

Job Name: 26-2212 - CDTI Building 1
Job Location: Charlestown, IN
Contractor: Dan Cristiani Excavating Co. Inc.

Plant: Beaver Dam

Tech: J. Coppage

8/18/2026 12:40:47 PM

PC: E. Bradley



Structure ID: 217 ST-MH

P2 MH108TS18-48ECC

MH Transition Slab 48" Hole

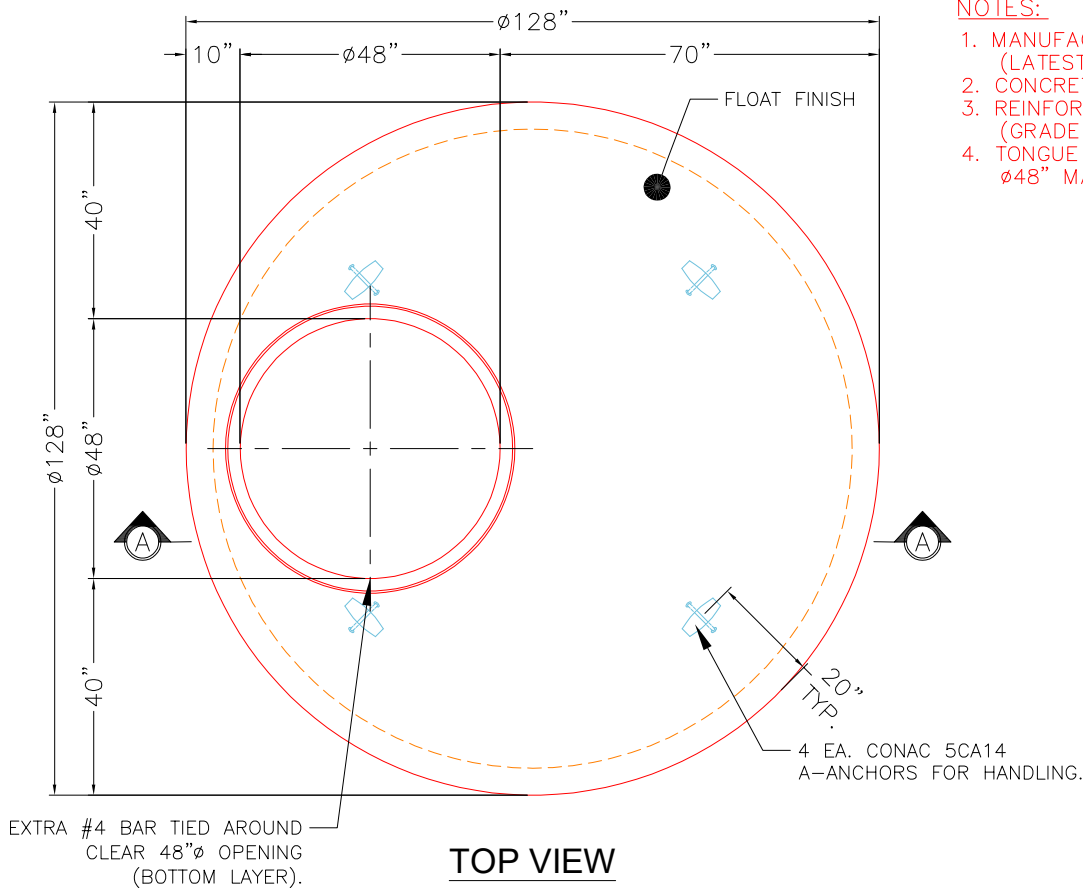
P6) 24" x 36" - CASTING HEIGHT - 6"
P5) 48" - MH FLAT TOP w/24"x36" Hole - 7"
P4) 48" - MH RISER Custom Ht - 48"
P3) 48" - MH RISER Custom Ht - 72"
P2) 108" - MH Transition Slab 48" Hole - 18"
P1) 108" - MH BASE - 96"
1) 108" - Conseal CS-102 1.00"
3) 48" - Conseal CS-102 1.00"
1) 24" x 36" - Conseal CS-102 1.00"
1) Hole - 70
1) Hole - 56
1) Hole - 24
18) MH Step ML-10-TDS-NCR - 10"

0 lb
1044 lb
3353 lb
4833 lb
12782 lb
37199 lb
0 lb
0 lb
0 lb
0 lb
0 lb
0 lb
0 lb

Structure Total: 59212 lb

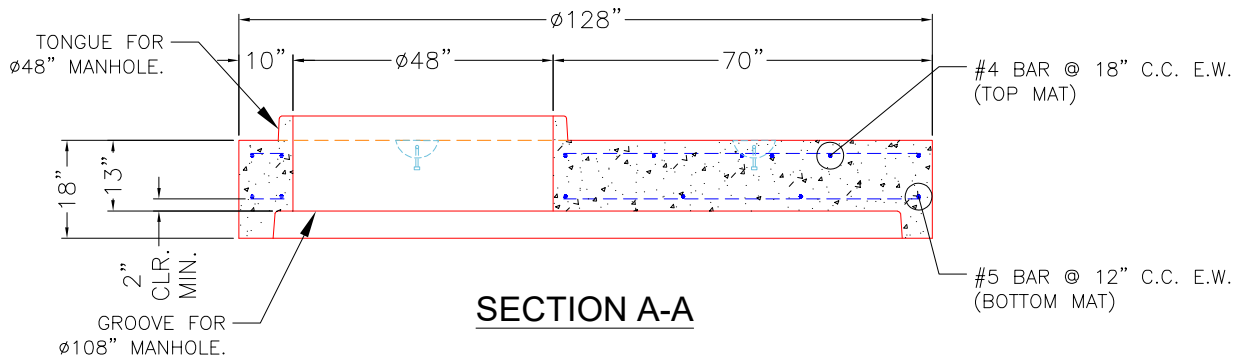
Structure Notes:

- **INDOT STATE PROJECT**
1. (GREEN HAT CI3158-F PROVIDED BY OTHERS)
 2. INDOT MH TYPE M / ASTM C478 SPEC'S.
 3. CONCRETE = 4,000 PSI AT 28 DAYS.
 4. NO INVERT CHANNEL.
 5. CASTING BY ICAST.
- REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB AS SHOWN BELOW.
 - RISER/WALLS (As .30)
 - FLOOR (As .62) #5 BARS AT 6" C.C.E.W.



NOTES:

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #4 & #5 BAR AS SHOWN (GRADE 60).
4. TONGUE REQUIRED OFFSET FOR 48" MANHOLE COMPONENTS.



Coating (Int):
Coating (Ext):

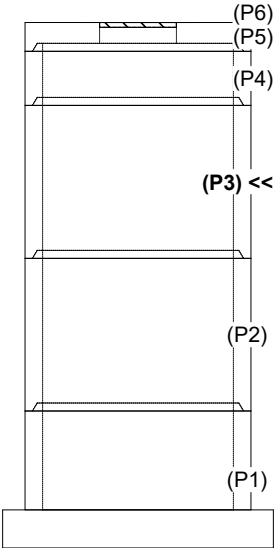
Seam Up: Tongue
Seam Dn: Groove

Wall Thickness: 10"

Height (Ext): 18"

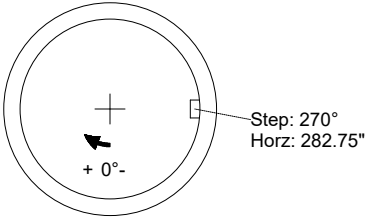
Weight (Net): 12782 lb
Volume (Net): 3.26cu.yd

Job Name: 26-1466 - Lower Mill Creek HWDW Protection Job Location: Cincinnati, OH Contractor: Sunesis Construction					Plant: 100 7/22/2026 12:40:07 PM		Tech: Jared - F PC: E. Bradley				
Structure ID: 220-8 SS-MH											
P3 MH120RS96			MH RISER T/G								
P6) 48" x 48" - HATCH (CAST FLUSH) - 3" P5) 120" - MH FLAT TOP w/48"x48" Hatch F/G - 18" P4) 120" - MH RISER Custom Ht T/G - 34" P3) 120" - MH RISER T/G - 96" P2) 120" - MH RISER T/G - 96" P1) 120" - MH BASE EF Cust. Ht. 24"F (14"EF =170"OD) T/n - 62" 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) 48" - MH INVERT CHANNEL - FULL HEIGHT 4) 120" - Hamilton Kent MH Gasket 1) Hole - 62 1) Hole - 76 1) Kor-N-Seal2 - S206-28 20) MH Step ML-10-TDS-NCR - 10"					100 lb 14814 lb 12916 lb 36468 lb 32259 lb 65517 lb 0 lb 0 lb 1440 lb 0 lb 0 lb 0 lb 6 lb 0 lb		Structure Notes: . 1. PER CINCINNATI MSD / ASTM C478 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. HATCH SUPPLIED BY OTHERS. 4. HATCH TO BE CAST INTO THE TOP SLAB. 5. BAFFLE WALL, WEIR PLATE, & INVERT CHANNEL PROVIDED BY OTHERS. REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB = H20 LOADING - RISER/WALLS (As .36) - FLOOR #6 BARS AT 6" O.C.E.W. DBL. MAT				
Rim: 498.5' Rim to Invert: 23.34' Slack: 0.6" Sump: 26.52" Step Position: 270°					Structure Total: 163520 lb						
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											



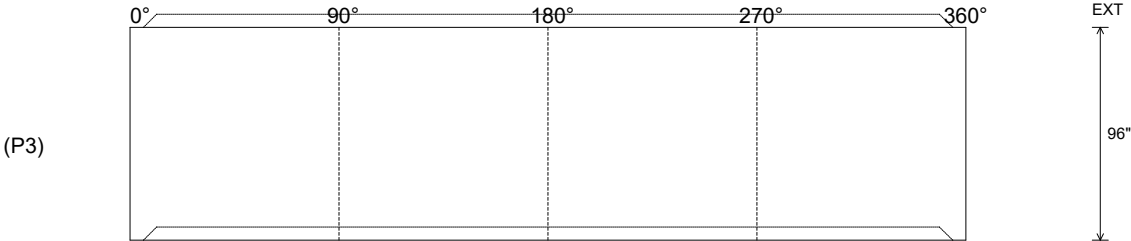
(P6)
(P5)
(P4)
(P3) <<
(P2)
(P1)

RIGHT-SIDE UP VIEW (int. dimensions)



Step: 270°
Horz: 282.75"
+ 0°

INSIDE WALL DIMENSIONS



(P3)

EXT
96"

Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Groove	Wall Thickness: 11" Floor Height: 0"	Height (Int): 96" Height (Ext): 96"	Weight (Net): 36468 lb Volume (Net): 9.32cu.yd
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Job Name: 26-3262 ADS Anchorage Middletown Fire Station 36
Job Location: Louisville, KY
Contractor: ADS Advanced Drainage Systems, Inc.

Plant: Beaver Dam

8/19/2026 4:28:04 PM

Tech: S. Felletter

PC: T. Ryan



Structure ID: WQU 1

P3 MH036LD10

MH FLAT TOP w/ 24" Ctr. Hole F/G

- P4) 24" - CASTING HEIGHT - 7"
P3) 36" - MH FLAT TOP w/ 24" Ctr. Hole F/G - 10"
P2) 36" - MH RISER Custom Ht T/G - 27"
P1) 36" - MH BASE T/n - 72"
1) ASSEMBLY REQUIRED
1) CASTING - HOE MC-375 F/C Storm
2) 36" - Con Seal CS-102 1.00"
1) 24" - Con Seal CS-102 1.00"
2) Hole - 10

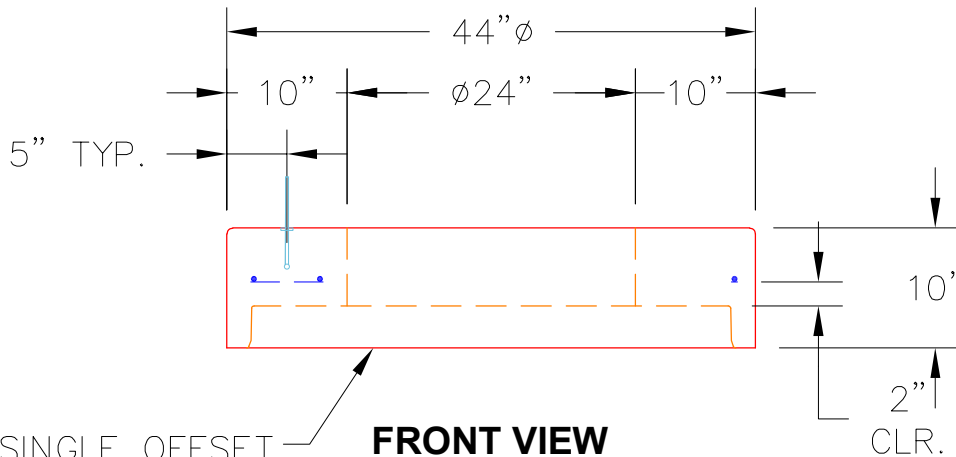
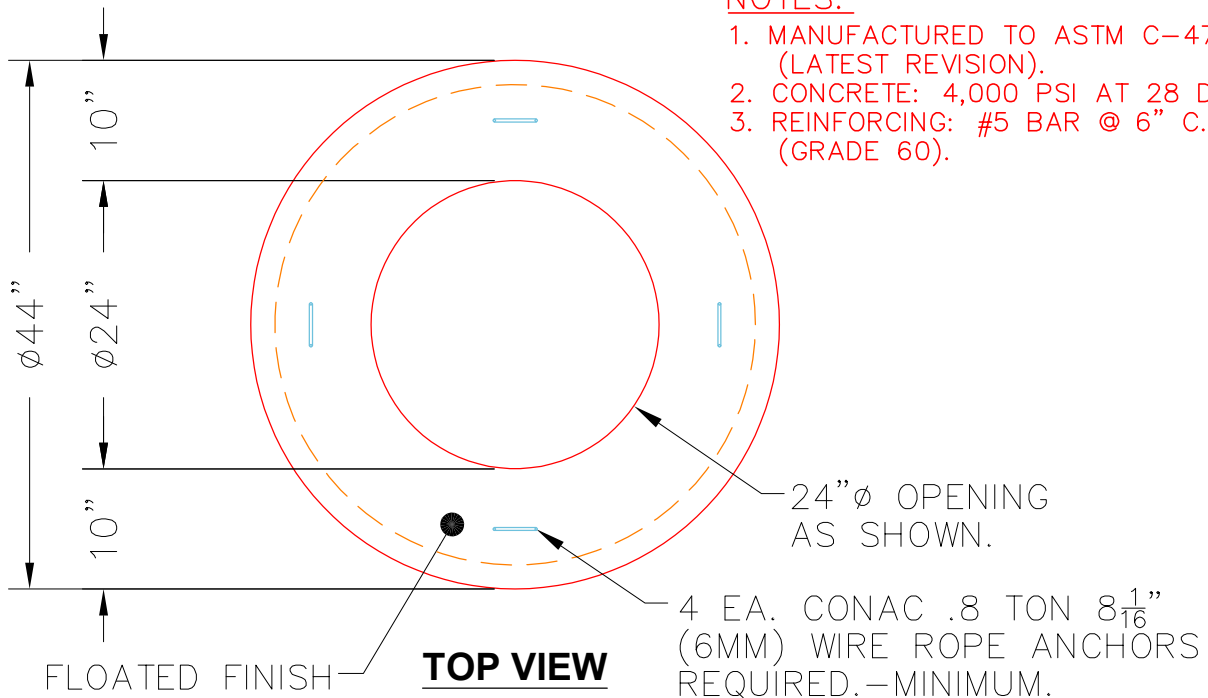
- 0 lb Structure Notes:
896 lb 1. PER ASTM C478 SPECIFICATIONS.
1139 lb 2. CONCRETE = 4,000 PSI AT 28 DAYS.
3717 lb 3. CASTING BY ICAST (HOE MC-375 F/C "STORM").
0 lb 4. LIFTING ANCHORS TO BE INSTALLED
271 lb ON THE OUTSIDE OF THE STRUCTURE.
0 lb
0 lb
0 lb
0 lb REINFORCING PER ASTM A615 (GRADE 60).

6023 lb - 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.

Structure Total:

NOTES:

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



STANDARD SINGLE OFFSET
GROOVE JOINT REQUIRED

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Groove

Wall Thickness: 4"

Height (Ext): 10"

Weight (Net): 896 lb
Volume (Net): 0.23cu.yd

Job Name: 26-2212 - CDTI Building 1
Job Location: Charlestown, IN
Contractor: Dan Cristiani Excavating Co. Inc.

Plant: Beaver Dam

8/18/2026 12:40:46 PM

Tech: J. Coppage

PC: E. Bradley



Structure ID: 216 ST-MH

P2 MH048LD12CC

MH FLAT LID w/24" Center Hole

- P3) 24" - CASTING HEIGHT - 1"
P2) 48" - MH FLAT LID w/24" Center Hole - 12"
P1) 48" - MH BASE Custom Ht - 54"
1) 48" - Conseal CS-102 1.00"
1) 24" - Conseal CS-102 1.00"
2) Hole - 24"
4) MH Step ML-10-TDS-NCR - 10"

Structure Total:

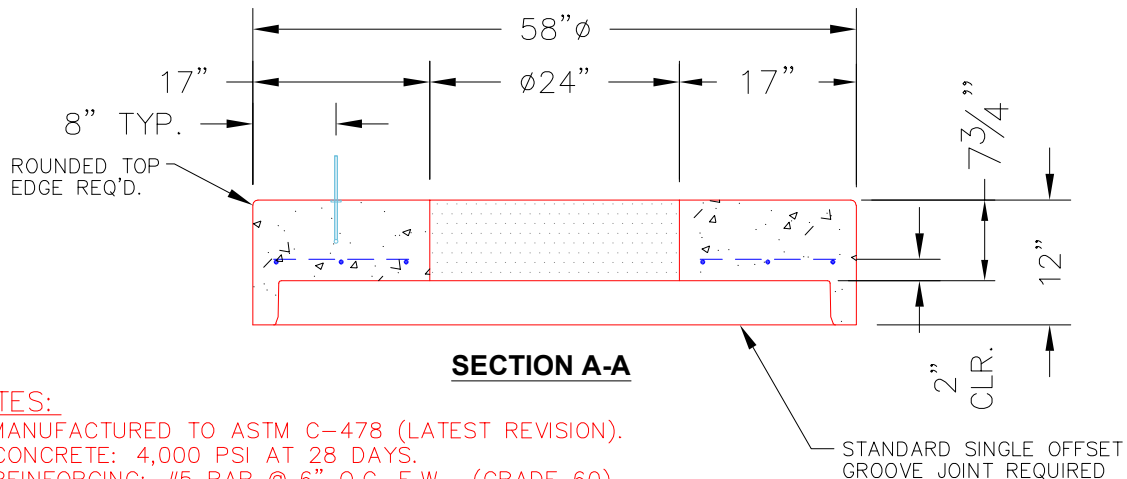
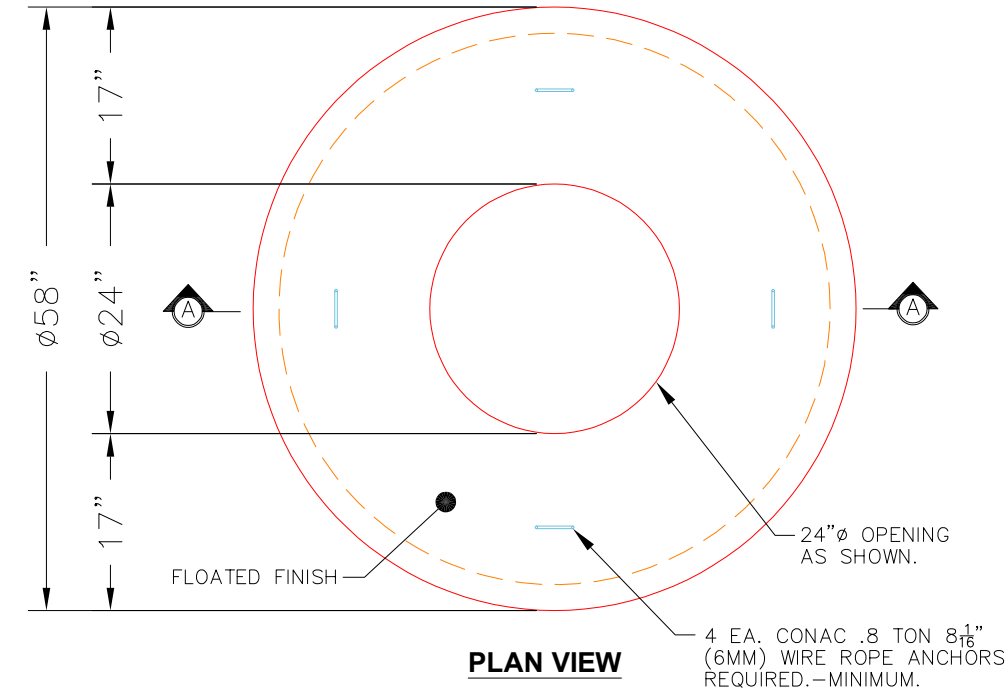
0 lb
1580 lb
4708 lb
0 lb
0 lb
0 lb
0 lb

6288 lb

Structure Notes:

INDOT STATE PROJECT

1. (GREEN HAT MG-BH4342-F PROVIDED BY OTHERS)
2. INDOT MH TYPE C / ASTM C478 SPEC'S.
3. CONCRETE = 4,000 PSI AT 28 DAYS.
4. NO INVERT CHANNEL.
5. REINFORCING PER ASTM A615 (GRADE 60).
 - RISER/WALLS (As .12)
 - FLOOR (As .62) #5 BARS AT 6" C.C.E.W.
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..



Coating (Int):
Coating (Ext):

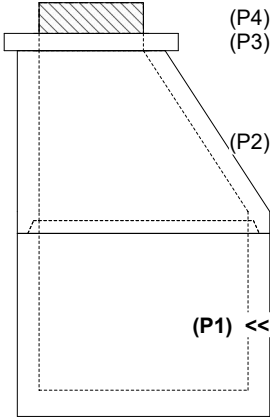
Seam Up: Flat
Seam Dn: Groove

Wall Thickness: 5"

Height (Ext): 12"

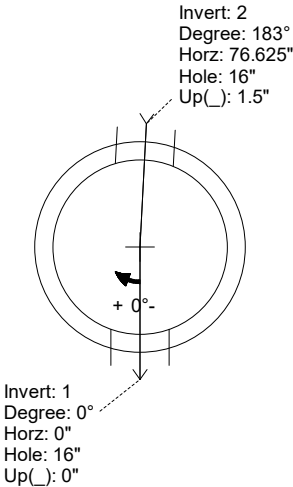
Weight (Net): 1580 lb
Volume (Net): 0.39cu.yd

Job Name: 25-3480 - Noel Ave Sewer Improvements Ph 3 Job Location: Madisonville, KY 42431 Contractor: Luttrell & Sons, LLC					Plant: 100 3/6/2026 6:37:21 AM		Tech: J. Horsley - A PC: Andy Chambers				
Structure ID: MH 13											
P1 MH048BA36X		MH BASE w/XYPEX T/n									
P4) 24" - CASTING HEIGHT - 7" P3) 24" - XYPEX GRADE RING F/F - 4" P2) 48" - ECC XYPEX CONE w/ 24" HOLE-SPECIAL F/G - 42" P1) 48" - MH BASE w/XYPEX T/n - 36" 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) JOINT WRAP - 0.065"x12"x50' CONSEAL CS212 1) 48" - MH INVERT CHANNEL w/XYPEX - FULL HEIGHT 1) ADMIXTURE XYPEX C-1000 RED 1) CASTING - HOE MC-375-SS F/C Sanitary 1) 48" - Conseal CS-102 1.00" (Double) 2) PSX - 16Y NYLO Structure Total: 8787 lb						0 lb 270 lb 3116 lb 3674 lb 0 lb 0 lb 1440 lb 0 lb 271 lb 0 lb 16 lb		Structure Notes: STATION: 0+00 LN S-1 1. PER ASTM C-478 SPECIFICATIONS 2. CONCRETE: 4,500 PSI AT 28 DAYS 3. REINFORCEMENT: PER ASTM A615 4. INVERT CHANNEL REQUIRED 5. XYPEX C-1000 ADMIXTURE REQUIRED 6. NO STEPS 7. HOE MC-375 FRAME & SELF-SEAL COVER "SANITARY" SUPPLIED BY ICAST			
Rim: 450.06'		Rim to Invert: 7.4'		Slack: 2.8"		Sump: 3"		Step Position:			
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset	
Invert 1	442.66'	0°	0"	10" PVC SDR26	10.5"	PSX 16Y NYLO	16"	16.312"	0"	0"	
Invert 2	442.78'	183°	92.625"	10" PVC SDR26	10.5"	PSX 16Y NYLO	16"	16.312"	1.5"	0"	
Invert 3											
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											



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

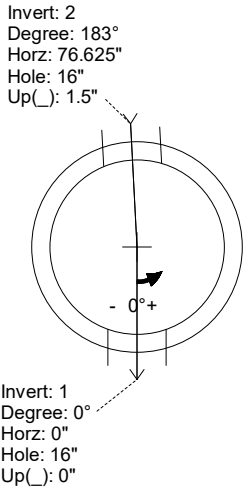
RIGHT-SIDE UP VIEW (int. dimensions)



Invert: 2
Degree: 183°
Horz: 76.625"
Hole: 16"
Up(): 1.5"

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

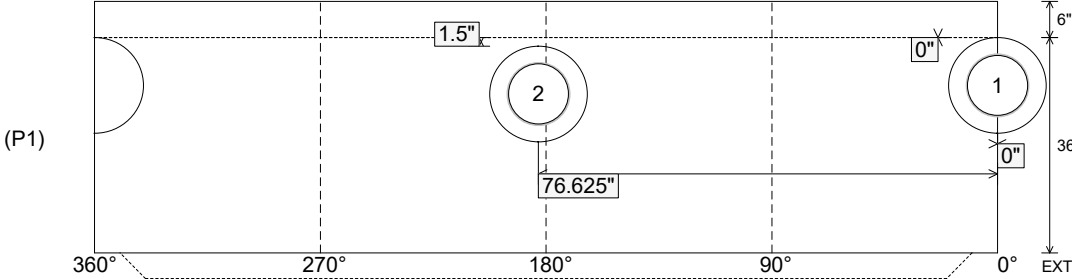
UPSIDE-DOWN VIEW (int. dimensions)



Invert: 2
Degree: 183°
Horz: 76.625"
Hole: 16"
Up(): 1.5"

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

INSIDE WALL DIMENSIONS



(P1)

1.5" 0" 6" 36" 0" 76.625" 0° 90° 180° 270° 360° EXT

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): 3674 lb Volume (Net): 0.94cu.yd
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Job Name: 25-3480 - Noel Ave Sewer Improvements Ph 3

Job Location: Madisonville, KY 42431

Contractor: Luttrell & Sons, LLC

Plant: 100

3/6/2026 6:37:21 AM

Tech: J. Horsley - A

PC: Andy Chambers



Structure ID: MH 13

P1MH048BA36XMH BASE w/XYPEX T/n

P4) 24" - CASTING HEIGHT - 7"

P3) 24" - XYPEX GRADE RING F/F - 4"

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

P1) 48" - MH BASE w/XYPEX T/n - 36"

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

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

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

1) ADMIXTURE XYPEX C-1000 RED

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

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

2) PSX - 16Y NYLO

0 lb

270 lb

3116 lb

3674 lb

0 lb

0 lb

1440 lb

0 lb

271 lb

0 lb

16 lb

Structure Total: 8787 lb

Structure Notes:

STATION: 0+00 LN S-1

1. PER ASTM C-478 SPECIFICATIONS

2. CONCRETE: 4,500 PSI AT 28 DAYS

3. REINFORCEMENT: PER ASTM A615

4. INVERT CHANNEL REQUIRED

5. XYPEX C-1000 ADMIXTURE REQUIRED

6. NO STEPS

7. HOE MC-375 FRAME & SELF-SEAL COVER

"SANITARY" SUPPLIED BY ICAST

Rim: 450.06'Rim to Invert: 7.4'Slack: 2.8"Sump: 3"Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	442.66'	0°	0"	10" PVC SDR26	10.5"	PSX 16Y NYLO	16"	16.312"	0"	0"
Invert 2	442.78'	183°	92.625"	10" PVC SDR26	10.5"	PSX 16Y NYLO	16"	16.312"	1.5"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

(P4)

(P3)

(P2)

(P1) <<

Invert: 2
Degree: 183°
Horz: 76.625"
Hole: 16"
Up(): 1.5"

+ 0°-

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

UPSIDE-DOWN VIEW (int. dimenions)

INVERT CHANNEL
DRAWING

INSIDE WALL DIMENSIONS

(P1)

1.5"

0"

6"

36"

0"

76.625"

360°

270°

180°

90°

0°

EXT

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): 3674 lb
Volume (Net): 0.94cu.yd

Job Name: 26-2212 - CDTI Building 1
Job Location: Charlestown, IN
Contractor: Dan Cristiani Excavating Co. Inc.

Plant: Beaver Dam

Tech: J. Coppage

8/18/2026 12:38:49 PM

PC: E. Bradley



Structure ID: 216 ST-MH

P1 MH048BA54

MH BASE Custom Ht

- P3) 24" - CASTING HEIGHT - 1"
P2) 48" - MH FLAT LID w/24" Center Hole - 12"
P1) 48" - MH BASE Custom Ht - 54"
1) 48" - Conseal CS-102 1.00"
1) 24" - Conseal CS-102 1.00"
2) Hole - 24"
4) MH Step ML-10-TDS-NCR - 10"

0 lb
1580 lb
4708 lb
0 lb
0 lb
0 lb
0 lb

Structure Total: 6288 lb

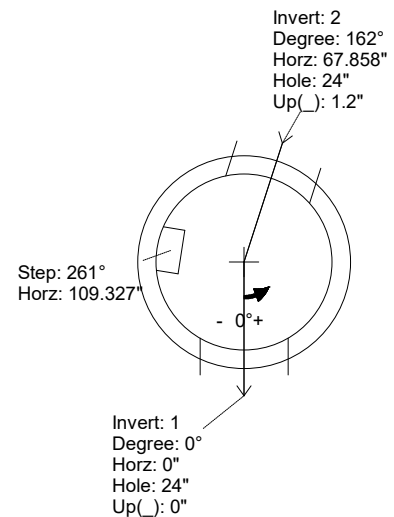
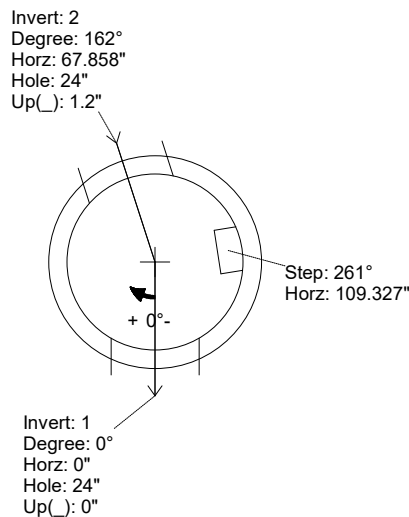
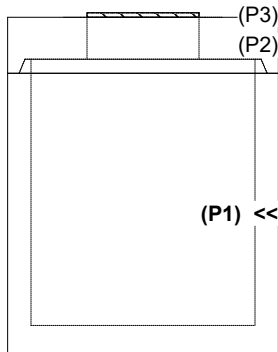
Structure Notes:
INDOT STATE PROJECT
1. (GREEN HAT MG-BH4342-F PROVIDED BY OTHERS)
2. INDOT MH TYPE C / ASTM C478 SPEC'S.
3. CONCRETE = 4,000 PSI AT 28 DAYS.
4. NO INVERT CHANNEL.
5. REINFORCING PER ASTM A615 (GRADE 60).
- CONE (As .12)
- RISER/WALLS (As .12)
- FLOOR (As .62) #5 BARS AT 6" C.C.E.W.
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..

Rim: 605.14' Rim to Invert: 5.69' Slack: 2.88" Sump: 1.6" Step Position: 261°

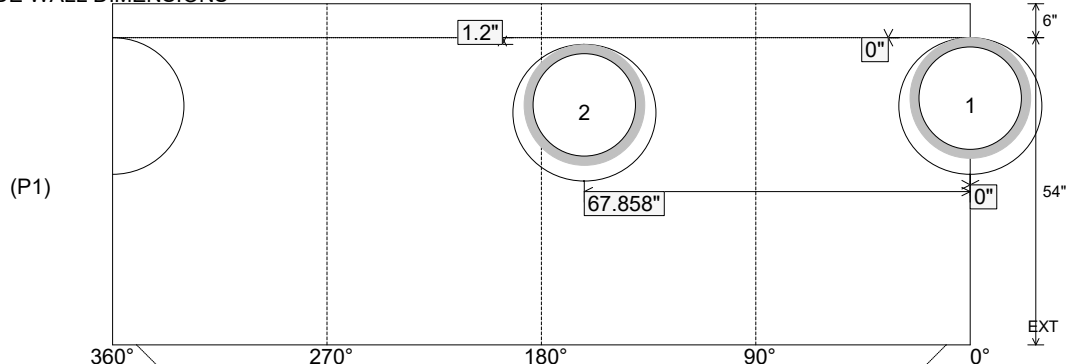
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	599.45'	0°	0"	18" HDPE	21.2"	Hole 24	24"	25.133"	0"	0"
Invert 2	599.55'	162°	81.996"	18" HDPE	21.2"	Hole 24	24"	25.133"	1.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



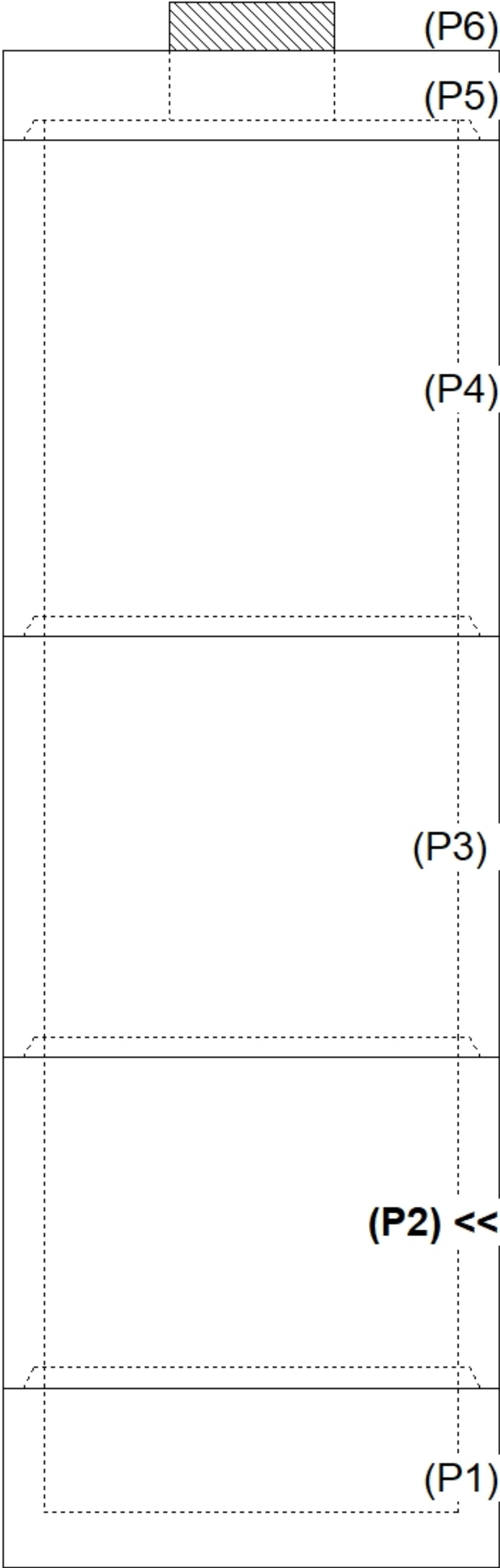
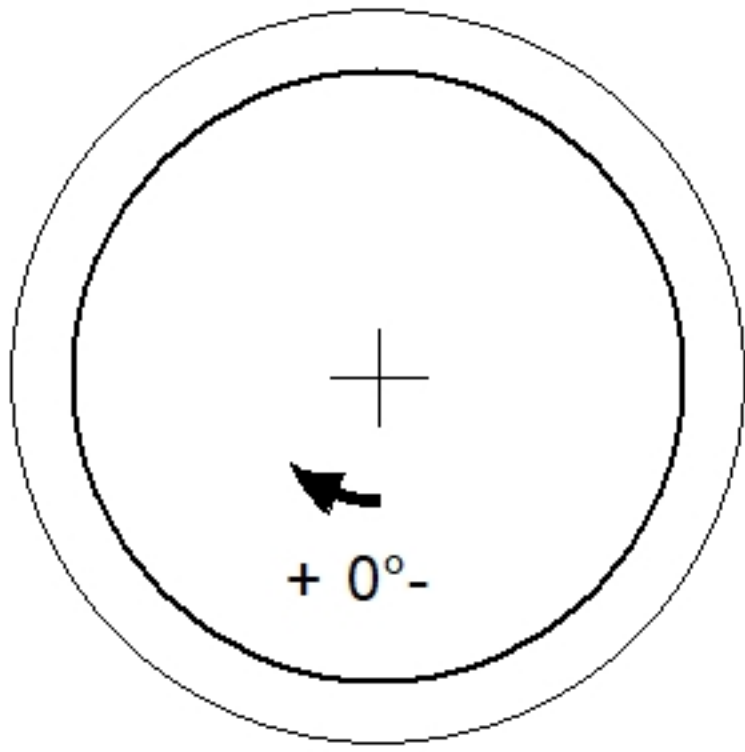
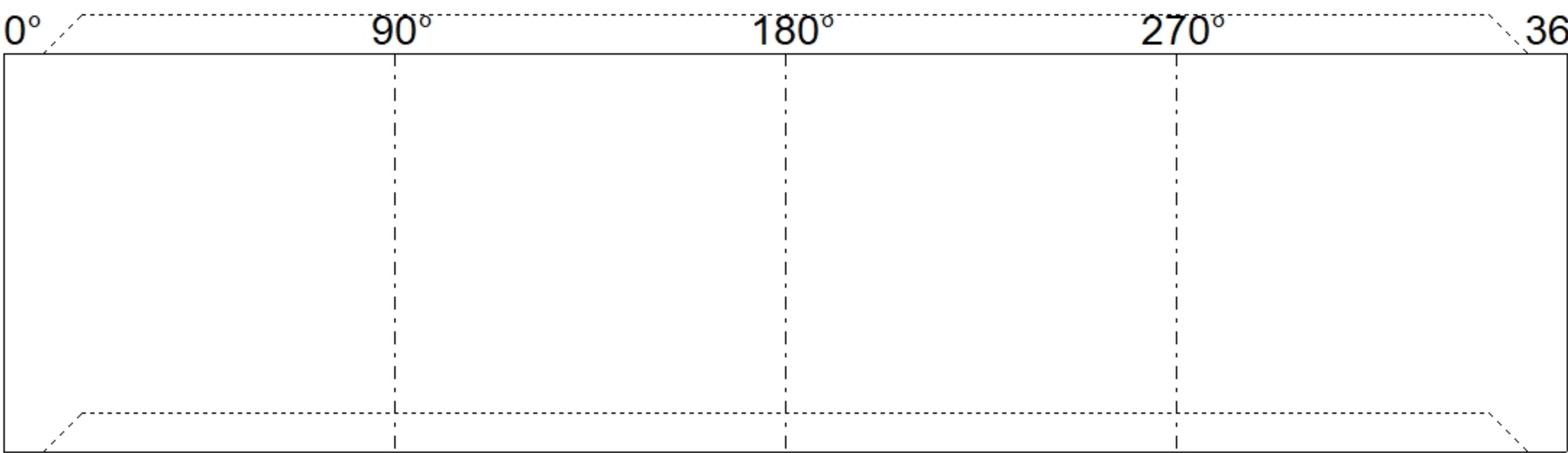
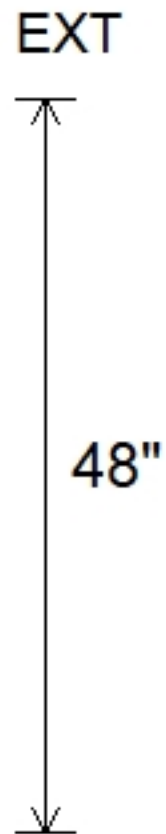
Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 5"
Floor Height: 6"

Height (Int): 54"
Height (Ext): 60"

Weight (Net): 4708 lb
Volume (Net): 1.2cu.yd

Job Name: 26-2976 ADS St. Charles at Park Hills Job Location: Park Hills, KY Contractor: ADS Advanced Drainage Systems, Inc.					Plant: Beaver Dam 7/23/2026 12:18:12 PM		Tech: S. Felletter PC: T. Ryan				
Structure ID: 4											
P2 MH060RS48			MH RISER T/G								
P6) 24" - CASTING HEIGHT - 7" P5) 60" - MH FLAT TOP w/24" Ctr. Hole F/G - 13" P4) 60" - MH RISER T/G - 72" P3) 60" - MH RISER Custom Ht T/G - 61" P2) 60" - MH RISER T/G - 48" P1) 60" - MH BASE T/n - 18" 1) ASSEMBLY REQUIRED 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) CASTING - HOE MC-375 F/C Storm 4) 60" - Conseal CS-102 1.00" (Double) 1) 24" - Conseal CS-102 1.00" (Double) 2) Hole - 38						0 lb 2674 lb 7516 lb 5148 lb 5011 lb 4612 lb 0 lb 0 lb 0 lb 271 lb 0 lb 0 lb 0 lb		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. LIFT ANCHORS TO BE ON THE OUTSIDE OF THE STRUCTURE. 5. P2 & P3 RISERS TO BE MECHANICALLY ATTACHED PRIOR TO INTERNAL INSTALLATION/DELIVERY. - 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: 828.73' Rim to Invert: 11.58' Slack: 0.96" Sump: 81" 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: 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: 26-2212 - CDTI Building 1
Job Location: Charlestown, IN
Contractor: Dan Cristiani Excavating Co. Inc.

Plant: Beaver Dam

Tech: J. Coppage

8/18/2026 12:40:33 PM

PC: E. Bradley



Structure ID: 202 ST-MH

P2 MH060LD13SP

MH FLAT TOP w/24"x48" Hole

- P3) 24" x 48" - CASTING HEIGHT - 8"
P2) 60" - MH FLAT TOP w/24"x48" Hole - 13"
P1) 60" - MH BASE Custom Ht - 46"
1) 60" - Conseal CS-102 1.00"
1) 24" x 48" - Conseal CS-102 1.00"
1) Hole - 40
1) Hole - 24
4) MH Step ML-10-TDS-NCR - 10"

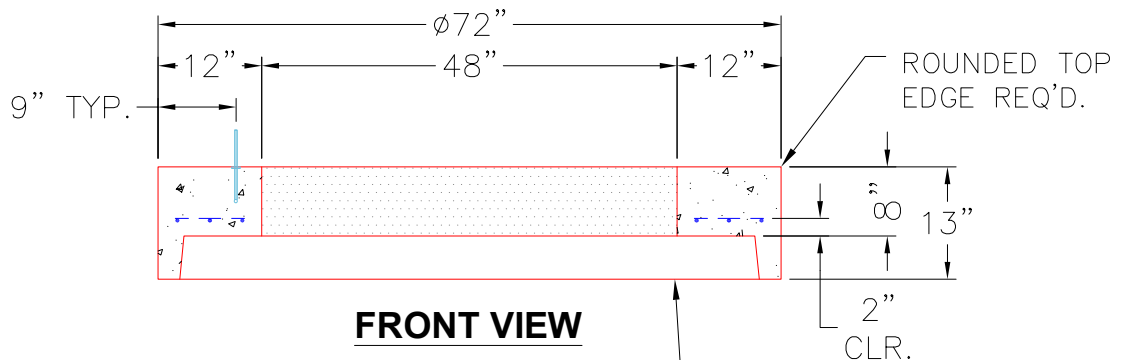
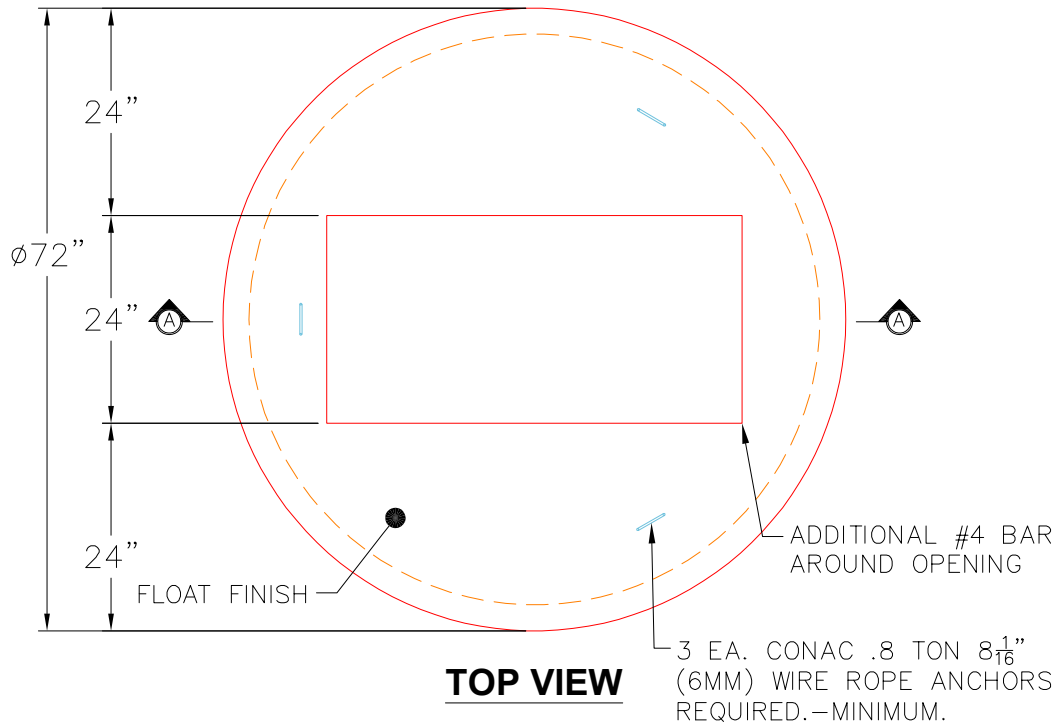
0 lb
2272 lb
6620 lb
0 lb
0 lb
0 lb
0 lb
0 lb

Structure Total: 8892 lb

Structure Notes:

INDOT STATE PROJECT

1. (NEENAH R-3287-15 PROVIDED BY OTHERS)
2. INDOT MH TYPE J / ASTM C478 SPEC'S.
3. CONCRETE = 4,000 PSI AT 28 DAYS.
4. NO INVERT CHANNEL.
5. REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #4 BARS AT 9" C.C.E.W..
 - RISER/WALLS (As .12)
 - FLOOR (As .62) #5 BARS AT 6" C.C.E.W.



NOTES:

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #4 BAR @ 9" O.C. E.W. (GRADE 60).

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Groove

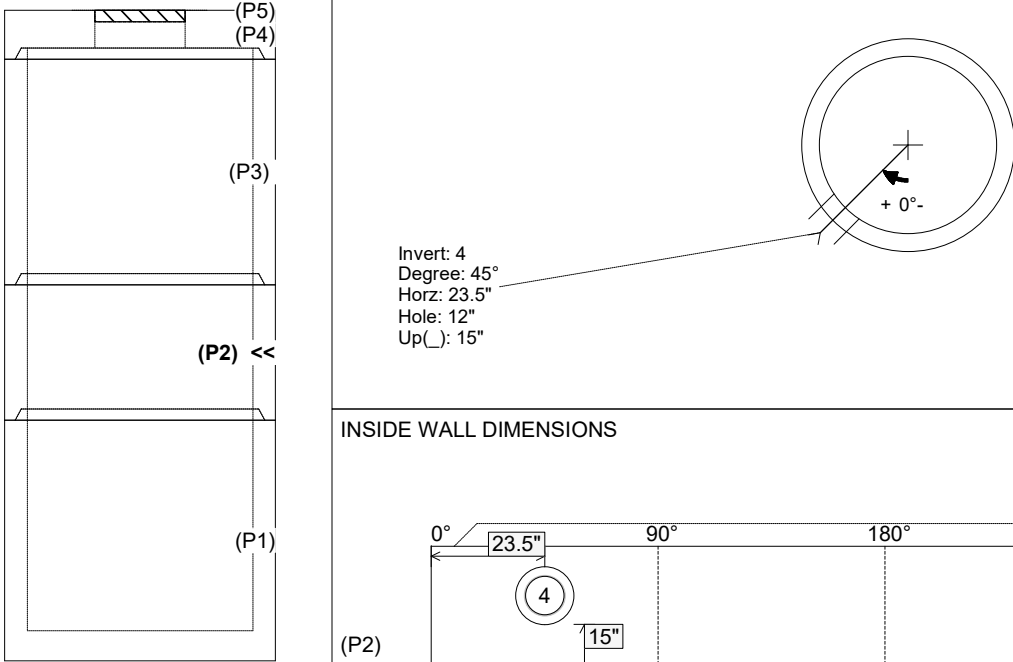
Wall Thickness: 6"

Height (Ext): 13"

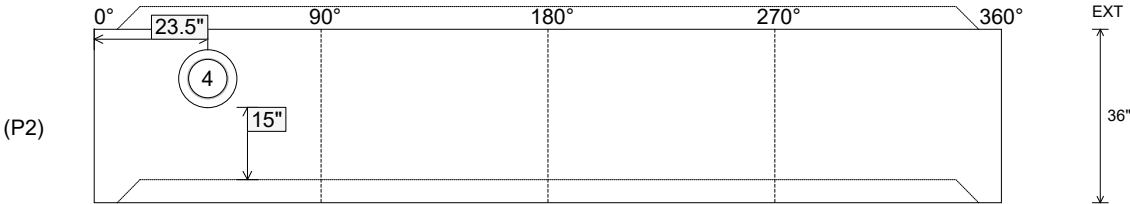
Weight (Net): 2272 lb
Volume (Net): 0.58cu.yd

Job Name: 26-2820 - Utility Relocation Job Location: Jackson, KY Contractor: Triton Construction					Plant: 100 8/18/2026 6:25:52 PM		Tech: Jared - F PC: E. Bradley			
Structure ID: QL1										
P2 MH060RS36S			MH RISER SPECIAL T/G							
P5) 24" x 36" - HATCH (CAST FLUSH) - 3" P4) 60" - MH FLAT TOP w/24"x36" Hatch F/G - 13" P3) 60" - MH RISER SPECIAL T/G - 60" P2) 60" - MH RISER SPECIAL T/G - 36" P1) 60" - MH BASE Custom Ht T/n - 56" 1) HATCH (Alum.) - HALLIDAY W1S 24"x36" 3) JOINT WRAP - 12" WD x 060" MAC WRAP 3) 60" - Conseal CS-231 1.00" (Double) 3) PSX - 8QRS-S NYLO 2) PSX - 12-08 NYLO					100 lb 2478 lb 6128 lb 3701 lb 8579 lb 61 lb 0 lb 0 lb 20 lb 16 lb ----- Structure Total: 21082 lb		Structure Notes: 1. PER ASTM C478 SPECIFICATIONS. 2. CONCRETE = 4,500 PSI AT 28 DAYS. 3. HALLIDAY W1S 36" X24" HATCH TO BE SUPPLIED BY ICAST & CAST-IN INTO TOP SLAB BY ICAST. REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W. - RISER/WALLS (As .24) - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.			
Rim: 736.74' Rim to Invert: 7.31' Slack: 0.48" Sump: 77.76" Step Position:					NOTE: 4 EA. 4CA14 CONAC A-ANCHORS FOR PLANT & FIELD HANDLING – INSTALLED AT 0, 90, 180, & 270, 12" FROM TOP OF WALLS					
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1										
Invert 2										
Invert 3										
Invert 4	729.43'	45°	28.25"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.081"	15"	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): 36" Height (Ext): 36"	Weight (Net): 3701 lb Volume (Net): 0.94cu.yd
----------------------------------	------------------------------------	--	--	--

Job Name: 26-2648 Midtown Commons Apartments Job Location: Madisonville, KY Contractor: Steve Pleasant Excavating					Plant: Beaver Dam 7/20/2026 10:44:14 AM		Tech: S. Felletter PC:				
Structure ID: 2.2 MHA											
P1		MH060BA72			MH BASE T/n						
P3) 24" - CASTING HEIGHT - 4" P2) 60" - MH FLAT LID w/24in ECC Hole F/G - 13" P1) 60" - MH BASE T/n - 72" 1) CASTING - HOE KY-206 F/C (KY TY1) 1) 60" - Conseal CS-102 1.00" 1) 24" - Conseal CS-102 1.00" 2) Hole - 38 6) MH Step ML-10-TDS-NCR - 10"					0 lb 2800 lb 9030 lb 206 lb 0 lb 0 lb 0 lb 0 lb 0 lb ----- 12036 lb		Structure Notes: 1. PER KYTC MH A / ASTM C478 SPEC'S. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. CASTING BY ICAST (HOE KY-206 F/C). . 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: 435' Rim to Invert: 7.15' Slack: 0.8" Sump: 4" Step Position: 107.5°											
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset	
Invert 1	427.85'	0°	0"	30" ADS N-12	35.1"	Hole 38	38"	41.151"	0"	0"	
Invert 2	427.93'	215°	135.088"	30" ADS N-12	35.1"	Hole 38	38"	41.151"	0.96"	0"	
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: 8"		Height (Int): 72" Height (Ext): 80"		Weight (Net): 9030 lb Volume (Net): 2.31cu.yd		

Job Name: 26-2212 - CDTI Building 1
Job Location: Charlestown, IN
Contractor: Dan Cristiani Excavating Co. Inc.

Plant: Beaver Dam

Tech: J. Coppage

8/18/2026 12:38:31 PM

PC: E. Bradley



Structure ID: 109 ST-MH

P1 MH072BAVF

MH BASE Custom Ht

- P4) 24" x 48" - CASTING HEIGHT - 8"
P3) 72" - MH FLAT TOP w/24"x48" Hole - 10"
P2) 72" - MH RISER Custom Ht - 44"
P1) 72" - MH BASE Custom Ht - 78"
2) 72" - Conseal CS-102 1.00"
1) 24" x 48" - Conseal CS-102 1.00"
2) Hole - 52
1) DOGHOUSE INVRTD - 32"x28"
6) MH Step ML-10-TDS-NCR - 10"

0 lb
4139 lb
5928 lb
12537 lb
0 lb
0 lb
0 lb
0 lb
0 lb

Structure Total: 22604 lb

Structure Notes:

****INDOT STATE PROJECT****

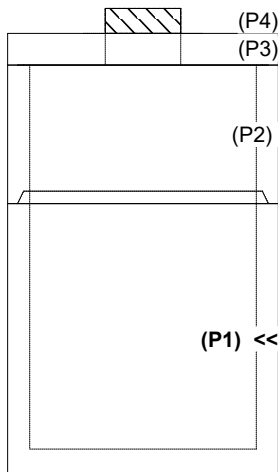
1. (NEENAH R-3287-15 PROVIDED BY OTHERS)
2. INDOT MH TYPE K / ASTM C478 SPEC'S.
3. CONCRETE = 4,000 PSI AT 28 DAYS.
4. NO INVERT CHANNEL.
5. REINFORCING PER ASTM A615 (GRADE 60).
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
 - RISER/WALLS (As .12)
 - FLOOR (As .62) #5 BARS AT 6" C.C.E.W.

Rim: 606.33' Rim to Invert: 11.44' Slack: 0.43' Sump: 3.15' Step Position: 111°

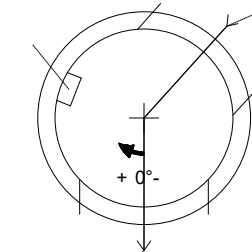
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	594.89'	0°	0"	42" HDPE	47.7"	Hole 52	52"	58.105"	0"	0"
Invert 2	594.99'	222°	166.609"	42" HDPE	47.7"	Hole 52	52"	58.105"	1.2"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimenions)



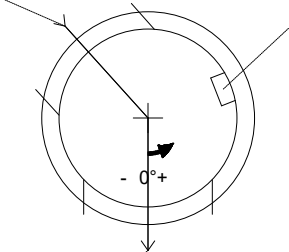
Step: 111°
Horz: 69.743"



Invert: 2
Degree: 222°
Horz: 139.487"
Hole: 52"
Up(): 1.2"

Invert: 2
Degree: 222°
Horz: 139.487"
Hole: 52"
Up(): 1.2"

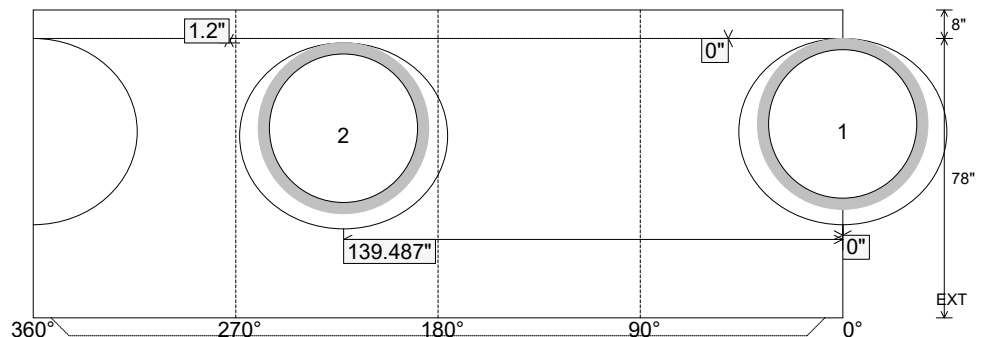
Step: 111°
Horz: 69.743"



Invert: 1
Degree: 0°
Horz: 0"
Hole: 52"
Up(): 0"

INSIDE WALL DIMENSIONS

(P1)



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 7"
Floor Height: 8"

Height (Int): 78"
Height (Ext): 86"

Weight (Net): 12537 lb
Volume (Net): 3.2cu.yd

Job Name: 25-3241P2 - Buck Hills Subdivision
Job Location: Lawrenceburg, KY 40342
Contractor: Edmonson Plumbing & Heating Supply

Plant: 100

7/24/2026 12:44:52 PM

Tech: Jared - A

PC: C. Goff



Structure ID: Wet Well

P3 MH072LD15S

MH FLAT TOP w/30"x48" Hatch

- P4) 30" x 48" - HATCH (CAST FLUSH) - 3"
P3) 72" - MH FLAT TOP w/30"x48" Hatch - 15"
P2) 72" - MH RISER Custom Ht - 69"
P1) 72" - MH BASE EF Cust. Ht. 08"F (8"EF =102"OD) - 24"
1) HATCH (Alum.) - HALLIDAY S1R 30"x48"
1) This Structure Includes a Cast-in Item - Halliday S1R 30" x 48" Hatch (Supplied by iCast)
2) JOINT WRAP - 12" WD x 072" MAC WRAP
1) SECONDARY POUR - Extended Flange
2) 72" - Conseal CS-231 1.00" (Double)
3) PSX - 8QRS-S NYLO
1) PSX - 12M NYLO

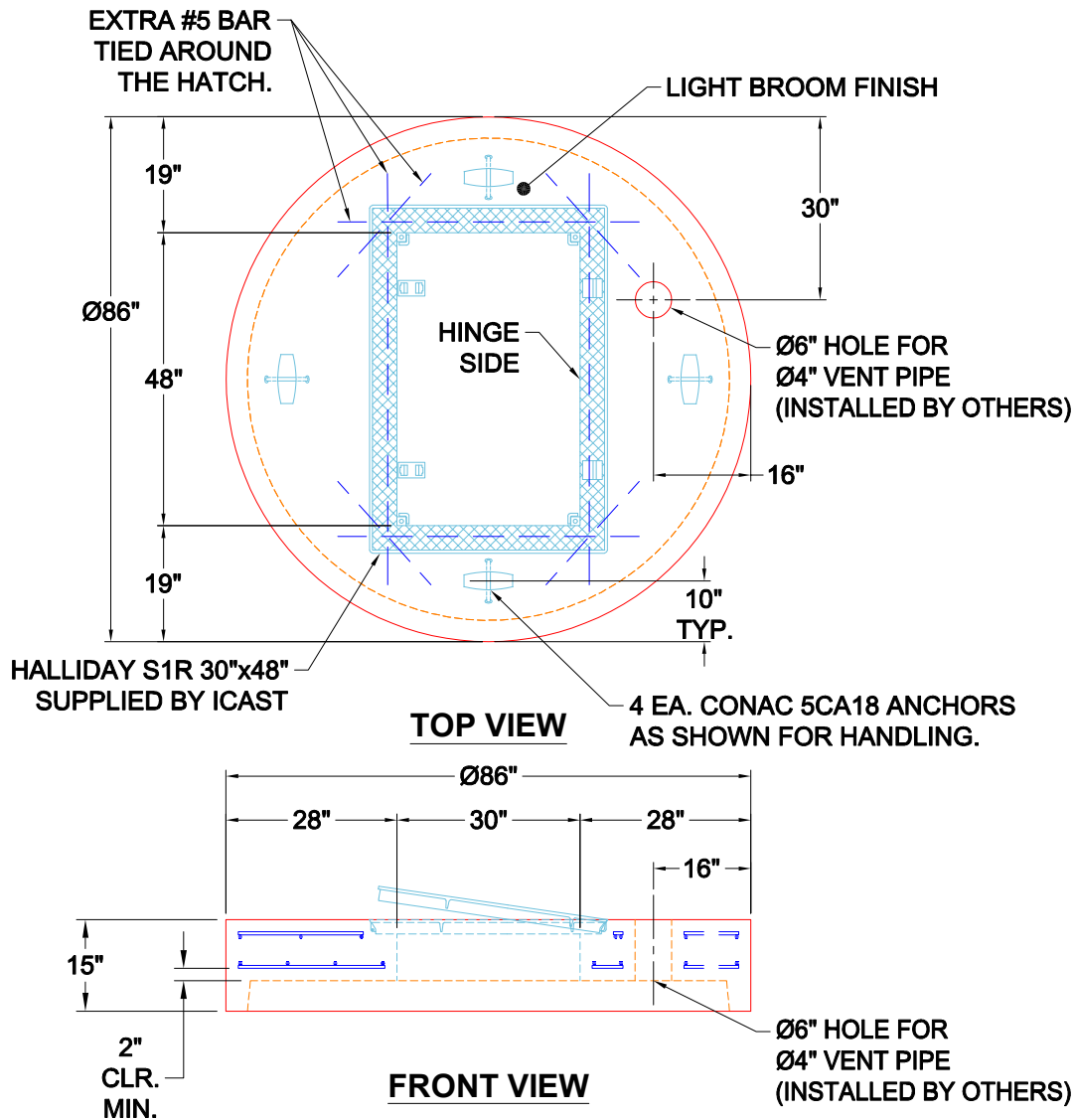
Structure Total:

100 lb
4186 lb
9900 lb
8984 lb
71 lb
0 lb
0 lb
0 lb
0 lb
20 lb
8 lb

23269 lb

Structure Notes:

1. PER ASTM C-478 SPECIFICATIONS
2. CONCRETE: 4,500 PSI AT 28 DAYS
3. REINFORCEMENT:
 - FLAT LID TOP MAT: #4 BAR @ 18" C.C. E.W. (GRADE 60)
 - FLAT LID BOTTOM MAT: #4 BAR @ 9" C.C. E.W. (GRADE 60)
 - BASE WALLS & RISER: PER ASTM A615
 - BASE FLOOR: #5 BAR @ 8" C.C. E.W. (GRADE 60)
4. NO STEPS
5. HALLIDAY S1R 30" X 48" HATCH SUPPLIED BY ICAST - TO BE CAST INTO FLAT LID



GENERAL NOTES:

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE 4,500 PSI AT 28 DAYS.
3. REINFORCING:
 - TOP MAT: #4 @ 18" C.C. E.W. (GRADE 60)
 - BOTTOM MAT: #4 @ 9" C.C. E.W. (GRADE 60)

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Groove

Wall Thickness: 7"

Height (Ext): 15"

Weight (Net): 4186 lb
Volume (Net): 1.07cu.yd

Job Name: 25-4547 - WWTP Improvements & Hydraulic Expansion
Job Location: Shepherdsville, KY
Contractor: Pace Contracting, LLC

Plant: 100

6/3/2026 6:27:34 PM

Tech: Jared - F

PC: J Jarvis



Structure ID: SCUM VAULT

P1 MH072BAEVF

MH BASE w/FLANGE (08F/07EF) T/n

- P3) 48" x 48" - CASTING HEIGHT - 0"
P2) 72" - MH FLAT TOP w/48"x48" Hatch F/G - 15"
P1) 72" - MH BASE w/FLANGE (08F/07EF) T/n - 51"
1) JOINT WRAP - 0.065"x6"x50" CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) HATCH (Alum.) - HALLIDAY W2S 48"x48"
1) 72" - Conseal CS-102 1.00" (Double)
1) 48" x 48" - Conseal CS-102 1.00" (Double)
4) Z-Lok - C107-6
1) PSX - 8QRS-S NYLO
4) MH Step ML-10-TDS-NCR - 10"

0 lb
3320 lb
12452 lb
0 lb
0 lb
126 lb
0 lb
0 lb
4 lb
6 lb
0 lb
Structure Total: 15909 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 5,000 PSI AT 28 DAYS.
3. HATCH SUPPLIED BY I-CAST (HALLIDAY W2S 48"x48").

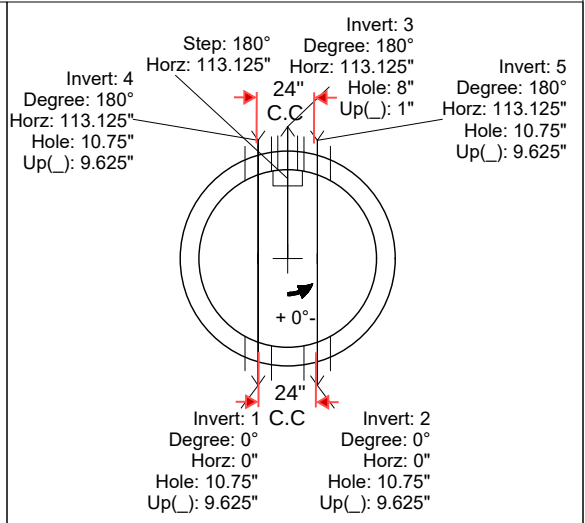
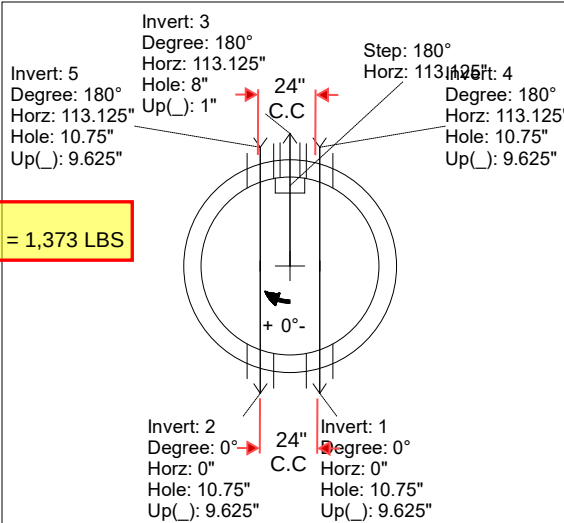
REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .31) #5 BARS AT 6" C.C.E.W.
- RISER/WALLS (As .12)
- FLOOR (As .37) #5 BARS AT 10" C.C.E.W.

Rim: 454' Rim to Invert: 5.25' Slack: 0" Sump: 3" Step Position: 180°

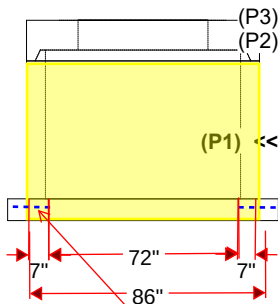
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	449.5'	0°	-12.125"	6" DI	6.875"	Z-Lok C107-6	10.75"	11.469"	9.625"	-12"
Invert 2	449.5'	0°	12.125"	6" DI	6.875"	Z-Lok C107-6	10.75"	11.469"	9.625"	12"
Invert 3	448.75'	180°	135.125"	4" DI	4.75"	PSX 8QRS-S NYLO	8"	8.017"	1"	0"
Invert 4	449.5'	180°	147.25"	6" DI	6.875"	Z-Lok C107-6	10.75"	11.469"	9.625"	12"
Invert 5	449.5'	180°	122.875"	6" DI	6.875"	Z-Lok C107-6	10.75"	11.469"	9.625"	-12"
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

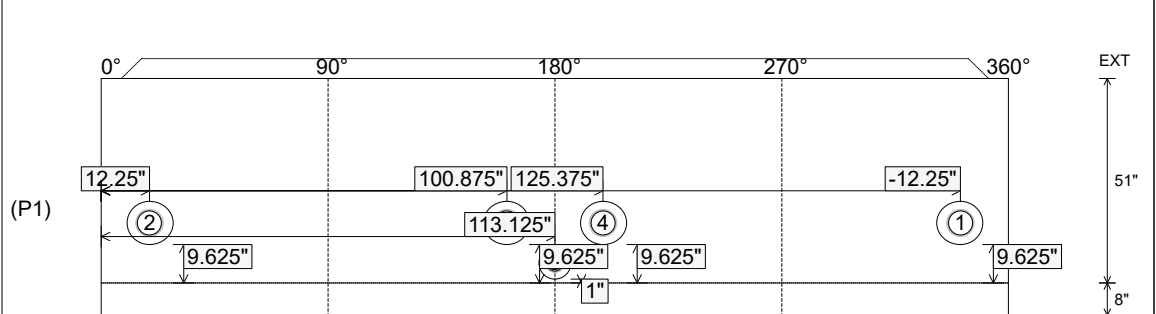


1ST POUR (BASE) = 11,079 LBS
2ND POUR (EXTENDED FLANGE) = 1,373 LBS



#5 BAR DOWELS @ 18" O.C TO BE
DRILLED IN BASE SLAB FOR FLANGE
ATTACHMENT

INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 7"
Floor Height: 8"

Height (Int): 51"
Height (Ext): 59"

Weight (Net): 12452 lb
Volume (Net): 3.18cu.yd

Job Name: 25-4547 - WWTP Improvements & Hydraulic Expansion
Job Location: Shepherdsville, KY
Contractor: Pace Contracting, LLC

Plant: 100

6/3/2026 6:27:34 PM

Tech: Jared - F

PC: J Jarvis



Structure ID: SCUM VAULT

P1 MH072BAEVF

MH BASE w/FLANGE (08F/07EF) T/n

- P3) 48" x 48" - CASTING HEIGHT - 0"
P2) 72" - MH FLAT TOP w/48"x48" Hatch F/G - 15"
P1) 72" - MH BASE w/FLANGE (08F/07EF) T/n - 51"
1) JOINT WRAP - 0.065"x6"x50" CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) HATCH (Alum.) - HALLIDAY W2S 48"x48"
1) 72" - Conseal CS-102 1.00" (Double)
1) 48" x 48" - Conseal CS-102 1.00" (Double)
4) Z-Lok - C107-6
1) PSX - 8QRS-S NYLO
4) MH Step ML-10-TDS-NCR - 10"

0 lb
3320 lb
12452 lb
0 lb
0 lb
126 lb
0 lb
0 lb
0 lb
4 lb
6 lb
0 lb

Structure Total: 15909 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 5,000 PSI AT 28 DAYS.
3. HATCH SUPPLIED BY I-CAST (HALLIDAY W2S 48"X48").

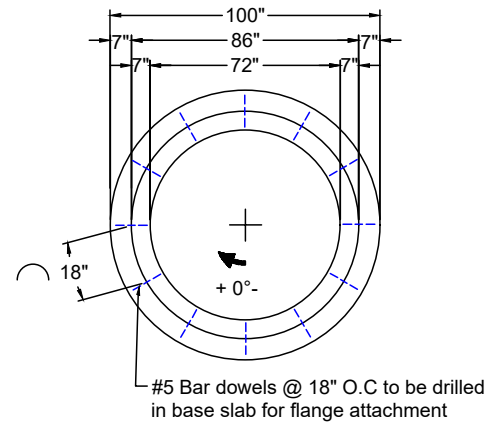
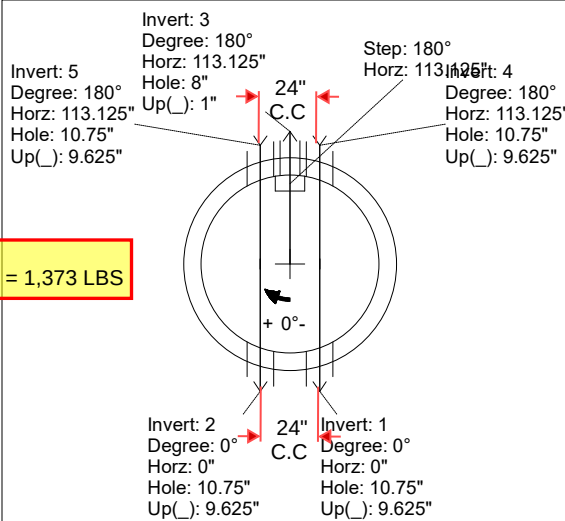
REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .31) #5 BARS AT 6" C.C.E.W.
- RISER/WALLS (As .12)
- FLOOR (As .37) #5 BARS AT 10" C.C.E.W.

Rim: 454' Rim to Invert: 5.25' Slack: 0" Sump: 3" Step Position: 180°

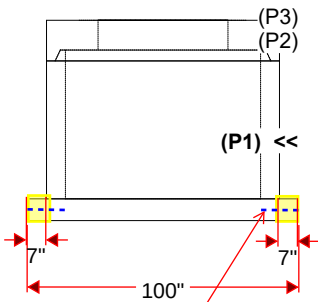
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	449.5'	0°	-12.125"	6" DI	6.875"	Z-Lok C107-6	10.75"	11.469"	9.625"	-12"
Invert 2	449.5'	0°	12.125"	6" DI	6.875"	Z-Lok C107-6	10.75"	11.469"	9.625"	12"
Invert 3	448.75'	180°	135.125"	4" DI	4.75"	PSX 8QRS-S NYLO	8"	8.017"	1"	0"
Invert 4	449.5'	180°	147.25"	6" DI	6.875"	Z-Lok C107-6	10.75"	11.469"	9.625"	12"
Invert 5	449.5'	180°	122.875"	6" DI	6.875"	Z-Lok C107-6	10.75"	11.469"	9.625"	-12"
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

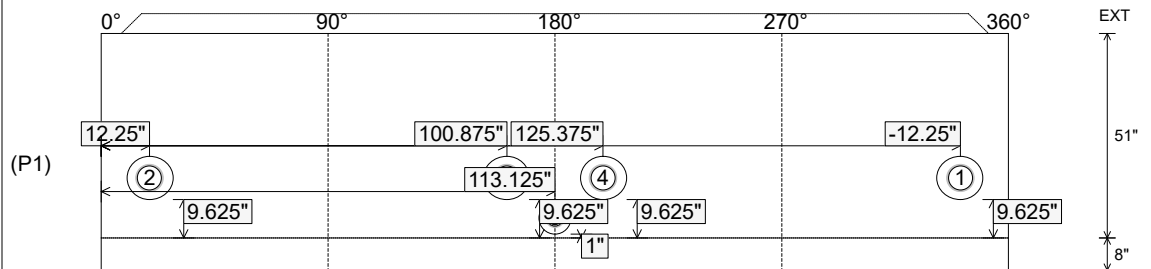


1ST POUR (BASE) = 11,079 LBS
2ND POUR (EXTENDED FLANGE) = 1,373 LBS



#5 BAR DOWELS @ 18" O.C TO BE
DRILLED IN BASE SLAB FOR FLANGE
ATTACHMENT

INSIDE WALL DIMENSIONS



Coating (Int):
Coating (Ext):

Seam Up: Tongue
Seam Dn: n/a

Wall Thickness: 7"
Floor Height: 8"

Height (Int): 51"
Height (Ext): 59"

Weight (Net): 12452 lb
Volume (Net): 3.18cu.yd

Job Name: 26-1549 Cowan St. Trunk Sewer
Job Location: Nashville, TN
Contractor: Garney Companies, Inc.

Plant: 100

8/5/2026 9:32:25 AM

Tech: Jared - A

PC: Jay Ross Jarvis



Structure ID: MH-5-6 SS-MH

P3 MH084RS96X

MH RISER w/XYPEX

- P6) 30" - CASTING HEIGHT - 6"
P5) 84" - MH FLAT TOP w/2X 30" Holes ECC w/XYPEX - 17"
P4) 84" - MH RISER w/XYPEX - 96"
P3) 84" - MH RISER w/XYPEX - 96"
P2) 84" - MH RISER w/XYPEX - 96"
P1) 84" - MH BASE w/FLANGE (12F/14EF) w/XYPEX - 93"
1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
1) ADMIXTURE XYPEX C-1000 RED
1) SECONDARY POUR - EXT. FLANGE
2) CASTING - JBS 1312 WT F/C SANITARY
4) 84" - Conseal CS-102 1.00" (Double)
2) A-Lok - 1840
1) Kor-N-Seal2 - S206-30 (DBL Bands)

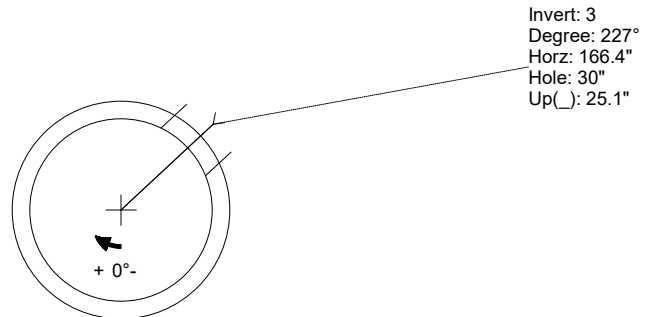
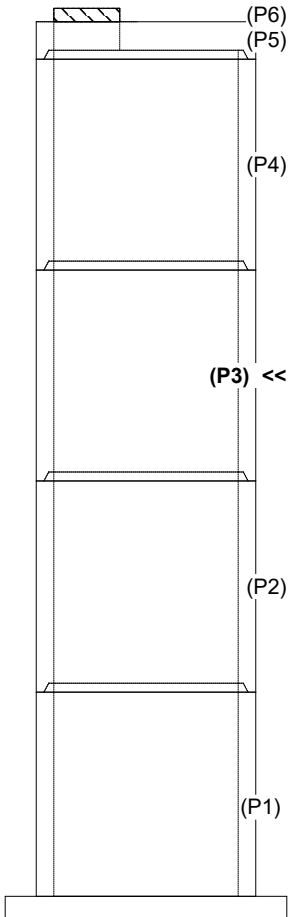
- 0 lb
6992 lb
18626 lb
18143 lb
18626 lb
27004 lb
0 lb
0 lb
0 lb
0 lb
600 lb
0 lb
2 lb
6 lb

Structure Total: 89999 lb
- Structure Notes:**
PLAN LABEL: MH-5
1. JBS 1312 WT F/C SANITARY PROVIDED BY ICAST.
2. PER ASTM C478 SPECIFICATIONS.
3. CONCRETE = 4,000 PSI AT 28 DAYS.
4. ADMIXTURE = XYPEX C-1000 RED.
5. 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.
6. DOUBLE BANDS FOR BOOTS
7. ANY REQUIRED INTERIOR COATINGS TO BE SUPPLIED & APPLIED BY OTHERS.
8. **NO STEPS**

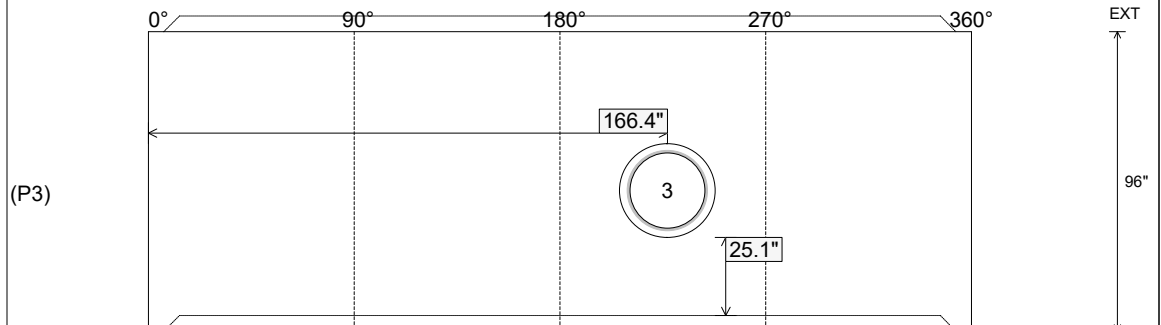
Rim: 417.26' Rim to Invert: 33.46' Slack: 0.02" Sump: 2.5" Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1										
Invert 2										
Invert 3	402.1'	227°	198.095"	24" DI	25.75"	Kor-N-Seal2 S206-30 (DBL Bands)	30"	30.677"	25.1"	0"
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: Groove	Wall Thickness: 8" Floor Height: 0"	Height (Int): 96" Height (Ext): 96"	Weight (Net): 18143 lb Volume (Net): 4.63cu.yd
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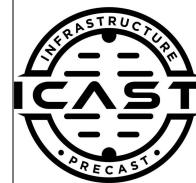
Plant: 100

8/4/2026 7:05:53 PM

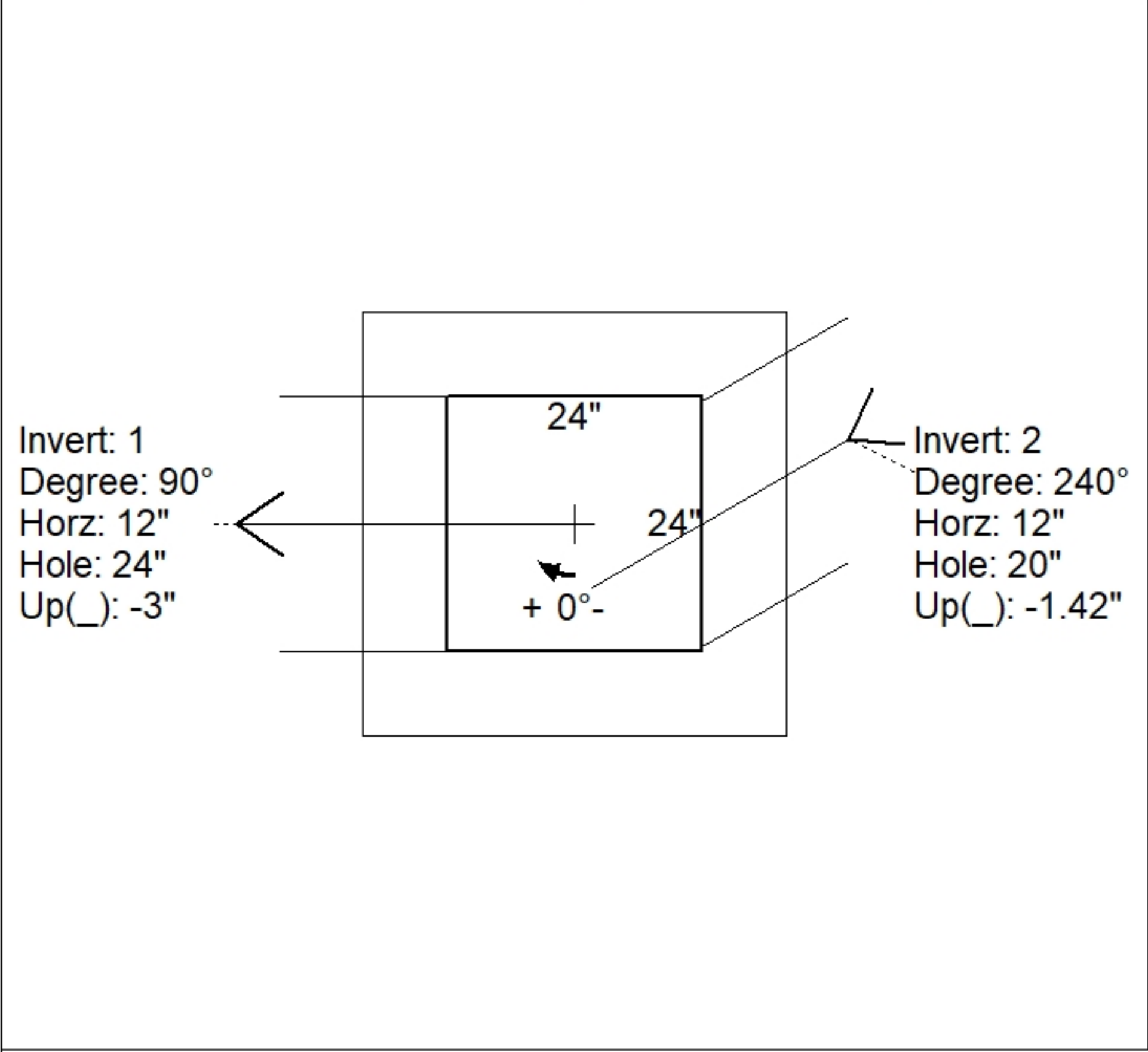
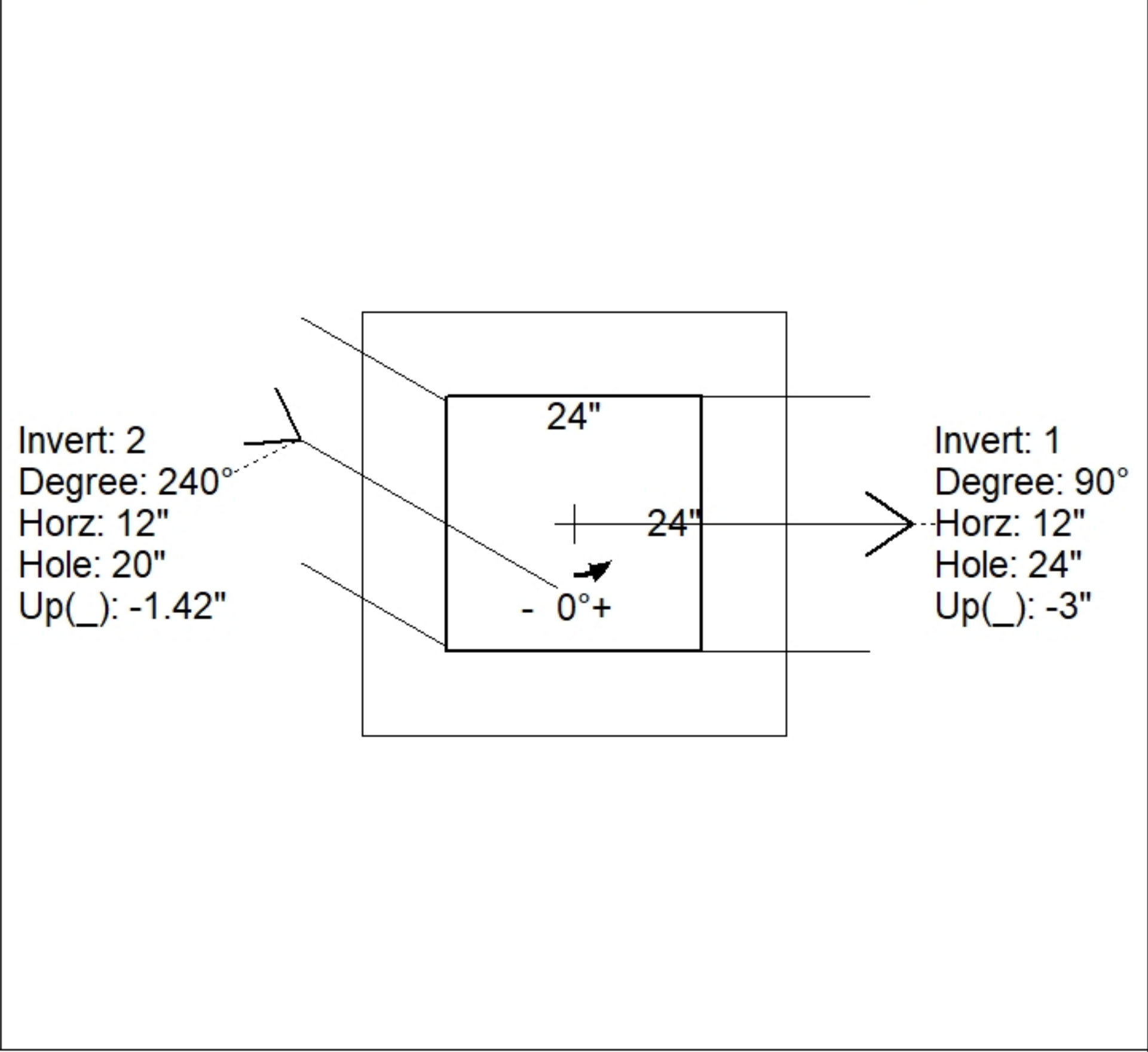
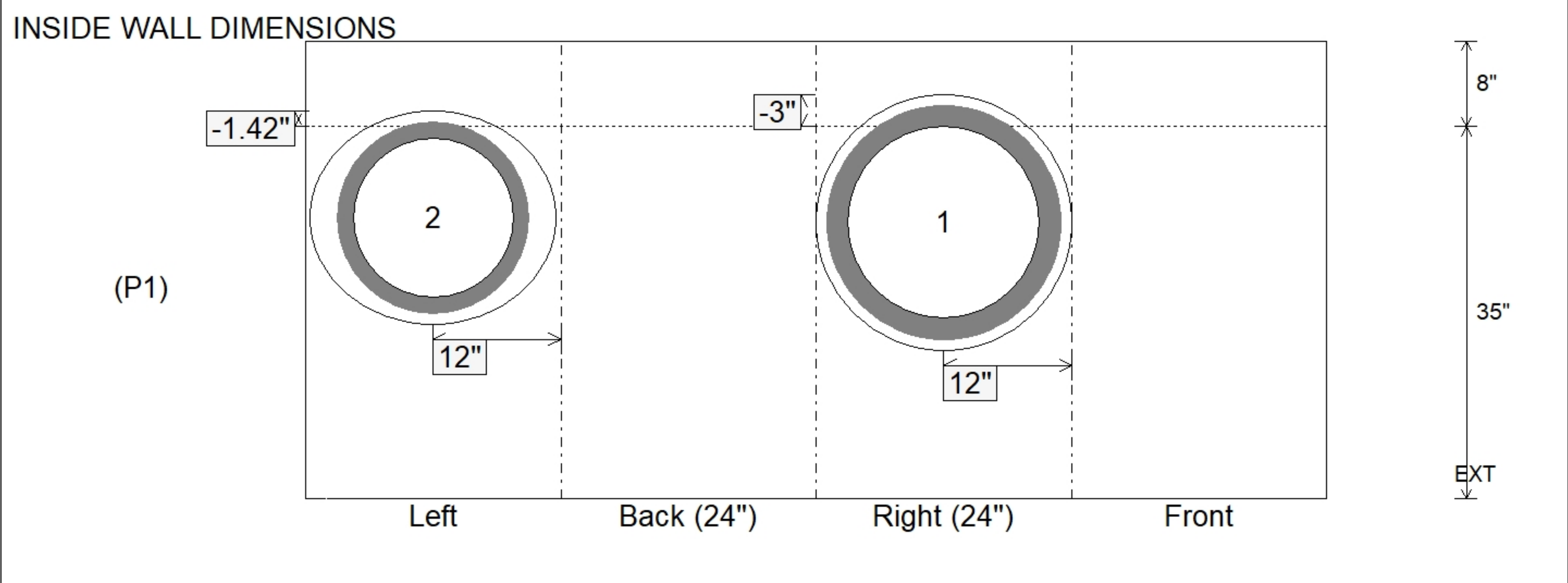
Tech:	Jared - F
PC:	A. Chambers



Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 9"	Height (Ext): 17"	Weight (Net): 8296 lb Volume (Net): 2.12cu.yd
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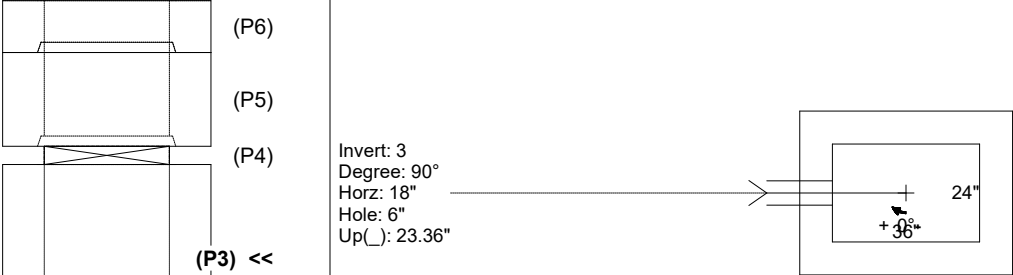
Weight (Net): 3187 lb
Volume (Net): 0.81cu.yd

Job Name: 26-2648 Midtown Commons Apartments Job Location: Madisonville, KY Contractor: Steve Pleasant Excavating				Plant: Beaver Dam 7/20/2026 10:44:22 AM		Tech: S. Felletter PC:				
Structure ID: 6.2 CBIF										
P1		BX2424-08BAVF		BOX BASE 8inW, 8inF, Variable Ht F/n						
P2) 24" x 24" - CASTING HEIGHT - 5" P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht F/n - 35" 1) CASTING - HOE KY-465 SET (CBI TY F) 1) 24" x 24" - Conseal CS-102 1.00" 1) Hole - 24 1) Hole - 20						0 lb 3610 lb 465 lb 0 lb 0 lb 0 lb ----- Structure Total: 4075 lb		Structure Notes: 1. KYTC CBI TYPE F / ASTM C913 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. NO INVERT CHANNEL. 4. NO STEPS. 5. CASTING BY ICAST (HOE KY-465 SET). REINFORCING PER ASTM A615 (GRADE 60). - WALLS (As .31) #5 BARS AT 12" C.C.E.W. - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.		
Rim: 430.02'		Rim to Invert: 3.41'		Slack: 0.92"		Sump: 0"		Step Position:		
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	426.61'	90°	20"	18" ADS N-12	22"	Hole 24	24"	24"	-3"	0"
Invert 2	426.7'	240°	15.381"	15" ADS N-12	18"	Hole 20	20"	23.094"	-1.42"	6"
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: Flat Seam Dn: n/a		Wall Thickness: 8" Floor Height: 8"		Height (Int): 35" Height (Ext): 43"		Weight (Net): 3610 lb Volume (Net): 0.92cu.yd	

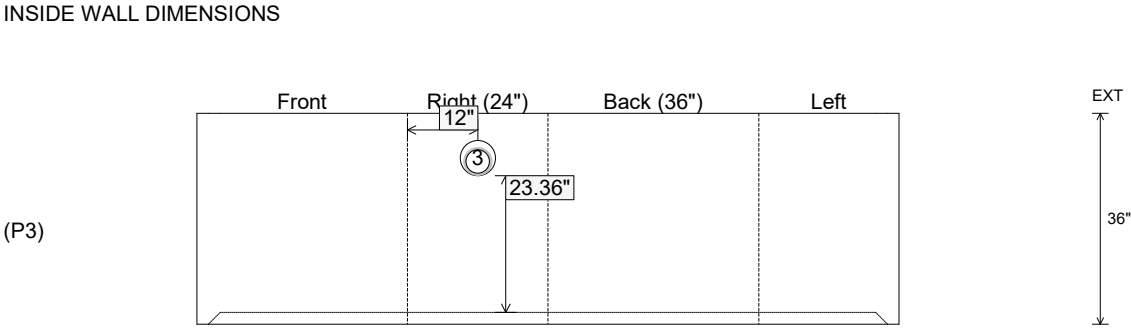
Job Name: 26-2648 Midtown Commons Apartments Job Location: Madisonville, KY Contractor: Steve Pleasant Excavating					Plant: Beaver Dam 7/20/2026 10:44:20 AM		Tech: S. Felletter PC:				
Structure ID: 5.1 CBIF											
P1 BX24300808VF		BOX BASE 8inW, 8inF, Variable Ht F/n									
P2) 24" x 30" - CASTING HEIGHT - 5" P1) 24" x 30" - BOX BASE 8inW, 8inF, Variable Ht F/n - 31" 1) CASTING - HOE KY-465 SET (CBI TY F) 1) 24" x 30" - Conseal CS-102 1.00" 2) Hole - 22					0 lb 3582 lb 465 lb 0 lb 0 lb ----- Structure Total: 4047 lb		Structure Notes: 1. KYTC CBI TYPE F / ASTM C913 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. NO INVERT CHANNEL. 4. NO STEPS. 5. CASTING BY ICAST (HOE KY-465 SET). REINFORCING PER ASTM A615 (GRADE 60). - WALLS (As .31) #5 BARS AT 12" C.C.E.W. - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.				
Rim: 428.96'		Rim to Invert: 3.04'		Slack: 0.48"		Sump: 0"		Step Position:			
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset	
Invert 1	425.92'	305°	28.642"	15" ADS N-12	18"	Hole 22	22"	26.857"	-3.5"	-6.85"	
Invert 2	426'	90°	23"	15" ADS N-12	18"	Hole 22	22"	22"	-2.54"	0"	
Invert 3											
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											
RIGHT-SIDE UP VIEW (int. dimensions)						UPSIDE-DOWN VIEW (int. dimenions)					
Invert: 2 Degree: 90° Horz: 15" Hole: 22" Up(): -2.54" Invert: 1 Degree: 305° Horz: 15.04" Hole: 22" Up(): -3.5"						Invert: 2 Degree: 90° Horz: 15" Hole: 22" Up(): -2.54" Invert: 1 Degree: 305° Horz: 15.04" Hole: 22" Up(): -3.5"					
INSIDE WALL DIMENSIONS											
Coating (Int): Coating (Ext):			Seam Up: Flat Seam Dn: n/a		Wall Thickness: 8" Floor Height: 8"		Height (Int): 31" Height (Ext): 39"		Weight (Net): 3582 lb Volume (Net): 0.92cu.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 7/30/2026 8:59:22 AM		Tech: J. Horsley PC: C. Goff						
Structure ID: 276 (438+65 RT)													
P3 BX2436-08R36			BOX RISER 8inW F/G										
P6) 24" x 120" - CB INLET KY A 10' TOP LEFT F/G - 10" P5) 24" x 120" - CB INLET KY A 10' BOTTOM LEFT T/G - 18" P4) 24" x 36" - FIELD ADJUSTMENT - 3.5" P3) 24" x 36" - BOX RISER 8inW F/G - 36" P2) 36" x 48" - CB FT REDUCER 24"X36" HOLE T/F - 8" P1) 36" x 48" - BOX BASE 8inW, 8inF, Variable Ht F/n - 59" 1) CASTING - HOE KY-206 F/C (KY TY1) 1) 36" x 48" - Conseal CS-102 1.00" 2) 24" x 36" - Conseal CS-102 1.00" 2) Hole - 44 1) Hole - 6						3400 lb 5270 lb 0 lb 3654 lb 1654 lb 8114 lb 206 lb 0 lb 0 lb 0 lb 0 lb Structure Total: 22298 lb		Structure Notes: . ** KYTC STATE PROJECT ** 1. PER KYTC CBI TYPE A / ASTM C913 SPEC'S. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. HOE KY-206 F/C CAST INTO TOP SLAB. REINFORCING PER ASTM A615 (GRADE 60). - TOP PHASE (As .62) #5 BARS AT 6" C.C.E.W. - TRANS. SLAB (As .62) #5 BARS AT 6" C.C.E.W (DBL MAT) - WALLS (As .31) #5 BARS AT 6" C.C.E.W. - FLOOR (As .31) #5 BARS AT 6" C.C.E.W.					
Rim: 542.75' Rim to Invert: 11.23' Slack: 0.26" Sump: 0" Step Position:													
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset			
Invert 1													
Invert 2													
Invert 3	539.25'	90°	26"	4" HDPE (perf pipe)	4.8"	Hole 6	6"	6"	23.36"	0"			
Invert 4													
Invert 5													
Invert 6													
Invert 7													
Invert 8													

RIGHT-SIDE UP VIEW (int. dimensions)

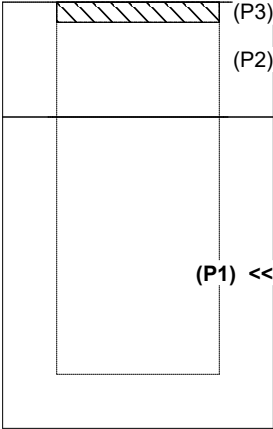


INSIDE WALL DIMENSIONS

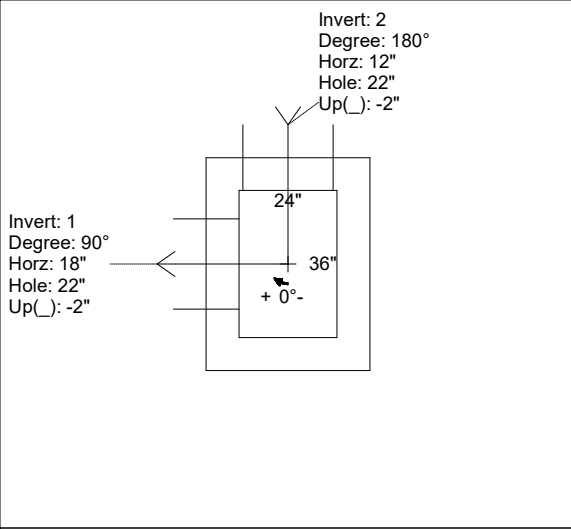


Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 8" Floor Height: 0"	Height (Int): 36" Height (Ext): 36"	Weight (Net): 3654 lb Volume (Net): 0.93cu.yd
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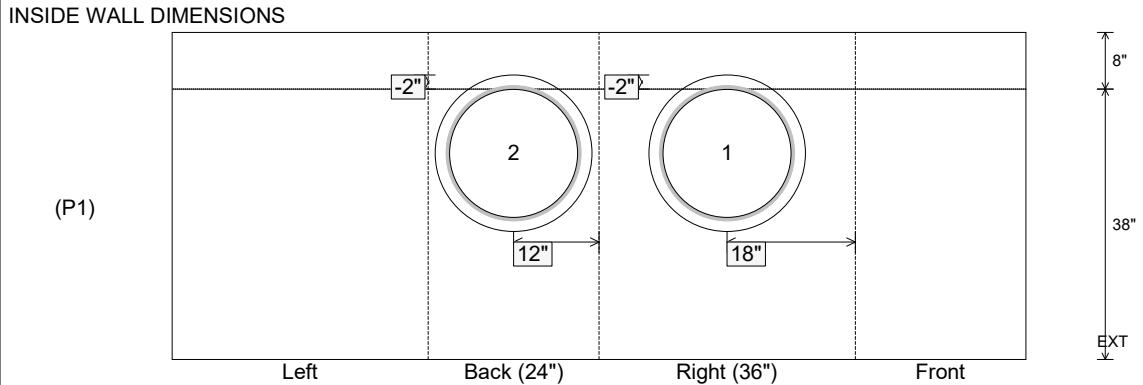
Job Name: 25-1684P14 KYTC Jefferson Co. Call 200 (251007) Job Location: I-264 Louisville, Ky. Contractor: Cleary Construction, Inc.					Plant: Beaver Dam, KY 8/4/2026 11:26:46 AM		Tech: J. Coppage PC: T. Ryan				
Structure ID: 5100+05 LT CBBI-MOD B1											
P1		BX2436-08BVF		BOX BASE 8inW, 8inF, Variable Ht							
P3) 24" x 120" - CASTING (cast in) - 3" P2) 24" x 120" - CB MED BAR BOX INLET 9B1 LH - 17" P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht - 38" 1) 24" x 36" - Conseal CS-102 1.00" 2) Hole - 22					0 lb 4000 lb 4763 lb 0 lb 0 lb ----- 0 lb Structure Total: 8763 lb		Structure Notes: . -KYTC STATE PROJECT 251007 -REINFORCING: #5 BAR @ 12" C/C E.W. (TYP.) -CASTING FRAMES & GRATES BY OTHERS. -CS-102 BUTYL REQUIRED (SUPPLIED BY ICAST). -KYTC CERTIFICATIONS REQUIRED.				
Rim: 587.42' Rim to Invert: 4.9' Slack: 3.8" Sump: 0" Step Position:											
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (_)	Offset	
Invert 1	582.52'	90°	26"	18" CMP	19"	Hole 22	22"	22"	-2"	0"	
Invert 2	582.52'	180°	20"	18" CMP	19"	Hole 22	22"	22"	-2"	0"	
Invert 3											
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											



RIGHT-SIDE UP VIEW (int. dimensions)

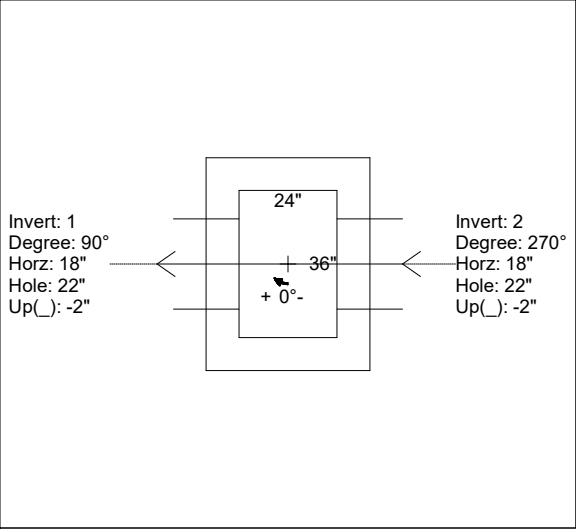


UPSIDE-DOWN VIEW (int. dimensions)

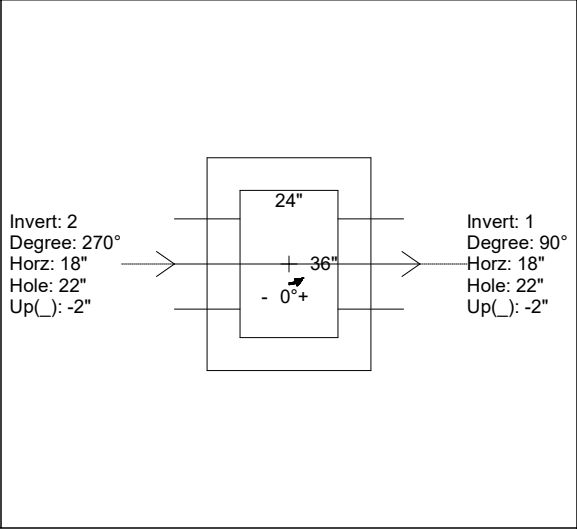


Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: n/a	Wall Thickness: 8" Floor Height: 8"	Height (Int): 38" Height (Ext): 46"	Weight (Net): 4763 lb Volume (Net): 1.22cu.yd
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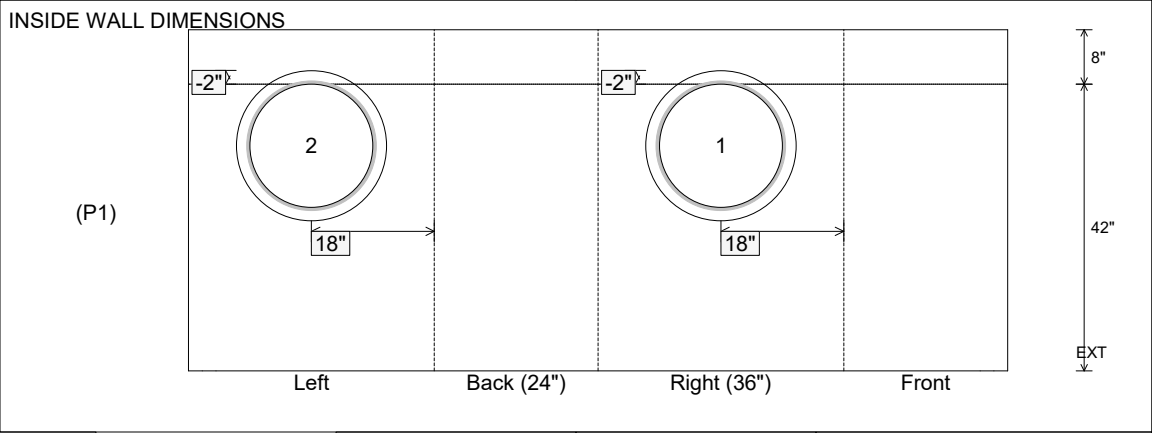
Job Name: 25-1684P14 KYTC Jefferson Co. Call 200 (251007) Job Location: I-264 Louisville, Ky. Contractor: Cleary Construction, Inc.					Plant: Beaver Dam, KY 8/4/2026 11:26:42 AM		Tech: J. Coppage PC: T. Ryan					
Structure ID: 5098+23 LT CBBI-MOD B1												
P1		BX2436-08BA42		BOX BASE 8inW, 8inF								
P3) 24" x 120" - CASTING (cast in) - 3" P2) 24" x 120" - CB MED BAR BOX INLET 9B1 LH - 17" P1) 24" x 36" - BOX BASE 8inW, 8inF - 42" 1) 24" x 36" - Conseal CS-102 1.00" 2) Hole - 22"					0 lb 4000 lb 5171 lb 0 lb 0 lb ----- 0 lb Structure Total: 9171 lb		Structure Notes: . -KYTC STATE PROJECT 251007 -REINFORCING: #5 BAR @ 12" C/C E.W. (TYP.) -CASTING FRAMES & GRATES BY OTHERS. -CS-102 BUTYL REQUIRED (SUPPLIED BY ICAST). -KYTC CERTIFICATIONS REQUIRED.					
Rim: 586.85'					Rim to Invert: 5.3'		Slack: 4.6"		Sump: 0"		Step Position:	
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset		
Invert 1	581.55'	90°	26"	18" CMP	19"	Hole 22	22"	22"	-2"	0"		
Invert 2	581.55'	270°	26"	18" CMP	19"	Hole 22	22"	22"	-2"	0"		
Invert 3												
Invert 4												
Invert 5												
Invert 6												
Invert 7												
Invert 8												



RIGHT-SIDE UP VIEW (int. dimensions)



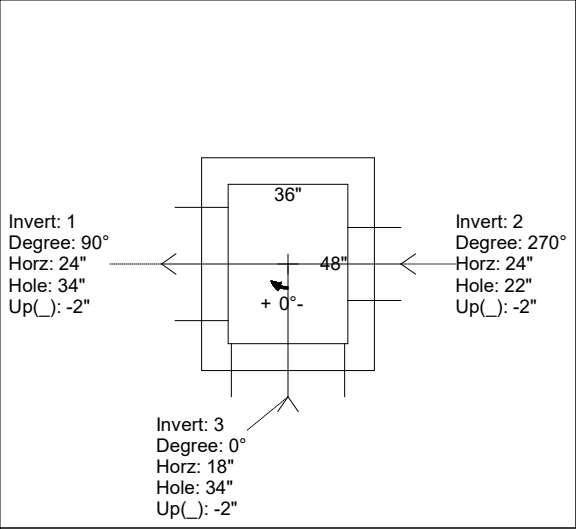
UPSIDE-DOWN VIEW (int. dimensions)



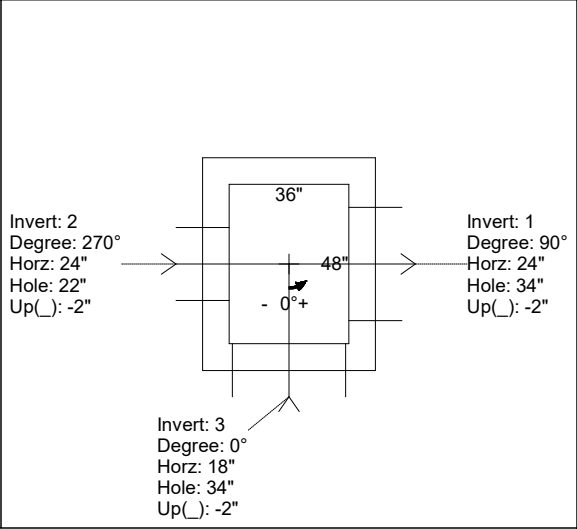
INSIDE WALL DIMENSIONS

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: n/a	Wall Thickness: 8" Floor Height: 8"	Height (Int): 42" Height (Ext): 50"	Weight (Net): 5171 lb Volume (Net): 1.32cu.yd
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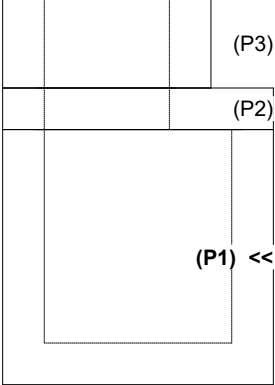
Job Name: 25-1684P14 KYTC Jefferson Co. Call 200 (251007) Job Location: I-264 Louisville, Ky. Contractor: Cleary Construction, Inc.					Plant: Beaver Dam, KY 8/4/2026 11:26:41 AM		Tech: J. Coppage PC: T. Ryan				
Structure ID: 5097+50 LT CBBI-MOD B1											
P1		BX3648-08BAVF		BOX BASE 8inW, 8inF, Variable Ht							
P3) 24" x 120" - CB MED BAR BOX INLET 9B1 LH - 17" P2) 36" x 48" - CB FT REDUCER 24"x36" HOLE-FT - 8" P1) 36" x 48" - BOX BASE 8inW, 8inF, Variable Ht - 41" 1) 36" x 48" - Conseal CS-102 1.00" 1) 24" x 36" - Conseal CS-102 1.00" 2) Hole - 34 1) Hole - 22					4000 lb 1654 lb 6265 lb 0 lb 0 lb 0 lb 0 lb		Structure Notes: . -KYTC STATE PROJECT 251007 -REINFORCING: #5 BAR @ 12" C/C E.W. (TYP.) -CASTING FRAMES & GRATES BY OTHERS. -CS-102 BUTYL REQUIRED (SUPPLIED BY ICAST). -KYTC CERTIFICATIONS REQUIRED.				
Structure Total:					11919 lb						
Rim: 586.52' Rim to Invert: 5.5' Slack: 0" Sump: 0" Step Position:											
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset	
Invert 1	581.02'	90°	32"	30" CMP	31"	Hole 34	34"	34"	-2"	0"	
Invert 2	581.02'	270°	32"	18" CMP	19"	Hole 22	22"	22"	-2"	0"	
Invert 3	581.02'	0°	26"	30" CMP	31"	Hole 34	34"	34"	-2"	0"	
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											



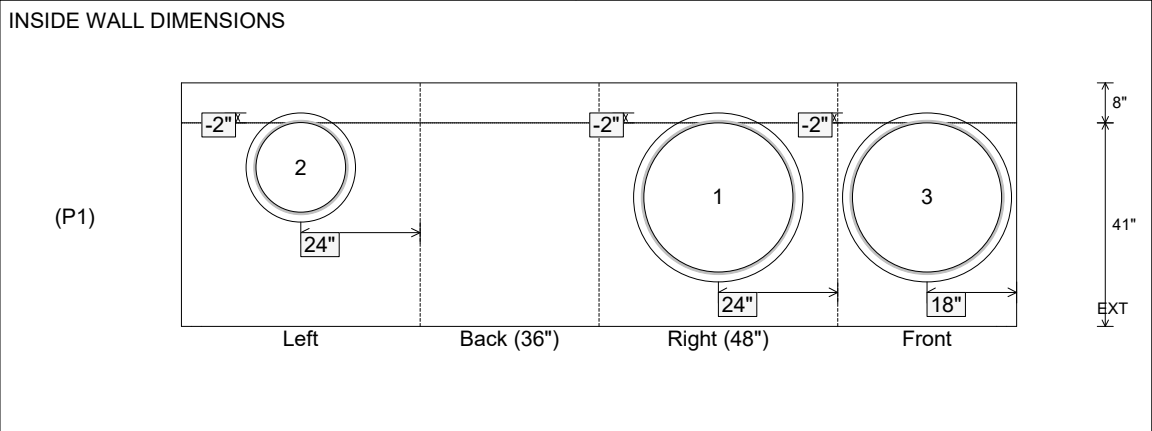
RIGHT-SIDE UP VIEW (int. dimensions)



UPSIDE-DOWN VIEW (int. dimensions)



(P1) <<



INSIDE WALL DIMENSIONS

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: n/a	Wall Thickness: 8" Floor Height: 8"	Height (Int): 41" Height (Ext): 49"	Weight (Net): 6265 lb Volume (Net): 1.6cu.yd
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Structure ID: 5090+98 LT CBBI-MOD B1

P2 BX4848-08RVF

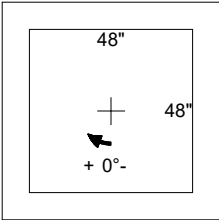
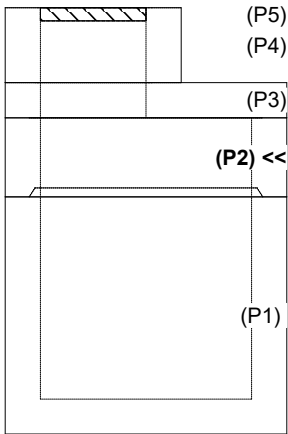
BOX RISER 8inW, Variable Ht

P5) 24" x 120" - CASTING (cast in) - 3"					0 lb	<u>Structure Notes:</u> . -KYTC STATE PROJECT 251007 -REINFORCING: #5 BAR @ 12" C/C E.W. (TYP.) -CASTING FRAMES & GRATES BY OTHERS. -CS-102 BUTYL REQUIRED (SUPPLIED BY ICAST). -KYTC CERTIFICATIONS REQUIRED.
P4) 24" x 120" - CB MED BAR BOX INLET 9B1 LH - 17"					4000 lb	
P3) 48" x 48" - CB FT REDUCER 24"X36" HOLE-FT - 8"					2170 lb	
P2) 48" x 48" - BOX RISER 8inW, Variable Ht - 18"					2707 lb	
P1) 48" x 48" - BOX BASE 8inW, 8inF, Variable Ht - 46"					7512 lb	
2) 48" x 48" - Conseal CS-102 1.00"					0 lb	
1) 24" x 36" - Conseal CS-102 1.00"					0 lb	
2) Hole - 40					0 lb	
1) Hole - 28					0 lb	

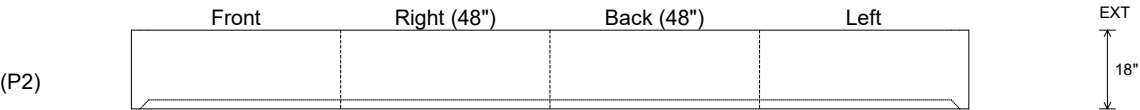
Structure Total:					16388 lb	
Rim: 583.81' Rim to Invert: 7.8' Slack: 4.6" Sump: 0" Step Position:						

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

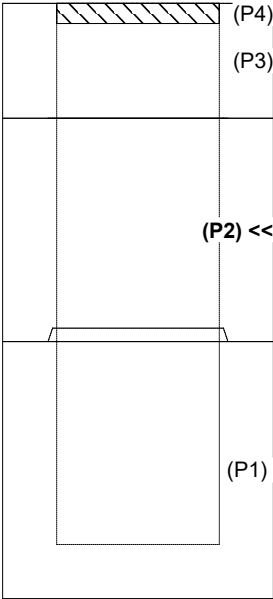
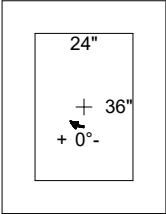
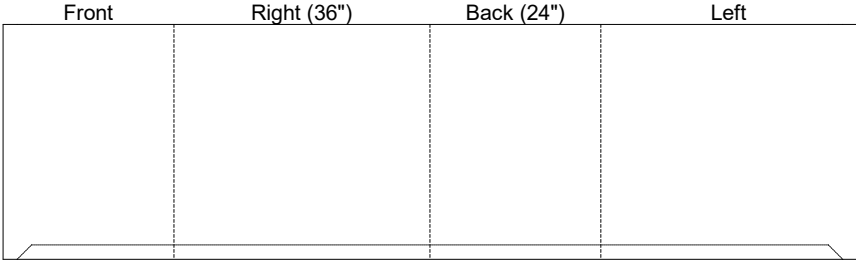
RIGHT-SIDE UP VIEW (int. dimensions)

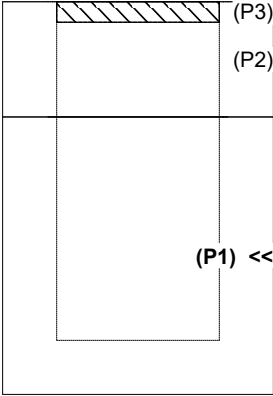
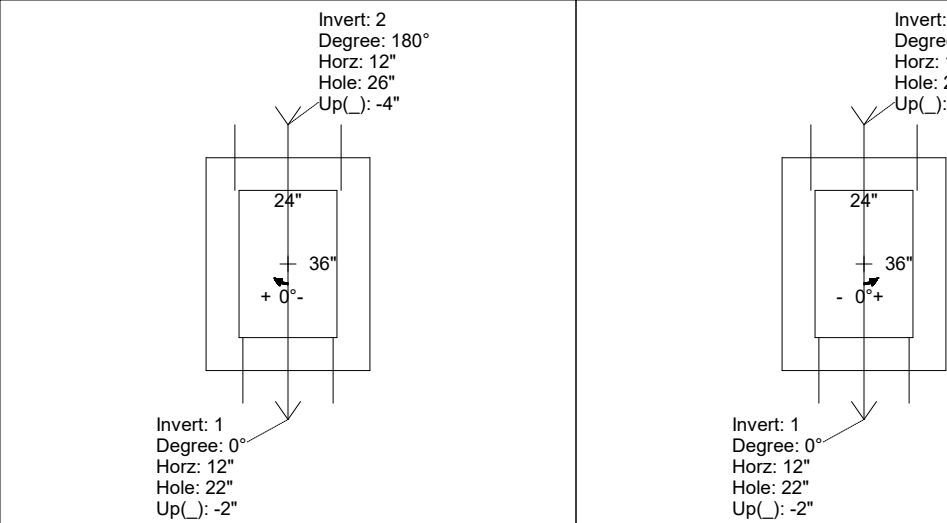
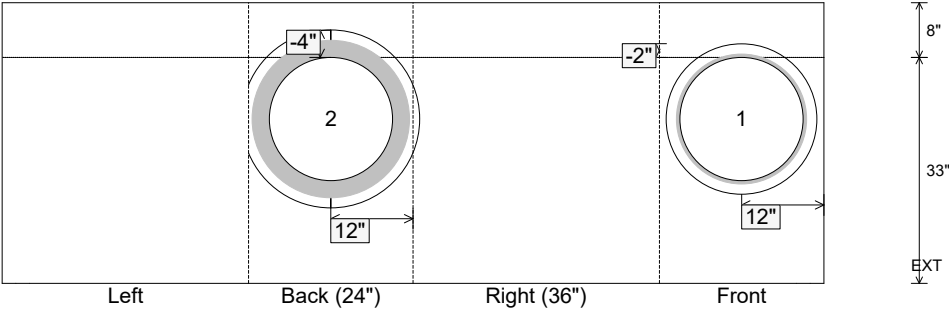


INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):		Seam Up: Flat Seam Dn: Groove	Wall Thickness: 8" Floor Height: 0"	Height (Int): 18" Height (Ext): 18"	Weight (Net): 2707 lb Volume (Net): 0.69cu.yd
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Job Name: 25-1684P14 KYTC Jefferson Co. Call 200 (251007) Job Location: I-264 Louisville, Ky. Contractor: Cleary Construction, Inc.					Plant: Beaver Dam, KY 8/4/2026 11:30:13 AM		Tech: J. Coppage PC: T. Ryan				
Structure ID: 5083+65 LT CBBI-MOD B1											
P2 BX2436-08R-VH			BOX RISER 8inW, Variable Ht								
P4) 24" x 120" - CASTING (cast in) - 3" P3) 24" x 120" - CB MED BAR BOX INLET 9B1 LH - 17" P2) 24" x 36" - BOX RISER 8inW, Variable Ht - 33" P1) 24" x 36" - BOX BASE 8inW, 8inF - 30" 2) 24" x 36" - Conseal CS-102 1.00" 1) Hole - 22						0 lb 4000 lb 3367 lb 4202 lb 0 lb 0 lb ----- Structure Total: 11569 lb		Structure Notes: . -KYTC STATE PROJECT 251007 -REINFORCING: #5 BAR @ 12" C/C E.W. (TYP.) -CASTING FRAMES & GRATES BY OTHERS. -CS-102 BUTYL REQUIRED (SUPPLIED BY ICAST). -KYTC CERTIFICATIONS REQUIRED.			
Rim: 581.17' Rim to Invert: 7' Slack: 4" 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											
Invert 5											
Invert 6											
Invert 7											
Invert 8											
RIGHT-SIDE UP VIEW (int. dimensions)											
											
INSIDE WALL DIMENSIONS											
		EXT 33"									
Coating (Int): Coating (Ext):			Seam Up: Flat Seam Dn: Groove		Wall Thickness: 8" Floor Height: 0"		Height (Int): 33" Height (Ext): 33"		Weight (Net): 3367 lb Volume (Net): 0.86cu.yd		

Job Name: 25-1684P14 KYTC Jefferson Co. Call 200 (251007) Job Location: I-264 Louisville, Ky. Contractor: Cleary Construction, Inc.					Plant: Beaver Dam, KY 8/4/2026 11:26:22 AM		Tech: J. Coppage PC: T. Ryan				
Structure ID: 5074+83 LT CBBI-MOD B1											
P1		BX2436-08BVF		BOX BASE 8inW, 8inF, Variable Ht							
P3) 24" x 120" - CASTING (cast in) - 3" P2) 24" x 120" - CB MED BAR BOX INLET 9B1 LH - 17" P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht - 33" 1) 24" x 36" - Conseal CS-102 1.00" 1) Hole - 22 1) Hole - 26					0 lb 4000 lb 4241 lb 0 lb 0 lb 0 lb ----- Structure Total: 8241 lb		Structure Notes: . -KYTC STATE PROJECT 251007 -REINFORCING: #5 BAR @ 12" C/C E.W. (TYP.) -CASTING FRAMES & GRATES BY OTHERS. -CS-102 BUTYL REQUIRED (SUPPLIED BY ICAST). -KYTC CERTIFICATIONS REQUIRED.				
Rim: 572.36'		Rim to Invert: 4.5'		Slack: 4"		Sump: 0"		Step Position:			
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (_)	Offset	
Invert 1	567.86'	0°	20"	18" CMP	19"	Hole 22	22"	22"	-2"	0"	
Invert 2	567.86'	180°	20"	18" RCP B WALL	23"	Hole 26	26"	25"	-4"	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): 33" Height (Ext): 41" Weight (Net): 4241 lb Volume (Net): 1.08cu.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

7/30/2026 8:55:50 AM

Tech: J. Horsley

PC: C. Goff

Structure ID: 272 (437+45 RT)

P1 BX3648-08BAVF

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

P7) 24" x 120" - CB INLET KY A 10' TOP LEFT F/G - 10"

P6) 24" x 120" - CB INLET KY A 10' BOTTOM LEFT T/G - 18"

P5) 24" x 36" - FIELD ADJUSTMENT - 3.5"

P4) 24" x 36" - BOX RISER 8inW F/G - 36"

P3) 24" x 36" - BOX RISER 8inW T/G - 36"

P2) 36" x 48" - CB FT REDUCER 24"X36" HOLE T/F - 8"

P1) 36" x 48" - BOX BASE 8inW, 8inF, Variable Ht F/n - 58"

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

1) 36" x 48" - Conseal CS-102 1.00"

2) 24" x 36" - Conseal CS-102 1.00"

2) Hole - 44

1) Hole - 20

1) Hole - 22

1) Hole - 6

3400 lb

5270 lb

0 lb

3188 lb

3673 lb

1654 lb

7980 lb

206 lb

0 lb

0 lb

0 lb

0 lb

0 lb

0 lb

Structure Notes:

** KYTC STATE PROJECT **

1. PER KYTC CBI TYPE A / ASTM C913 SPEC'S.

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

3. HOE KY-206 F/C CAST INTO TOP SLAB.

REINFORCING PER ASTM A615 (GRADE 60).

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

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

- WALLS (As .31) #5 BARS AT 6" C.C.E.W.

- FLOOR (As .31) #5 BARS AT 6" C.C.E.W.

Structure Total: 25371 lb

Rim: 546.02'

Rim to Invert: 14.15'

Slack: 0.3"

Sump: 0"

Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	531.87'	270°	32"	36" HDPE	41.7"	Hole 44	44"	44"	-2.85"	0"
Invert 2										
Invert 3	531.87'	90°	32"	36" HDPE	41.7"	Hole 44	44"	44"	-2.85"	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: Flat

Seam Dn: n/a

Wall Thickness: 8"

Floor Height: 8"

Height (Int): 58"

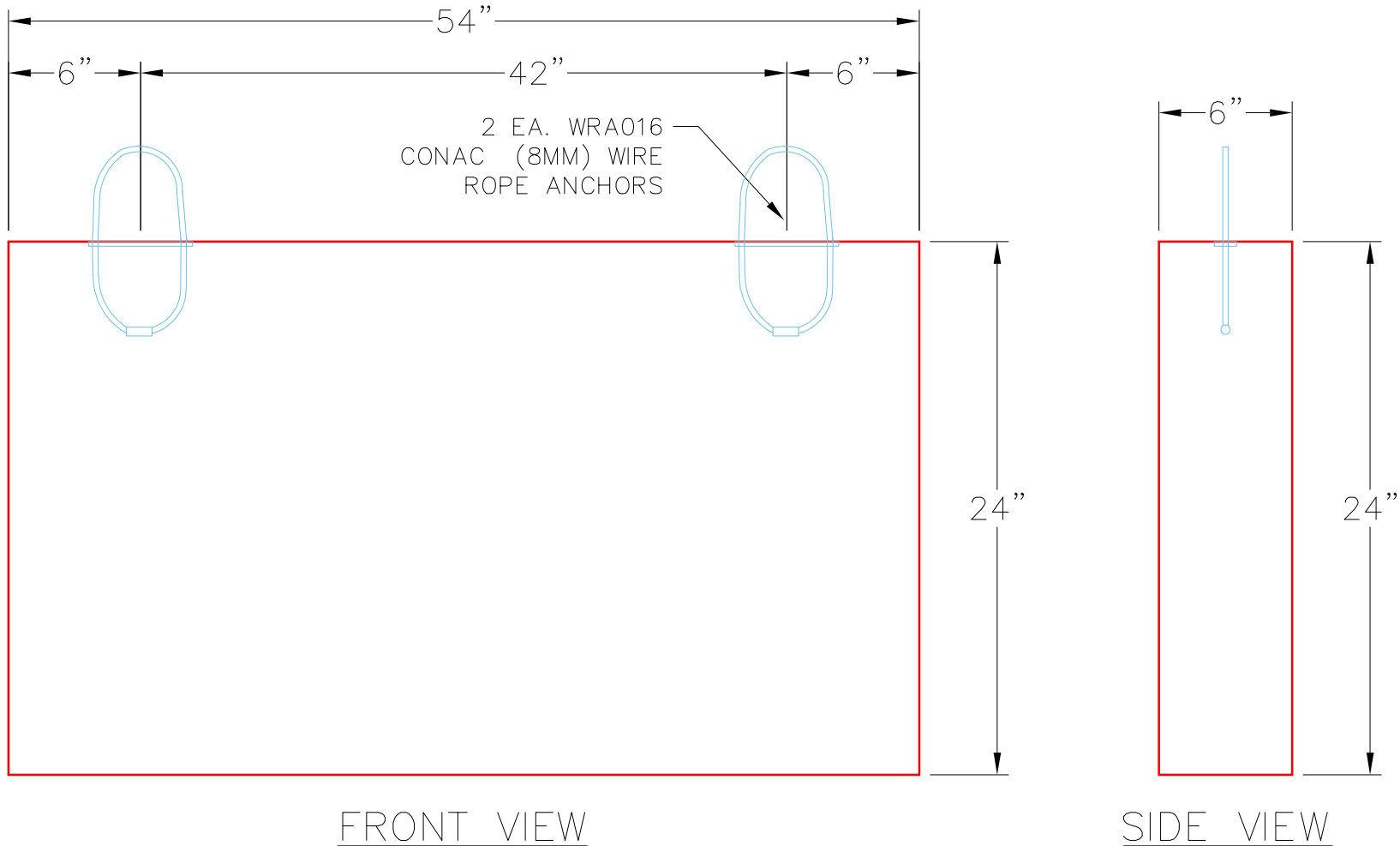
Height (Ext): 66"

Weight (Net): 7980 lb

Volume (Net): 2.04cu.yd

GENERAL NOTES:

1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 5,000 PSI AT 28 DAYS.
3. REINFORCING: #5 @ 12" C/C E.W. 2" COVER MIN.
4. WEIGHT: 653 LBS. EACH
5. CONTRACTOR TO SECURE FES TOE TO THE FES.



PRODUCTION WORK ORDER		PRODUCT I.D.: FES24B-TB	DESCRIPTION: TOE FOR 24" FES	
	QUALITY CONTROL CHECKLIST ☐ ALL DIMENSIONS CORRECT. ☐ LIFTERS INSTALLED. ☐ OPENING CENTERED. ☐ REINFORCING CORRECT. ☐ SURFACE QUALITY ACCEPTABLE. ☐ EDGES CHAMFERED. ☐ ALL PATCHWORK ACCEPTABLE.	PRODUCT VIEW: RIGHT SIDE UP	CUSTOMER: RUSSELL'S EXCAVATING	
		PLANT: BEAVER DAM, KY.	PROJECT: PROJECT COLT	
		WEIGHT: 653 LBS.	STRUCTURE: 403-33 FES TOE	
		TOP SECTION JOINT: N/A	ORDER NO: 26-1227	
		BASE SECTION JOINT: N/A	PC: A. CHAMBERS	DRAWING: J. COPPAGE
		QC CHECK INITIALS:	DATE: 6/26/26	SCALE: NTS PG. 1 of 1

Job Name: 25-1684P14 KYTC Jefferson Co. Call 200 (251007)
Job Location: I-264 Louisville, Ky.
Contractor: Cleary Construction, Inc.

Plant: Beaver Dam, KY
8/6/2026 2:22:32 PM

Tech: J. Coppage
PC: T. Ryan



Structure ID: 5094+66 LT CBBI-MOD B1

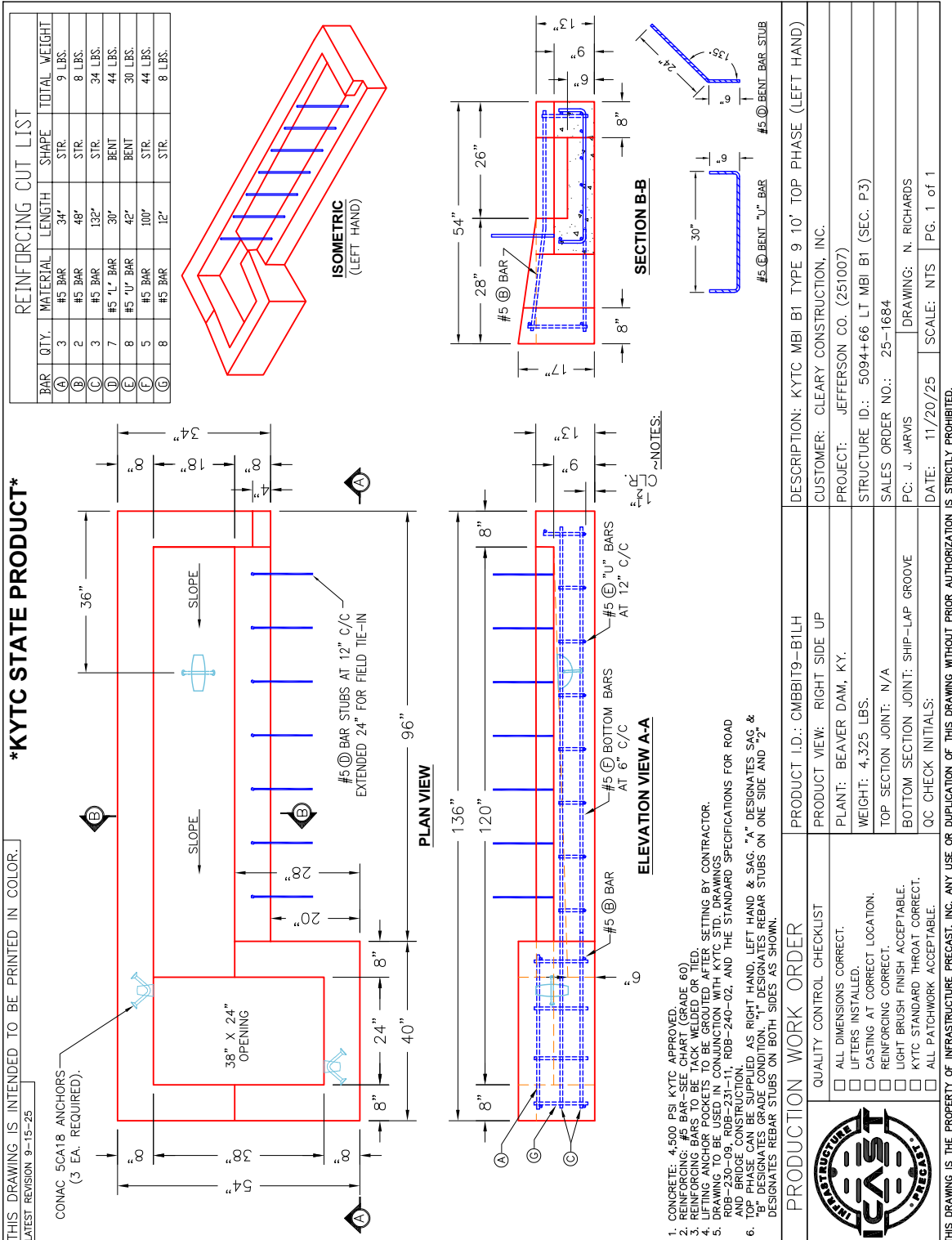
P3 CMBBIT9-B1LH

CB MED BAR BOX INLET 9B1 LH

- P4) 24" x 120" - CASTING (cast in) - 3"
P3) 24" x 120" - CB MED BAR BOX INLET 9B1 LH - 17"
P2) 36" x 48" - CB FT REDUCER 24"X36" HOLE-FT - 8"
P1) 36" x 48" - BOX BASE 8inW, 8inF, Variable Ht - 45"
1) 36" x 48" - Conseal CS-102 1.00"
1) 24" x 36" - Conseal CS-102 1.00"
2) Hole - 40

- 0 lb Structure Notes:
4000 lb -KYTC STATE PROJECT 251007
1654 lb -REINFORCING: #5 BAR @ 12" C/C E.W. (TYP.)
6589 lb -CASTING FRAMES & GRATES BY OTHERS.
0 lb -CS-102 BUTYL REQUIRED (SUPPLIED BY ICAST).
0 lb -KYTC CERTIFICATIONS REQUIRED.
0 lb

Structure Total: 12243 lb



Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Flat	Wall Thickness: 8"	Height (Ext): 17"	Weight (Net): 4000 lb Volume (Net): 0cu.yd
----------------------------------	--------------------------------	--------------------	-------------------	---

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

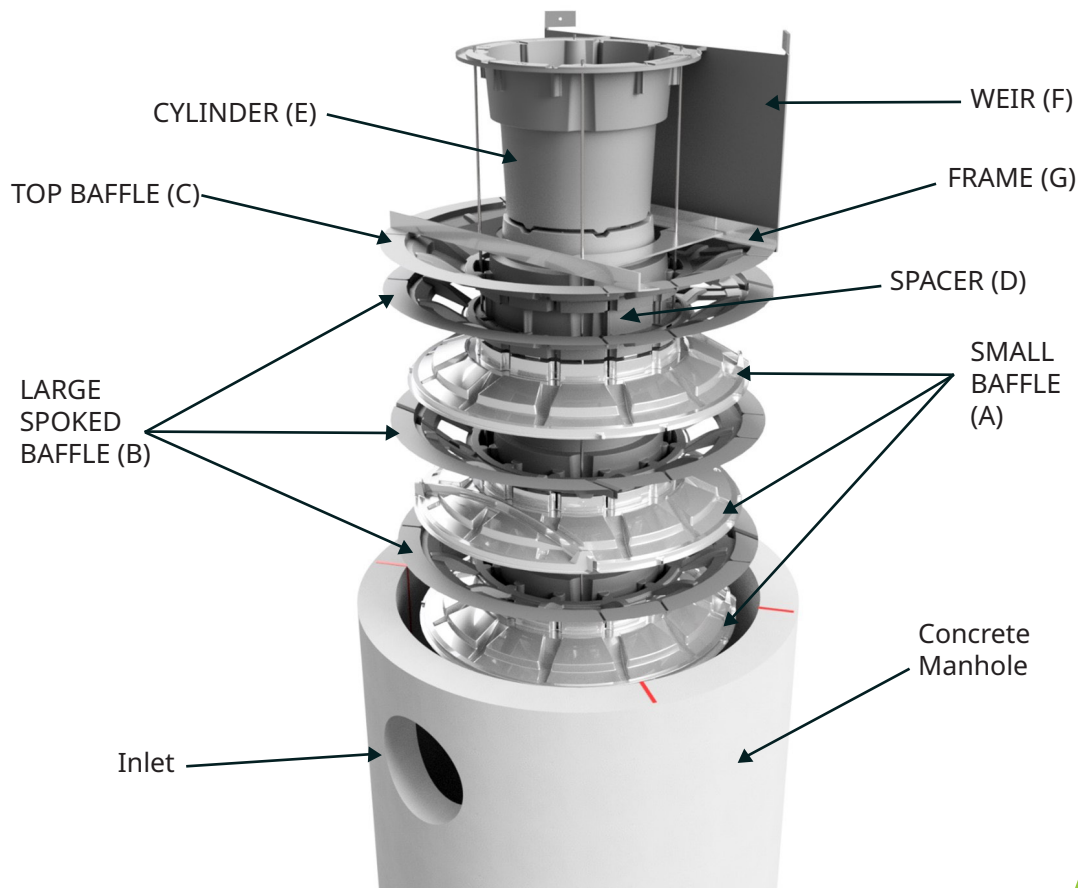
Section 1: Internal Components, Hardware & Tools

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)".
- Conesal 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

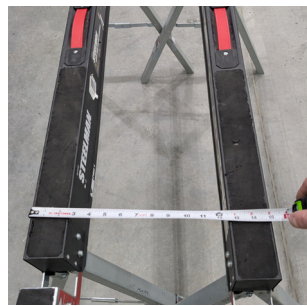


Figure 2



Figure 3



Figure 4



Figure 5

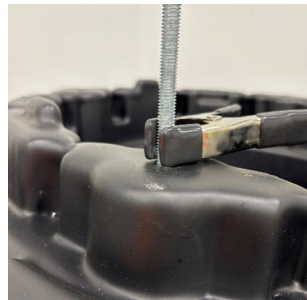


Figure 6



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

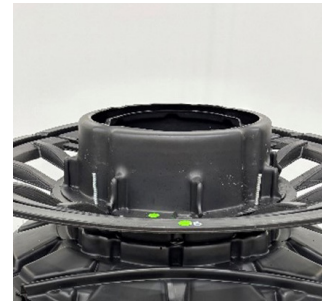


Figure 9



Figure 10



Figure 11



Figure 12

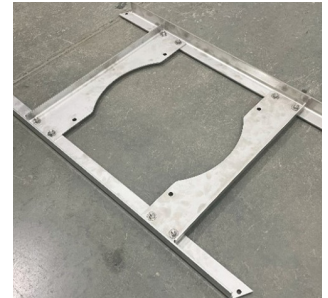


Figure 13

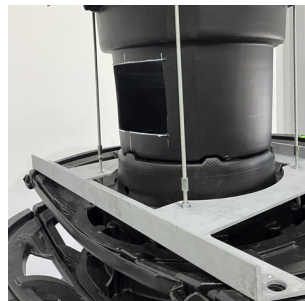


Figure 14



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

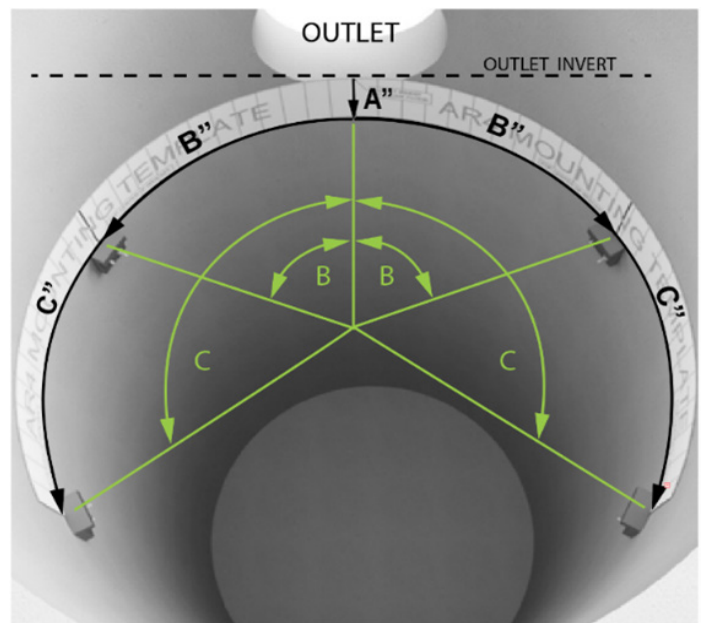


Table 1: Angular Measurements

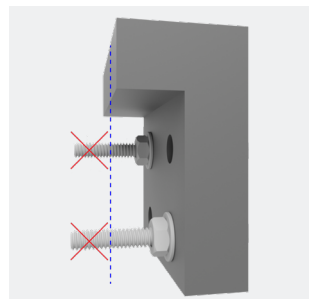
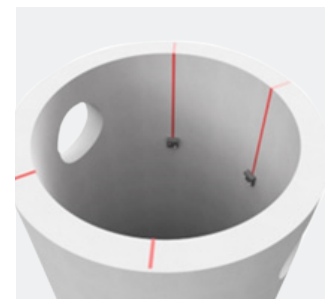
Arcadia Model	A. Depth from Outlet Invert in (mm)	B. Angle from Outlet Center	C. Angle from Outlet Center
AR3	4 1/2 (114.3)	65°	115°
AR4	5 1/2 (139.7)	60°	120°
AR5	6 (150)	65°	115°
AR6	6 1/2 (165.1)	60°	120°
AR8	8 (200)	60°	120°

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



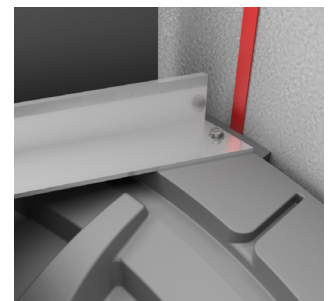
Figure 32



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

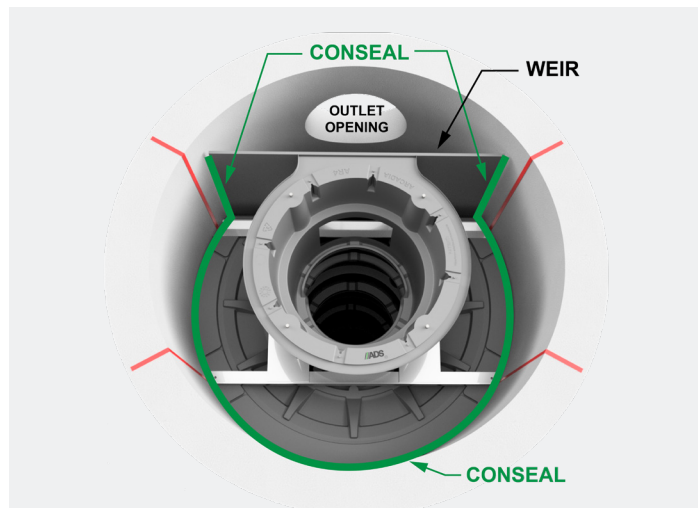


Figure 36

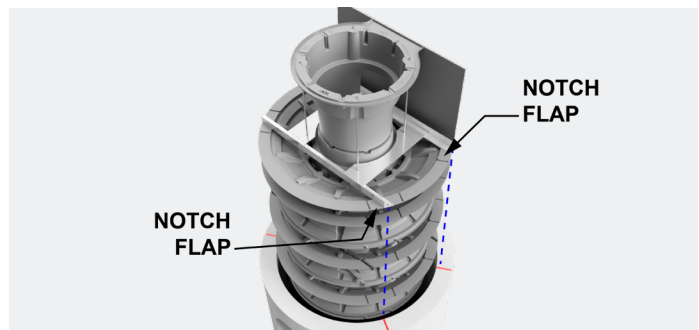


Figure 37

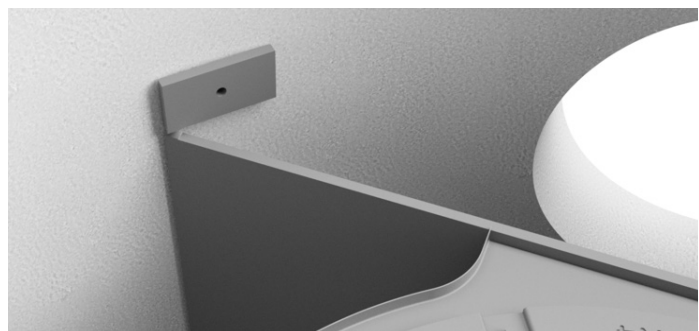
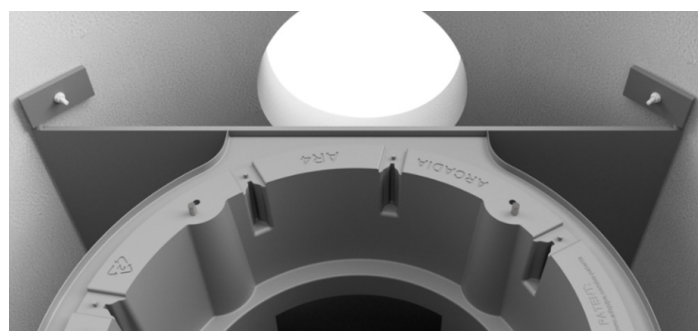


Figure 38



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

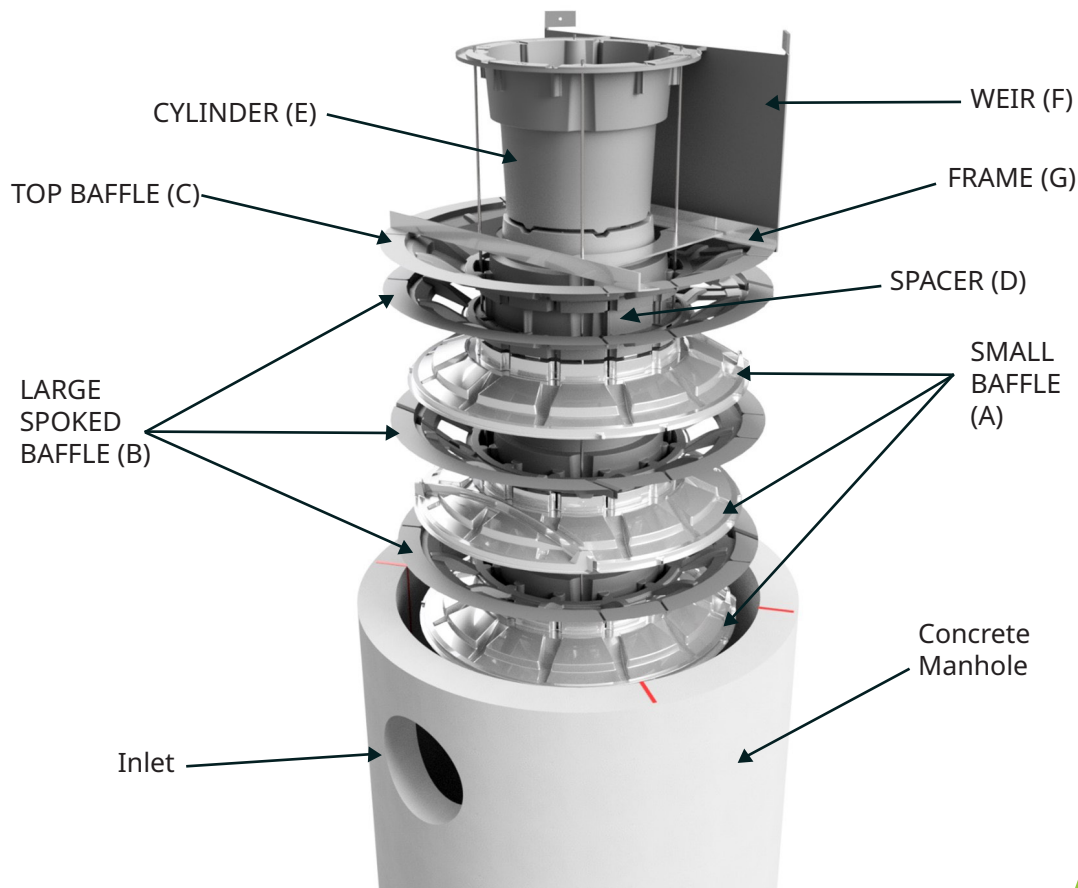
Section 1: Internal Components, Hardware & Tools

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)".
- Conesal 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

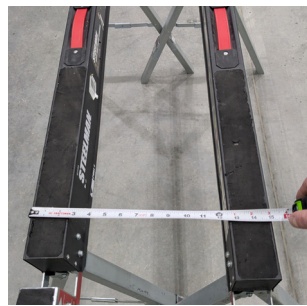


Figure 2



Figure 3



Figure 4



Figure 5

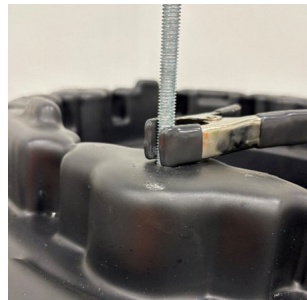


Figure 6



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

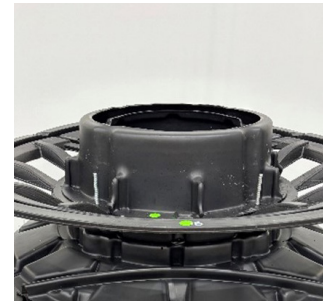


Figure 9



Figure 10



Figure 11



Figure 12

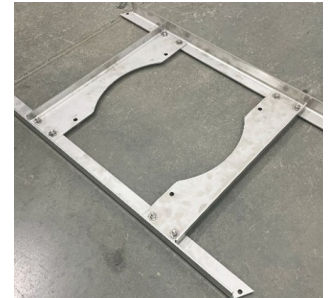


Figure 13

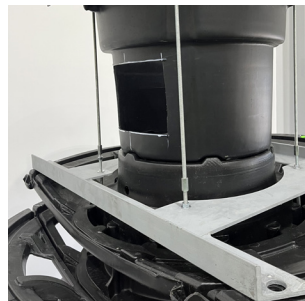


Figure 14



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

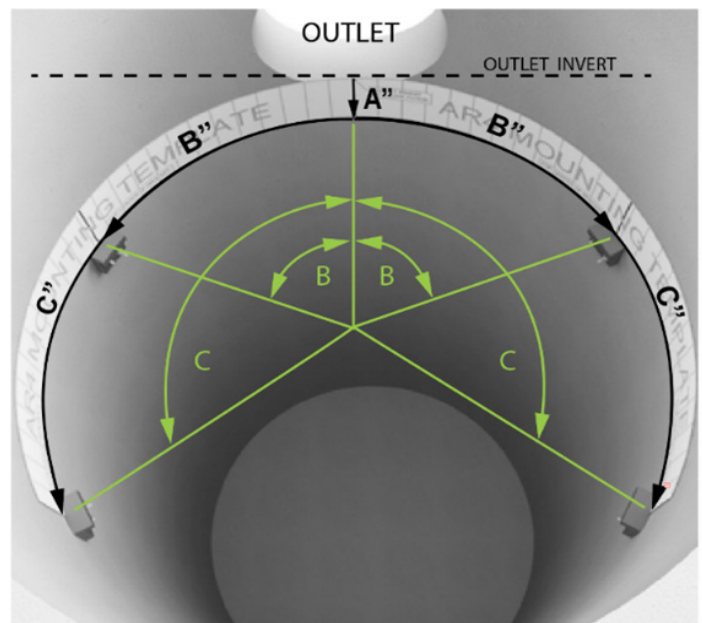


Table 1: Angular Measurements

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

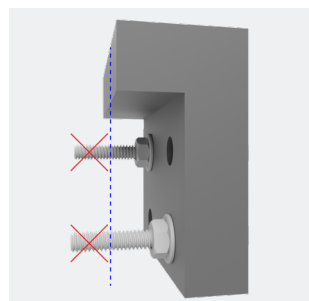
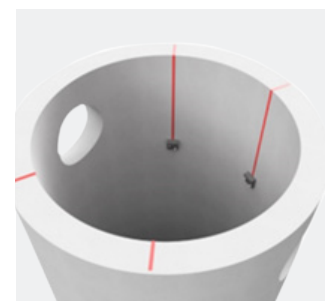


Figure 26



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)"
- Conseal 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



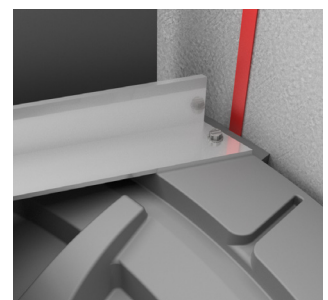
Figure 32



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

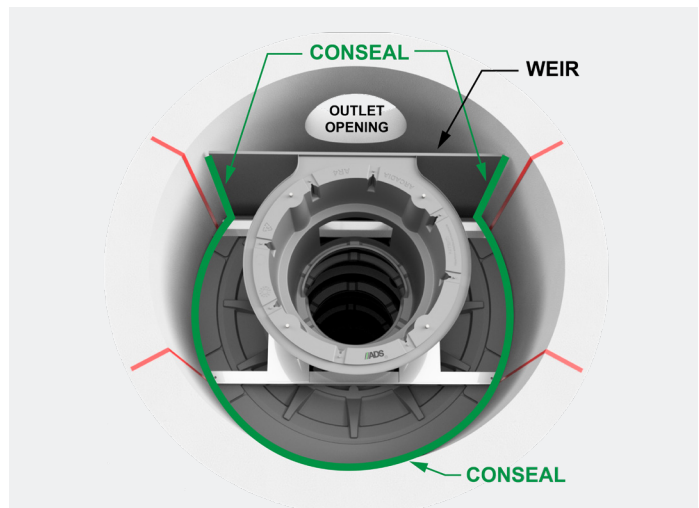


Figure 36

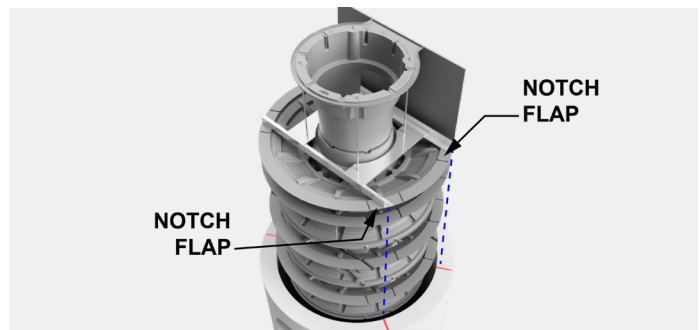


Figure 37

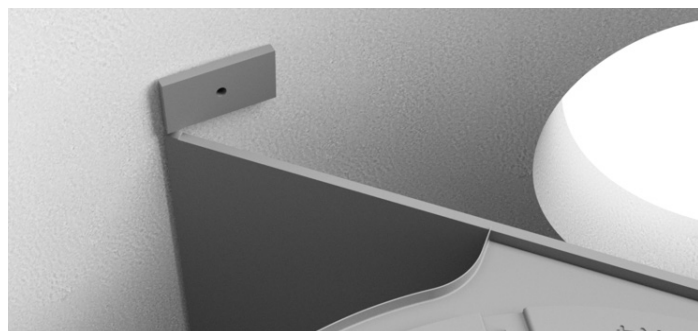
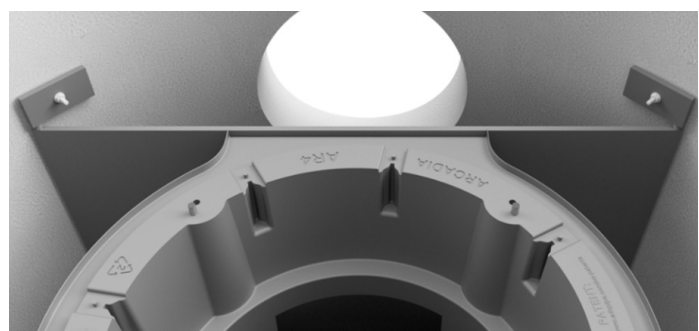
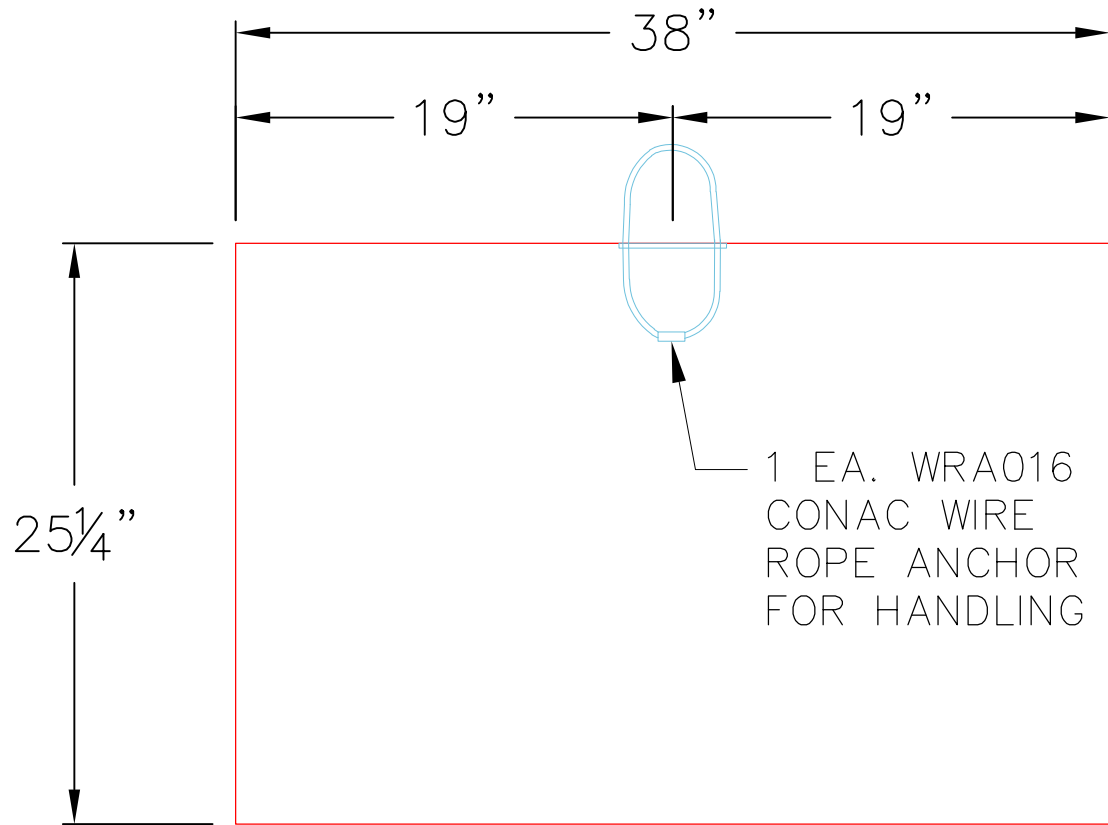
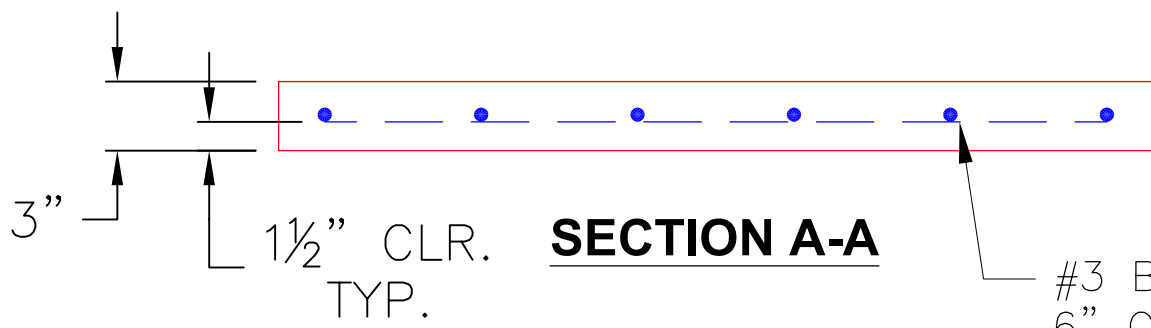


Figure 38





PLAN VIEW



SECTION A-A

GENERAL NOTES:

1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 5,000 PSI AT 28 DAYS.
3. REINFORCING: PER ASTM A615. (GRADE 60).
 - BASE #3 BAR @ 6" O.C.E.W. - 1 1/2" MIN. REBAR CLEARANCE (TYP)
5. WEIGHT: 241 LBS

#3 BAR @
6" C.C.E.W.
(GRADE 60)

PRODUCTION WORK ORDER		PRODUCT I.D.: CVW	DESCRIPTION: 38" X 3" X 25 1/4" TALL WEIR WALL	
	QUALITY CONTROL CHECKLIST	PRODUCT VIEW: RIGHT SIDE UP	CUSTOMER: CONVERGENT WATER TECHNOLOGIES	
	☐ ALL DIMENSIONS CORRECT.	PLANT: BEAVER DAM, KY.	PROJECT: GALLATIN PRETX-LT	
	☐ LIFTERS INSTALLED.	WEIGHT: 241 LBS.	STRUCTURE: QL1 ST-CB (1)	
	☐ HOLE LOCATION(S) CORRECT.	TOP SECTION JOINT: N/A	ORDER NO: 26-2112	
	☐ REINFORCING CORRECT.	BASE SECTION JOINT: N/A	PC: C. GOFF	DRAWING: S. FELLETTTER
	☐ SURFACE QUALITY ACCEPTABLE.	QC CHECK INITIALS:	DATE: 08/17/26	SCALE: NTS
	☐ EDGES CHAMFERED.			PG. 1 of 1
☐ ALL PATCHWORK ACCEPTABLE.				

Job Name: 26-2648 Midtown Commons Apartments
Job Location: Madisonville, KY
Contractor: Steve Pleasant Excavating

Plant: Beaver Dam

Tech: S. Felletter

7/20/2026 10:46:18 AM

PC:



Structure ID: 6.1 DBI14

P2 BX024024-08LD08-14

CB FLAT TOP 8"W (HOE KY-210) F/F

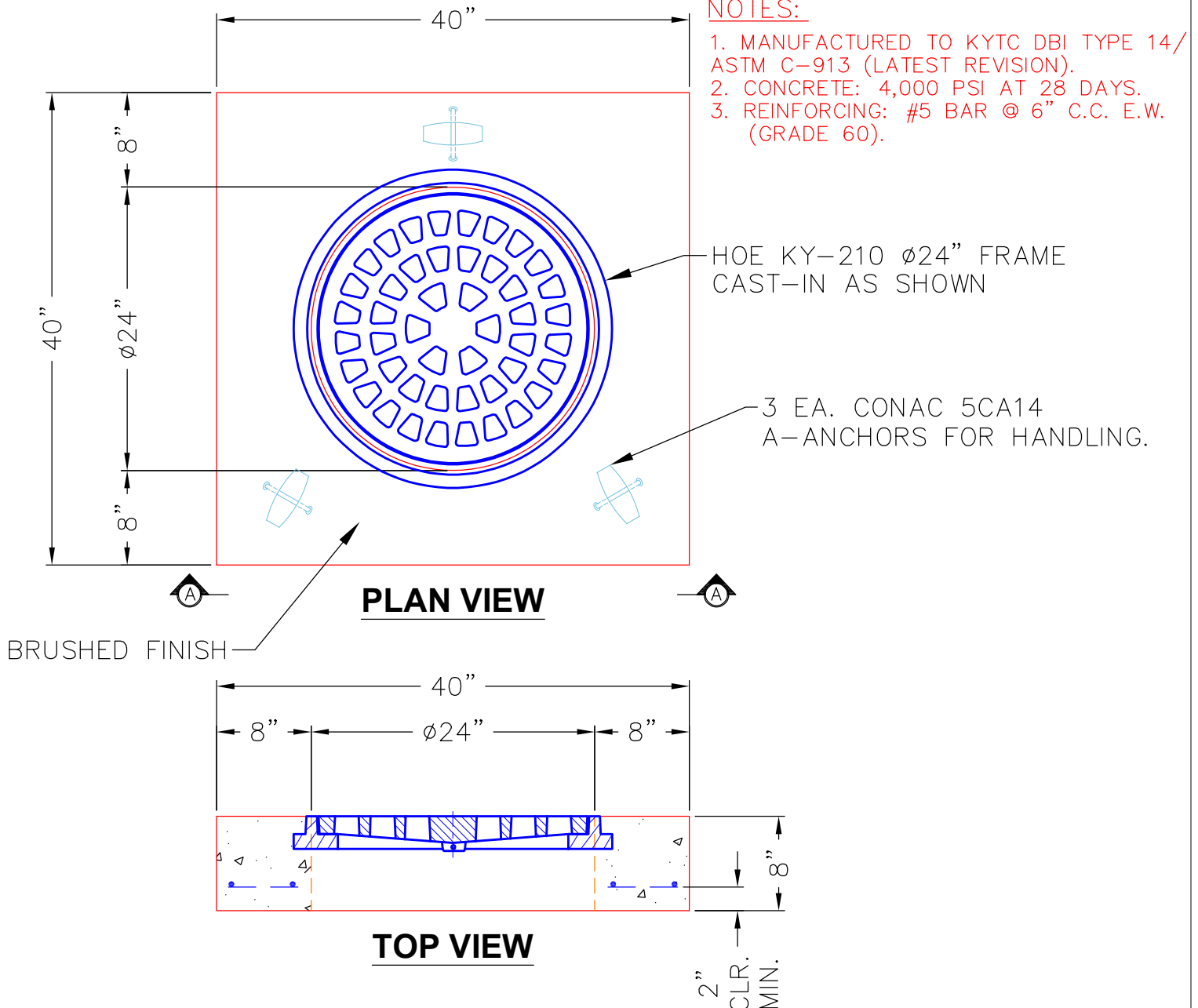
- P3) 19.5" - CASTING (cast in) - 2.75"
P2) 24" x 24" - CB FLAT TOP 8"W (HOE KY-210) F/F - 8"
P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht F/n - 22"
1) CASTING - HOE KY-210 F/G (DBI 14)
1) This Structure Includes a Cast-in Item
1) 24" x 24" - Conseal CS-102 1.00"
1) Hole - 22

- 0 lb
943 lb
2709 lb
178 lb
0 lb
0 lb
0 lb
Structure Notes:
1. KYTC DBI TYPE 14 / ASTM C913 SPECIFICATIONS
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO INVERT CHANNEL.
4. DBI-14 F/G CAST INTO TOP SLAB (HOE KY-210 F/G RADIAL).

Structure Total:

3830 lb

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



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 8"

Height (Ext): 8"

Weight (Net): 943 lb
Volume (Net): 0.24cu.yd

Job Name: 26-1814 - Brownsville Sewer System Additions
Job Location: Cave City, KY
Contractor: Luttrell & Sons, LLC

Plant: 100

8/4/2026 10:23:35 AM

Tech: Jared - F

PC: A. Chambers



Structure ID: QL11 VV

P2 BX072072-08TS-S

CB FLAT TOP 8"W w/37"X36 Hatch F/F

- P3) 37" x 36" - HATCH (CAST FLUSH) - 3"
P2) 72" x 72" - CB FLAT TOP 8"W w/37"X36 Hatch F/F - 8"
P1) 72" x 72" - BOX BASE 8inW, 8inF, Variable Ht F/n - 64"
1) 72" x 72" - Conseal CS-102 1.00" (Double)
4) PSX - 12-06 NYLO
5) MH Step ML-10-TDS-NCR - 10"

Structure Total:

100 lb
4304 lb
18643 lb
0 lb
32 lb
0 lb

23079 lb

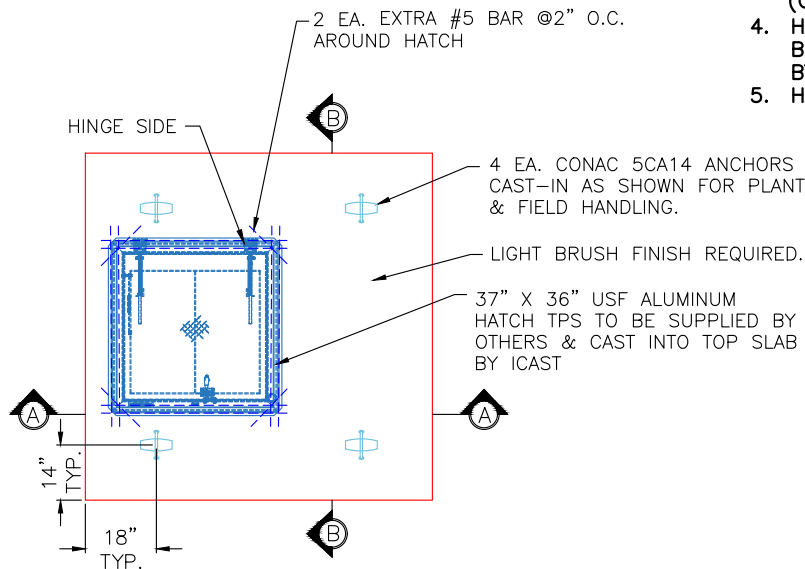
Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. 36" X 36" ALUMINIUM HATCH SUPPLIED BY OTHERS.

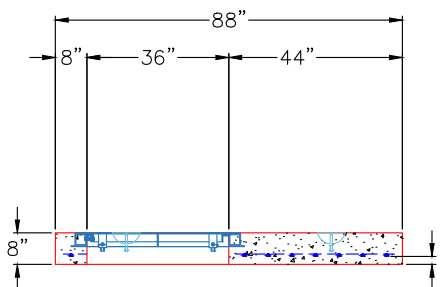
REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
- WALLS (As .47) #5 BARS AT 12" C.C.E.W.
- FLOOR (As .47) #5 BARS AT 12" C.C.E.W.

GENERAL NOTES:

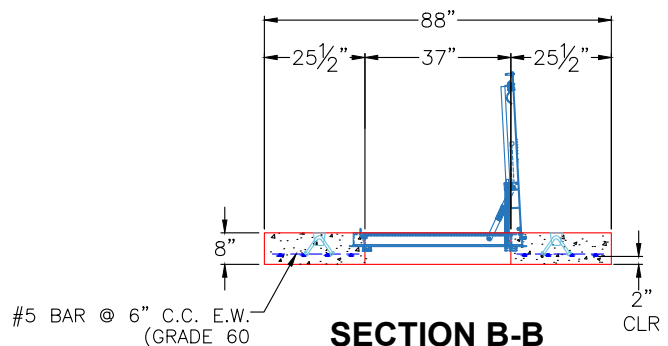
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)
4. HATCH: 37" X 36" USF ALUMINUM HATCH TPS TO BE SUPPLIED BY OTHERS & CAST INTO TOP SLAB BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



PLAN VIEW



SECTION A-A
(RIGHT-SIDE-UP VIEW)



SECTION B-B
(RIGHT-SIDE-UP VIEW)

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 8"

Height (Ext): 8"

Weight (Net): 4304 lb
Volume (Net): 1.1cu.yd

Job Name: 26-1814 - Brownsville Sewer System Additions
Job Location: Cave City, KY
Contractor: Luttrell & Sons, LLC

Plant: 100

8/4/2026 10:23:35 AM

Tech: Jared - F

PC: A. Chambers



Structure ID: QL7 VV

P2 BX072072-08TS-S

CB FLAT TOP 8"W w/37"X36 Hatch F/F

P3) 37" x 36" - HATCH (CAST FLUSH) - 3"
P2) 72" x 72" - CB FLAT TOP 8"W w/37"X36 Hatch F/F - 8"
P1) 72" x 72" - BOX BASE 8inW, 8inF, Variable Ht F/n - 64"
1) 72" x 72" - Conseal CS-102 1.00" (Double)
4) PSX - 12-06 NYLO

100 lb
4304 lb
18643 lb
0 lb
32 lb

Structure Total: 23079 lb

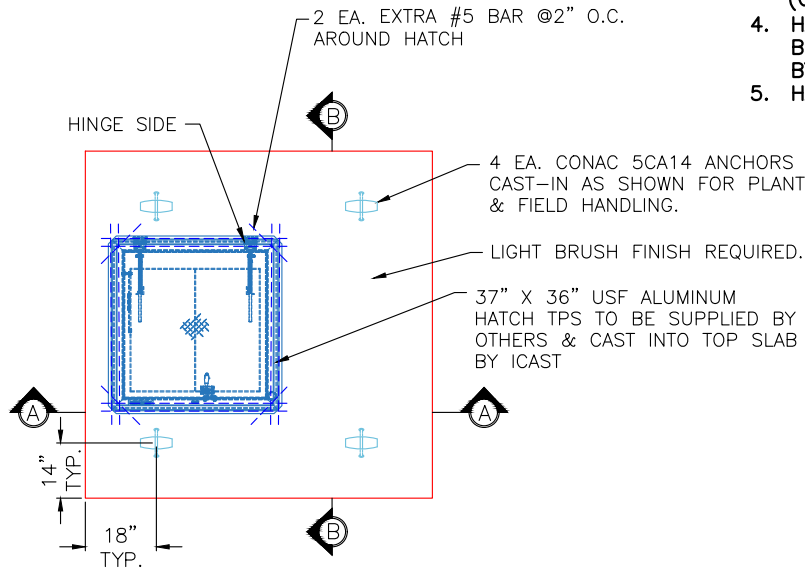
Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. 37" X 36" ALUMINIUM HATCH SUPPLIED BY OTHERS.

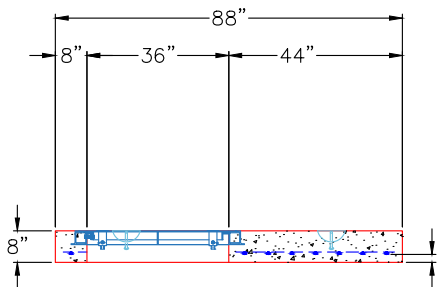
REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
- WALLS (As .47) #5 BARS AT 12" C.C.E.W.
- FLOOR (As .47) #5 BARS AT 12" C.C.E.W.

GENERAL NOTES:

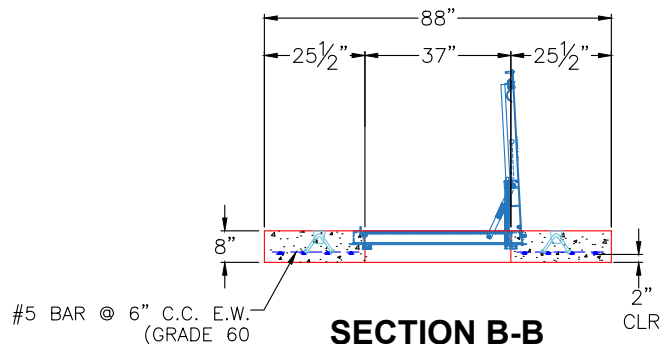
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)
4. HATCH: 37" X 36" USF ALUMINUM HATCH TPS TO BE SUPPLIED BY OTHERS & CAST INTO TOP SLAB BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



PLAN VIEW



SECTION A-A
(RIGHT-SIDE-UP VIEW)



SECTION B-B
(RIGHT-SIDE-UP VIEW)

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 8"

Height (Ext): 8"

Weight (Net): 4304 lb
Volume (Net): 1.1cu.yd

Job Name: 26-1814 - Brownsville Sewer System Additions
Job Location: Cave City, KY
Contractor: Luttrell & Sons, LLC

Plant: 100

8/4/2026 10:22:55 AM

Tech: Jared - F

PC: A. Chambers



Structure ID: QL4 VV

P1 BX072072-08BA-VH

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

P3) 37" x 36" - HATCH (CAST FLUSH) - 3"
P2) 72" x 72" - CB FLAT TOP 8"W w/37"X36 Hatch F/F - 8"
P1) 72" x 72" - BOX BASE 8inW, 8inF, Variable Ht F/n - 64"
1) 72" x 72" - Conseal CS-102 1.00" (Double)
4) PSX - 8QRS-S NYLO
3) MH Step ML-10-TDS-NCR - 10"

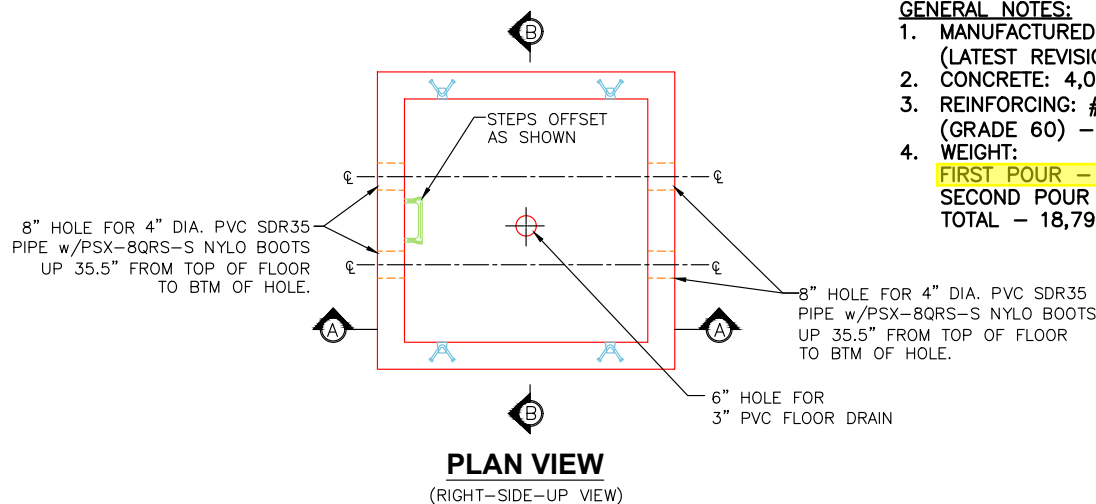
Structure Total: 23242 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. 37" X 36" ALUMINIUM HATCH SUPPLIED BY OTHERS.

REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
- WALLS (As .47) #5 BARS AT 12" C.C.E.W..
- FLOOR (As .47) #5 BARS AT 12" C.C.E.W..

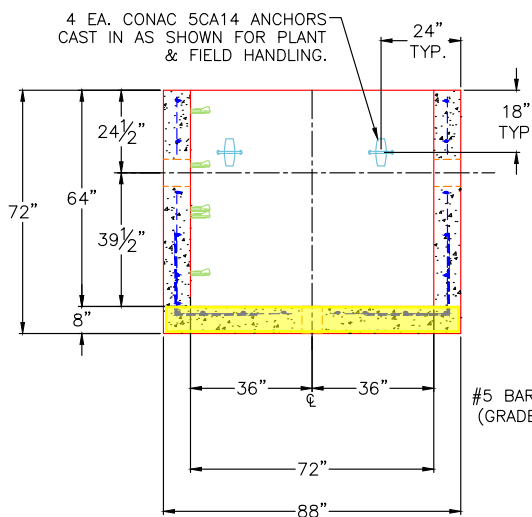
Rim: 496.25' Rim to Invert: 2.87' Slack: 0" Sump: 37.56" Step Position: 0°



GENERAL NOTES:

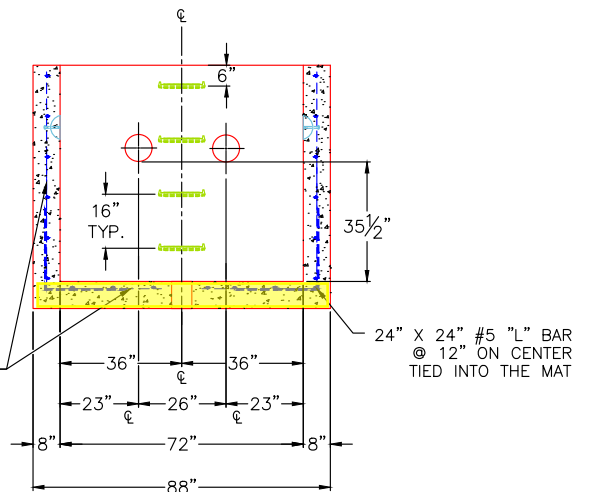
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 12" E.W. O.C. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)
4. WEIGHT:
FIRST POUR - 5,179 LBS.
SECOND POUR - 13,613 LBS.
TOTAL - 18,792 LBS.

FIRST POUR DRAWING



SECTION A-A

(RIGHT-SIDE-UP VIEW)



SECTION B-B

(RIGHT-SIDE-UP VIEW)

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: n/a

Wall Thickness: 8"
Floor Height: 8"

Height (Int): 64"
Height (Ext): 72"

Weight (Net): 18812 lb
Volume (Net): 4.8cu.yd

Job Name: 26-1814 - Brownsville Sewer System Additions
Job Location: Cave City, KY
Contractor: Luttrell & Sons, LLC

Plant: 100

8/4/2026 10:22:55 AM

Tech: Jared - F

PC: A. Chambers



Structure ID: QL4 VV

P1 BX072072-08BA-VH

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

- P3) 37" x 36" - HATCH (CAST FLUSH) - 3"
P2) 72" x 72" - CB FLAT TOP 8"W w/37"X36 Hatch F/F - 8"
P1) 72" x 72" - BOX BASE 8inW, 8inF, Variable Ht F/n - 64"
1) 72" x 72" - Conseal CS-102 1.00" (Double)
4) PSX - 8QRS-S NYLO
3) MH Step ML-10-TDS-NCR - 10"

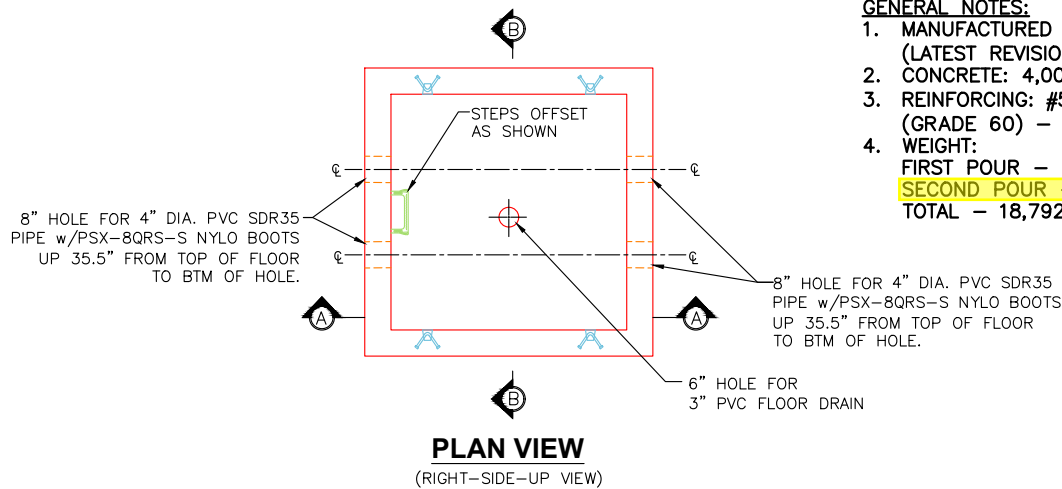
Structure Total: 23242 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. 37" X 36" ALUMINIUM HATCH SUPPLIED BY OTHERS.

REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
- WALLS (As .47) #5 BARS AT 12" C.C.E.W..
- FLOOR (As .47) #5 BARS AT 12" C.C.E.W..

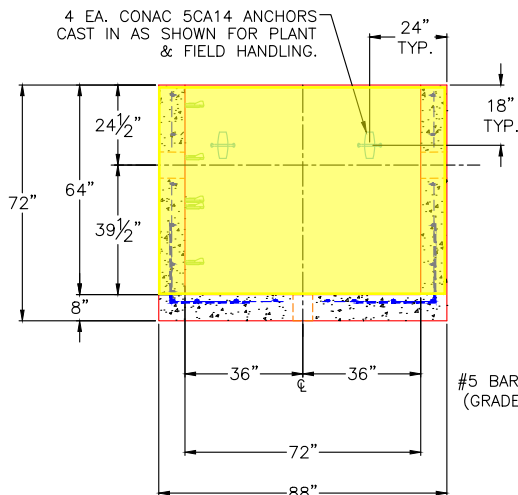
Rim: 496.25' Rim to Invert: 2.87' Slack: 0' Sump: 37.56' Step Position: 0°



GENERAL NOTES:

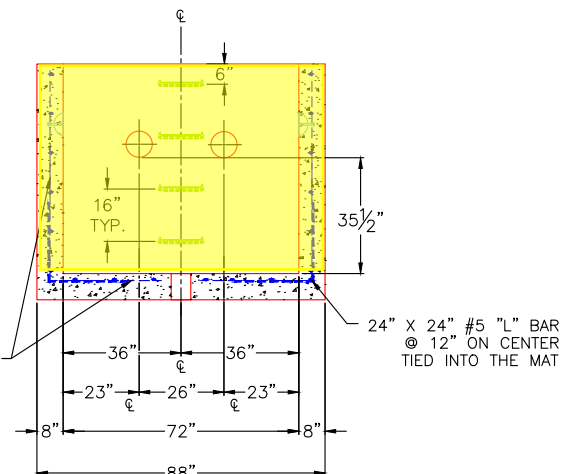
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 12" E.W. O.C. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)
4. WEIGHT:
FIRST POUR - 5,179 LBS.
SECOND POUR - 13,613 LBS.
TOTAL - 18,792 LBS.

SECOND POUR DRAWING



SECTION A-A

(RIGHT-SIDE-UP VIEW)



SECTION B-B

(RIGHT-SIDE-UP VIEW)

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: n/a

Wall Thickness: 8"
Floor Height: 8"

Height (Int): 64"
Height (Ext): 72"

Weight (Net): 18812 lb
Volume (Net): 4.8cu.yd

Job Name: 25-1684P14 KYTC Jefferson Co. Call 200 (251007)
Job Location: I-264 Louisville, Ky.
Contractor: Cleary Construction, Inc.

Plant: Beaver Dam, KY
8/4/2026 11:28:46 AM

Tech: J. Coppage
PC: T. Ryan



Structure ID: 5095+00 LT JB-A

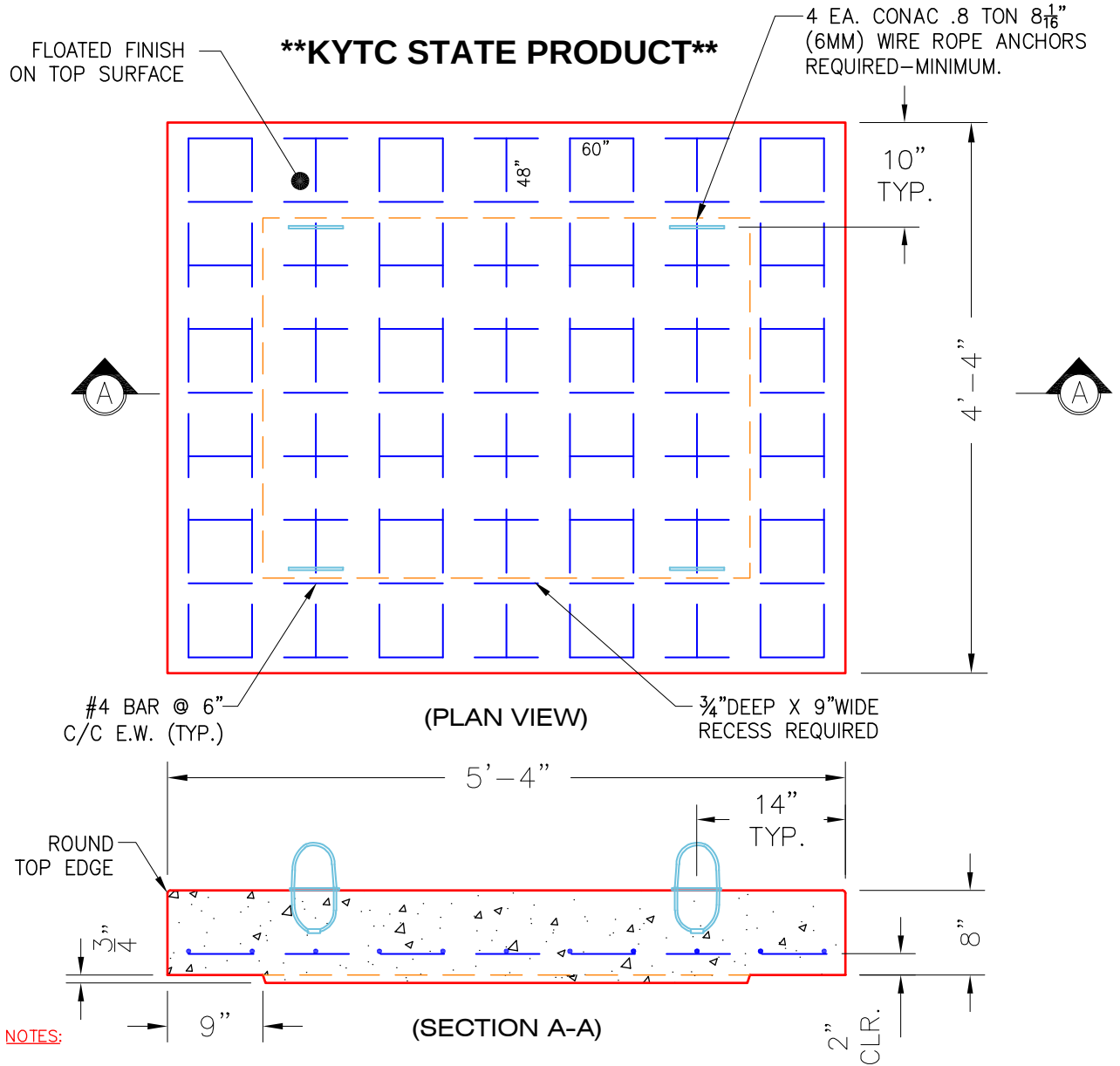
P2 BX3648_08LD08

CB FLAT TOP 8"W SOLID

P2) 36" x 48" - CB FLAT TOP 8"W SOLID - 8"
P1) 36" x 48" - BOX BASE 8inW, 8inF - 42"
1) 36" x 48" - Conseal CS-102 1.00"
2) Hole - 40
1) Hole - 22

2234 lb
5931 lb
0 lb
0 lb
0 lb
Structure Total: 8165 lb

Structure Notes:
-KYTC STATE PROJECT 251007
-REINFORCING: #5 BAR @ 12" C/C E.W. (TYP.)
-CS-102 BUTYL REQUIRED (SUPPLIED BY ICAST).
-KYTC CERTIFICATIONS REQUIRED.



#4 BAR CUT LIST
9 EA. @ 60"
11 EA. @ 48"

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

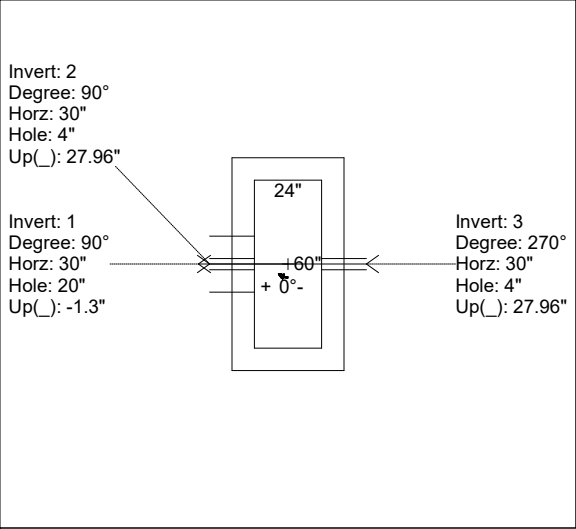
Wall Thickness: 8"

Height (Ext): 8"

Weight (Net): 2234 lb
Volume (Net): 0.57cu.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 7/30/2026 8:55:47 AM		Tech: J. Horsley PC: C. Goff				
Structure ID: 266 (434+55 RT)											
P1		BX2460-08BA36		BOX BASE 8inW, 8inF F/n							
P4) 15" x 59" - P.I.P. - BY OTHERS - 8" P3) 15" x 59" - FIELD ADJUSTMENT - 3" P2) 24" x 60" - BX FLAT LID 8inW, w/15"x59" HOLE (KYTC DBI-13S) F/F - 8" P1) 24" x 60" - BOX BASE 8inW, 8inF F/n - 36" 1) CASTING - HOE KY-206 F/C (KY TY1) 1) 24" x 60" - Conseal CS-102 1.00" 1) Hole - 20 2) Hole - 4						0 lb 0 lb 1461 lb 6646 lb 206 lb 0 lb 0 lb 0 lb ----- Structure Total: 8313 lb		Structure Notes: **KYTC STATE PROJECT** 1. KYTC DBI TYPE 13S / ASTM C-913 SPEC'S. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. CASTING BY ICAST (HOE KY-230S F/G SHIPPED LOOSE). 4. STUB #5 BARS 4" OUT TOP OF TOP SLAB (SPA AT 12" C/C) AROUND 15"x59" HOLE. REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W. (DBL MAT). - WALLS (As .31) #5 BARS AT 12" C.C.E.W.. - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.			
Rim: 546'		Rim to Invert: 4.61'		Slack: 0.32"		Sump: 0"		Step Position:			
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (")	Offset	
Invert 1	541.39'	90°	38"	15" HDPE	17.6"	Hole 20	20"	20"	-1.3"	0"	
Invert 2	543.72'	90°	38"	4" WEEP HOLE	4"	Hole 4	4"	4"	27.96"	0"	
Invert 3	543.72'	270°	38"	4" WEEP HOLE	4"	Hole 4	4"	4"	27.96"	0"	
Invert 4											
Invert 5											
Invert 6											
Invert 7											
Invert 8											

RIGHT-SIDE UP VIEW (int. dimensions)

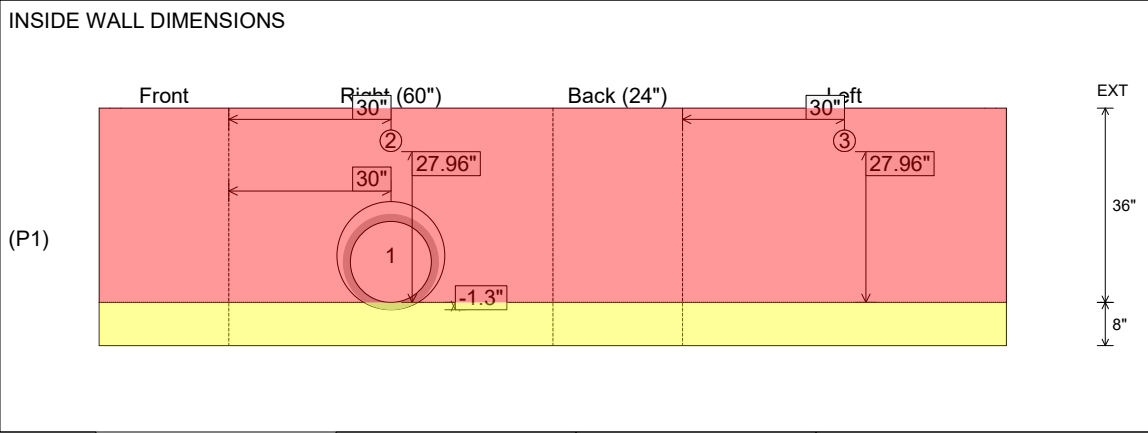


UPSIDE-DOWN VIEW (int. dimensions)

2-Stage Pour Required

First pour drawing
First pour weight = 2,040 LBS
Second pour weight = 4,606 LBS

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): 6646 lb Volume (Net): 1.7cu.yd
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Job Name: 24-4208 - KYTC Christian Co. Call 100 (ID 241018) Job Location: Hopkinsville, KY Contractor: Scotty's Contracting & Stone, LLC					Plant: Beaver Dam		Tech: J. Horsley			
					7/30/2026 8:55:47 AM		PC: C. Goff			
Structure ID: 266 (434+55 RT)										
P1 BX2460-08BA36					BOX BASE 8inW, 8inF F/n					
P4) 15" x 59" - P.I.P. - BY OTHERS - 8" P3) 15" x 59" - FIELD ADJUSTMENT - 3" P2) 24" x 60" - BX FLAT LID 8inW, w/15"x59" HOLE (KYTC DBI-13S) F/F - 8" P1) 24" x 60" - BOX BASE 8inW, 8inF F/n - 36" 1) CASTING - HOE KY-206 F/C (KY TY1) 1) 24" x 60" - Conseal CS-102 1.00" 1) Hole - 20 2) Hole - 4					0 lb 0 lb 1461 lb 6646 lb 206 lb 0 lb 0 lb 0 lb ----- Structure Total: 8313 lb		Structure Notes: **KYTC STATE PROJECT** 1. KYTC DBI TYPE 13S / ASTM C-913 SPEC'S. 2. CONCRETE = 4,000 PSI AT 28 DAYS. 3. CASTING BY ICAST (HOE KY-230S F/G SHIPPED LOOSE). 4. STUB #5 BARS 4" OUT TOP OF TOP SLAB (SPA AT 12" C/C) AROUND 15"x59" HOLE. REINFORCING PER ASTM A615 (GRADE 60). - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W. (DBL MAT). - WALLS (As .31) #5 BARS AT 12" C.C.E.W.. - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.			
							Rim: 546' Rim to Invert: 4.61' Slack: 0.32" Sump: 0" Step Position:			
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	541.39'	90°	38"	15" HDPE	17.6"	Hole 20	20"	20"	-1.3"	0"
Invert 2	543.72'	90°	38"	4" WEEP HOLE	4"	Hole 4	4"	4"	27.96"	0"
Invert 3	543.72'	270°	38"	4" WEEP HOLE	4"	Hole 4	4"	4"	27.96"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)

2-Stage Pour Required

Second pour drawing

First pour weight = 2,040 LBS

Second pour weight = 4,606 LBS

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): 6646 lb Volume (Net): 1.7cu.yd
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The image contains two technical drawings of a rectangular concrete slab, labeled "PLAN VIEW" and "TOP VIEW".

PLAN VIEW: This drawing shows the top surface of the slab. The overall dimensions are 76" in width and 40" in depth. The width is divided into three sections: 8 1/2" on the left, 59" in the center, and 8 1/2" on the right. The depth is divided into three sections: 8" at the top, 15" in the middle, and 8" at the bottom. A central rectangular area is outlined in red, with a note indicating a "15" X 59" OPENING OFFSET IN SLAB". Four blue dots are located within this red-outlined area, with a note pointing to them: "4 EA. CONAC .8 TON 8 1/16" (6MM) WIRE ROPE ANCHORS FOR HANDLING.". A light blue horizontal bar is shown near the top edge, with a note pointing to it: "FLOAT FINISH". A dimension of 14" TYP. is shown for the distance from the right edge of the red-outlined area to the right edge of the slab.

TOP VIEW: This drawing shows the side of the slab. The overall width is 76" and the depth is 8". The width is divided into three sections: 8 1/2" on the left, 59" in the center, and 8 1/2" on the right. The depth is divided into three sections: 8" at the top, 15" in the middle, and 8" at the bottom. A red-outlined area is shown, with a note indicating a "15" X 59" OPENING OFFSET IN SLAB". Four blue dots are located within this red-outlined area, with a note pointing to them: "4 EA. CONAC .8 TON 8 1/16" (6MM) WIRE ROPE ANCHORS FOR HANDLING.". A light blue horizontal bar is shown near the top edge, with a note pointing to it: "FLOAT FINISH". A dimension of 14" TYP. is shown for the distance from the right edge of the red-outlined area to the right edge of the slab. A dimension of 5" TYP. is shown for the distance from the left edge of the slab to the left edge of the red-outlined area. A dimension of 2" CLR. MIN. is shown for the distance from the bottom edge of the slab to the bottom edge of the red-outlined area.

Job Name: 24-4208 - KYTC Christian Co. Call 100 (ID 241018)
Job Location: Hopkinsville, KY
Contractor: Scotty's Contracting & Stone, LLC

Plant: Beaver Dam

Tech: J. Horsley

7/30/2026 8:57:27 AM

PC: C. Goff



Structure ID: 254 (430+25 LT)

P2 BX024024-08LD08S

BX FLAT LID 8inW SPEC. (KY JB-B1) F/F

P3) CASTING (cast in) - 0
P2) 24" x 24" - BX FLAT LID 8inW SPEC. (KY JB-B1) F/F - 8"
P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht F/n - 44"
1) CASTING - HOE KY-206 F/C (KY TY1)
1) 24" x 24" - Conseal CS-102 1.00"
2) Hole - 20

Structure Total:

0 lb
770 lb
4433 lb
206 lb
0 lb
0 lb

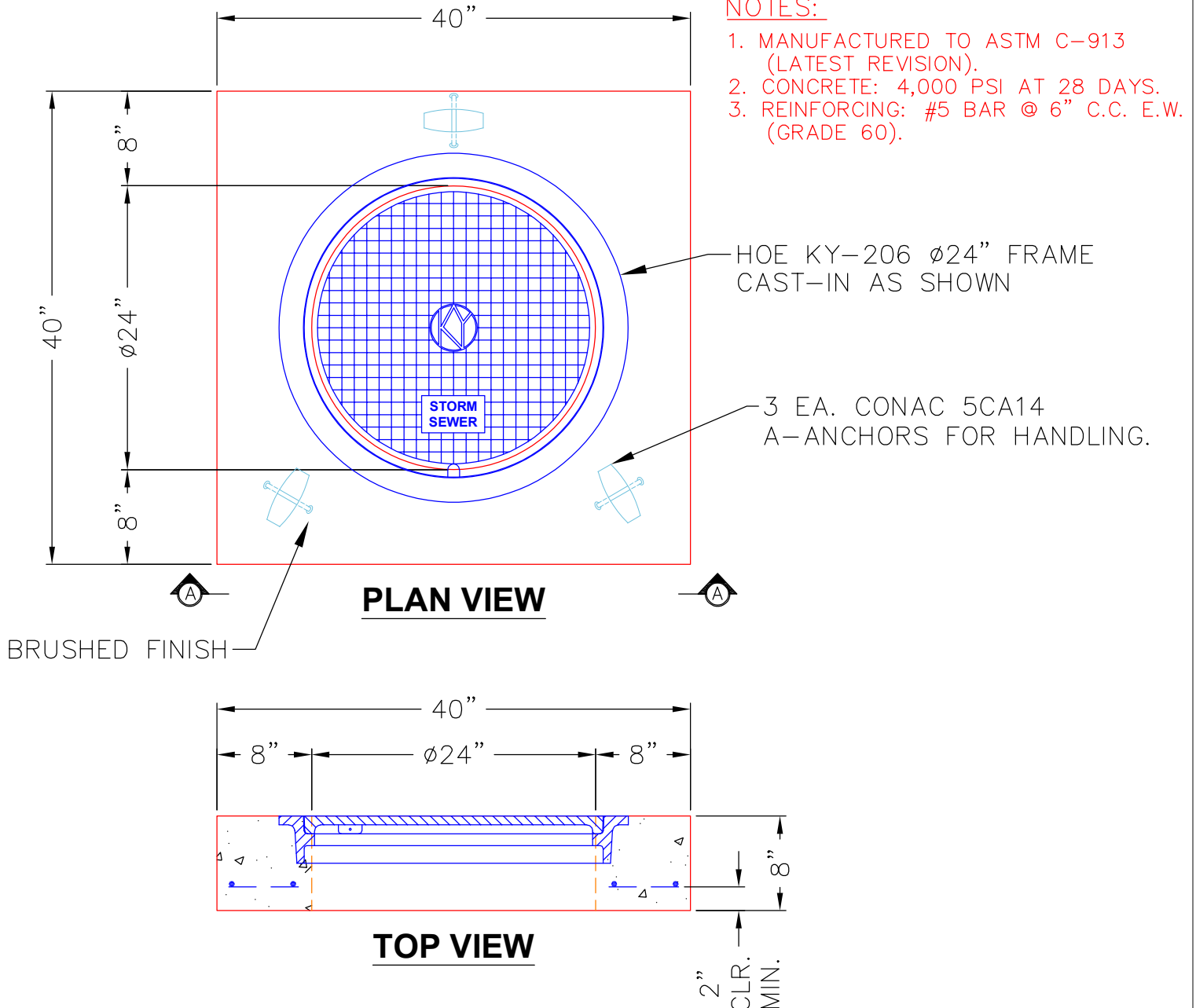
5409 lb

Structure Notes:

****KYTC STATE PROJECT****

1. KYTC JUNCTION BOX B1 / PER ASTM C913 SPEC'S.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. TOP SLAB w KYTC TYPE 1 F/C CAST FLUSH.

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



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 8"

Height (Ext): 8"

Weight (Net): 770 lb
Volume (Net): 0.2cu.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

Tech: J. Horsley

7/30/2026 8:57:23 AM

PC: C. Goff



Structure ID: 242 (427+72 LT)

P2 BX024024-08LD08S

BX FLAT LID 8inW SPEC. (KY JB-B1) F/F

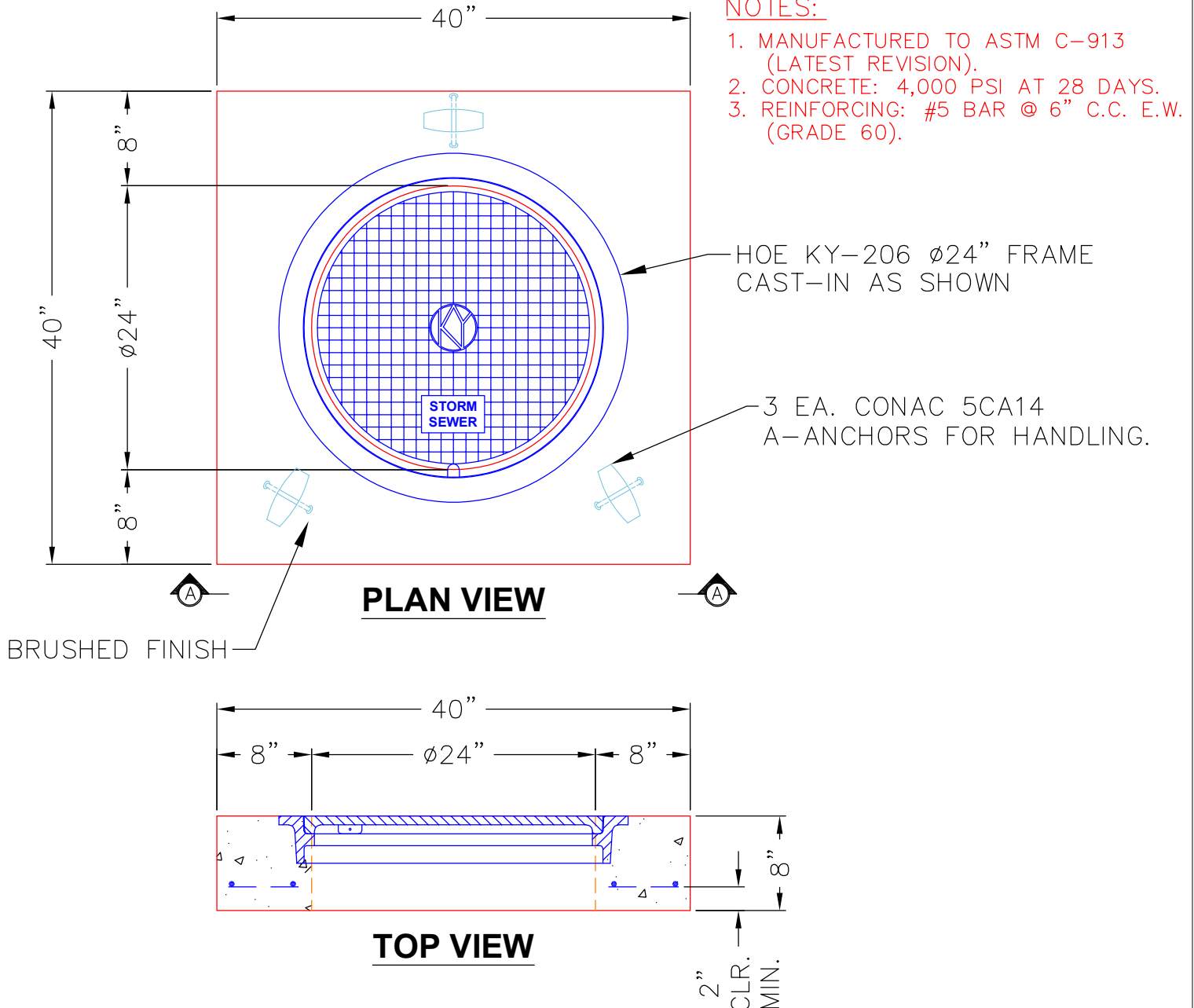
P3) CASTING (cast in) - 0
P2) 24" x 24" - BX FLAT LID 8inW SPEC. (KY JB-B1) F/F - 8"
P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht F/n - 47"
1) CASTING - HOE KY-206 F/C (KY TY1)
1) 24" x 24" - Conseal CS-102 1.00"
2) Hole - 20

0 lb
770 lb
4691 lb
206 lb
0 lb
0 lb

Structure Total: 5667 lb

Structure Notes:
KYTC STATE PROJECT
1. KYTC JUNCTION BOX B1 / PER ASTM C913 SPEC'S.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. TOP SLAB w KYTC TYPE 1 F/C CAST FLUSH.

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



Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

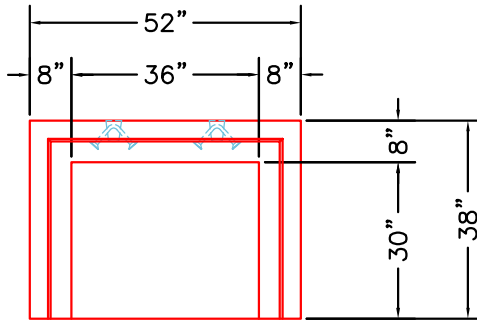
Wall Thickness: 8"

Height (Ext): 8"

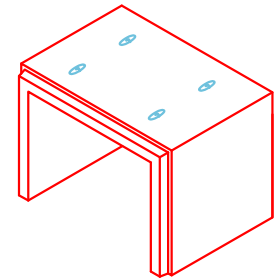
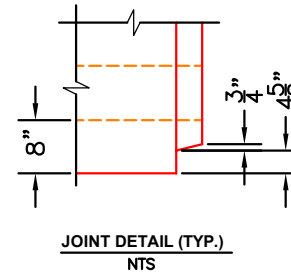
Weight (Net): 770 lb
Volume (Net): 0.2cu.yd

GENERAL NOTES

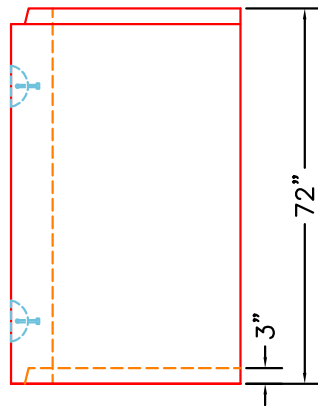
1. MANUFACTURED TO ASTM C1577 (LATEST REVISION).
2. CONCRETE: 5,000 PSI AT 28 DAYS.
3. LOAD REQUIREMENTS = KY-HL93 (KY TABLE1).
4. COVER DEPTH = 4' TO 6'.
5. REINFORCING: PER ASTM C1577 (GRADE 60). SEE ATTACHED STAMPED DESIGN CALCULATIONS.
6. BOX CULVERT TO BE SEALED WITH CONCRETE SEALANTS, INC. CS-102 ROLL BUTYL MASTIC. (SUPPLIED BY ICAST).
7. EXTERIOR JOINT WRAP TO BE 12" WIDE CS212.
8. WEIGHT: 36" X 30" X 69" LONG SECTION = 5,188 LBS.



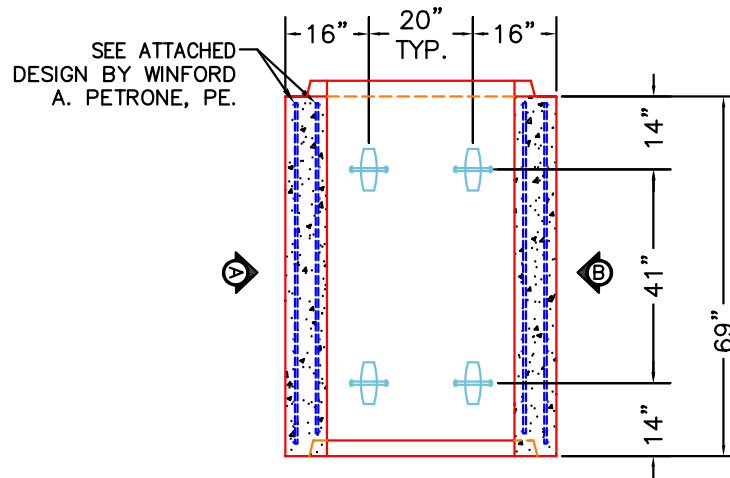
END VIEW



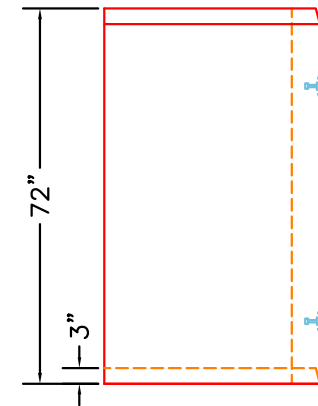
**COMPONENT
ISOMETRIC VIEW**



VIEW A
UPRIGHT IN MOLD



PLAN VIEW
UPRIGHT IN MOLD



VIEW B
UPRIGHT IN MOLD

4 EA. CONAC 5CA14
LIFTING ANCHORS

PRODUCTION WORK ORDER



QUALITY CONTROL CHECKLIST

- ☐ ALL DIMENSIONS CORRECT.
- ☐ LIFTERS INSTALLED INSIDE.
- ☐ RECESS WITH HAUNCHES CORRECT.
- ☐ REINFORCING CORRECT.
- ☐ SURFACE QUALITY ACCEPTABLE.
- ☐ LIFTERS INSTALLED OUTSIDE.
- ☐ PRODUCT SQUARE.

PRODUCT I.D.: CBS

PRODUCT VIEW: RIGHT SIDE UP

PLANT: BEAVER DAM, KY.

WEIGHT: 5,188 LBS.

TOP JOINT: TONGUE

BOTTOM JOINT: GROOVE

QC CHECK INITIALS:

DESCRIPTION: 36" X 30" X 69" LONG 3-SIDED BOX CULVERT

CUSTOMER: CLEARY CONSTRUCTION INC

PROJECT: UK BP9 SITE THERMAL AND ELECTRIC UTILITIES

STRUCTURE: 36" X 30" X 69" BOX CULVERT (P13)

SALES ORDER/QUOTE NO: 25-2504

PC: C. GOFF

DRAWING: S. FELLETER

DATE: 07/31/26

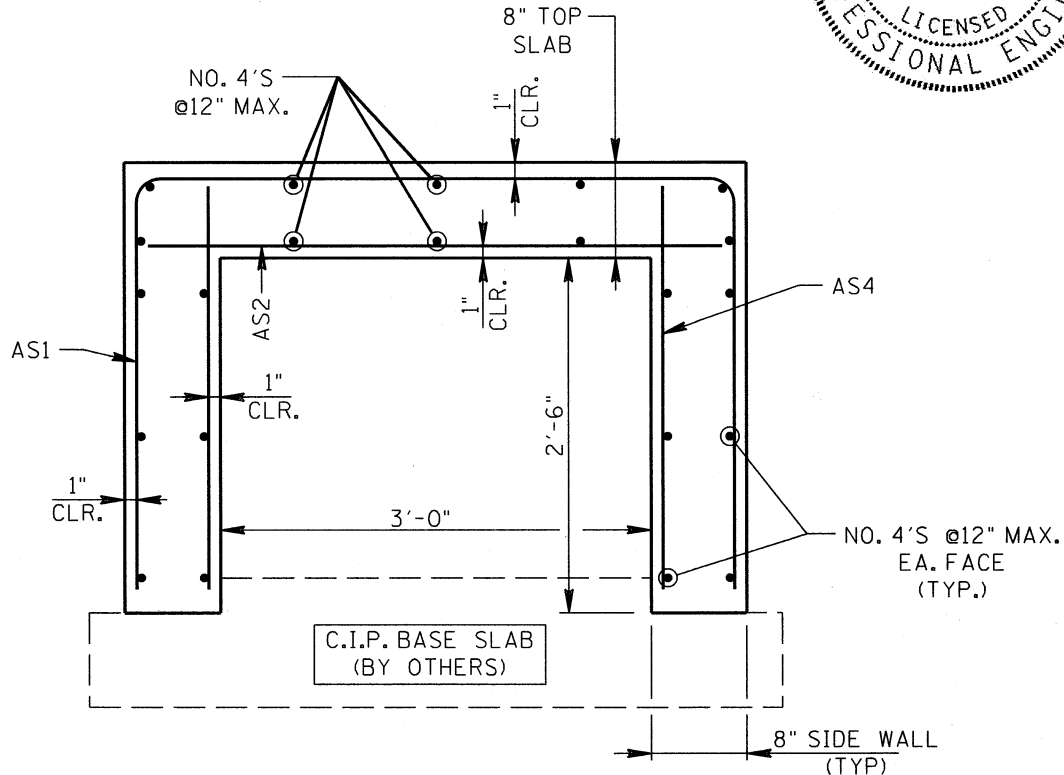
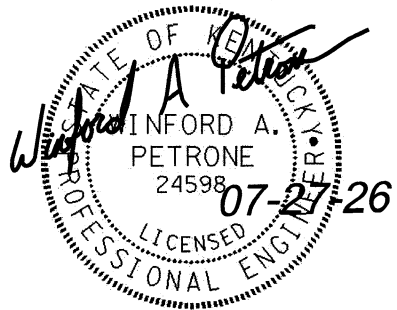
SCALE: NTS

PG. 1 of 1

58/60

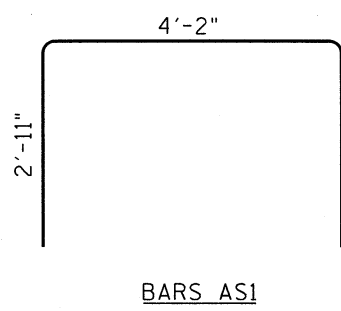
NOTE: SEE "PRECAST DESIGN SUBMITTALS, CONCRETE COMPONENTS" SHEET FOR SUMMARY OF BUILDING AND DESIGN CODES, MATERIALS REQUIREMENTS, AND DESIGN LOADS.

NOTE: SEE ICAST WORKING DRAWINGS FOR ADDITIONAL INFORMATION AND LOCATION OF EACH COMPONENT.



PRECAST TUNNEL SECTION
3'-0"X2'-6" STEAM TUNNEL RUN #2
NON-BEND UNITS

NOTE: CLEARANCE BETWEEN CUT-OFF ENDS OF BARS AND OUTSIDE FACES OF CONCRETE=2".



REINFORCING STEEL		
LOCATION	REQUIRED	COMMENTS
AS1	NO. 4'S@10"	BEND AS SHOWN
AS2	NO. 4'S@10"	EXTEND TO EXTER. FACES
AS3	NOT USED	NOT USED
AS4	NO. 4'S@12"	

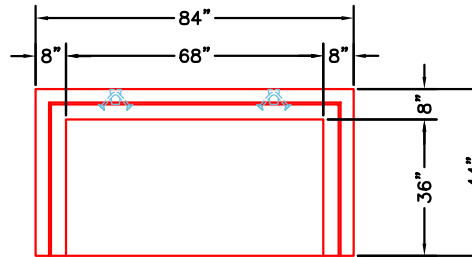
AS1, AS2, AND AS4 REINFORCING BARS
Fy-min=60 K.S.I.

THIS SECTION TO BE USED FOR ALL
RUN #2: NON-ANGLED UNITS,
RECTANGULAR IN PLAN VIEW.

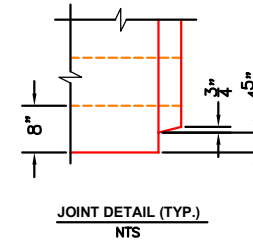
SK-4

GENERAL NOTES

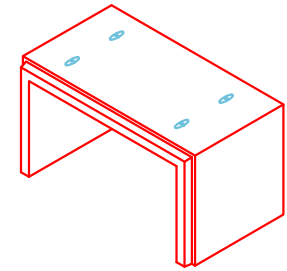
1. MANUFACTURED TO ASTM C1577 (LATEST REVISION).
2. 2. CONCRETE: 5,000 PSI AT 28 DAYS
3. .LOAD REQUIREMENTS = KY-HL93 (KY TABLE1).
4. COVER DEPTH = 4' TO 6'.
5. REINFORCEMENT PER ATTACHED DESIGN BY WINFORD A. PETRONE, PE
6. BOX CULVERT TO BE SEALED WITH CONCRETE SEALANTS, INC. CS-102 ROLL BUTYL MASTIC. (SUPPLIED BY ICAST).
7. EXTERIOR JOINT WRAP TO BE 12" WIDE CS212.
8. WEIGHT: 68" X 36" X 69" LONG SECTION = 7,226 LBS.



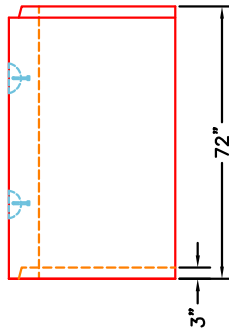
END VIEW



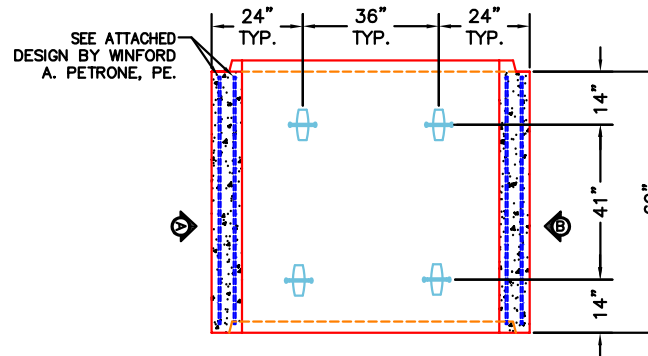
JOINT DETAIL (TYP.)
NTS



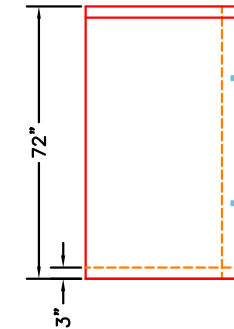
COMPONENT
ISOMETRIC VIEW



VIEW A
UPRIGHT IN MOLD



PLAN VIEW
UPRIGHT IN MOLD



VIEW B
UPRIGHT IN MOLD

4 EA. CONAC 5CA14
LIFTING ANCHORS

PRODUCTION WORK ORDER

PRODUCT I.D.: CBS

DESCRIPTION: 68" X 36" X 69" LONG 3-SIDED BOX CULVERT



QUALITY CONTROL CHECKLIST

- ☐ ALL DIMENSIONS CORRECT.
- ☐ LIFTERS INSTALLED INSIDE.
- ☐ RECESS WITH HAUNCHES CORRECT.
- ☐ REINFORCING CORRECT.
- ☐ SURFACE QUALITY ACCEPTABLE.
- ☐ LIFTERS INSTALLED OUTSIDE.
- ☐ PRODUCT SQUARE.

PRODUCT VIEW: RIGHT SIDE UP

CUSTOMER: CLEARY CONSTRUCTION INC

PLANT: BEAVER DAM, KY.

PROJECT: UK BP9 SITE THERMAL AND ELECTRIC UTILITIES

WEIGHT: 7,226 LBS.

STRUCTURE: 68" X 36" X 69" BOX CULVERT (P10)

TOP JOINT: TONGUE

SALES ORDER/QUOTE NO: 25-2504

BOTTOM JOINT: GROOVE

PC: C. GOFF

DRAWING: S. FELLETER

QC CHECK INITIALS:

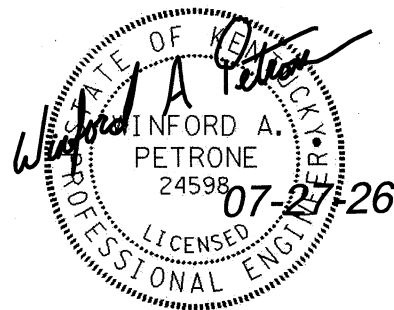
DATE: 07/31/26

SCALE: NTS

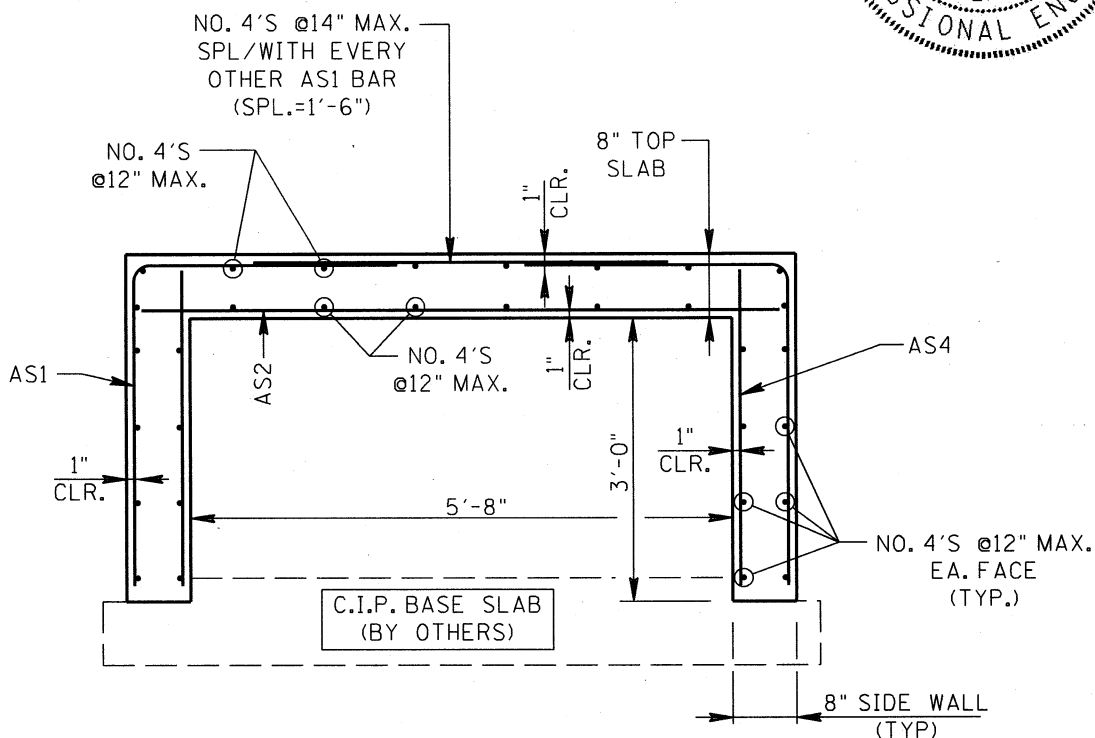
PG. 1 of 1

NOTE: SEE "PRECAST DESIGN SUBMITTALS, CONCRETE COMPONENTS" SHEET FOR SUMMARY OF BUILDING AND DESIGN CODES, MATERIALS REQUIREMENTS, AND DESIGN LOADS.

NOTE: SEE ICAST WORKING DRAWINGS FOR ADDITIONAL INFORMATION AND LOCATION OF EACH COMPONENT.



55/60

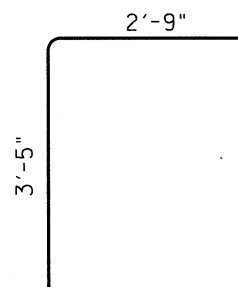


PRECAST TUNNEL SECTION

5'-8"X3'-0" STEAM TUNNEL RUN #1
NON-WEDGED UNITS

NOTE: CLEARANCE BETWEEN CUT-OFF
ENDS OF BARS AND OUTSIDE
FACES OF CONCRETE=2".

REINFORCING STEEL		
LOCATION	REQUIRED	COMMENTS
AS1	NO. 4'S@7"	BEND AS SHOWN
AS2	NO. 4'S@7"	EXTEND TO EXTER. FACES
AS3	NOT USED	NOT USED
AS4	NO. 4'S@12"	



BARS AS1

AS1, AS2, AND AS4 REINFORCING BARS

Fy-min=60 K.S.I.

THIS SECTION TO BE USED FOR ALL
RUN #1: NON-WEDGED UNITS,
RECTANGULAR IN PLAN VIEW.

SK-1

PRECAST STEAM TUNNELS: RUN NO.1, TYPICAL UNIT SECTION

UK BP9 SITE THERMAL AND ELECTRIC: 5'-8"X3'-0" STEAM TUNNEL RUN #1

Job Name: 26-2945 - The Cumberlands Lift Station
Job Location: Bowling Green, KY
Contractor: Endesol, Inc.

Plant: Beaver Dam

7/21/2026 1:57:23 PM

Tech: J. Coppage

PC: E. Bradley



Structure ID: Combo Lift Station

P3 CTS

Combined Lift Station Top Slab Custom

- P4) 36" x 54" - HATCH (CAST FLUSH) - 3"
P3) 96" - Combined Lift Station Top Slab Custom - 12"
P2) 96" - Combined Lift Station Walls/Floor - 59"
P1) 96" - MH BASE (12"F) Custom Ht - 64"
1) JOINT WRAP - 12" WD x 096" MAC WRAP
1) Cast-in Item - 2x Hatches
1) SECONDARY POUR - Walls For Vault Sect.
1) SECONDARY POUR - Vault Extension
1) HATCH (Alum.) - HALLIDAY S1R 36"x54"
1) HATCH (Alum.) - HALLIDAY S1R 42"x42"
1) SPECIAL Pre-Assembly of Internal Material Required
1) 96" - Conseal CS-231 1.00" (Double)
1) 36" x 54" - Conseal CS-231 1.00" (Double)
1) PSX - 8QRS-S NYLO
1) PSX - 12-08 NYLO
5) MH Step ML-10-TDS-NCR - 10"

100 lb
11763 lb
31830 lb
26136 lb
0 lb
0 lb
0 lb
0 lb
0 lb
91 lb
93 lb
0 lb
0 lb
0 lb
0 lb
6 lb
8 lb
0 lb

Structure Total: 70029 lb

Structure Notes:

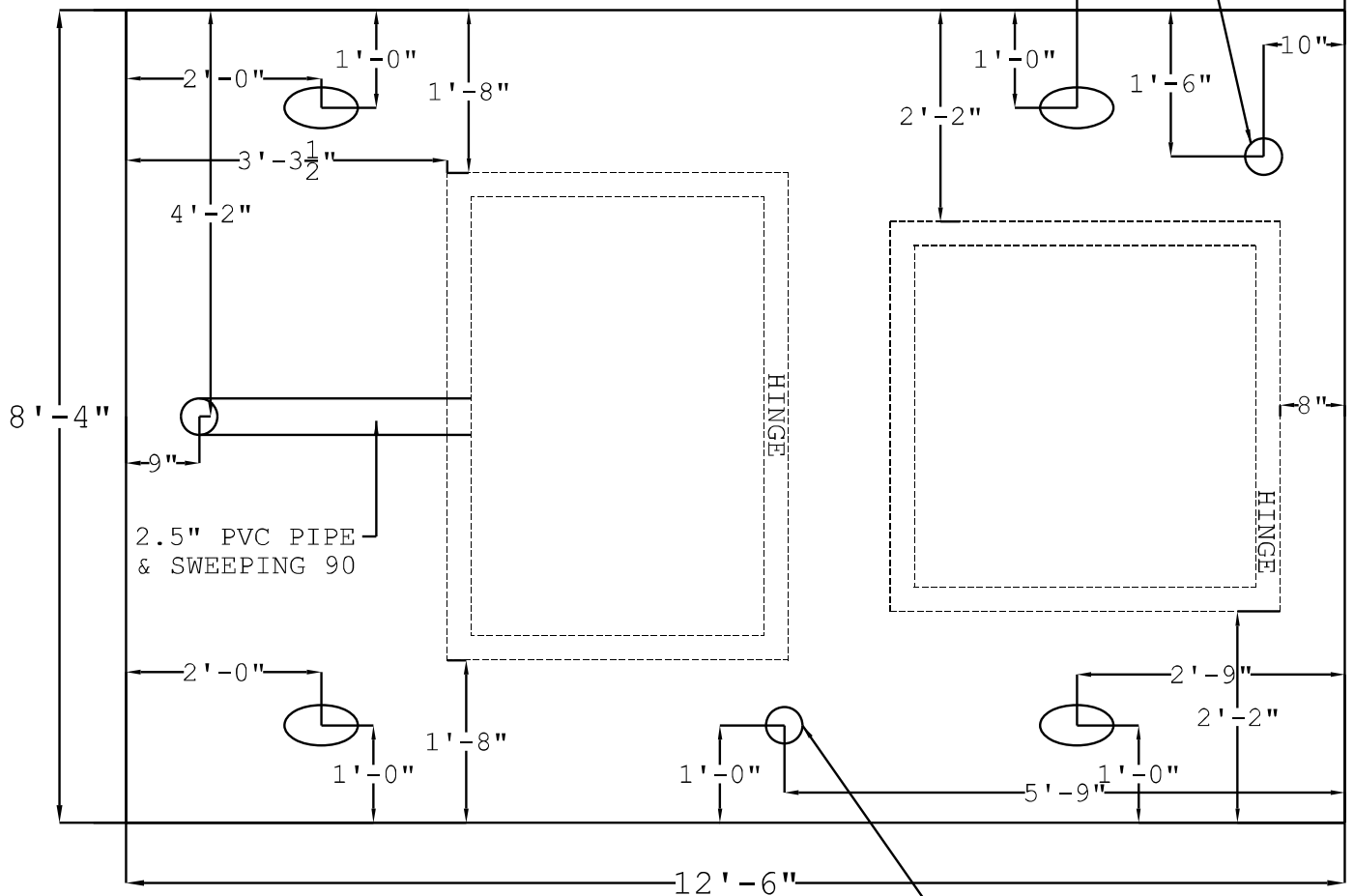
1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 5,000 PSI AT 28 DAYS.
3. REINFORCING PER ASTM A615 (GRADE 60).

GRADE 60 REINFORCING STEEL SCHEDULE

BASE SLAB: #6 @ 6" OC EW TOP, #5 @ 12" EW BOT
VALVE VAULT FLOOR SLAB: #5 @ 8" OC EW
VALVE VAULT WALL SECTION: #5 @ 12" OC EW
LID SLAB: #4 @ 12" OC EW TOP, #5 @ 12" EW BOT
(EXTRA #5 BAR AROUND THE HATCHES)

12" THICK TOP SLAB

4.5"x18" SS.
NIPPLE CAST INTO
TOP SLAB



TOP SLAB

4.5"x12" SS.
NIPPLE CAST INTO
TOP SLAB
THREADS STICKING UP
2" OUT OF CONCRETE

Coating (Int):
Coating (Ext):

Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 7"

Height (Ext): 12"

Weight (Net): 11765 lb
Volume (Net): 3cu.yd

Job Name: 26-1463 - Brown Co Landfill Vaults
Job Location: Pleasant Township, OH
Contractor: Hinkle Construction Services, LLC

Plant: 100

7/10/2026 4:19:30 PM

Tech: Jared - F
PC: E. Bradley



Structure ID: 3

P2 BX048176-08LD08-S

BX FLAT TOP 8"W w/(2) 30"x36" HATCHES F/F

P3) 30" x 36" - HATCH (CAST FLUSH) - 3"
P2) 48" x 176" - BX FLAT TOP 8"W w/(2) 30"x36" HATCHES F/F - 8"
P1) 48" x 176" - BOX BASE 8inW, 8inF, Variable Ht F/n - 40"
2) HATCH (Alum.) - HALLIDAY W1S 30"x36"
1) Conseal CS-102 1.00" (Double)
4) Hole - 6

100 lb
6799 lb
21062 lb
138 lb
0 lb
0 lb

Structure Total: 28099 lb

Structure Notes:

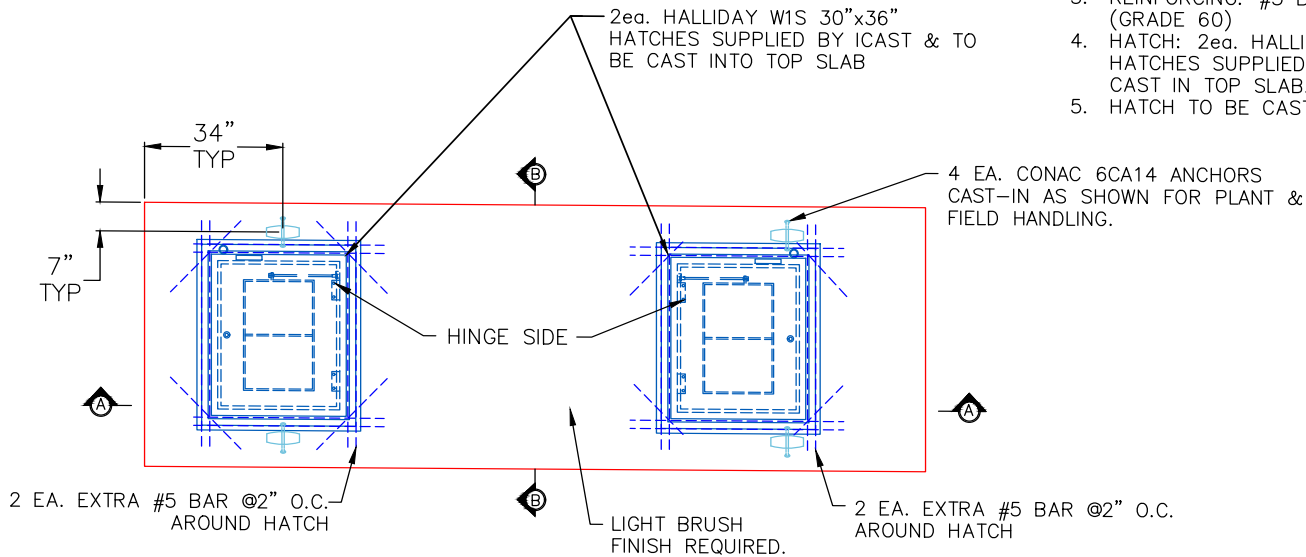
1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. HATCH SUPPLIED BY ICAST (2ea. HALLIDAY W1S 30X36).

REINFORCING PER ASTM A615 (GRADE 60).

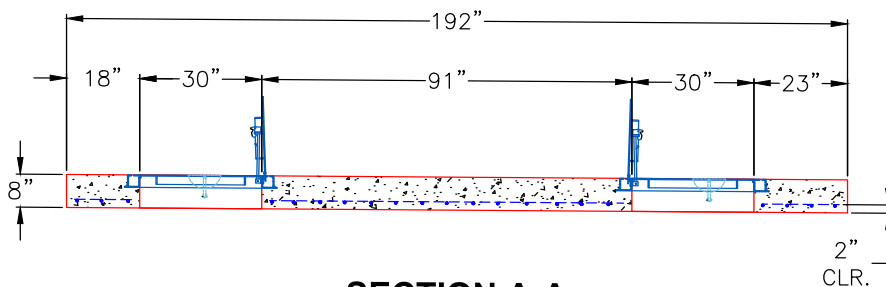
- TOP SLAB(As .62)#5 BARS AT 6" C.C.E.W.
- WALLS(As .37)#5 BARS AT 8" C.C.E.W.
- FLOOR(As .37)#5 BARS AT 8" C.C.E.W.

GENERAL NOTES:

1. MANUFACTURED TO ASTM C-913 (LATEST REVISION)
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60)
4. HATCH: 2ea. HALLIDAY W1S 30"x36" HATCHES SUPPLIED BY ICAST TO BE CAST IN TOP SLAB.
5. HATCH TO BE CAST INTO TOP OF LID.

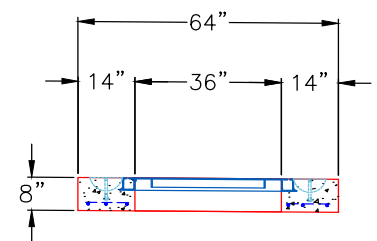


PLAN VIEW



SECTION A-A

(RIGHT-SIDE-UP VIEW)



SECTION B-B

(RIGHT-SIDE-UP VIEW)

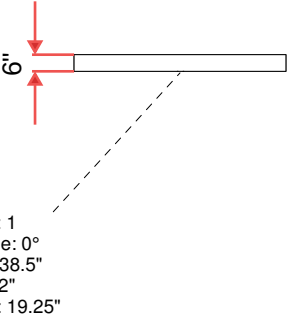
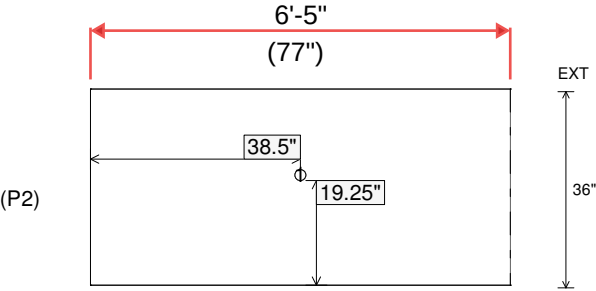
Coating (Int):
Coating (Ext):

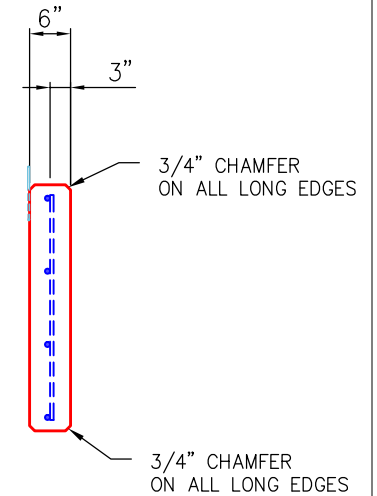
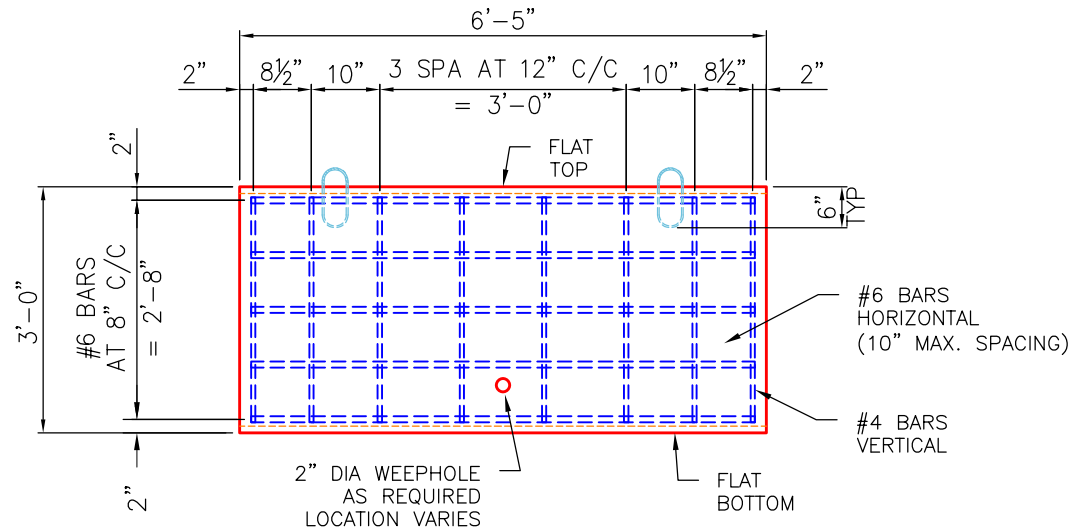
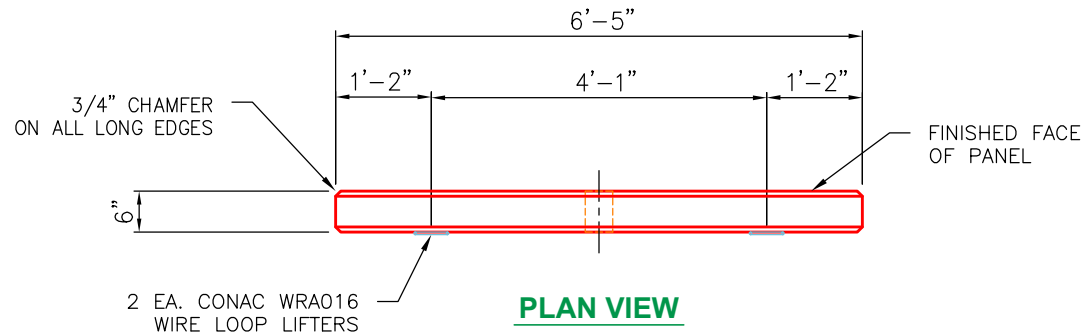
Seam Up: Flat
Seam Dn: Flat

Wall Thickness: 8"

Height (Ext): 8"

Weight (Net): 6799 lb
Volume (Net): 1.74cu.yd

Job Name: 26-1333 - Mitchell Hill Road Project Job Location: Louisville, KY 40118 Contractor: Hall Contracting of Kentucky Inc				Plant: 100 6/16/2026 1:23:35 PM		Tech: J. Horsley PC: J. Jarvis				
Structure ID: WALL P21-P22										
P2 CUSTOM WALL				WALL PANEL 6" THICK F/F						
P2) 77" x 6" - WALL PANEL 6" THICK F/F - 3.00' HT x 6.42' LONG P1) 77" x 6" - WALL PANEL 6" THICK F/F - 3.00' HT x 6.42' LONG 1) Hole - 2						1398 lb 1398 lb 0 lb ----- Structure Total: 2795 lb		Structure Notes: 1. PER ASTM C913 SPECIFICATIONS. 2. CONCRETER = 4,000 PSI AT 28" DAYS. 3. SMOOTH FORM FINISH ON THE FRONT SURFACE. 4. 3/4" CHAMFER ON ALL LONG EDGES. REINFORCING PER ASTM A615 (GRADE 60). -VERTICAL BARS = #4 BARS AT 12" C/C -HORIZONTAL BARS = #6 BARS EQUALLY SPACED (10" MAX.)		
Rim: 691'		Rim to Invert: 1.4'		Slack: 0"		Sump: 55.2"		Step Position:		
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	689.6'	0°	38.5"	2" WEEP HOLE	2"	Hole 2	2"	2"	19.25"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										
(P2) << (P1) RIGHT-SIDE UP VIEW (int. dimensions)  Note: See attached typical drawing for reinforcing and lifting details. INSIDE WALL DIMENSIONS 										
Coating (Int): Coating (Ext):			Seam Up: Flat Seam Dn: Flat		Wall Thickness: 0" Floor Height: 0"		Height (Int): 36" Height (Ext): 36"		Weight (Net): 1398 lb Volume (Net): 0.36cu.yd	



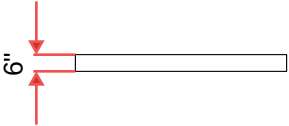
GENERAL NOTES:

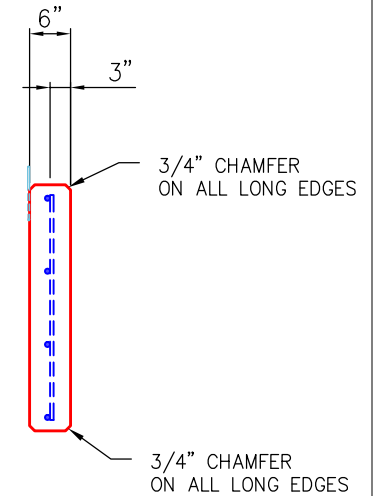
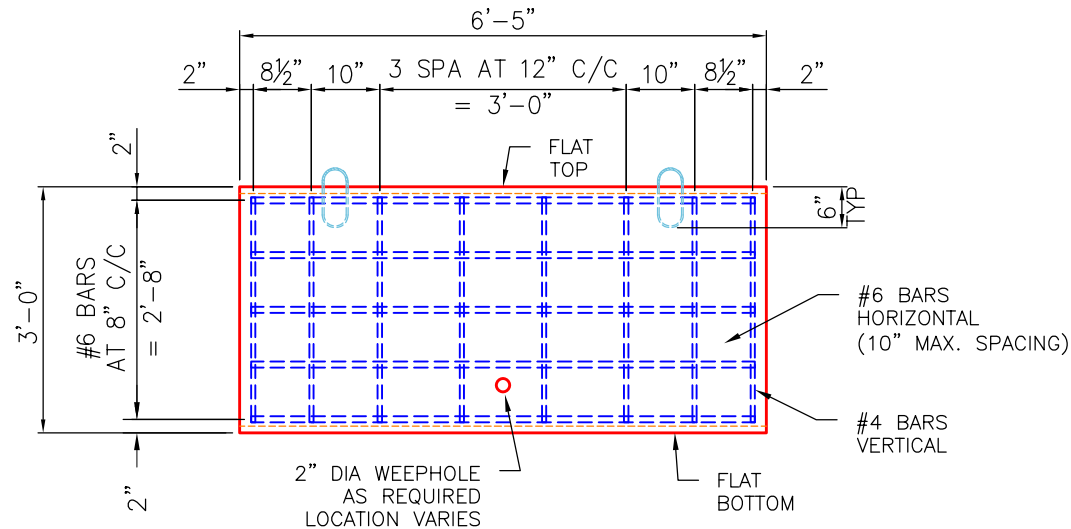
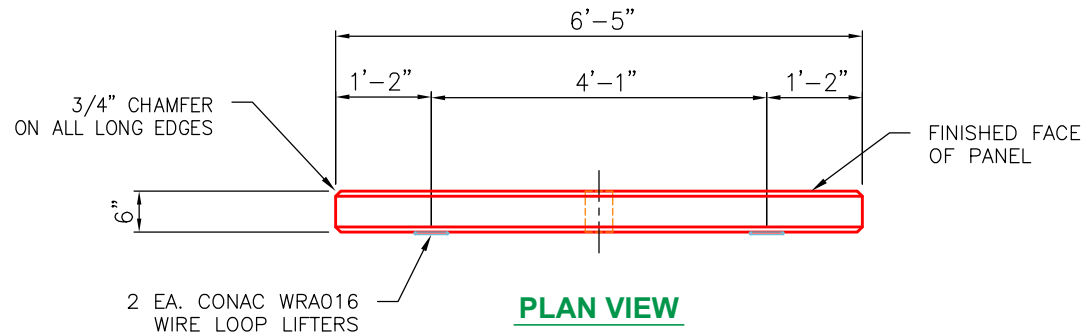
1. MANUFACTURED ASTM C913 SPECIFICATIONS.
2. CONCRETE: 4,000 PSI MINIMUM AT 28 DAYS.
3. REINFORCING: AS PER PLAN DESIGN (GRADE 60).
4. CONAC 5CA14 ANCHORS CAST IN FOR HANDLING.
5. WEIGHT = 1,413 LBS
6. 68 REQUIRED.

SIDE VIEW

END VIEW

REVISION INFORMATION				SUBMITTAL DESCRIPTION: WALL PANEL 6.50' LG x 6" THK.	
REV. 	DATE:	NO REVISIONS TO DATE		CUSTOMER: HALL CONTRACTING OF KY INC.	
				PROJECT: MITCHELL HILL ROAD PROJECT	
				STRUCTURE ID.: WALL PANEL 6" THK (78" LG x 36" HT)	
				SALES ORDER NO: 26-1333	
				CHECK: B. SMITH	DRAWN BY: J. HORSLEY
				DATE: 04/20/26	SCALE: NTS PG. 1 of 1

Job Name: 26-1333 - Mitchell Hill Road Project Job Location: Louisville, KY 40118 Contractor: Hall Contracting of Kentucky Inc					Plant: 100 6/16/2026 1:22:08 PM		Tech: J. Horsley PC: J. Jarvis				
Structure ID: WALL P20-P21											
P1 CUSTOM WALL				WALL PANEL 6" THICK F/F							
P3) 77" x 6" - WALL PANEL 6" THICK F/F - 1.00' HT x 6.42' LONG P2) 77" x 6" - WALL PANEL 6" THICK F/F - 3.00' HT x 6.42' LONG P1) 77" x 6" - WALL PANEL 6" THICK F/F - 3.00' HT x 6.42' LONG 1) Hole - 2						466 lb 1398 lb 1398 lb -----0 lb Structure Total: 3261 lb		Structure Notes: . 1. PER ASTM C913 SPECIFICATIONS. 2. CONCRETER = 4,000 PSI AT 28" DAYS. 3. SMOOTH FORM FINISH ON THE FRONT SURFACE. 4. 3/4" CHAMFER ON ALL LONG EDGES. REINFORCING PER ASTM A615 (GRADE 60). -VERTICAL BARS = #4 BARS AT 12" C/C -HORIZONTAL BARS = #6 BARS EQUALLY SPACED (10" MAX.)			
Rim: 692'		Rim to Invert: 2'		Slack: 0"		Sump: 60"		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)  UPSIDE-DOWN VIEW (int. dimensions) Note: See attached typical drawing for reinforcing and lifting details. (P3) (P2) (P1) << INSIDE WALL DIMENSIONS (P1) 6'-5" (77") 36" Coating (Int): Coating (Ext): Seam Up: Flat Seam Dn: Flat Wall Thickness: 0" Floor Height: 0" Height (Int): 36" Height (Ext): 36" Weight (Net): 1398 lb Volume (Net): 0.36cu.yd											



GENERAL NOTES:

1. MANUFACTURED ASTM C913 SPECIFICATIONS.
2. CONCRETE: 4,000 PSI MINIMUM AT 28 DAYS.
3. REINFORCING: AS PER PLAN DESIGN (GRADE 60).
4. CONAC 5CA14 ANCHORS CAST IN FOR HANDLING.
5. WEIGHT = 1,413 LBS
6. 68 REQUIRED.

SIDE VIEW

END VIEW

REVISION INFORMATION				SUBMITTAL DESCRIPTION: WALL PANEL 6.50' LG x 6" THK.	
REV. 	DATE:	NO REVISIONS TO DATE		CUSTOMER: HALL CONTRACTING OF KY INC.	
				PROJECT: MITCHELL HILL ROAD PROJECT	
				STRUCTURE ID.: WALL PANEL 6" THK (78" LG x 36" HT)	
				SALES ORDER NO: 26-1333	
				CHECK: B. SMITH	DRAWN BY: J. HORSLEY
				DATE: 04/20/26	SCALE: NTS PG. 1 of 1

Job Name: 26-1333 - Mitchell Hill Road Project

Job Location: Louisville, KY 40118

Contractor: Hall Contracting of Kentucky Inc

Plant: 100

6/16/2026 1:23:34 PM

Tech: J. Horsley

PC: J. Jarvis



Structure ID: WALL P20-P21

P2 CUSTOM WALL

WALL PANEL 6" THICK F/F

P3) 77" x 6" - WALL PANEL 6" THICK F/F - 1.00' HT x 6.42' LONG

P2) 77" x 6" - WALL PANEL 6" THICK F/F - 3.00' HT x 6.42' LONG

P1) 77" x 6" - WALL PANEL 6" THICK F/F - 3.00' HT x 6.42' LONG

1) Hole - 2

466 lb

1398 lb

1398 lb

0 lb

Structure Total: 3261 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.

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

3. SMOOTH FORM FINISH ON THE FRONT SURFACE.

4. 3/4" CHAMFER ON ALL LONG EDGES.

REINFORCING PER ASTM A615 (GRADE 60).

-VERTICAL BARS = #4 BARS AT 12" C/C

-HORIZONTAL BARS = #6 BARS EQUALLY SPACED (10" MAX.)

Rim: 692'

Rim to Invert: 2'

Slack: 0"

Sump: 60"

Step Position:

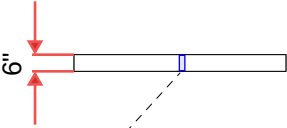
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ()	Offset
Invert 1	690'	0°	38.5"	2" WEEP HOLE	2"	Hole 2	2"	2"	24"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

(P3)

(P2) <<

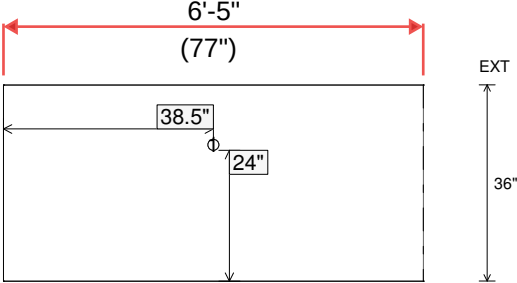
(P1)

RIGHT-SIDE UP VIEW (int. dimensions)



Note:
See attached typical drawing
for reinforcing and lifting details.

INSIDE WALL DIMENSIONS



Coating (Int):

Coating (Ext):

Seam Up: Flat

Seam Dn: Flat

Wall Thickness: 0"

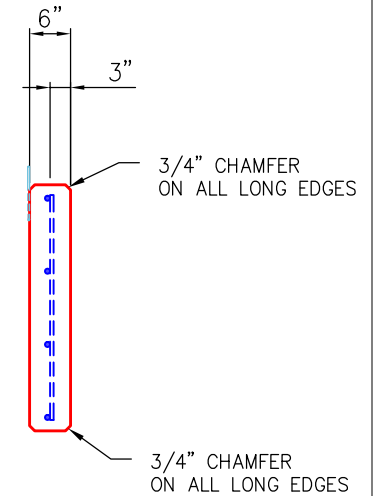
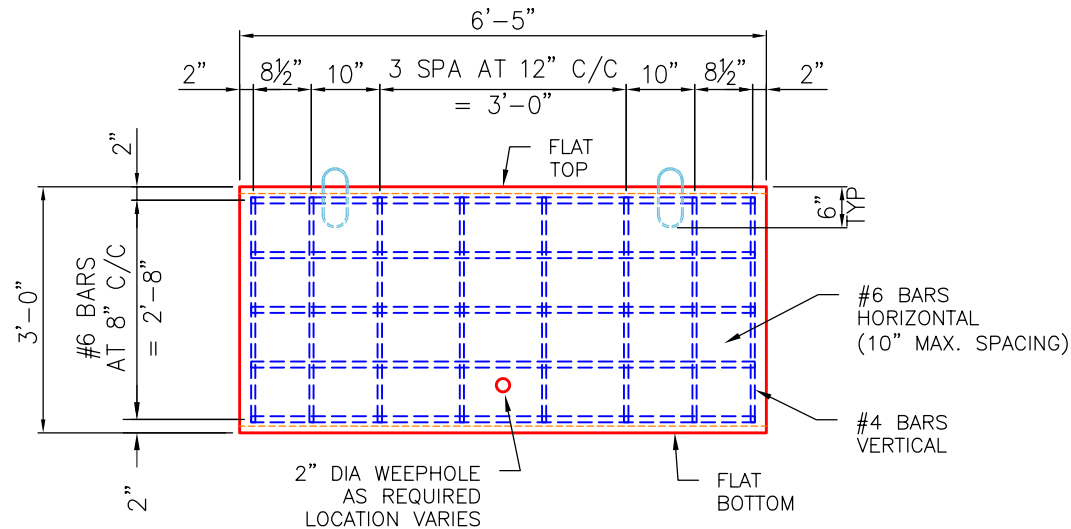
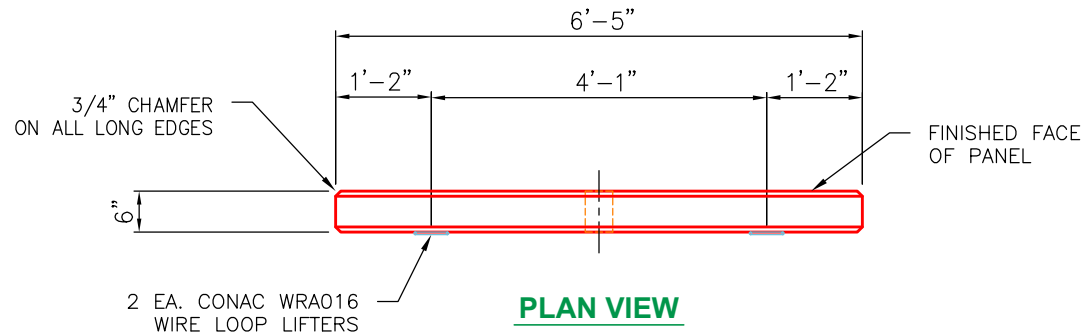
Floor Height: 0"

Height (Int): 36"

Height (Ext): 36"

Weight (Net): 1398 lb

Volume (Net): 0.36cu.yd



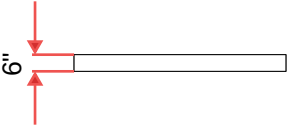
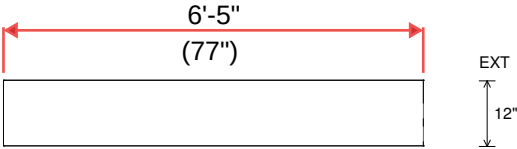
GENERAL NOTES:

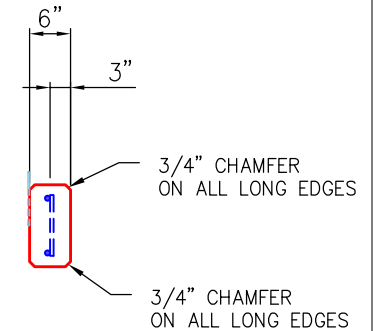
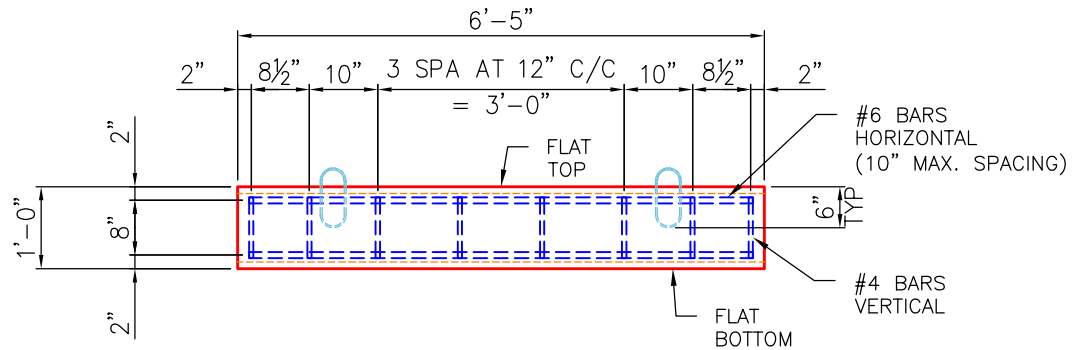
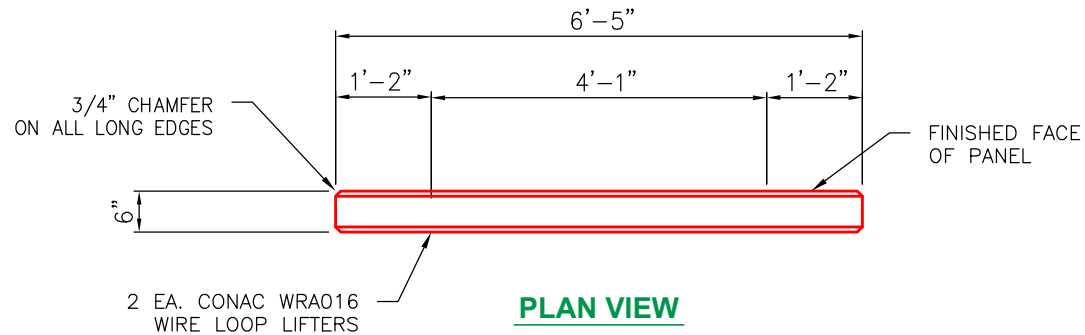
1. MANUFACTURED ASTM C913 SPECIFICATIONS.
2. CONCRETE: 4,000 PSI MINIMUM AT 28 DAYS.
3. REINFORCING: AS PER PLAN DESIGN (GRADE 60).
4. CONAC 5CA14 ANCHORS CAST IN FOR HANDLING.
5. WEIGHT = 1,413 LBS
6. 68 REQUIRED.

SIDE VIEW

END VIEW

REVISION INFORMATION				SUBMITTAL DESCRIPTION: WALL PANEL 6.50' LG x 6" THK.	
REV. 	DATE:	NO REVISIONS TO DATE		CUSTOMER: HALL CONTRACTING OF KY INC.	
				PROJECT: MITCHELL HILL ROAD PROJECT	
				STRUCTURE ID.: WALL PANEL 6" THK (78" LG x 36" HT)	
				SALES ORDER NO: 26-1333	
				CHECK: B. SMITH	DRAWN BY: J. HORSLEY
				DATE: 04/20/26	SCALE: NTS PG. 1 of 1

Job Name: 26-1333 - Mitchell Hill Road Project Job Location: Louisville, KY 40118 Contractor: Hall Contracting of Kentucky Inc					Plant: 100 6/16/2026 1:23:35 PM		Tech: J. Horsley PC: J. Jarvis				
Structure ID: WALL P20-P21											
P3 CUSTOM WALL				WALL PANEL 6" THICK F/F							
P3) 77" x 6" - WALL PANEL 6" THICK F/F - 1.00' HT x 6.42' LONG P2) 77" x 6" - WALL PANEL 6" THICK F/F - 3.00' HT x 6.42' LONG P1) 77" x 6" - WALL PANEL 6" THICK F/F - 3.00' HT x 6.42' LONG 1) Hole - 2						466 lb 1398 lb 1398 lb 0 lb ----- Structure Total: 3261 lb		Structure Notes: . 1. PER ASTM C913 SPECIFICATIONS. 2. CONCRETE = 4,000 PSI AT 28" DAYS. 3. SMOOTH FORM FINISH ON THE FRONT SURFACE. 4. 3/4" CHAMFER ON ALL LONG EDGES. REINFORCING PER ASTM A615 (GRADE 60). -VERTICAL BARS = #4 BARS AT 12" C/C -HORIZONTAL BARS = #6 BARS EQUALLY SPACED (10" MAX.)			
Rim: 692'		Rim to Invert: 2'		Slack: 0"		Sump: 60"		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) (P3) << (P2) (P1)  Note: See attached typical drawing for reinforcing and lifting details.											
INSIDE WALL DIMENSIONS (P3) 											
Coating (Int): Coating (Ext):				Seam Up: Flat Seam Dn: Flat		Wall Thickness: 0" Floor Height: 0"		Height (Int): 12" Height (Ext): 12"		Weight (Net): 466 lb Volume (Net): 0.12cu.yd	



GENERAL NOTES:

1. MANUFACTURED ASTM C913 SPECIFICATIONS.
2. CONCRETE: 4,000 PSI MINIMUM AT 28 DAYS.
3. REINFORCING: AS PER PLAN DESIGN (GRADE 60).
4. CONAC 5CA14 ANCHORS CAST IN FOR HANDLING.
5. WEIGHT = 472 LBS
6. 1 REQUIRED.

REVISION INFORMATION				SUBMITTAL DESCRIPTION: WALL PANEL 6.50' LG x 6" THK.	
REV. 	DATE:	NO REVISIONS TO DATE		CUSTOMER: HALL CONTRACTING OF KY INC.	
				PROJECT: MITCHELL HILL ROAD PROJECT	
				STRUCTURE ID.: WALL PANEL 6" THK (78" LG x 12" HT)	
				SALES ORDER NO: 26-1333	
				CHECK: B. SMITH	DRAWN BY: J. HORSLEY
				DATE: 04/20/26	SCALE: NTS PG. 1 of 1