below. Use 7/16" (11.11 mm) socket to drive in lag screws until snug.
8. Affix WEIR (F) edges to manhole walls using concrete anchors. See **figures 37 and 38**.
 - a. Bend WEIR (F) installation tabs to the manhole wall as shown in **figure 37**.
 - b. Mark holes for anchors, one hole per tab.
 - c. Drill a 1/4" (6.35 mm) hole 2 1/2" (63.5 mm) deep at each marked hole.
 - d. Bend WEIR (F) installation tabs to manhole wall.
 - e. Insert anchors and lightly hammer in place to secure WEIR (F) to manhole wall.
 - f. Tighten the locking nuts to firmly secure brackets to the manhole wall as shown in **figure 38**.
9. Finally, seal WEIR (F) & TOP BAFFLE (C) edges to manhole wall using conseal to fill any gaps. See **figure 35**.

Figure 35

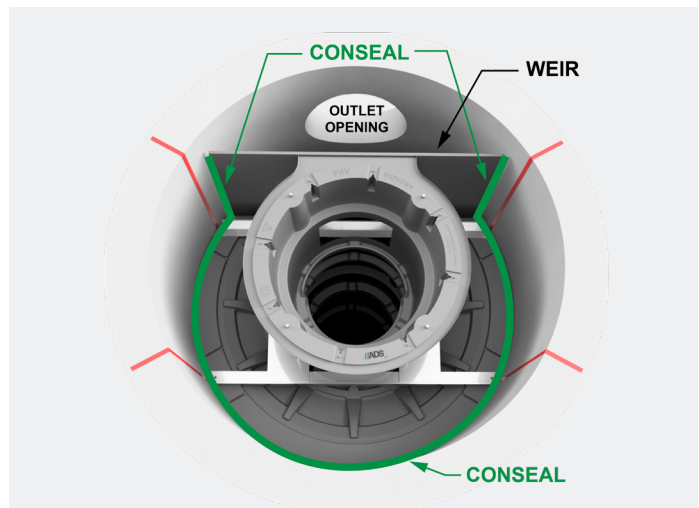


Figure 36

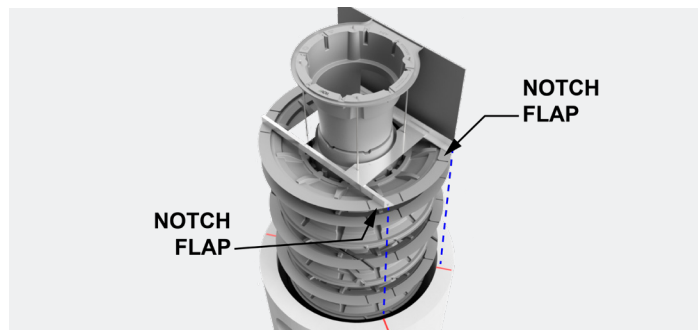


Figure 37

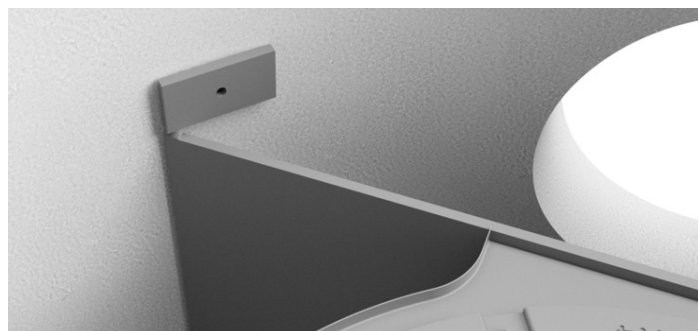
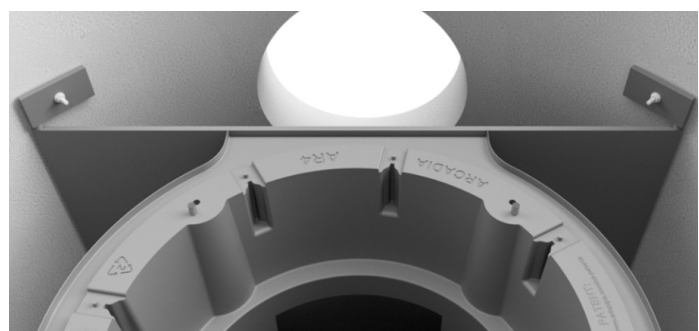


Figure 38



Job Name: 26-1787 - Kroger Expansion
 Job Location: Murray, KY
 Contractor: Parker Excavating, LLC.

Plant: 100

7/22/2026 3:25:03 PM

Tech: J. Horsley

PC: J. Jarvis



Structure ID: C7 ST-CI

P1 BX4872-08BAVF

BOX BASE 8inW, 8inF, Variable Ht T/n

- P5) 6" x 36" - CASTING - Curb Back/Hood - 3.50"
 P4) 30" x 36" - CASTING - Frame&Grate F/F - 6.50"
 P3) 48" x 72" - CB FLAT TOP 8"W w/30"x36" HOLE F/F - 8"
 P2) 48" x 72" - BOX RISER 8inW, Variable Ht F/G - 72"
 P1) 48" x 72" - BOX BASE 8inW, 8inF, Variable Ht T/n - 65"
 1) SECONDARY POUR
 1) CASTING - JBS 2064-V SET (F/G/H)
 2) 48" x 72" - Con Seal CS-102 1.00"
 2) Hole - 30
 1) Hole - 20
 4) Hole - 6
 11) MH Step ML-10-TDS-NCR - 10"

0 lb
 0 lb
 3056 lb
 12846 lb
 14037 lb
 0 lb
 500 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb

Structure Total: 30439 lb

Structure Notes:

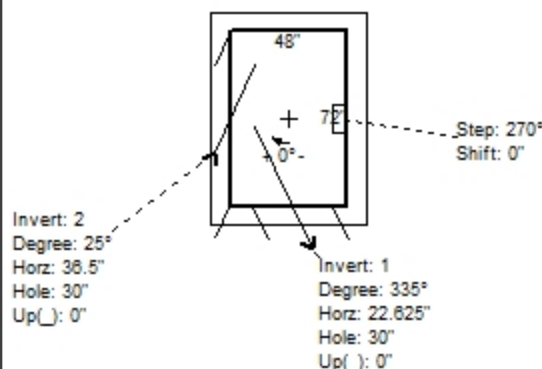
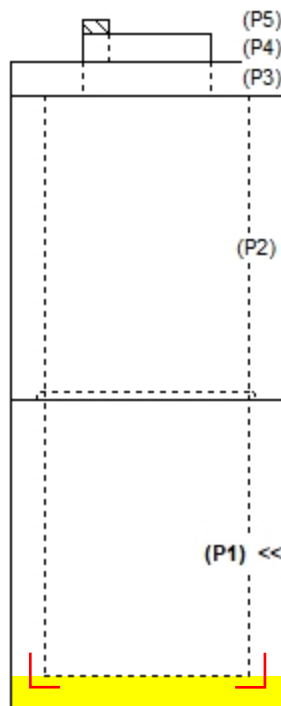
- PER ASTM C478 SPECIFICATIONS.
 - CONCRETE = 4,000 PSI AT 28 DAYS.
 - CASTING BY ICAST (JBS 2064 F/G)
- REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - RISER/WALLS (As .18)
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.

Rim: 500.38' Rim to Invert: 12.79' Slack: 0.484' Sump: 2.004' Step Position: 180'

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	487.59'	335°	26.875"	24" HP STORM	28"	Hole 30	30"	33.101"	0"	14"
Invert 2	487.59'	25°	27.375"	24" HP STORM	28"	Hole 30	30"	70.986"	0"	21.962"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

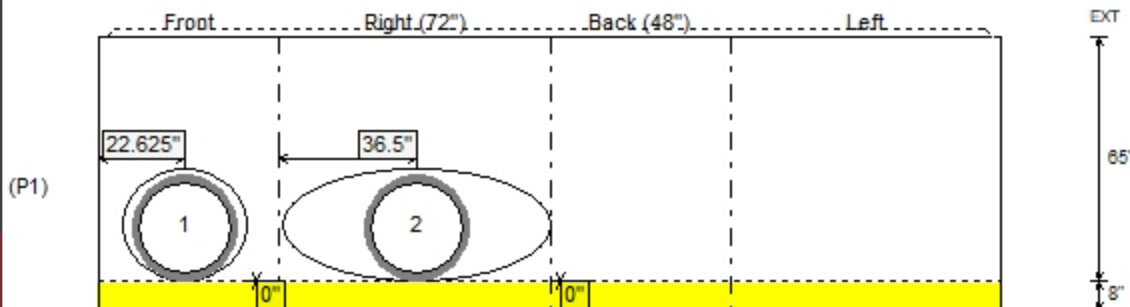
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



SECONDARY POUR REQUIRED.
 1ST POUR (FLOOR) = 3,780 LBS
 2ND POUR (WALLS) = 10,257 LBS

INSIDE WALL DIMENSIONS



1ST POUR (FLOOR)
 STUB #5 L BARS (18"x36")
 OUT TOP OF FLOOR FOR
 CONNECTING WALLS

Coating (Int):
 Coating (Ext):

Seam Up: Tongue
 Seam Dn: n/a

Wall Thickness: 8"
 Floor Height: 8"

Height (Int): 65"
 Height (Ext): 73"

Weight (Net): 14037 lb
 Volume (Net): 3.59cu.yd

Job Name: 26-1787 - Kroger Expansion
 Job Location: Murray, KY
 Contractor: Parker Excavating, LLC.

Plant: 100

7/22/2026 3:25:03 PM

Tech: J. Horsley

PC: J. Jarvis



Structure ID: C7 ST-CI

P1A BX4872-08BAVF

BOX BASE 8inW, 8inF, Variable Ht T/n

- P5) 6" x 36" - CASTING - Curb Back/Hood - 3.50"
 P4) 30" x 36" - CASTING - Frame&Grate F/F - 6.50"
 P3) 48" x 72" - CB FLAT TOP 8"W w/30"x36" HOLE F/F - 8"
 P2) 48" x 72" - BOX RISER 8inW, Variable Ht F/G - 72"
 P1) 48" x 72" - BOX BASE 8inW, 8inF, Variable Ht T/n - 65"
 1) SECONDARY POUR
 1) CASTING - JBS 2064-V SET (F/G/H)
 2) 48" x 72" - Con Seal CS-102 1.00"
 2) Hole - 30
 1) Hole - 20
 4) Hole - 6
 11) MH Step ML-10-TDS-NCR - 10"

0 lb
 0 lb
 3056 lb
 12846 lb
 14037 lb
 0 lb
 500 lb
 0 lb
 0 lb
 0 lb
 0 lb
 0 lb

Structure Total: 30439 lb

Structure Notes:

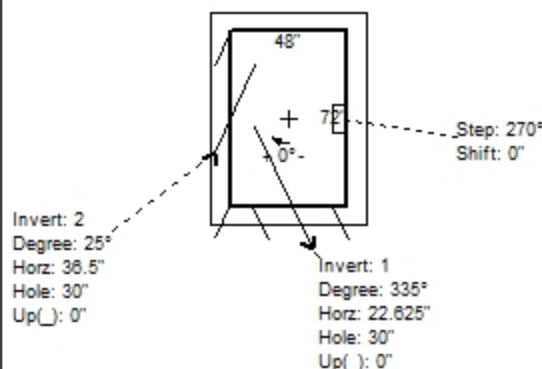
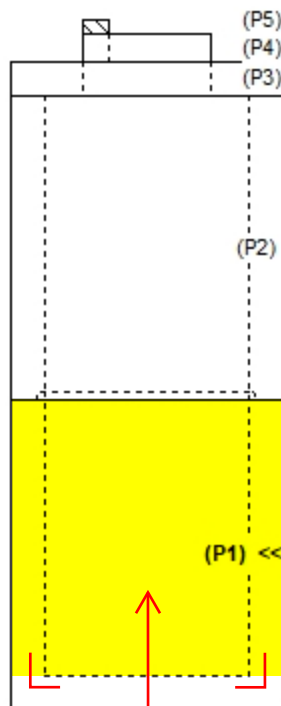
- PER ASTM C478 SPECIFICATIONS.
 - CONCRETE = 4,000 PSI AT 28 DAYS.
 - CASTING BY ICAST (JBS 2064 F/G)
- REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
 - RISER/WALLS (As .18)
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.

Rim: 500.38' Rim to Invert: 12.79' Slack: 0.484' Sump: 2.004' Step Position: 180'

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	487.59'	335°	26.875"	24" HP STORM	28"	Hole 30	30"	33.101"	0"	14"
Invert 2	487.59'	25°	27.375"	24" HP STORM	28"	Hole 30	30"	70.986"	0"	21.962"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

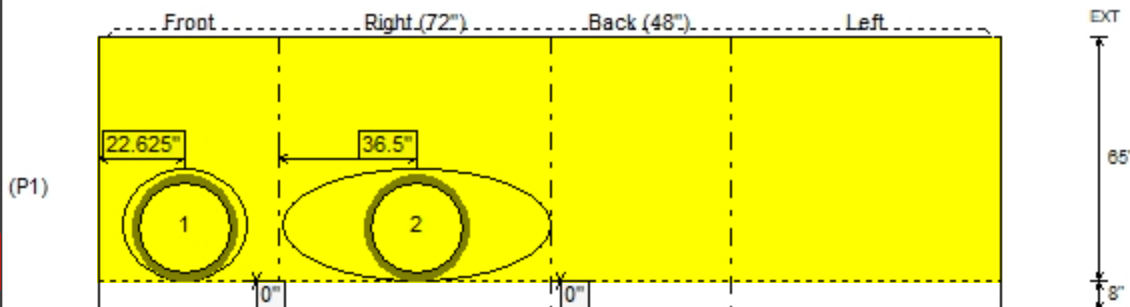
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



SECONDARY POUR REQUIRED.
 1ST POUR (FLOOR) = 3,780 LBS
 2ND POUR (WALLS) = 10,257 LBS

INSIDE WALL DIMENSIONS



Coating (Int):
 Coating (Ext):

Seam Up: Tongue
 Seam Dn: n/a

Wall Thickness: 8"
 Floor Height: 8"

Height (Int): 65"
 Height (Ext): 73"

Weight (Net): 14037 lb
 Volume (Net): 3.59cu.yd

Job Name: 26-2509 - Airpark Expansion Industrial Subdivision
Job Location: Owensboro, KY 42301
Contractor: Koberstein Contracting, Inc.

Plant: 100
7/24/2026 10:33:28 AM

Tech: Jared - F
PC: A. Chambers



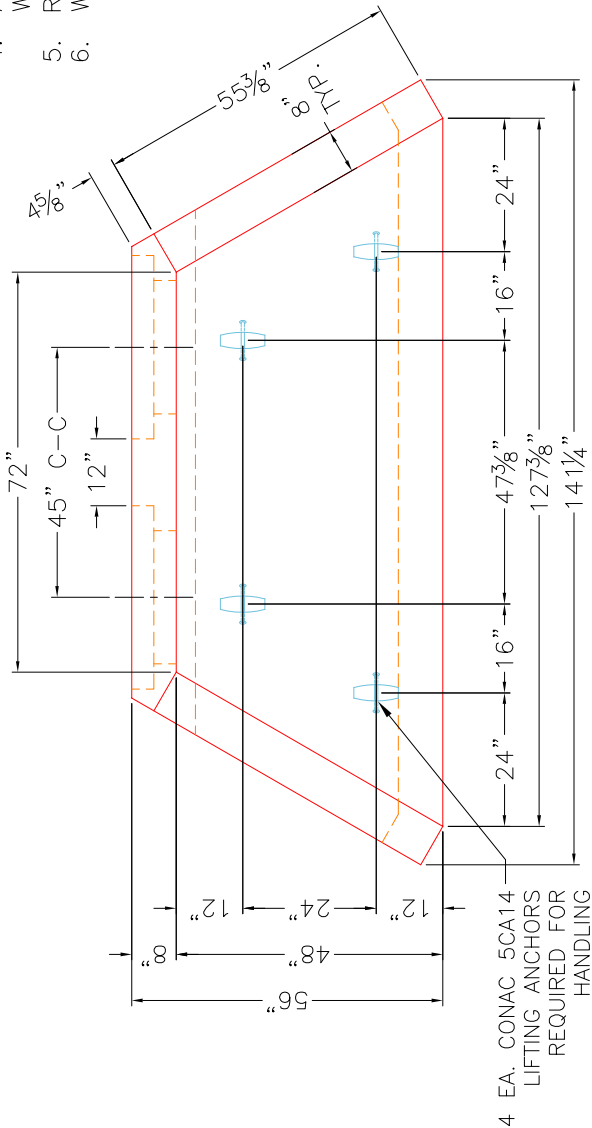
Structure ID: AA-1 HW

P1 HWDBLCUSTOM

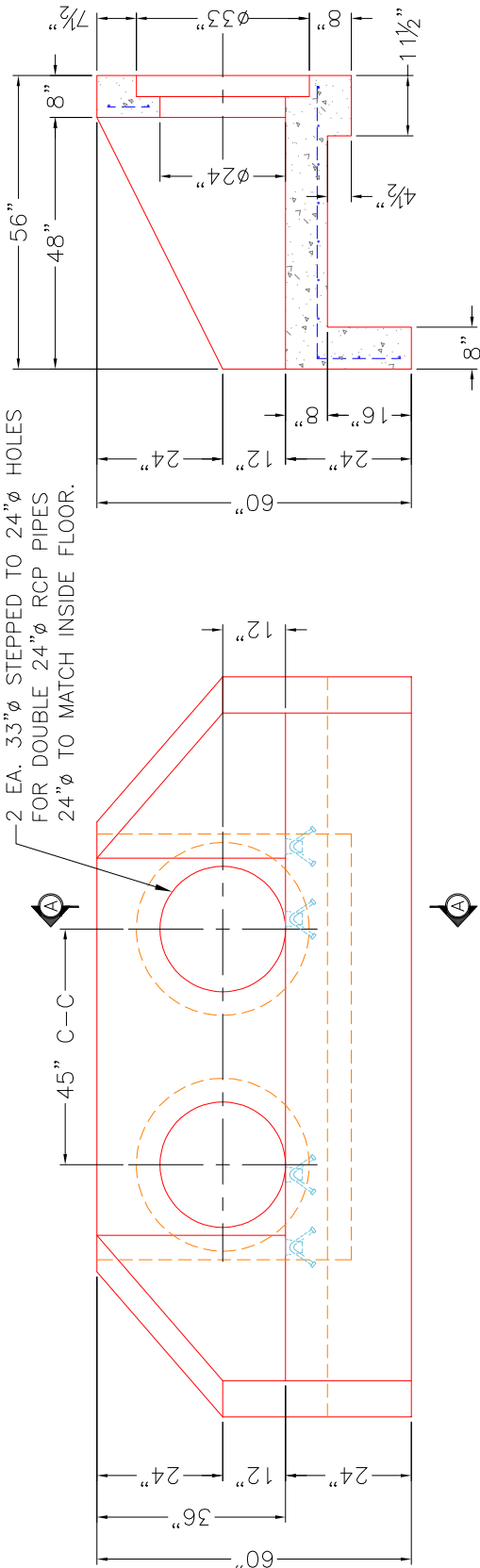
24" - DBL S&F HEADWALL

GENERAL NOTES:

1. THE FOLLOWING STANDARD SPECIFICATIONS APPLY:
 - REINFORCING-811.02, STRUCTURE-710.03.01
 - TACK WELDING-605.03.04
2. MINIMUM 2" CONCRETE COVER ON REBAR.
3. CONCRETE: KYTC APPROVED.
4. ALL PICK UP POINTS GROUTED BY CONTRACTOR.
5. WITH STACK APPROVED NON-SHRINK GROUT.
6. REINFORCING: #5 @ 12" C/C E.W. TYPICAL.
7. WEIGHT: 9,025 LBS.



TOP VIEW



FRONT VIEW

SECTION A-A

Job Name: 26-1364 - Ollie Car Wash
Job Location: Owensboro, KY
Contractor: Winwater Hartford KY Co.

Plant: 100

7/17/2026 6:38:25 PM

Tech: Jared - F
PC: A. Chambers



Structure ID: 2000-GT-TANK-2

P2 BX072144-08LD06S

CB FLAT TOP 6"W w/(2) 24" HOLES F/F

- P4) 24" - CASTING HEIGHT - 7"
P3) 24" - GRADE RING F/F - 3"
P2) 60" x 126" - CB FLAT TOP 6"W w/(2) 24" HOLES F/F - 8"
P1) 60" x 126" - BOX BASE 6inW, 6inF, Variable Ht F/n - 72"
1) CASTING - HOE MC-315 F/C Storm
2) 24" - Conseal CS-102 1.00"
5) Hole - 10

Structure Total:

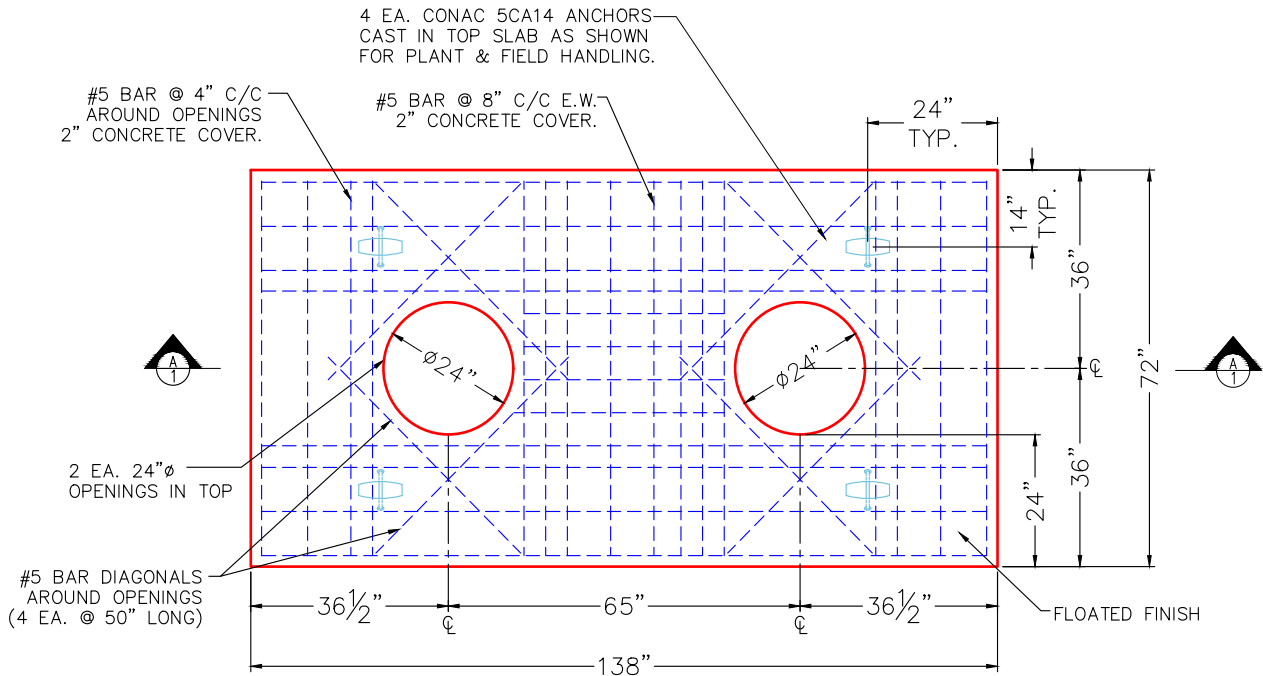
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6064 lb
19160 lb
258 lb
0 lb
0 lb

25684 lb

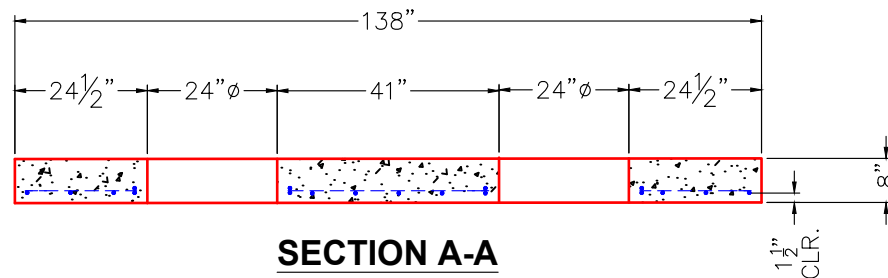
Structure Notes:

1. PER ASTM C-890-13 SPECIFICATIONS.
2. CONCRETE = 4,500 PSI AT 28 DAYS.
3. THIRD POUR REQ'D - BAFFLE WALL.
4. CASTING BY ICAST (HOE MC-315 F/C "STORM")

REINFORCING PER ASTM A615 (GRADE 60)
FOR H-20 DESIGN LOADING.
- TOP SLAB (As .47) #5 BARS AT 8" C.C.E.W.
- WALLS (As .47) #5 BARS AT 8" C.C.E.W.
- FLOOR (As .47) #5 BARS AT 8" C.C.E.W.



PLAN VIEW



SECTION A-A

NOTES:

1. PER ASTM C-890-13 LATEST REVISION.
2. CONCRETE = 4,500 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 8" C/C E.W. (GRADE 60).
(H-20 TRAFFIC RATED DESIGN)
4. SEALED WITH 1" CS-102 BUTYL SEALANT
5. TOP SLAB WEIGHT = 6,063 LBS.

Coating (Int):
Coating (Ext):

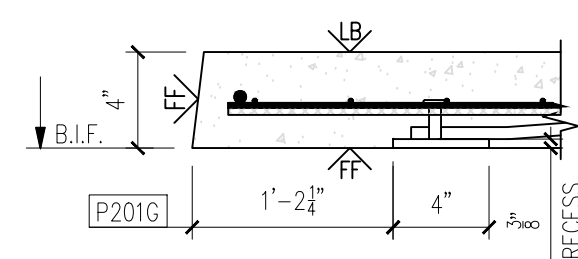
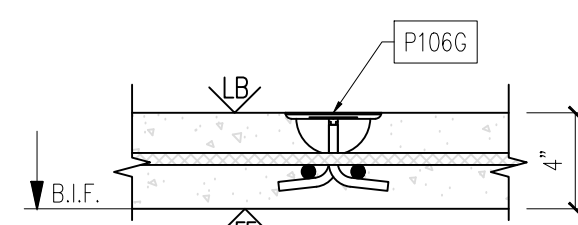
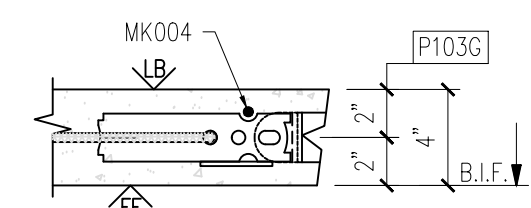
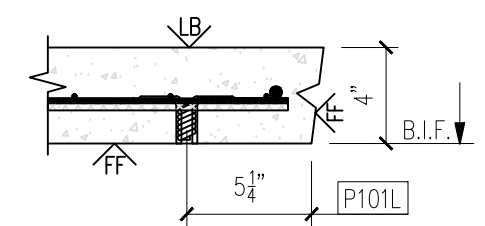
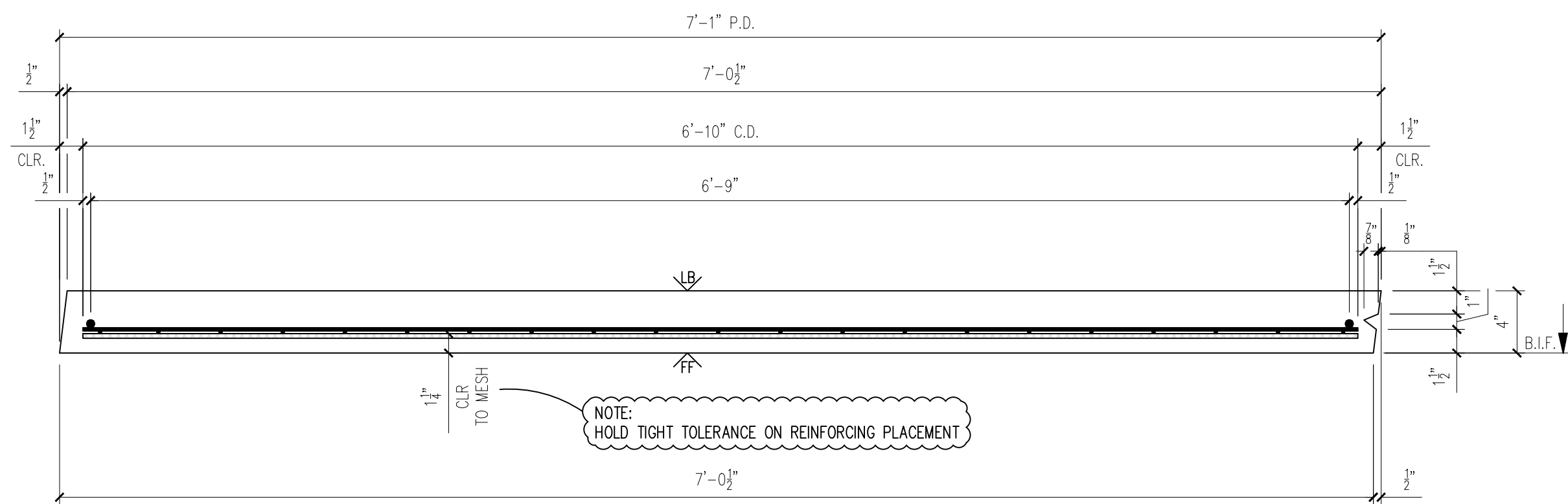
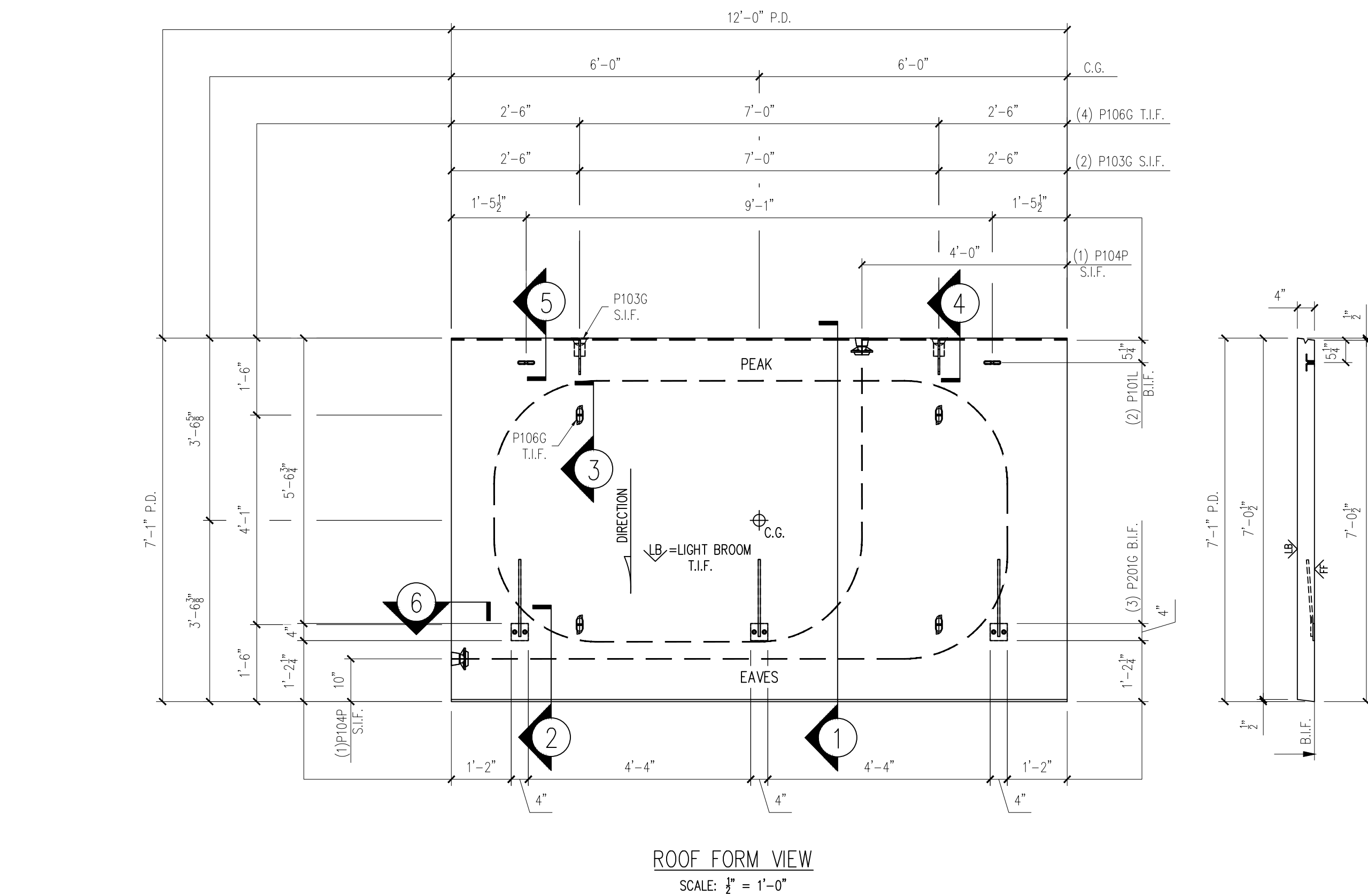
Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 6064 lb
Volume (Net): 1.55cu.yd

25-3470
CCHS Precast Buildings
ID - CTS
Roof - RP-01B
Weight - 4,220
1 Required



MESSAGE CENTER

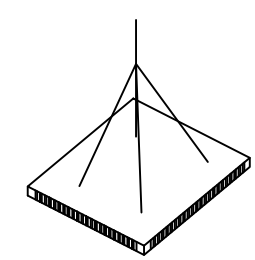
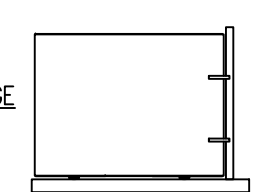
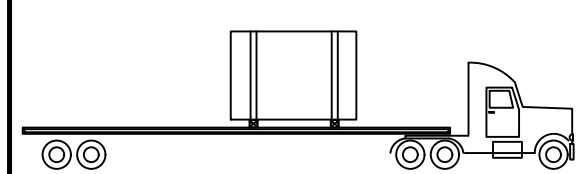
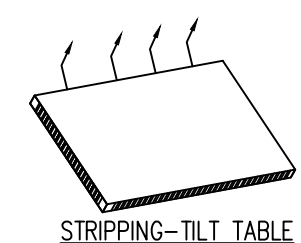
1. REFER TO DETAILS FOR REINFORCEMENT/CABLE PLACEMENT
2. SHOP TICKET SHOWS EXTERIOR FINISH CAST FACE UP

CHECKED BY: _____ DATE: _____

APPROVED BY: _____ DATE: _____

BILL OF MATERIALS		
MARK #	DESCRIPTION	QTY
P201G	ℓ 4"x4"x ³ / ₈ " W/(2) 3" Ø X 1 ¹ / ₂ " H.A.S. W/ 1'-4" BENT REBAR (GALV.)	3
P103G	2 TON TECH ERECTION ANCHOR (GALV.)	2
P104P	U-5 POST TENSION ANCHOR (PLAIN) WITH PLASTIC POCKET	2
P106G	2 TON PLATE ANCHOR (GALV.)	4
P101L	1 ¹ / ₂ " Ø X 1 ¹ / ₂ " F-63 FLARED THIN SLAB COIL INSERT (ELECTROPLATED)	2

HANDLING INSTRUCTIONS



CONCRETE INSTRUCTIONS
CONCRETE RELEASE @ 2,500 P.S.I.
CONCRETE @ 28 DAYS: 5,000 P.S.I.
POST-TENSION @ 3,500 P.S.I.

CONCRETE MIXES	
CONCRETE - GRAY	VOLUME = 1.04 C.Y.
CONCRETE - MIX 1	VOLUME = - C.Y.
CONCRETE - MIX 2	VOLUME = - C.Y.
SOFT SOUND	VOLUME = - C.Y.
TOTALS	VOLUME = 1.04 C.Y.

FINISHING INSTRUCTIONS

LB = LIGHT BROOM FINISH
FF = FORM FINISH

L = 12'-0"	SQ.FT.(T.I.F.) = 84.37
W = 7'-1"	SQ.FT.(T.I.F.) = -
D = 4"	SQ.FT.(T.I.F.) = -

CONTROL NUMBERS:

<u>PRODUCT</u>	<u>SALES ORDER NUMBER</u>
BUILDING	101208C
<u>SHEET NUMBER</u>	<u>NUMBER REQUIRED</u>
1 OF 2	2

DATE	DESCRIPTION	INI.	REV.
-		-	Δ
-		-	Δ
-		-	Δ
-		-	Δ
-		-	Δ

PROJECT: 10'X12'X8' GATE HOUSE BUILDING
5185 FORT CAMPBELL BOULEVARD
HOPKINSVILLE, KY 42240
CONTRACTOR: CHRISTIAN COUNTY SCHOOLS

SCALE
NTS

DRAWN BY
FTL

CHECK BY
WCR

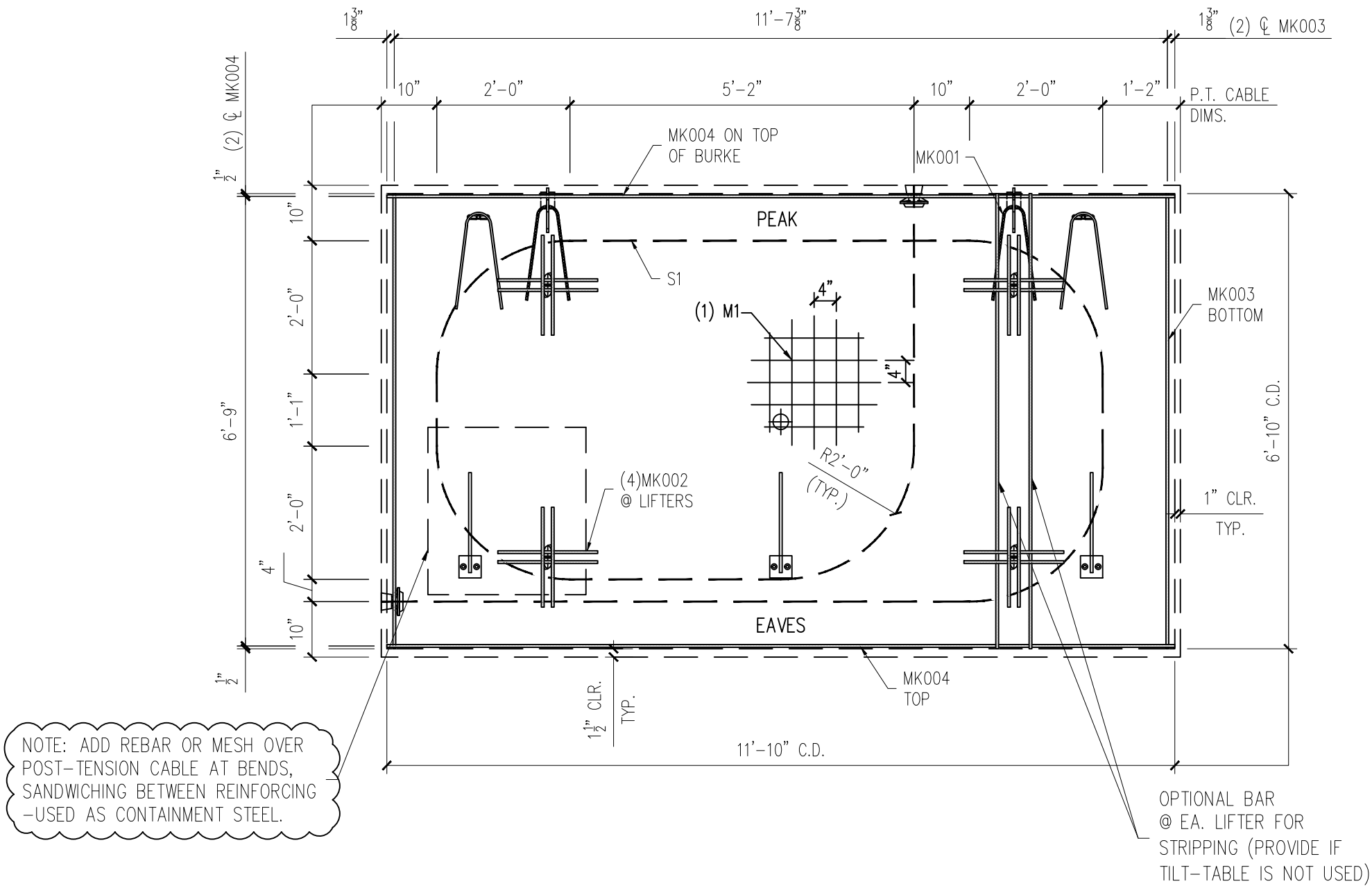
ISSUE DATE
07.01.26

PIECE MARK
RP-01

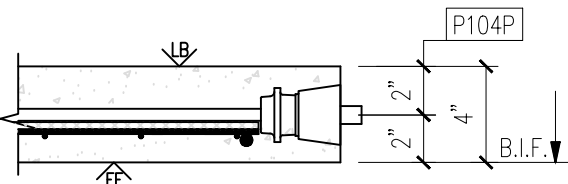
EASI-SET® WORLDWIDE
 5119 Cattlett Rd. • Midland, VA 22728 • info@EasiSet.com
www.EasiSet.com • 800-547-4045 • Fax 540-439-2541

25-3470
CCHS Precast Buildings
ID - CTS
Roof - RP-01B
Weight - 4,220
1 Required

NOTE:
DIMENSIONS PROVIDED ARE PULLED FROM EDGE OF
CAGE TO CENTERLINE OF REBAR AND TO CENTER
OF REBAR TO CENTER OF REBAR



ROOF REINFORCING VIEW
SCALE: 1/2" = 1'-0"



MESSAGE CENTER

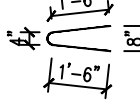
1. REFER TO DETAILS FOR REINFORCEMENT/CABLE PLACEMENT

2. SUPPLEMENTAL STEEL FOR STRIPPING AND HANDLING MAY BE ADDED AS REQUIRED.

CHECKED BY: DATE:
APPROVED BY: DATE:

- NOTES:
1. TRIM PLASTIC SHEATH AT BOTH ENDS OF THE PT CABLE TO FIT BETWEEN U-5 ANCHOR PLATES
 2. CONSTRUCT REBAR-MESH CAGE ACCORDING TO THE DRAWINGS. SECURE LIFTING APPARATUS TO FORM AND ADD PROPER REINFORCEMENT. PLACE REBAR-MESH CAGE AND HAIRPINS AT INSERTS WITH PROPER CLEARANCES (PER DRAWINGS).
 3. PLACE AND SECURE PT CABLE AS INDICATED ON THE DRAWINGS (REINFORCING VIEW)

PRODUCT	SALES ORDER NUMBER
BUILDING	101208C
SHEET NUMBER	NUMBER REQUIRED
2 OF 2	2

REINFORCING SCHEDULE		
MARK #	DESCRIPTION	QTY
MK001	#3 X 3'-0" 	4
MK002	#4 X 1'-6" 	16
MK003	#3 X 6'-10" 	2
MK004	#3 X 11'-10" 	2
S1	1/2" X 43'-2" LONG P.T. CABLE	1
MESH SCHEDULE		
MARK #	DESCRIPTION	QTY
M1	W4XW4 4"x4" WWF 11'-10" X 6'-10"	1

DATE	REV	INI.	DESCRIPTION
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

PROJECT: 10'X12'X8' GATE HOUSE BUILDING
5185 FORT CAMPBELL BOULEVARD
HOPKINSVILLE, KY 42240
CONTRACTOR: CHRISTIAN COUNTY SCHOOLS

SCALE NTS
DRAWN BY FTL
CHECK BY WCR
ISSUE DATE 07.01.26
PIECE MARK RP-01

EASI-SET® WORLDWIDE
EASI-SET®
5119 Catlett Rd. • Midland, VA 22728 • info@EasiSet.com
www.EasiSet.com • 800-547-4045 • Fax 540-439-2541

PT Check for Gate House Roof RP-01 (PCI MNL - 1)

Material Data

(7) Wire lo-lax Strand - ASTM A416

Φ_{ps} 0.500 in,

A_s 0.153 in²

E_s 28500000 psi

f_{pu} 270 ksi

Strand Length **480 in**

Assume (Info supplied by strand manufacturer)

k = 0.0007 Wobble Friction Coeff.

μ = 0.05 Curvature friction coeff. (Initial tension of 3,000 lbs)

Strand is to be stressed 70% of ultimate

= 28917 lbs

Adjustments to tensioning

1) Dead end anchor wedge seating loss

~ Expected to be 1/8 in

2) Live end anchor wedge seating loss

~ Expected to be 1/8 in, recommend over pull 1/8"

3) Elastic Shortening

Neglect for this pnl

4) Friction Loss

Additional force to overcome frictional forces between strand and sheathing



Cable Configuration

25-3470

CCHS Precast Buildings

ID - CTS

Roof - RP-01B

Weight - 4,220

1 Required

Tensioning Computations

Basic Elongation = $\frac{(\text{Force required beyond initial tension}) (\text{Length of strand between anchorages})}{(\text{Area of strand}) (\text{Modulus of Elasticity})}$

= 2.85 in

Adjustments

a) Dead end anchor wedge seating: Add 1/8" to elong. No force adjustment req'd

Add 1/8 in

b) Live end seating: over pull by 1/8"

1/8 in

Force adjustment $t = \frac{1136 \text{ lbs}}{1136 \text{ lbs}} \alpha = \text{curvature} = \pi(2.5) = 7.85 \text{ radians}$

c) Friction losses $\frac{PD}{PS} = e^{-\{kL + \mu\alpha\}}$

= 0.657

Avg. strand force = 0.828 17.17% Loss

Recommend sequential jacking at both ends of the tendon be used to reduce the overstressing the strand at the live end

Friction loss at mid-point of tendon

$\frac{PD}{PS} = e^{-\frac{\{kL + \mu\alpha\}}{2}}$

= 0.810

Avg. strand force over

half of tendon = 0.905 9.48% Loss

Total force and elongation at live end must be increased to compensate for friction losses

Elong. Adjustment = 0.271 in

Force Adjustment = 2743 lbs

Total Force Required = 32795 lbs **OK**

Elongation Summary:

Gross Theoretical Elongation			
Basic Elongation		2.85 in	
Dead End Seating Loss		0.125 in	
Live End Seating Loss		0.125 in	
Friction Losses		0.271 in	
Total Elongation		3.37 in	
Rounded		3 6/16 in	
Tolerance limits	-7.0%	3.14 in	3 2/16 in
	+7.0%	3.61 in	3 10/16 in

Job Name: 25-2952 - KYTC Jefferson Co Call 106 (251315)
Job Location: Indiana, KY
Contractor: Louisville Paving and Construction

Plant: 100

6/16/2026 8:42:10 AM

Tech: J. Horsley - A

PC: J. Jarvis



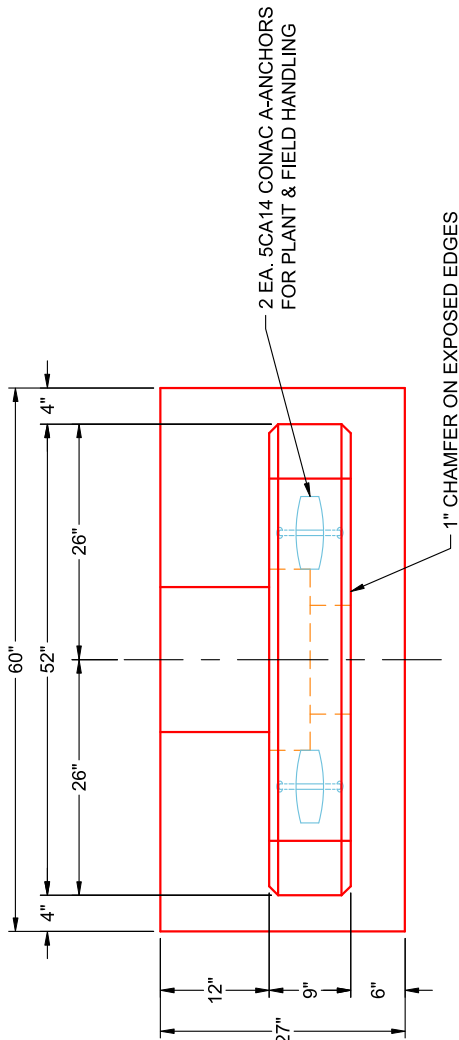
Structure ID: HW

P1 HWMSD12

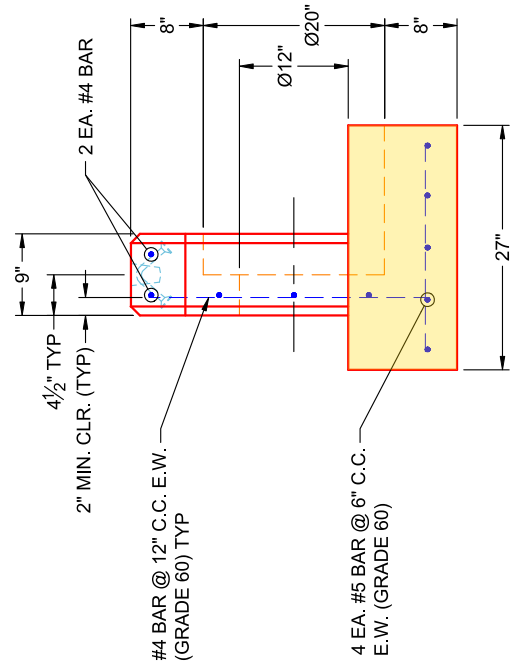
12" - STANDARD HEADWALL MSD F/F

GENERAL NOTES:

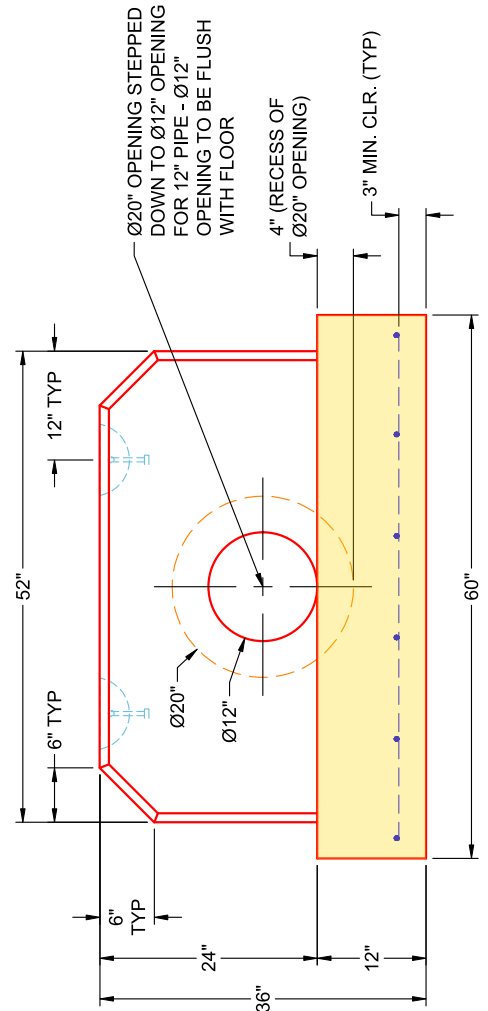
1. CONCRETE: 4,500 PSI AT 28 DAYS
2. REINFORCEMENT: #4 BAR & #5 BAR AS SHOWN (GRADE 60) - MIN. 2" REBAR CLEARANCE (TYP)
3. THIS DRAWING TO BE USED IN CONJUNCTION WITH MSD STANDARD DRAWING DH-01-01
4. REINFORCING BARS TO BE TACK WELDED OR TIED
5. 1" CHAMFER ON ALL EXPOSED EDGES
6. TOTAL WEIGHT: 2,340 LBS
- FIRST POUR: 1,570 LBS
- SECOND POUR: 770 LBS



PLAN VIEW
(RIGHT SIDE UP)



SIDE VIEW
(RIGHT SIDE UP)



FRONT VIEW
(RIGHT SIDE UP)

Job Name: 25-2952 - KYTC Jefferson Co Call 106 (251315)
Job Location: Indiana, KY
Contractor: Louisville Paving and Construction

Plant: 100

6/16/2026 8:42:10 AM

Tech: J. Horsley - A

PC: J. Jarvis



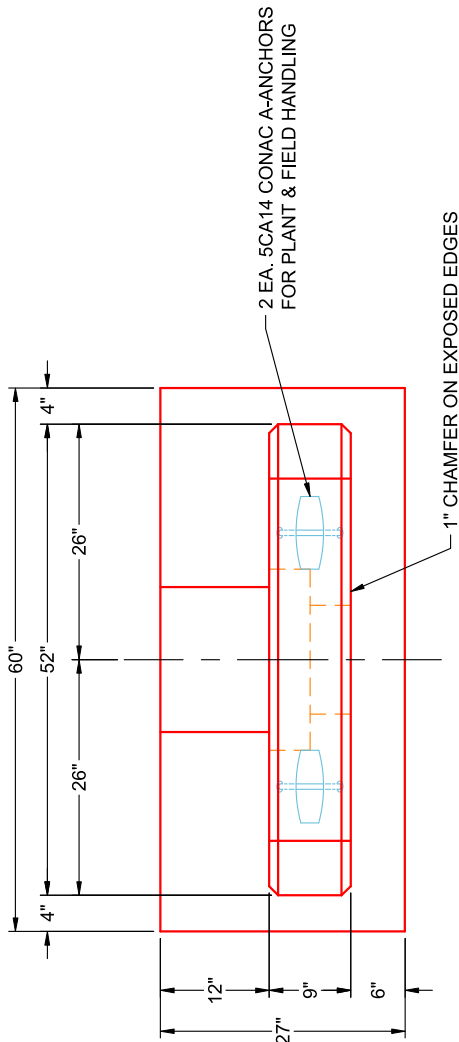
Structure ID: HW

P1 HWMSD12

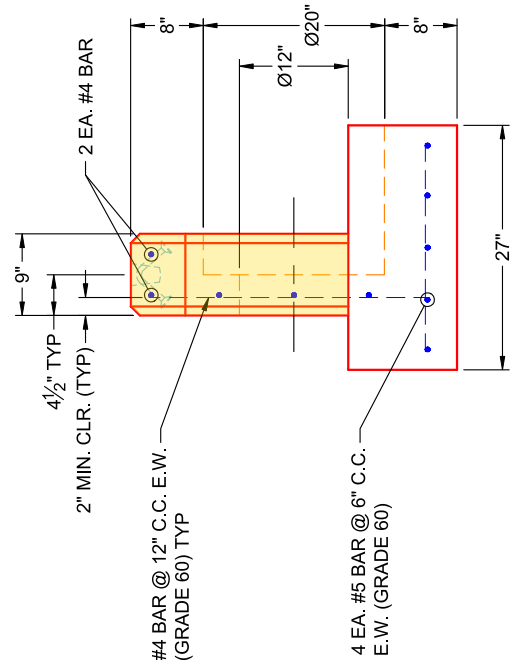
12" - STANDARD HEADWALL MSD F/F

GENERAL NOTES:

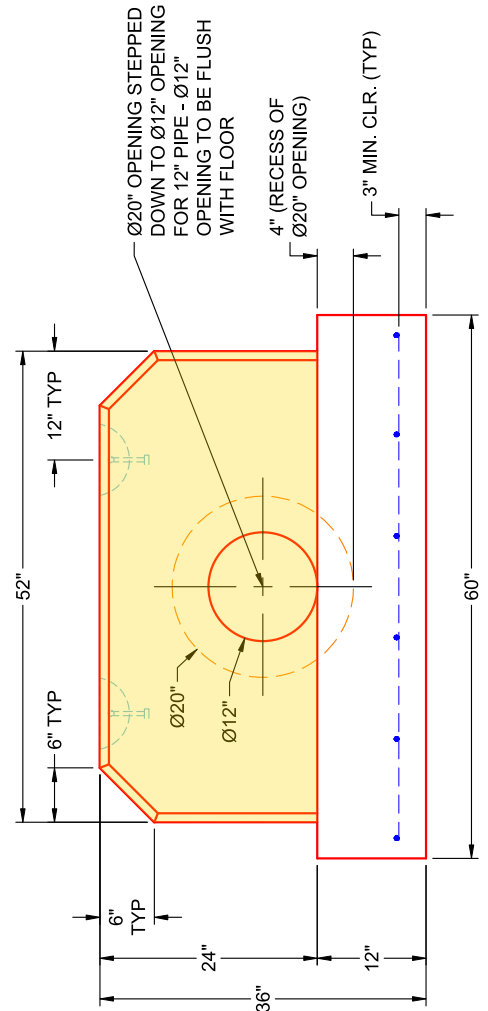
1. CONCRETE: 4,500 PSI AT 28 DAYS
2. REINFORCEMENT: #4 BAR & #5 BAR AS SHOWN (GRADE 60) - MIN. 2" REBAR CLEARANCE (TYP)
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4. REINFORCING BARS TO BE TACK WELDED OR TIED
5. 1" CHAMFER ON ALL EXPOSED EDGES
6. TOTAL WEIGHT: 2,340 LBS
- FIRST POUR: 1,570 LBS
- SECOND POUR: 770 LBS



PLAN VIEW
(RIGHT SIDE UP)



SIDE VIEW
(RIGHT SIDE UP)



FRONT VIEW
(RIGHT SIDE UP)

Job Name: 25-2952 - KYTC Jefferson Co Call 106 (251315)		Plant: 100	Tech: J. Horsley - A	
Job Location: Indiana, KY Contractor: Louisville Paving and Construction		6/12/2026 3:12:27 PM	PC: J. Jarvis	
Structure ID: 65				
P2 BX024024-08LD08-14		CB FLAT TOP 8"W (HOE KY-210) F/F		
P3) 19.5" - CASTING (cast in) - 2.75" P2) 24" x 24" - CB FLAT TOP 8"W (HOE KY-210) F/F - 8" P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht F/n - 28" 1) This Structure Includes a Cast-in Item - HOE KY-210 Frame (Supplied By Others) 1) 24" x 24" - Conseal CS-102 1.00" 1) Hole - 18		0 lb 943 lb 3292 lb 0 lb 0 lb 0 lb ----- 4235 lb Structure Total:	Structure Notes: ** KYTC STATE PROJECT ** 1. PER KYTC DBI TYPE 14 / ASTM C-913 SPECS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: #5 BAR @ 6" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP) 4. HOE KY-210 FRAME & GRATE SUPPLIED BY OTHERS - FRAME TO BE CAST INTO FLAT LID 5. LIFTERS: 2 EA. 5CA14 CONAC A-ANCHORS FOR PLANT & FIELD HANDLING - INSTALLED AS SHOWN 6. TOP SURFACE TO RECEIVE LIGHT BRUSH FINISH	
</				

Job Number:

25-2952

Job Name:

KYTC Jefferson Co Call 106
(251315)

Structure:

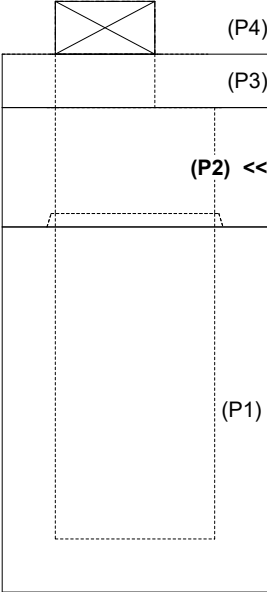
65

Note:

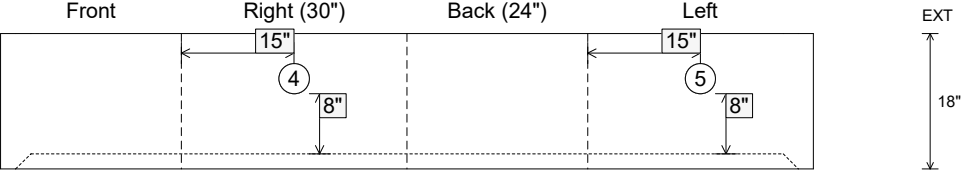
HOE KY-210 Frame Supplied By
Others To Be Cast Into Flat Lid

Job Name: 25-2952 - KYTC Jefferson Co Call 106 (251315) Job Location: Indiana, KY Contractor: Louisville Paving and Construction				Plant: 100 6/12/2026 3:11:13 PM		Tech: J. Horsley - A PC: J. Jarvis				
Structure ID: 62										
P2 BX2430-08R18				BOX RISER 8inW F/G						
P4) 15" x 27" - P.I.P. - BY OTHERS - 8" P3) 24" x 30" - CB FLAT TOP 8"W w/15"x27" HOLE F/F - 8" P2) 24" x 30" - BOX RISER 8inW F/G - 18" P1) 24" x 30" - BOX BASE 8inW, 8inF, Variable Ht T/n - 47" 2) 24" x 30" - Conseal CS-102 1.00" 1) 15" x 27" - Conseal CS-102 1.00" 2) Hole - 24 1) Hole - 18 2) Hole - 4						0 lb 963 lb 1675 lb 5026 lb 0 lb 0 lb 0 lb 0 lb 0 lb 0 lb Structure Total: 7664 lb		Structure Notes: ** KYTC STATE PROJECT ** 1. PER KYTC DBI TYPE 13G / ASTM C-913 SPECS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: #5 BAR @ 12" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP) 4. HOE KY-230G FRAME & GRATE SUPPLIED BY OTHERS - POURED IN PLACE BY OTHERS		
Rim: 552.16' Rim to Invert: 6.75' Slack: 0" Sump: 0" Step Position:										
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (_)	Offset
Invert 1										
Invert 2										
Invert 3										
Invert 4	550.16'	90°	23"	4" WEEP HOLE	4"	Hole 4	4"	4"	8"	0"
Invert 5	550.16'	270°	23"	4" WEEP HOLE	4"	Hole 4	4"	4"	8"	0"
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 8" Floor Height: 0"	Height (Int): 18" Height (Ext): 18"	Weight (Net): 1675 lb Volume (Net): 0.43cu.yd
----------------------------------	----------------------------------	--	--	--

Job Name: 25-2952 - KYTC Jefferson Co Call 106 (251315)
Job Location: Indiana, KY
Contractor: Louisville Paving and Construction

Plant: 100

6/12/2026 3:12:20 PM

Tech: J. Horsley - A

PC: J. Jarvis



Structure ID: 14A

P2 BX036036-08LD08S

CB FLAT TOP 8"W SPEC. (KY-328 CAST IN) F/F

- P3) 36" x 36" - CASTING (cast in) - 3"
P2) 36" x 36" - CB FLAT TOP 8"W SPEC. (KY-328 CAST IN) F/F - 8"
P1) 36" x 36" - BOX BASE 8inW, 8inF, Variable Ht F/n - 28"
1) This Structure Includes a Cast-in Item - HOE KY-328 Frame (Supplied by Others)
2) 36" x 36" - Conseal CS-102 1.00"
1) Hole - 20

Structure Total:

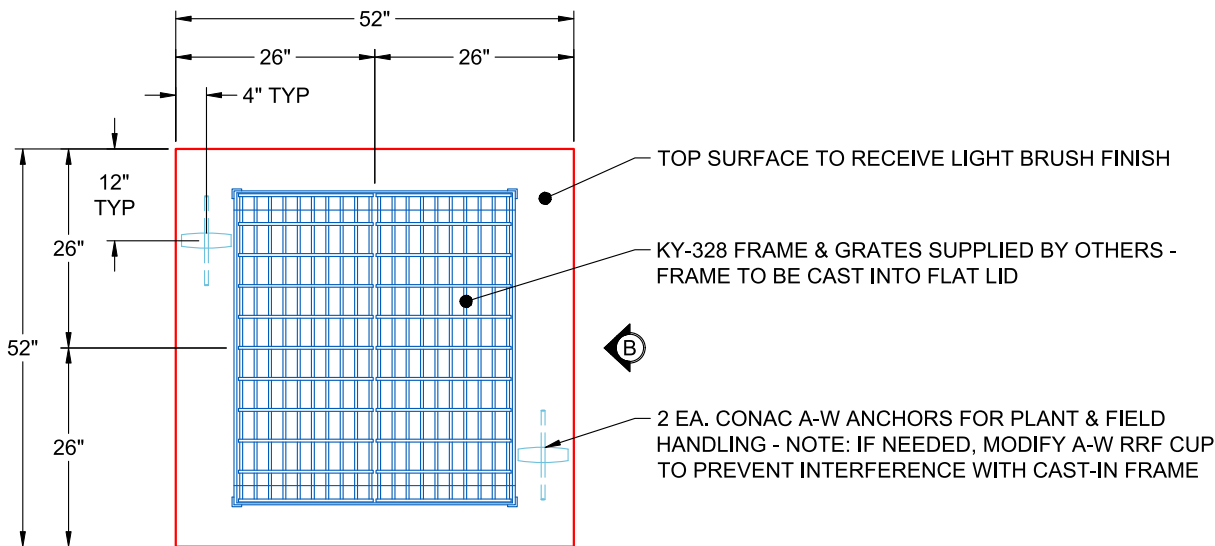
0 lb
996 lb
4912 lb
0 lb
0 lb
0 lb

5908 lb

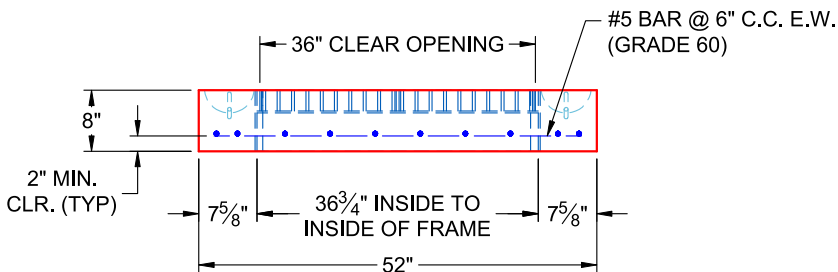
Structure Notes:

**** KYTC STATE PROJECT ****

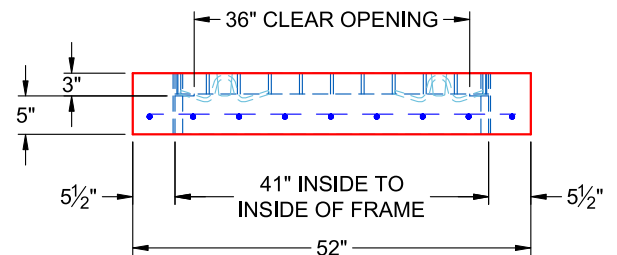
1. PER KYTC DBI TYPE 3 / ASTM C-913 SPECS
2. CONCRETE: 4,000 PSI AT 28 DAYS
3. REINFORCEMENT: #5 BAR @ 6" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)
4. HOE KY-328 FRAME & GRATES SUPPLIED BY OTHERS - FRAME TO BE CAST INTO FLAT LID
5. LIFTERS: 2 EA. CONAC A-W ANCHORS FOR PLANT & FIELD HANDLING - INSTALLED AS SHOWN
- IF NEEDED, MODIFY A-W RRF CUP TO PREVENT INTERFERENCE WITH CAST-IN FRAME
6. TOP SURFACE TO RECEIVE LIGHT BRUSH FINISH



PLAN VIEW
(RIGHT SIDE UP)



VIEW A
(RIGHT SIDE UP)



VIEW B
(RIGHT SIDE UP)

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 8"

Height (Ext): 8"

Weight (Net): 996 lb
Volume (Net): 0.25cu.yd

Job Number:

25-2952

Job Name:

KYTC Jefferson Co Call 106
(251315)

Structure:

14A

Note:

HOE KY-328 Frame Supplied By
Others To Be Cast Into Flat Lid