

Job Name: 26-2256 ADS Iron Synergy Additions  
 Job Location: Louisville, KY  
 Contractor: ADS Advanced Drainage Systems, Inc.

Plant: Beaver Dam  
 5/22/2026 1:09:52 PM

Tech: S. Felletter  
 PC: T. Ryan



**Structure ID: 1**

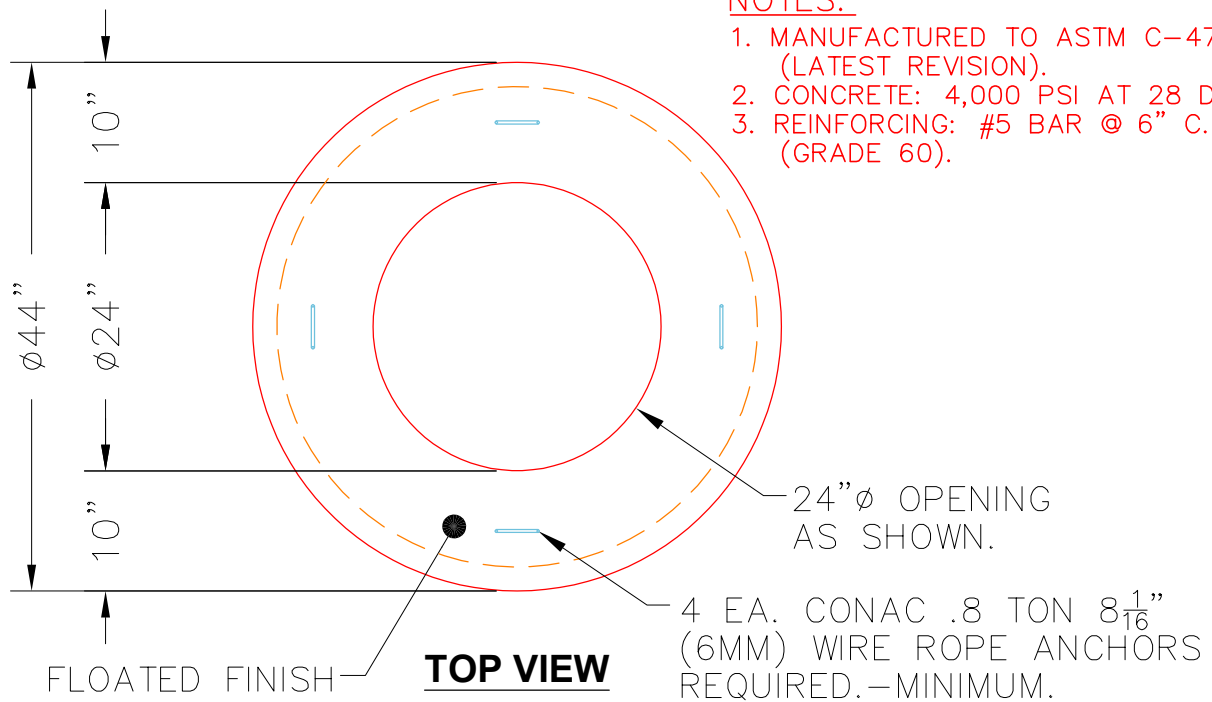
**P4 MH036LD10**

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

- P6) 24" - CASTING HEIGHT - 7"
- P5) 24" - GRADE RING F/F - 3"
- P4) 36" - MH FLAT TOP w/ 24" Ctr. Hole F/G - 10"
- P3) 36" - MH RISER T/G - 24"
- P2) 36" - MH RISER T/G - 60"
- P1) 36" - MH BASE T/n - 18"
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) ASSEMBLY REQUIRED
- 1) CASTING - HOE MC-375 F/C Storm
- 3) 36" - Conseal CS-102 1.00" (Double)
- 2) Hole - 12

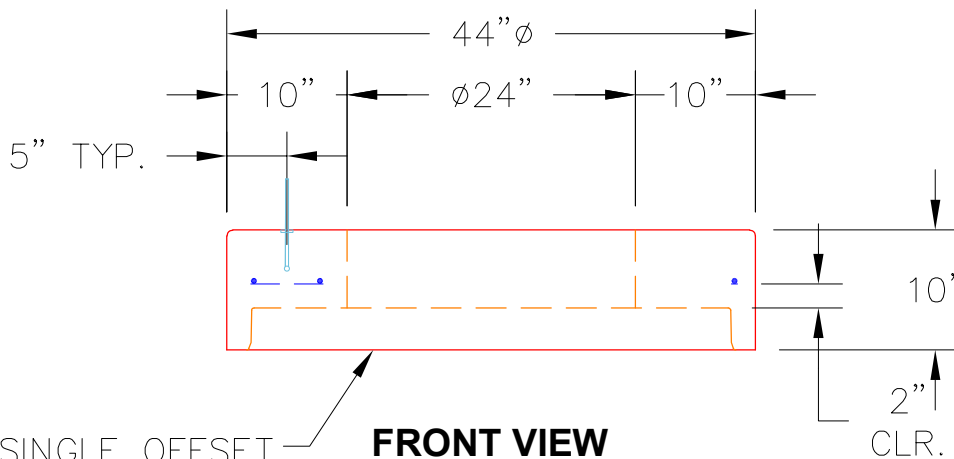
- Structure Notes:**
1. PER ASTM C478 SPECIFICATIONS.
  2. CONCRETE = 4,000 PSI AT 28 DAYS.
  3. CASTING BY ICAST (HOE MC-375 F/C "STORM").
  4. LIFTING ANCHORS TO BE INSTALLED ON THE OUTSIDE OF THE STRUCTURE.
- REINFORCING PER ASTM A615 (GRADE 60).
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..
  - RISER/WALLS (As .12)
  - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Structure Total: 6360 lb



**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: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/27/2026 8:36:45 PM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: SSMH 2 (3)**

**P1 MH048BA36**

**MH BASE T/n**

- P4) 24" - CASTING HEIGHT - 7"
- P3) 24" - GRADE RING F/F - 3"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 42"
- P1) 48" - MH BASE T/n - 36"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 1) 48" - Conseal CS-102 1.00" (Double)
- 2) A-Lok - 0285

- 0 lb
- 202 lb
- 3200 lb
- 3782 lb
- 0 lb
- 1440 lb
- 2 lb
- 271 lb
- 0 lb
- 2 lb
- 
- Structure Total: 8900 lb

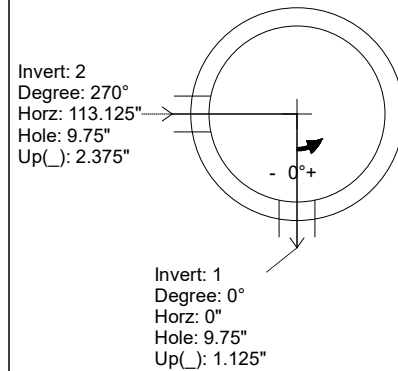
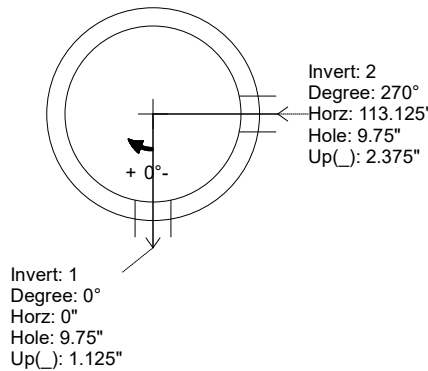
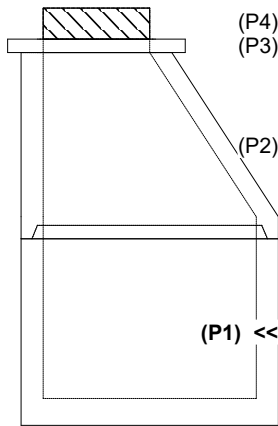
**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS.  
 4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).  
  
 REINFORCING PER ASTM A615 (GRADE 60).  
 - CONE (As .12)  
 - RISER/WALLS (As .12)  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 874' Rim to Invert: 7.2' Slack: 0.4" Sump: 2" Step Position:

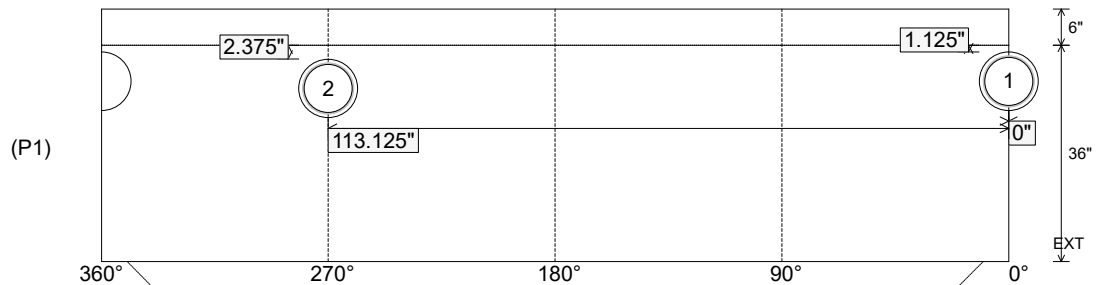
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	866.8'	0°	0"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	1.125"	0"
Invert 2	866.9'	270°	136.625"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	2.375"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 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: 5"  
 Floor Height: 6"

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

Weight (Net): 3782 lb  
 Volume (Net): 0.97cu.yd

Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/27/2026 8:36:45 PM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: SSMH 2 (3)**

**P1 MH048BA36**

**MH BASE T/n**

- P4) 24" - CASTING HEIGHT - 7"
- P3) 24" - GRADE RING F/F - 3"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 42"
- P1) 48" - MH BASE T/n - 36"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 1) 48" - Conseal CS-102 1.00" (Double)
- 2) A-Lok - 0285

0 lb  
 202 lb  
 3200 lb  
 3782 lb  
 0 lb  
 1440 lb  
 2 lb  
 271 lb  
 0 lb  
 2 lb  
 -----  
 Structure Total: 8900 lb

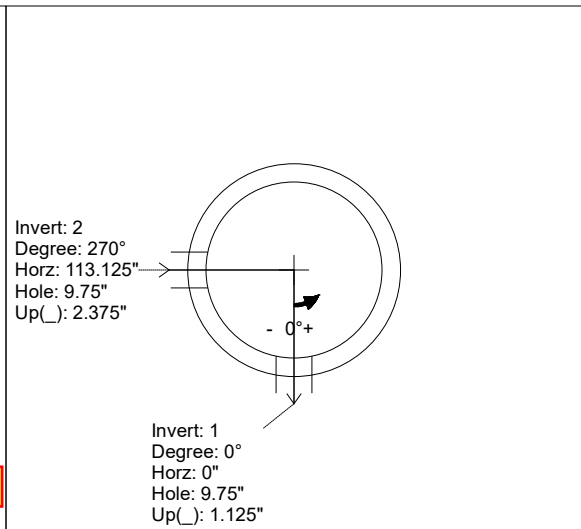
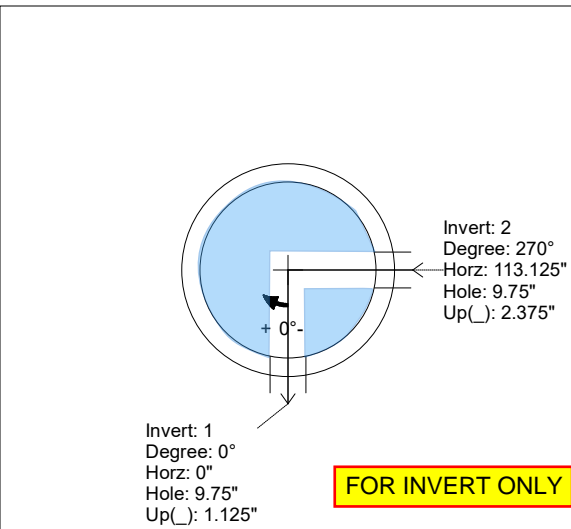
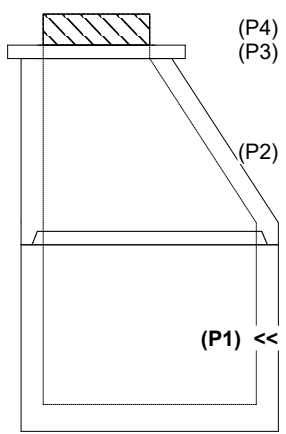
**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS.  
 4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).  
  
 REINFORCING PER ASTM A615 (GRADE 60).  
 - CONE (As .12)  
 - RISER/WALLS (As .12)  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 874' Rim to Invert: 7.2' Slack: 0.4" Sump: 2" Step Position:

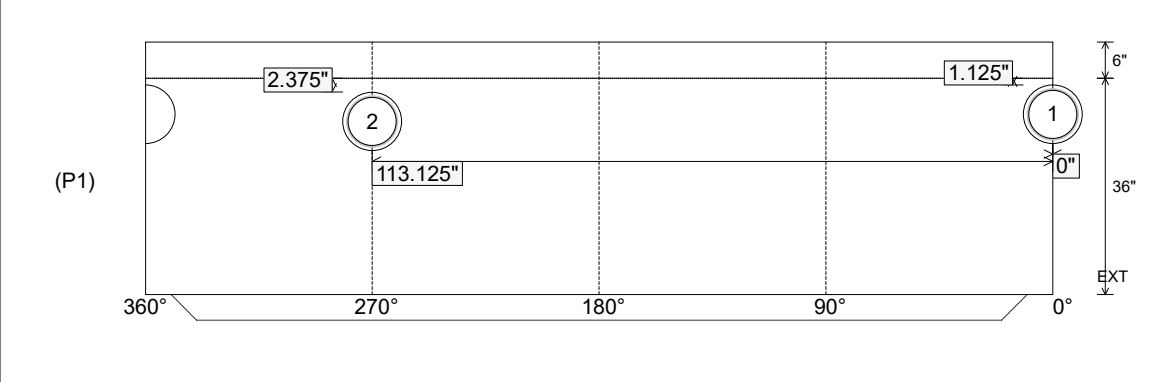
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	866.8'	0°	0"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	1.125"	0"
Invert 2	866.9'	270°	136.625"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	2.375"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 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: 5" Floor Height: 6"	Height (Int): 36" Height (Ext): 42"	Weight (Net): 3782 lb Volume (Net): 0.97cu.yd
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Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/27/2026 8:37:07 PM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: SSMH 3 (2)**

**P2 MH048RS36S**

**MH RISER T/G**

- P5) 24" - CASTING HEIGHT - 7"
- P4) 24" - GRADE RING F/F - 4"
- P3) 48" - ECC CONE w/ 24" HOLE F/G - 24"
- P2) 48" - MH RISER T/G - 36"
- P1) 48" - MH BASE T/h - 24"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 2) 48" - Conseal CS-102 1.00" (Double)
- 2) A-Lok - 0285
- 1) A-Lok - 0200

0 lb  
 270 lb  
 1550 lb  
 2515 lb  
 2928 lb  
 0 lb  
 1440 lb  
 2 lb  
 271 lb  
 0 lb  
 2 lb  
 1 lb  
 -----  
 Structure Total: 8978 lb

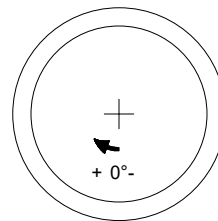
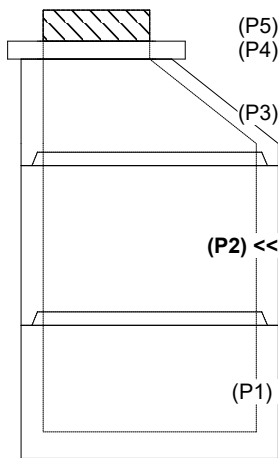
- Structure Notes:**
1. PER ASTM C478 SPECIFICATIONS.
  2. CONCRETE = 4,000 PSI AT 28 DAYS.
  3. NO STEPS.
  4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).

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

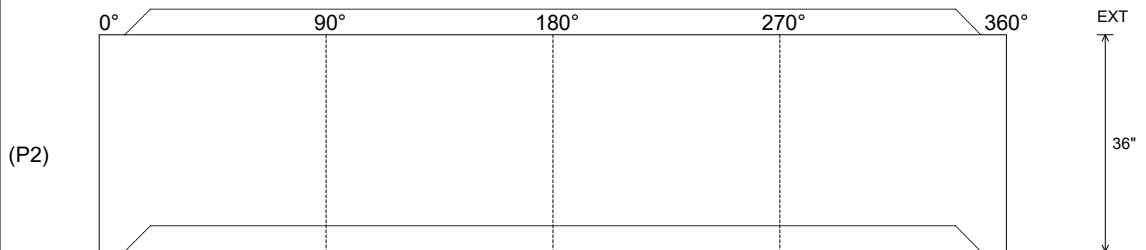
Rim: 873.07'    Rim to Invert: 7.85'    Slack: 1.2"    Sump: 2"    Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (L)	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: 5"  
 Floor Height: 0"

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

Weight (Net): 2515 lb  
 Volume (Net): 0.64cu.yd

Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/27/2026 8:36:46 PM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: SSMH 1**

**P1 MH048BA30**

**MH BASE T/n**

- P4) 24" - CASTING HEIGHT - 7"
- P3) 24" - GRADE RING F/F - 4"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 36"
- P1) 48" - MH BASE T/n - 30"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) A-Lok - 0285
- 2) A-Lok - 0200

0 lb  
 270 lb  
 3000 lb  
 3362 lb  
 0 lb  
 1440 lb  
 2 lb  
 271 lb  
 0 lb  
 1 lb  
 2 lb  
 -----  
 Structure Total: 8348 lb

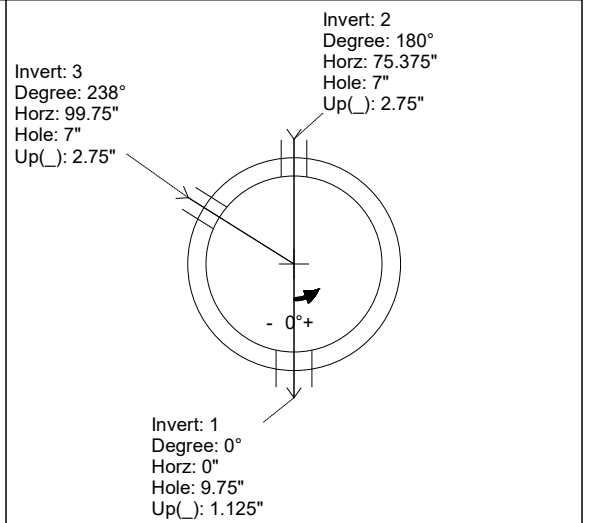
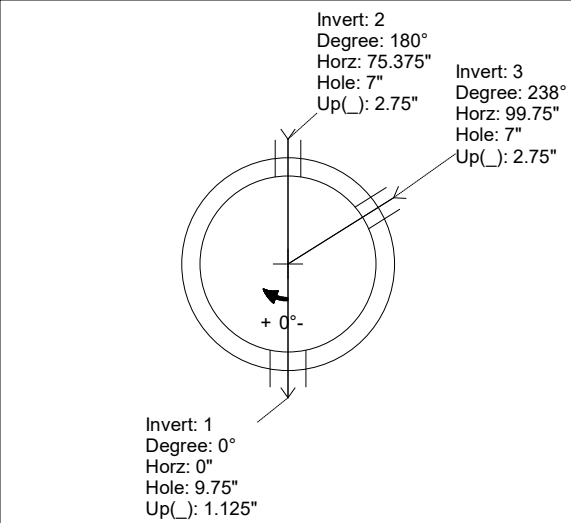
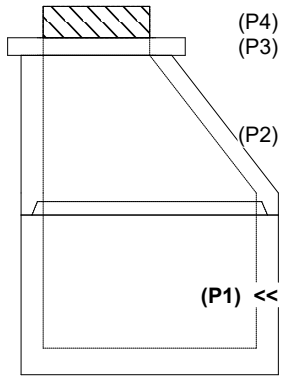
**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS.  
 4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).  
  
 REINFORCING PER ASTM A615 (GRADE 60).  
 - CONE (As .12)  
 - RISER/WALLS (As .12)  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 874.23' Rim to Invert: 6.33' Slack: 0.96" Sump: 2" Step Position:

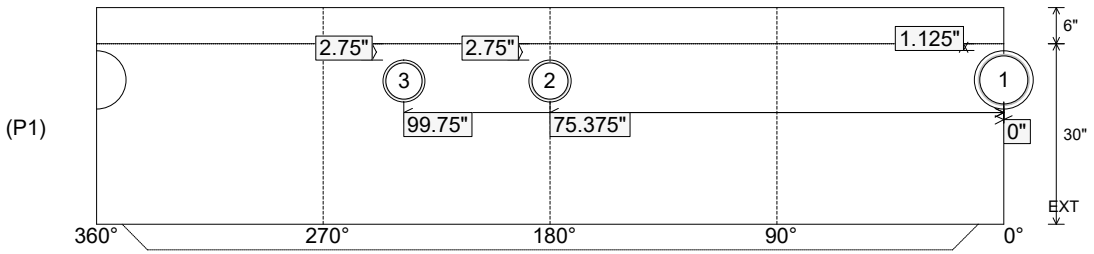
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	867.9'	0°	0"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	1.125"	0"
Invert 2	868'	180°	91.125"	6" PVC SDR35	6.25"	A-Lok 0200	7"	7.025"	2.75"	0"
Invert 3	868'	238°	120.5"	6" PVC SDR35	6.25"	A-Lok 0200	7"	7.025"	2.75"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 30" Height (Ext): 36"	Weight (Net): 3362 lb Volume (Net): 0.86cu.yd
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Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/27/2026 8:36:46 PM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: SSMH 1**

**P1 MH048BA30**

**MH BASE T/n**

- P4) 24" - CASTING HEIGHT - 7"
- P3) 24" - GRADE RING F/F - 4"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 36"
- P1) 48" - MH BASE T/n - 30"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) A-Lok - 0285
- 2) A-Lok - 0200

0 lb  
 270 lb  
 3000 lb  
 3362 lb  
 0 lb  
 1440 lb  
 2 lb  
 271 lb  
 0 lb  
 1 lb  
 2 lb  
 -----  
 Structure Total: 8348 lb

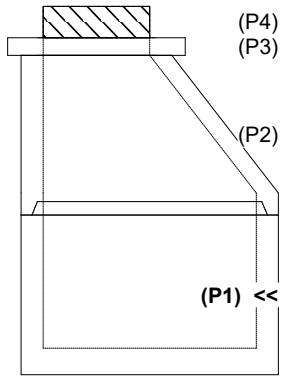
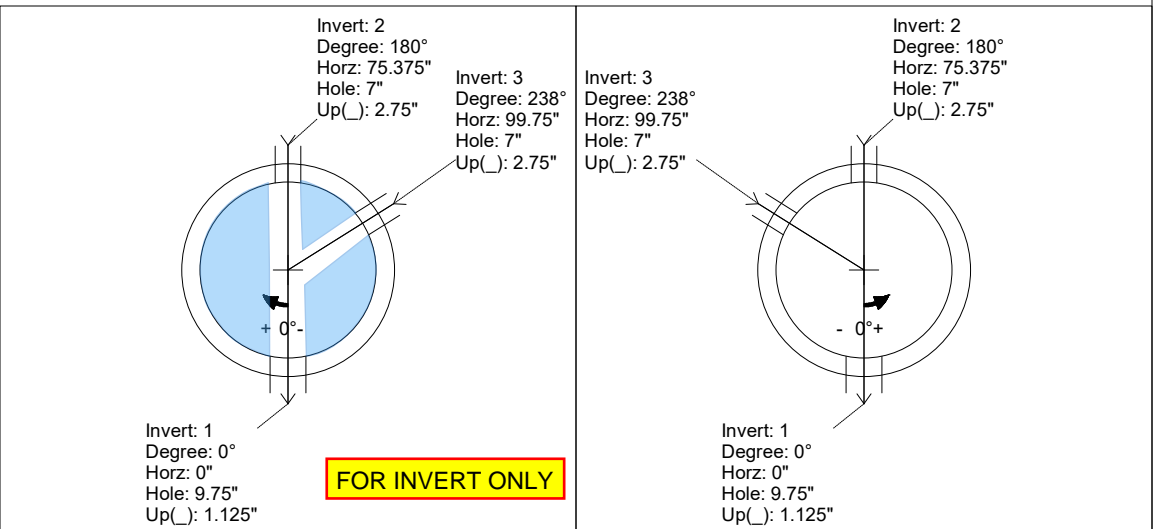
**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS.  
 4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).  
  
 REINFORCING PER ASTM A615 (GRADE 60).  
 - CONE (As .12)  
 - RISER/WALLS (As .12)  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 874.23' Rim to Invert: 6.33' Slack: 0.96" Sump: 2" Step Position:

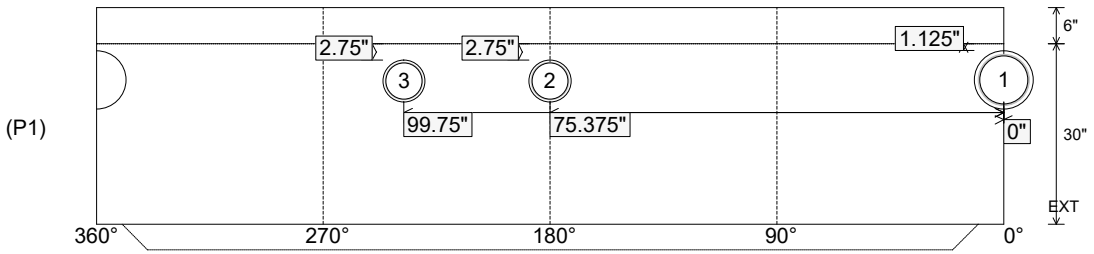
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	867.9'	0°	0"	8" PVC SDR35	8.5"	A-Lok 0285	9.75"	9.818"	1.125"	0"
Invert 2	868'	180°	91.125"	6" PVC SDR35	6.25"	A-Lok 0200	7"	7.025"	2.75"	0"
Invert 3	868'	238°	120.5"	6" PVC SDR35	6.25"	A-Lok 0200	7"	7.025"	2.75"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 30" Height (Ext): 36"	Weight (Net): 3362 lb Volume (Net): 0.86cu.yd
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Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/27/2026 8:36:27 PM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: SSMH 1**

**P2 MH048CN36-S**

**ECC CONE w/ 24" HOLE F/G**

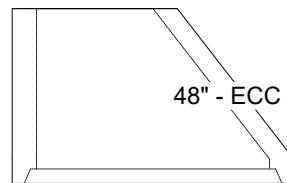
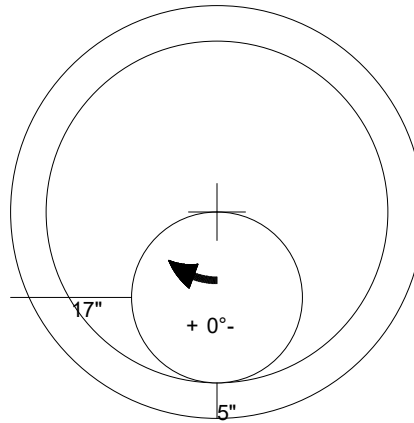
- P4) 24" - CASTING HEIGHT - 7"
- P3) 24" - GRADE RING F/F - 4"
- P2) 48" - ECC CONE w/ 24" HOLE F/G - 36"
- P1) 48" - MH BASE T/n - 30"
- 1) JOINT WRAP - 12" WD x 048" MAC WRAP
- 1) 48" - MH INVERT CHANNEL - FULL HEIGHT
- 1) Inflow Dish FOR MC-375
- 1) CASTING - HOE MC-375 F/C GMWSS
- 1) 48" - Conseal CS-102 1.00" (Double)
- 1) A-Lok - 0285
- 2) A-Lok - 0200

0 lb  
 270 lb  
 3000 lb  
 3362 lb  
 0 lb  
 1440 lb  
 2 lb  
 271 lb  
 0 lb  
 1 lb  
 2 lb  
 -----  
 Structure Total: 8348 lb

Structure Notes:

1. PER ASTM C478 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS.
4. CASTING BY ICAST (HOE MC-375 F/C GMWSS).

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



48" - ECC CONE w/ 24" HOLE F/G - 36" - (P2)

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Groove

Wall Thickness: 5"

Height (Ext): 36"

Weight (Net): 3000 lb  
 Volume (Net): 0.5cu.yd

Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/28/2026 11:25:39 AM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: 105 (27)**

**P1 MH048BAVF**

**MH BASE Custom Ht T/n**

- P3) 24" - CASTING HEIGHT - 7"
- P2) 48" - MH FLAT TOP w/ 24" ECC Hole F/G - 12"
- P1) 48" - MH BASE Custom Ht T/n - 69"
- 1) CASTING - HOE MC-375 F/C Storm
- 1) 48" - Conseal CS-102 1.00"
- 2) Hole - 30
- 1) Hole - 16
- 6) MH Step ML-10-TDS-NCR - 10"

0 lb  
 1561 lb  
 5433 lb  
 271 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 Structure Total: 7265 lb

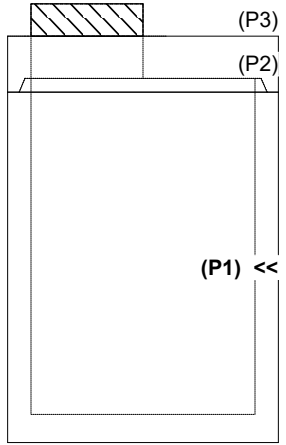
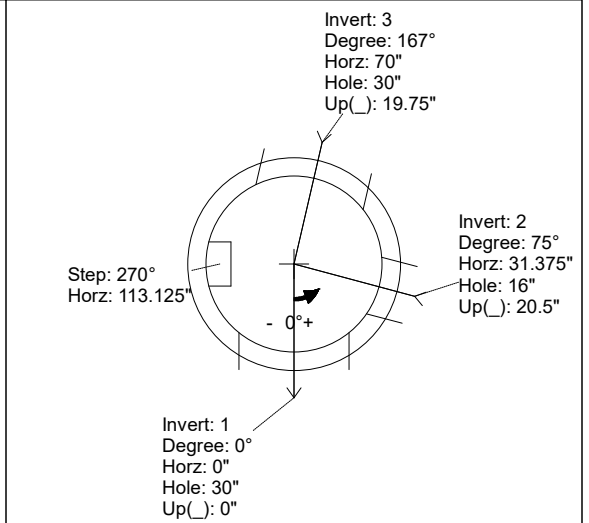
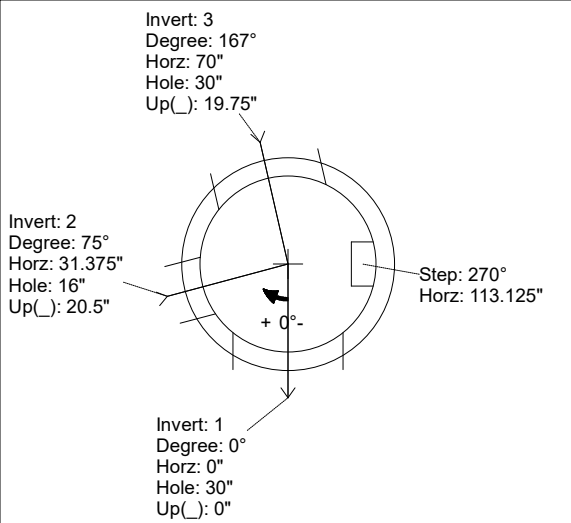
**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO INVERT CHANNEL.  
 4. CASTING BY ICAST (HOE MC-375 F/C STORM).  
 REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..  
 - RISER/WALLS (As .12)  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 873.2' Rim to Invert: 7.2' Slack: 0.3" Sump: 1.9" Step Position: 270

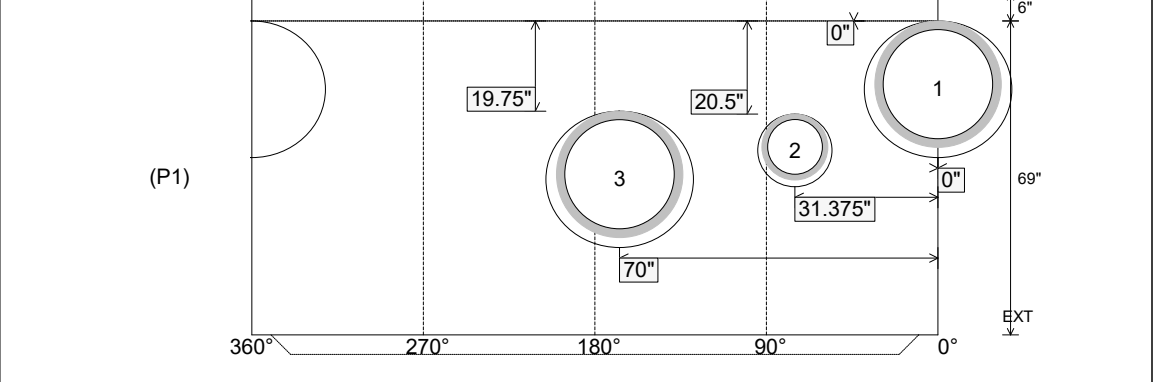
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	866'	0°	0"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 2	867.65'	75°	38"	12" HDPE	14.5"	Hole 16	16"	16.312"	20.5"	0"
Invert 3	867.65'	167°	84.5"	24" HDPE	27.8"	Hole 30	30"	32.406"	19.75"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 69" Height (Ext): 75"	Weight (Net): 5433 lb Volume (Net): 1.39cu.yd
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Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/28/2026 11:25:29 AM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: 5 (8)**

**P1 MH048BA36**

**MH BASE T/n**

- P3) 24" x 36" - CASTING HEIGHT - 6"
- P2) 48" - MH FLAT TOP w/24"x36" Hole F/G - 12"
- P1) 48" - MH BASE T/n - 36"
- 1) CASTING - HOE 470 SET LV (F/G/H)
- 1) 48" - Conseal CS-102 1.00"
- 1) 24" x 36" - Conseal CS-102 1.00"
- 1) Hole - 30
- 1) Hole - 24

0 lb  
 1300 lb  
 3332 lb  
 394 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 Structure Total: 5026 lb

- Structure Notes:**
1. PER ASTM C478 SPECIFICATIONS.
  2. CONCRETE = 4,000 PSI AT 28 DAYS.
  3. NO STEPS AND NO INVERT CHANNEL.
  4. CASTING BY ICAST (HOE 470 SET LV (F/G/H)).

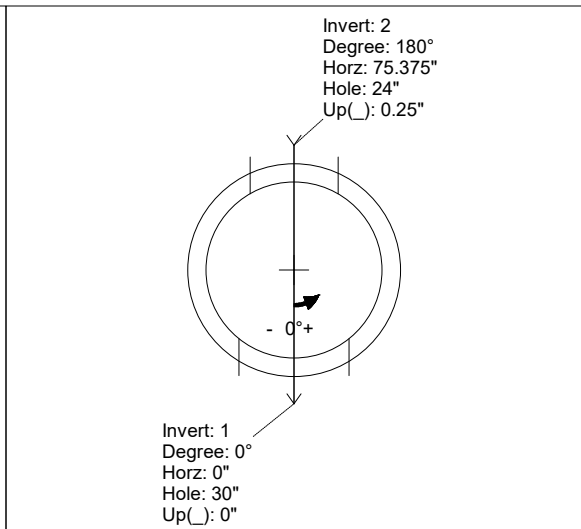
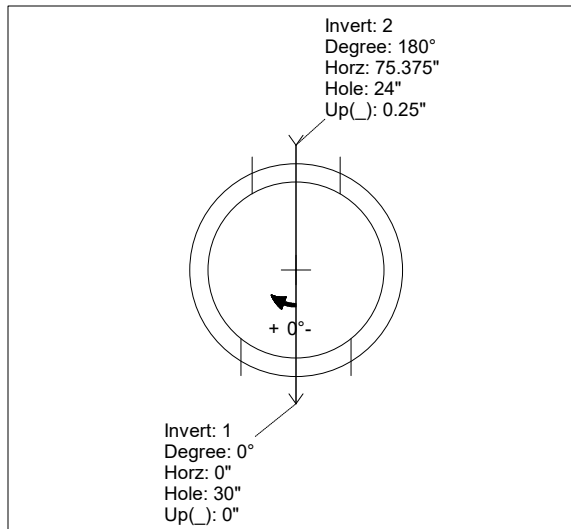
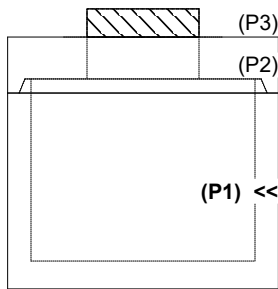
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..  
 - RISER/WALLS (As .12)  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 871' Rim to Invert: 4.35' Slack: 0.1" Sump: 1.9" Step Position:

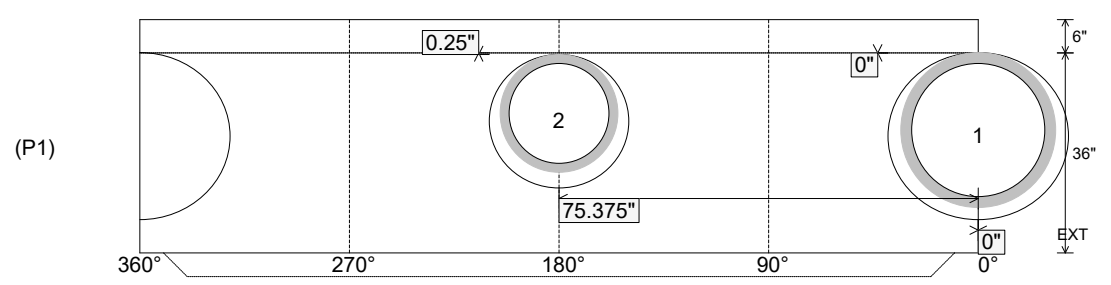
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	866.65'	0°	0"	24" HDPE	27.8"	Hole 30	30"	32.406"	0"	0"
Invert 2	866.65'	180°	91.125"	18" HDPE	21.2"	Hole 24	24"	25.133"	0.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):  
 Coating (Ext):

Seam Up: Tongue  
 Seam Dn: n/a

Wall Thickness: 5"  
 Floor Height: 6"

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

Weight (Net): 3332 lb  
 Volume (Net): 0.85cu.yd

Job Name: 24-1164 Paddy's Run Flood PS  
 Job Location: Louisville, Ky.  
 Contractor: Core & Main LP (Lou)

Plant: Beaver Dam, Ky.  
 5/18/2026 8:15:55 AM

Tech: S. Felletter  
 PC:



**Structure ID: Storm MH**

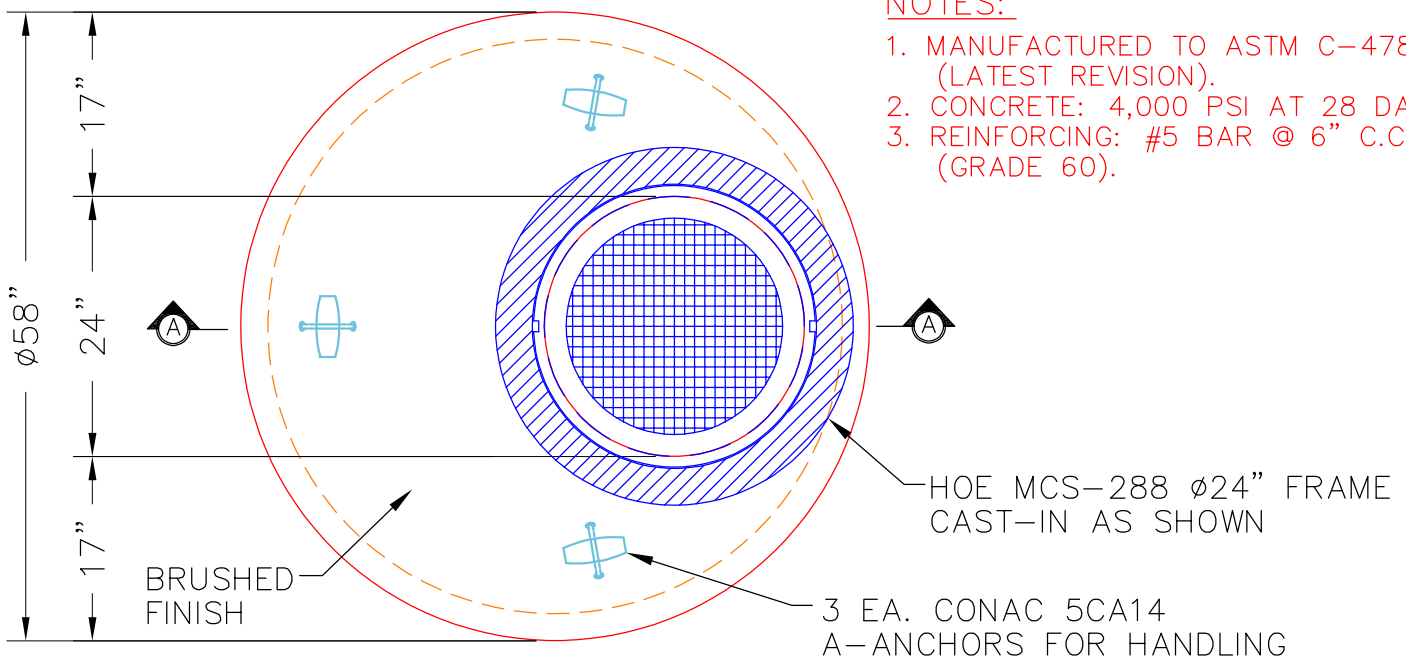
**P1 MH048LD12S**

**MH FLAT TOP SPECIAL (MCS-288) F/G**

- P1) 48" - MH FLAT TOP SPECIAL (MCS-288) F/G - 12"  
 1) CASTING - HOE MCS-288 Cover Storm  
 1) CASTING - HOE MCS-288 Frame  
 1) This Structure Includes a Cast-in Item

1593 lb  
 125 lb  
 123 lb  
 0 lb  
 -----  
 Structure Total: 1841 lb

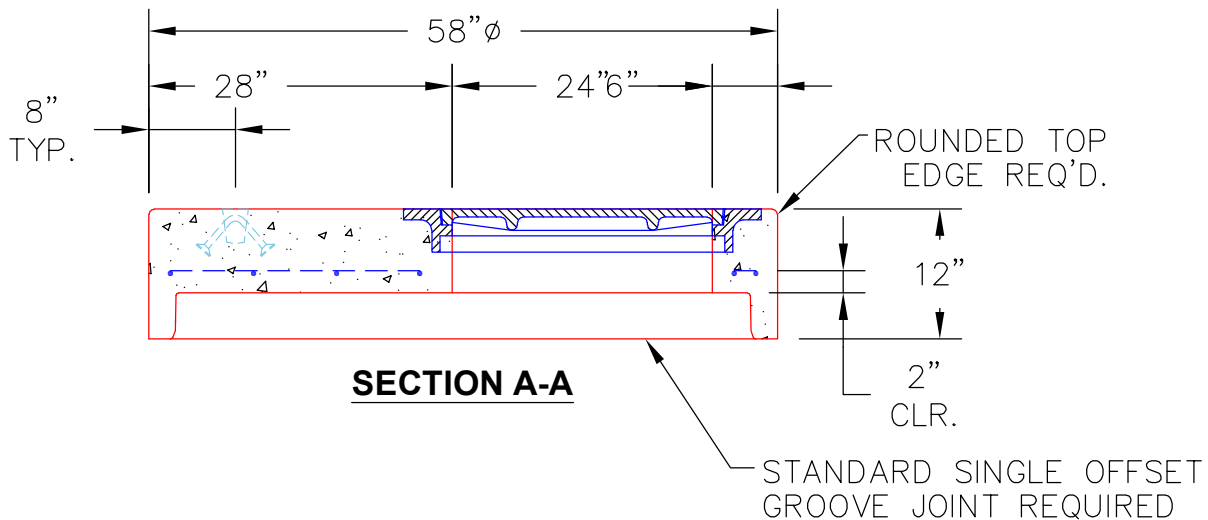
- Structure Notes:** 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO INVERT CHANNEL.  
 4. CASTING BY ICAST (HOE MCS-288). CAST-IN.  
 REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.



**NOTES:**

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

**PLAN VIEW**



**SECTION A-A**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Groove

Wall Thickness: 5"

Height (Ext): 12"

Weight (Net): 1593 lb  
 Volume (Net): 0.41cu.yd

**Structure ID: B-1**

**P1 MH048BA24CDARED**

**MH BASE w/ConBlock-CDA Red T/n**

P5) 24" - CASTING HEIGHT - 6"	0 lb
P4) 24" - GRADE RING w/ConBlock-CDA Red F/F - 3"	202 lb
P3) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30"	1961 lb
P2) 48" - MH RISER w/ConBlock-CDA Red T/G - 48"	3353 lb
P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 24"	2911 lb
1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT	1440 lb
1) JOINT WRAP - 0.065"x6"x50" CONSEAL CS212	0 lb
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)	0 lb
1) ADMIXTURE CONBLOCK CDA RED	0 lb
1) CASTING - JBS 1155 F/C SANITARY	250 lb
2) 48" - Conseal CS-102 1.00" (Double)	0 lb
1) 24" - Conseal CS-102 1.00" (Double)	0 lb
2) PSX - 12-08 NYLO	16 lb
9) MH Step ML-10-TDS-NCR - 10"	0 lb
<b>Structure Total:</b>	<b>10134 lb</b>

Structure Notes:

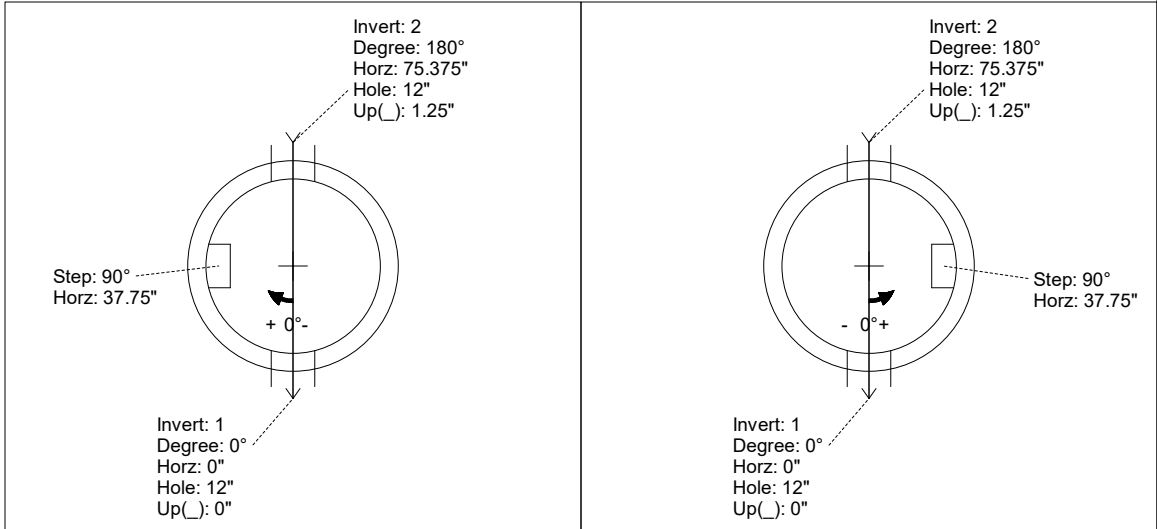
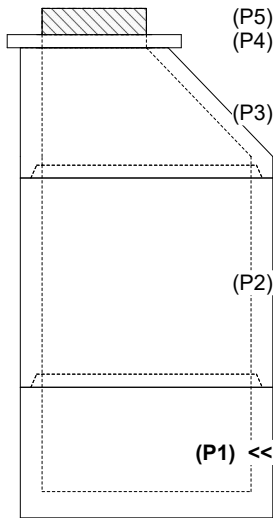
1. PER ASTM C-478 SPECIFICATIONS
2. CONCRETE: 4,000 PSI AT 28 DAYS
3. REINFORCEMENT: PER ASTM A615
4. INVERT CHANNEL REQUIRED
5. CONBLOCK CDA RED ADMIXTURE REQUIRED
6. STEPS AT 90 DEGREES
7. JBS 1155 FRAME & COVER "SANITARY" SUPPLIED BY ICAST

Rim: 427.83'    Rim to Invert: 9.13'    Slack: 0.56"    Sump: 2"    Step Position: 90°

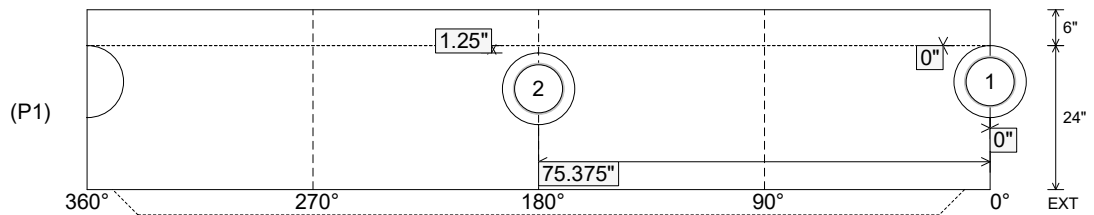
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	418.7'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	418.8'	180°	91.125"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 24" Height (Ext): 30"	Weight (Net): 2911 lb Volume (Net): 0.74cu.yd
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**Structure ID: B-1**

**P1 MH048BA24CDARED**

**MH BASE w/ConBlock-CDA Red T/n**

P5) 24" - CASTING HEIGHT - 6"	0 lb
P4) 24" - GRADE RING w/ConBlock-CDA Red F/F - 3"	202 lb
P3) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30"	1961 lb
P2) 48" - MH RISER w/ConBlock-CDA Red T/G - 48"	3353 lb
P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 24"	2911 lb
1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT	1440 lb
1) JOINT WRAP - 0.065"x6"x50" CONSEAL CS212	0 lb
1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)	0 lb
1) ADMIXTURE CONBLOCK CDA RED	0 lb
1) CASTING - JBS 1155 F/C SANITARY	250 lb
2) 48" - Conseal CS-102 1.00" (Double)	0 lb
1) 24" - Conseal CS-102 1.00" (Double)	0 lb
2) PSX - 12-08 NYLO	16 lb
9) MH Step ML-10-TDS-NCR - 10"	0 lb
<b>Structure Total:</b>	<b>10134 lb</b>

Structure Notes:

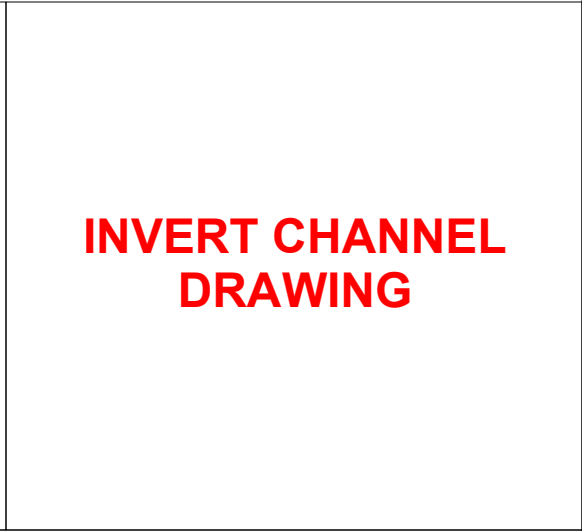
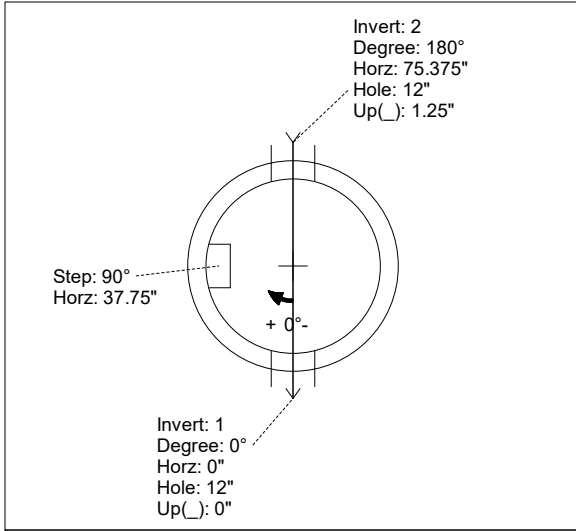
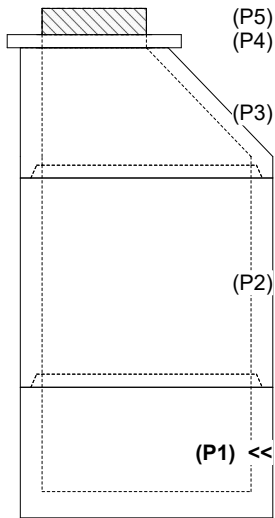
1. PER ASTM C-478 SPECIFICATIONS
2. CONCRETE: 4,000 PSI AT 28 DAYS
3. REINFORCEMENT: PER ASTM A615
4. INVERT CHANNEL REQUIRED
5. CONBLOCK CDA RED ADMIXTURE REQUIRED
6. STEPS AT 90 DEGREES
7. JBS 1155 FRAME & COVER "SANITARY" SUPPLIED BY ICAST

Rim: 427.83'    Rim to Invert: 9.13'    Slack: 0.56"    Sump: 2"    Step Position: 90°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	418.7'	0°	0"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	418.8'	180°	91.125"	8" PVC SDR35	8.5"	PSX 12-08 NYLO	12"	12.129"	1.25"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

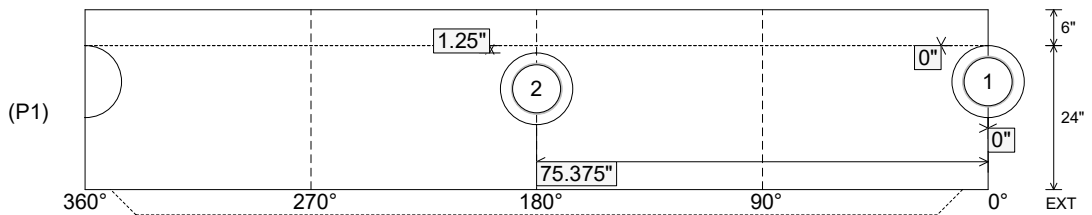
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimenions)



INVERT CHANNEL DRAWING

INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 24" Height (Ext): 30"	Weight (Net): 2911 lb Volume (Net): 0.74cu.yd
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Job Name: 25-2422 - Woodland Springs Section 3 (Sanitary)  
 Job Location: Clarksville, TN  
 Contractor: Byard Construction, LLC

Plant: 100

5/14/2026 2:16:06 PM

Tech: Jared - A

PC: A. Chambers



**Structure ID: A-10**

**P1 MH048BA30CDARED**

**MH BASE w/ConBlock-CDA Red T/n**

- P4) 24" - CASTING HEIGHT - 6" 0 lb
- P3) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30" 1961 lb
- P2) 48" - MH RISER w/ConBlock-CDA Red T/G - 24" 1677 lb
- P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 30" 3336 lb
- 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT 1440 lb
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 0 lb
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 0 lb
- 1) ADMIXTURE CONBLOCK CDA RED 0 lb
- 1) CASTING - JBS 1155 F/C SANITARY 250 lb
- 2) 48" - Conseal CS-102 1.00" (Double) 0 lb
- 1) 24" - Conseal CS-102 1.00" (Double) 0 lb
- 1) PSX - 12-08 NYLO 8 lb
- 2) PSX - 8QRS-S NYLO 13 lb
- 7) MH Step ML-10-TDS-NCR - 10" 0 lb

Structure Total: 8685 lb

Structure Notes:

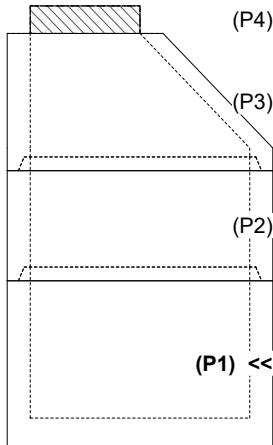
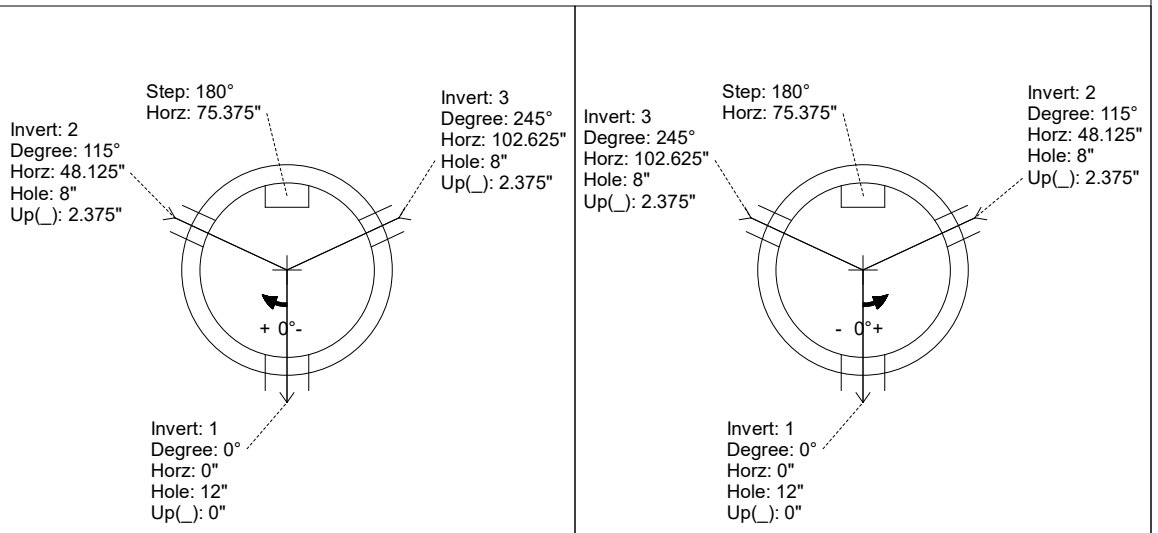
1. PER ASTM C-478 SPECIFICATIONS
2. CONCRETE: 4,000 PSI AT 28 DAYS
3. REINFORCEMENT: PER ASTM A615
4. INVERT CHANNEL REQUIRED
5. CONBLOCK CDA RED ADMIXTURE REQUIRED
6. STEPS AT 180 DEGREES
7. JBS 1155 FRAME & COVER "SANITARY" SUPPLIED BY ICAST

Rim: 469.8' Rim to Invert: 7.35' Slack: 0.2" Sump: 2" Step Position: 180°

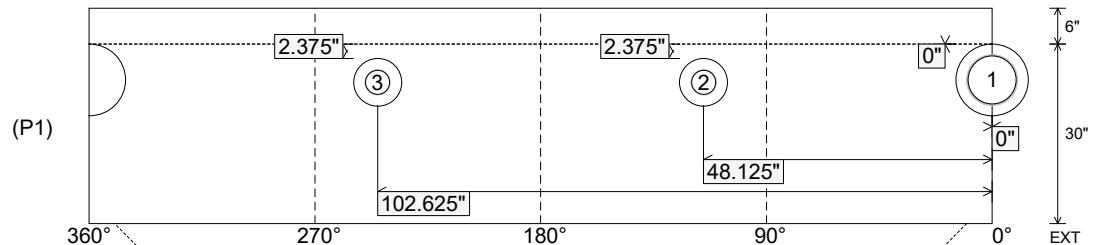
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	462.45'	0°	0"	8" PVC SDR26	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	462.65'	115°	58.25"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	2.375"	0"
Invert 3	462.65'	245°	124"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	2.375"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):  
Coating (Ext):

Seam Up: Tongue  
Seam Dn: n/a

Wall Thickness: 5"  
Floor Height: 6"

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

Weight (Net): 3336 lb  
Volume (Net): 0.85cu.yd

**Structure ID: A-10**

**P1 MH048BA30CDARED**

**MH BASE w/ConBlock-CDA Red T/n**

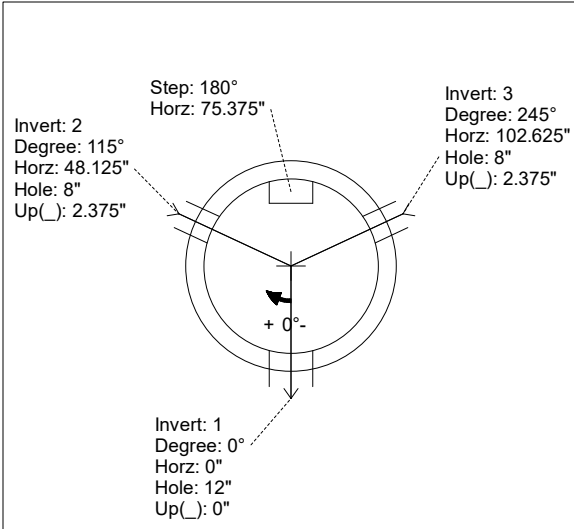
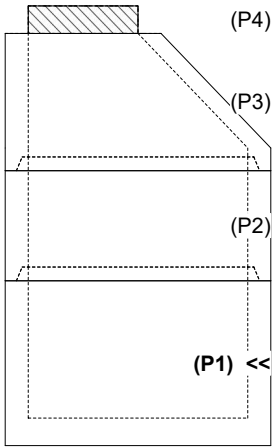
P4) 24" - CASTING HEIGHT - 6" P3) 48" - ECC CONE w/ 24" HOLE, w/ConBlock-CDA Red F/G - 30" P2) 48" - MH RISER w/ConBlock-CDA Red T/G - 24" P1) 48" - MH BASE w/ConBlock-CDA Red T/n - 30" 1) 48" - MH INVERT CHANNEL w/ConBlock-CDA Red - FULL HEIGHT 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.) 1) ADMIXTURE CONBLOCK CDA RED 1) CASTING - JBS 1155 F/C SANITARY 2) 48" - Conseal CS-102 1.00" (Double) 1) 24" - Conseal CS-102 1.00" (Double) 1) PSX - 12-08 NYLO 2) PSX - 8QRS-S NYLO 7) MH Step ML-10-TDS-NCR - 10"	0 lb 1961 lb 1677 lb 3336 lb 1440 lb 0 lb 0 lb 0 lb 250 lb 0 lb 0 lb 8 lb 8 lb 13 lb 0 lb	<b>Structure Notes:</b> 1. PER ASTM C-478 SPECIFICATIONS 2. CONCRETE: 4,000 PSI AT 28 DAYS 3. REINFORCEMENT: PER ASTM A615 4. INVERT CHANNEL REQUIRED 5. CONBLOCK CDA RED ADMIXTURE REQUIRED 6. STEPS AT 180 DEGREES 7. JBS 1155 FRAME & COVER "SANITARY" SUPPLIED BY ICAST
<b>Structure Total:</b>		<b>8685 lb</b>

Rim: 469.8'    Rim to Invert: 7.35'    Slack: 0.2"    Sump: 2"    Step Position: 180°

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	462.45'	0°	0"	8" PVC SDR26	8.5"	PSX 12-08 NYLO	12"	12.129"	0"	0"
Invert 2	462.65'	115°	58.25"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	2.375"	0"
Invert 3	462.65'	245°	124"	4" PVC SDR35	4.25"	PSX 8QRS-S NYLO	8"	8.038"	2.375"	0"
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

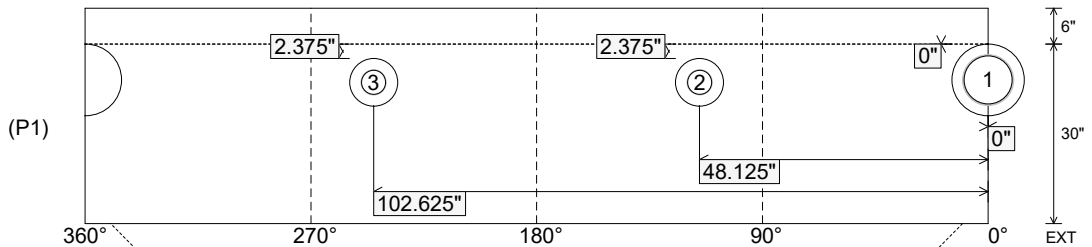
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INVERT CHANNEL DRAWING

INSIDE WALL DIMENSIONS



Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: n/a	Wall Thickness: 5" Floor Height: 6"	Height (Int): 30" Height (Ext): 36"	Weight (Net): 3336 lb Volume (Net): 0.85cu.yd
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Job Name: 23-2792 - Teal Dr. Development  
 Job Location: Gallatin, TN  
 Contractor: Stewart Richey

Plant: 100

Tech: J. Horsley - F

3/25/2026 1:41:45 PM

PC: C. Goff



**Structure ID: STM-H1**

**P1 MH048BA42**

**MH BASE T/n**

- P3) 30" x 30" - CASTING HEIGHT - 6"
- P2) 48" - MH FLAT TOP w/30"x30" Hole F/G - 12"
- P1) 48" - MH BASE T/n - 42"
- 1) CASTING - JBS 3101 Single Set (F/G/H)
- 1) 48" - Conseal CS-102 1.00"
- 1) 30" x 30" - Conseal CS-102 1.00"
- 2) Hole - 26
- 4) MH Step ML-10-TDS-NCR - 10"

0 lb  
 1350 lb  
 3798 lb  
 619 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 Structure Total: 5767 lb

- Structure Notes:**
1. PER ASTM C478 SPECIFICATIONS.
  2. CONCRETE = 4,000 PSI AT 28 DAYS.
  3. NO INVERT CHANNEL.
  4. CASTING BY ICAST (JBS 3101 SINGLE SET (F/G/H))

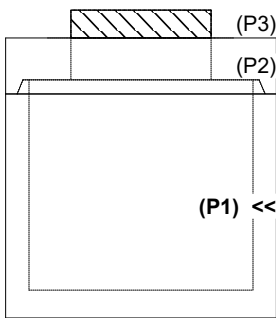
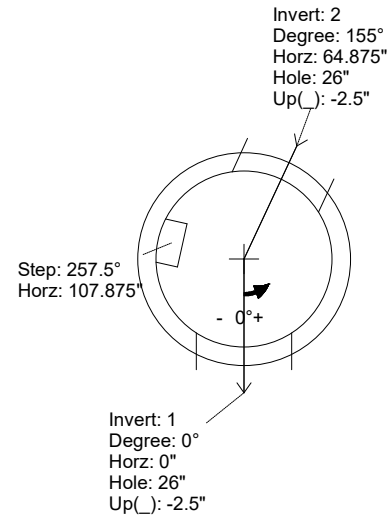
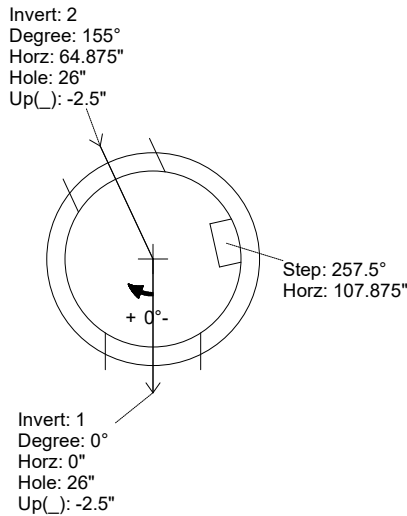
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..  
 - RISER/WALLS (As .12)  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 469.55' Rim to Invert: 5' Slack: 0" Sump: 0" Step Position: 257.5°

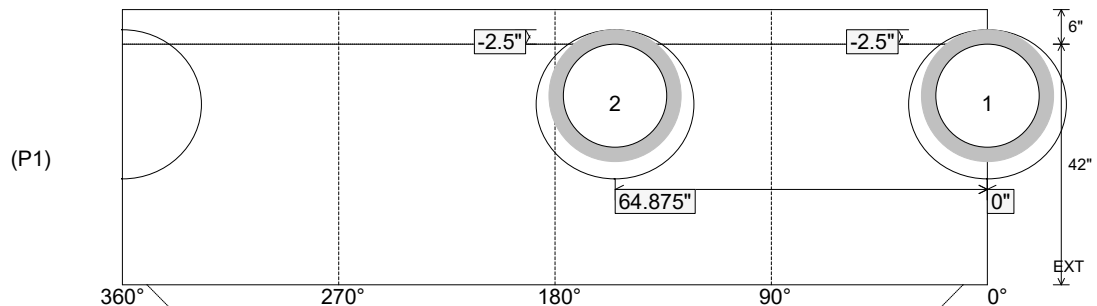
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	464.55'	0°	0"	18" RCP B WALL	23"	Hole 26	26"	27.476"	-2.5"	0"
Invert 2	464.55'	155°	78.5"	18" RCP B WALL	23"	Hole 26	26"	27.476"	-2.5"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
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): 42"  
 Height (Ext): 48"

Weight (Net): 3798 lb  
 Volume (Net): 0.97cu.yd

Job Name: 23-2792 - Teal Dr. Development  
 Job Location: Gallatin, TN  
 Contractor: Stewart Richey

Plant: 100  
 3/25/2026 1:42:50 PM

Tech: J. Horsley - F  
 PC: C. Goff

**Structure ID: STM-H1**

**P2 MH048LD12S**

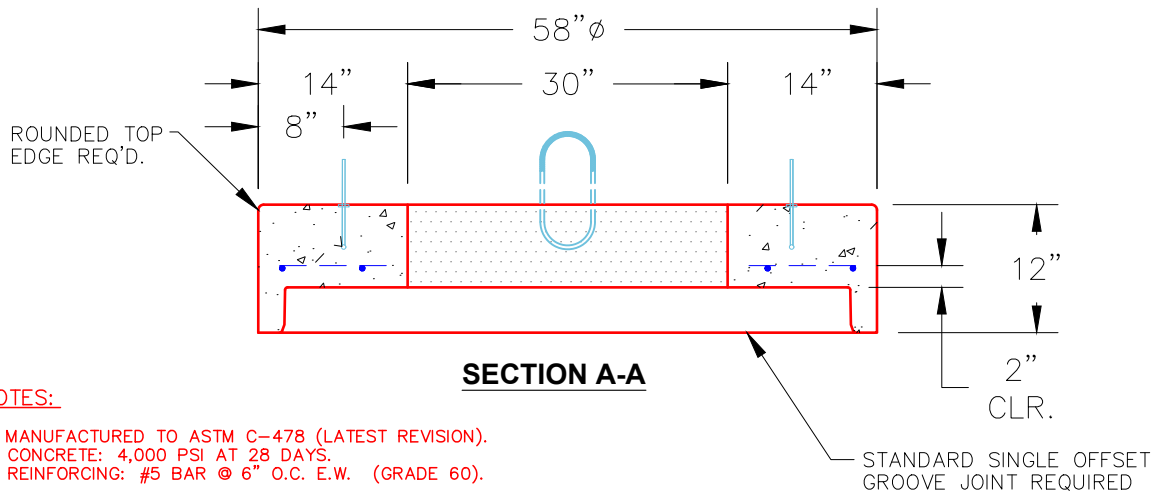
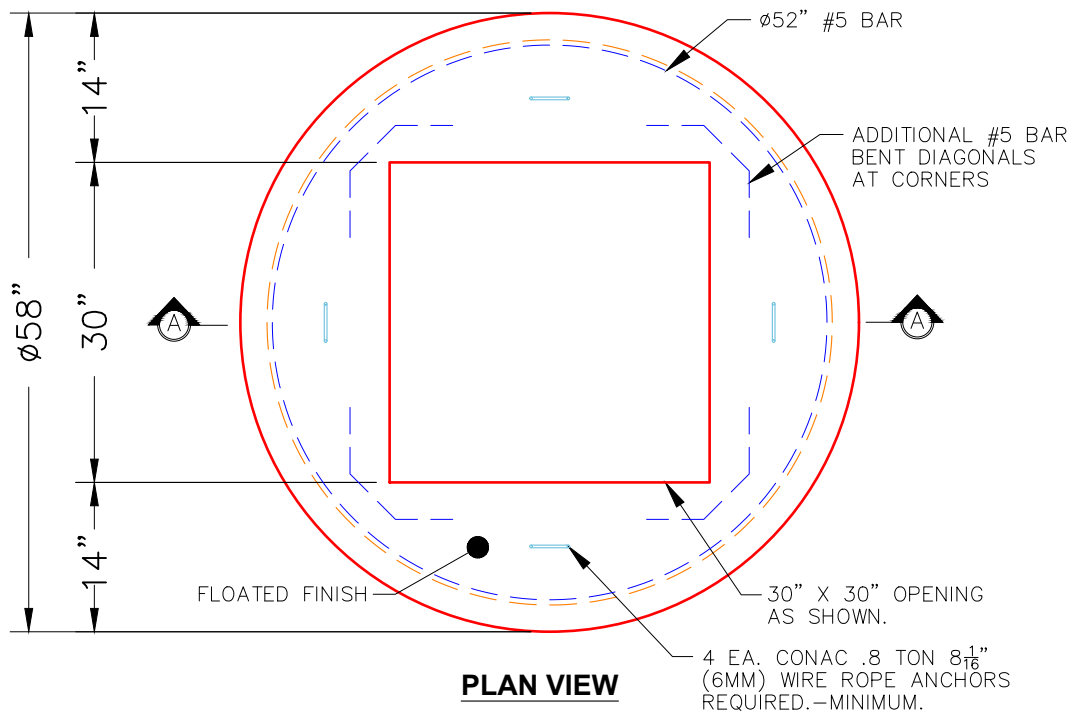
**MH FLAT TOP w/30"x30" Hole F/G**

- P3) 30" x 30" - CASTING HEIGHT - 6"
- P2) 48" - MH FLAT TOP w/30"x30" Hole F/G - 12"
- P1) 48" - MH BASE T/n - 42"
- 1) CASTING - JBS 3101 Single Set (F/G/H)
- 1) 48" - Conseal CS-102 1.00"
- 1) 30" x 30" - Conseal CS-102 1.00"
- 2) Hole - 26
- 4) MH Step ML-10-TDS-NCR - 10"

0 lb  
 1350 lb  
 3798 lb  
 619 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 Structure Total: 5767 lb

**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO INVERT CHANNEL.  
 4. CASTING BY ICAST (JBS 3101 SINGLE SET (F/G/H))

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



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

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Groove

Wall Thickness: 5"

Height (Ext): 12"

Weight (Net): 1350 lb  
 Volume (Net): 0.33cu.yd

Job Name: 23-2792 - Teal Dr. Development  
 Job Location: Gallatin, TN  
 Contractor: Stewart Richey

Plant: 100  
 3/25/2026 1:42:48 PM

Tech: J. Horsley - F  
 PC: C. Goff

**Structure ID: STM-C5**

**P2 MH048LD12S**

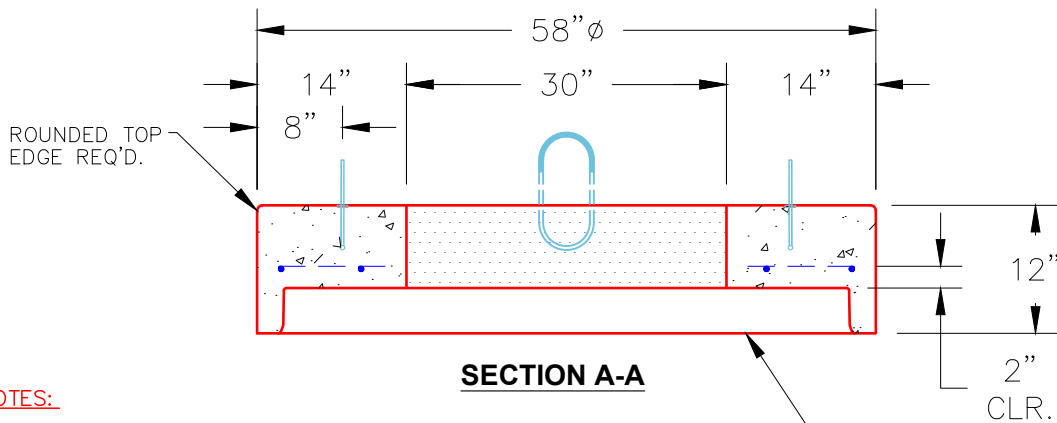
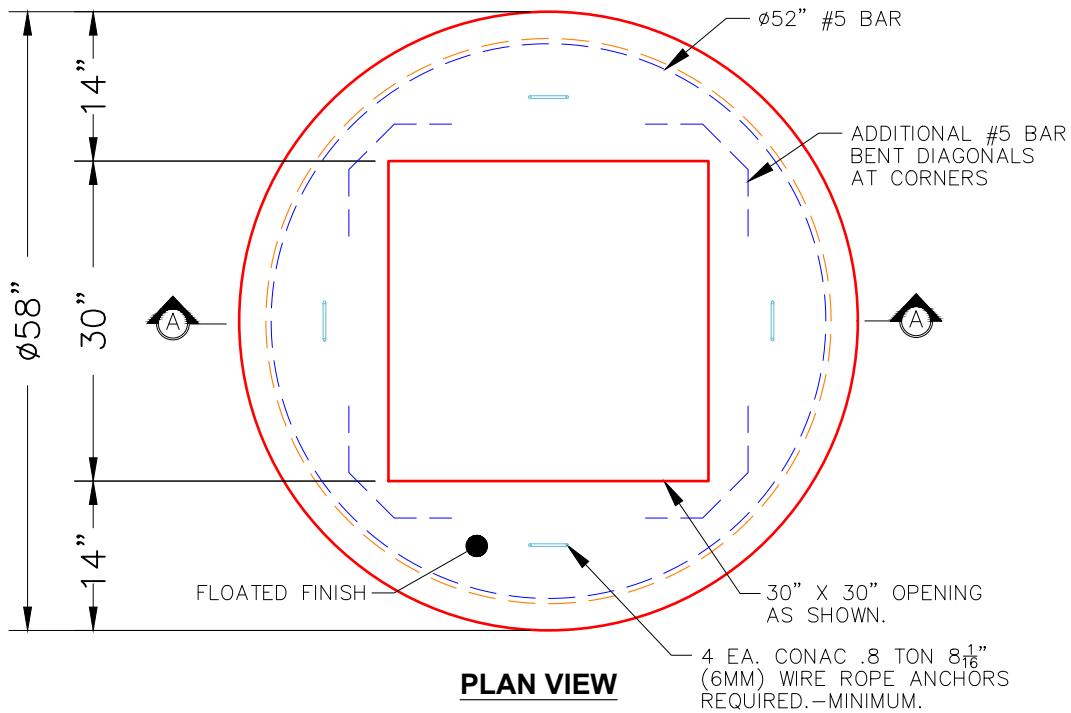
**MH FLAT TOP w/30"x30" Hole F/G**

- P4) 30" x 30" - CASTING HEIGHT - 6"
- P3) 30" x 30" - GRADE RING F/F - 3"
- P2) 48" - MH FLAT TOP w/30"x30" Hole F/G - 12"
- P1) 48" - MH BASE T/n - 30"
- 1) CASTING - JBS 3101 Single Set (F/G/H)
- 1) 48" - Conseal CS-102 1.00"
- 2) 30" x 30" - Conseal CS-102 1.00"
- 2) Hole - 22
- 3) MH Step ML-10-TDS-NCR - 10"

0 lb  
 218 lb  
 1350 lb  
 3097 lb  
 619 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 Structure Total: 5283 lb

**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO INVERT CHANNEL.  
 4. CASTING BY ICAST (JBS 3101 SINGLE SET (F/G/H))

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



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

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 5"	Height (Ext): 12"	Weight (Net): 1350 lb Volume (Net): 0.33cu.yd
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Job Name: 26-1227 - Project Colt  
 Job Location: Evansville, IN  
 Contractor: Russell's Excavating

Plant: 100  
 5/12/2026 11:30:51 AM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: 303-5 MHJ**

**P2 MH060LD08-24X36RECT**

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

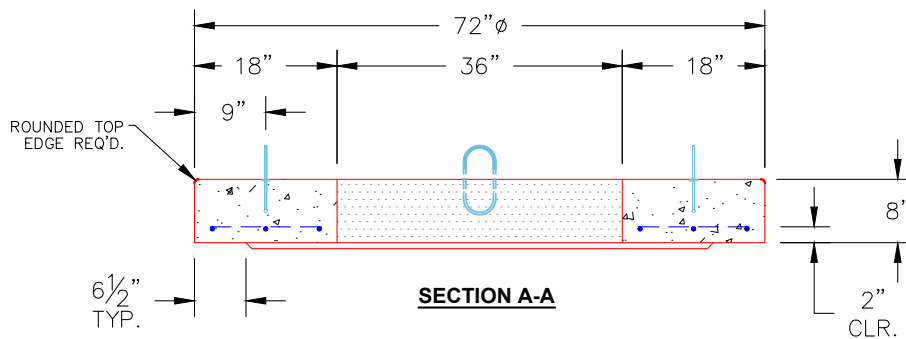
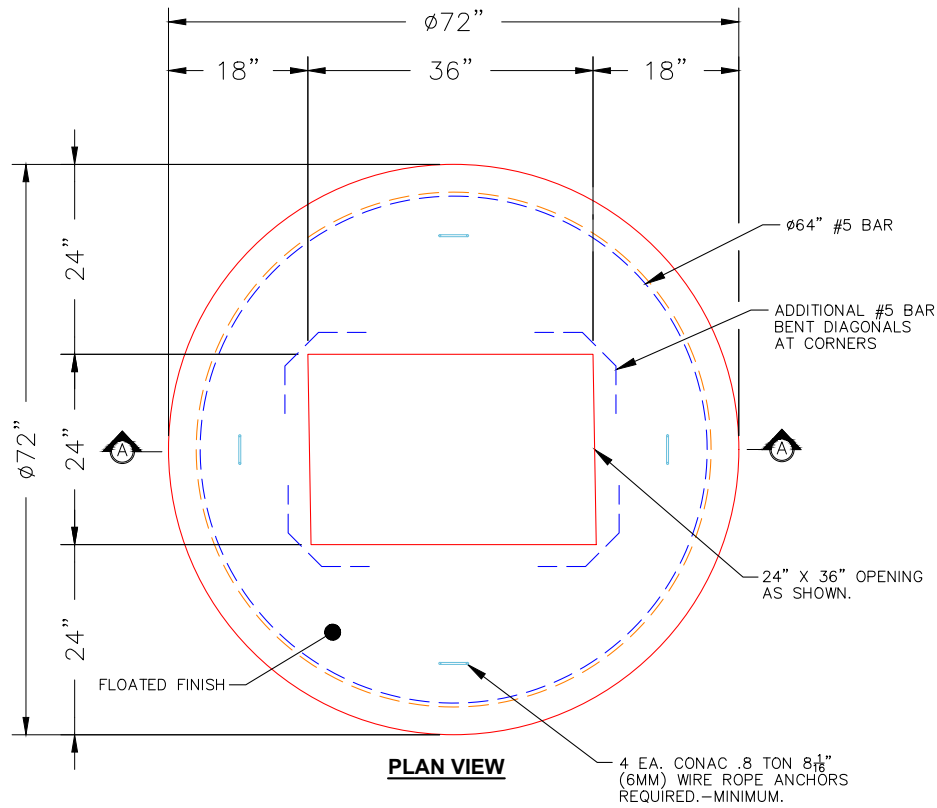
- P3) 24" x 36" - CASTING HEIGHT - 4"
- P2) 60" - MH FLAT TOP w/24"x36" Hole F/F - 8"
- P1) 60" - MH BASE Custom Ht F/n - 49"
- 1) CASTING - HOE 518 F/G
- 1) 60" - Conseal CS-102 1.00"
- 1) 24" x 36" - Conseal CS-102 1.00"
- 2) Hole - 24
- 1) Hole - 20
- 2) Hole - 6
- 4) MH Step ML-10-TDS-NCR - 10"

0 lb  
 2153 lb  
 7193 lb  
 354 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 Structure Total: 9700 lb

Structure Notes:

1. INDOT MH TYPE J / ASTM C478 SPEC'S.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO INVERT CHANNEL.
4. CASTING BY ICAST (HOE 518 F/G).

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.



NOTES:

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

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: Flat	Wall Thickness: 6"	Height (Ext): 8"	Weight (Net): 2153 lb Volume (Net): 0.55cu.yd
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Job Name: 26-1227 - Project Colt  
 Job Location: Evansville, IN  
 Contractor: Russell's Excavating

Plant: 100  
 5/12/2026 11:30:18 AM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: 103-13 MHJ**

**P1 MH060BAVF**

**MH BASE Custom Ht F/n**

- P3) 24" - CASTING HEIGHT - 1"
- P2) 60" - MH FLAT LID w/24in ECC Hole F/F - 8"
- P1) 60" - MH BASE Custom Ht F/n - 61"
- 1) EJ 6489 GRATE
- 1) 60" - Conseal CS-102 1.00"
- 2) Hole - 44
- 2) Hole - 6
- 5) MH Step ML-10-TDS-NCR - 10"

0 lb  
 2429 lb  
 7390 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 Structure Total: 9819 lb

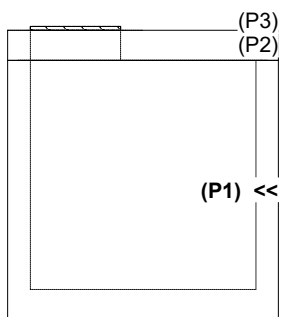
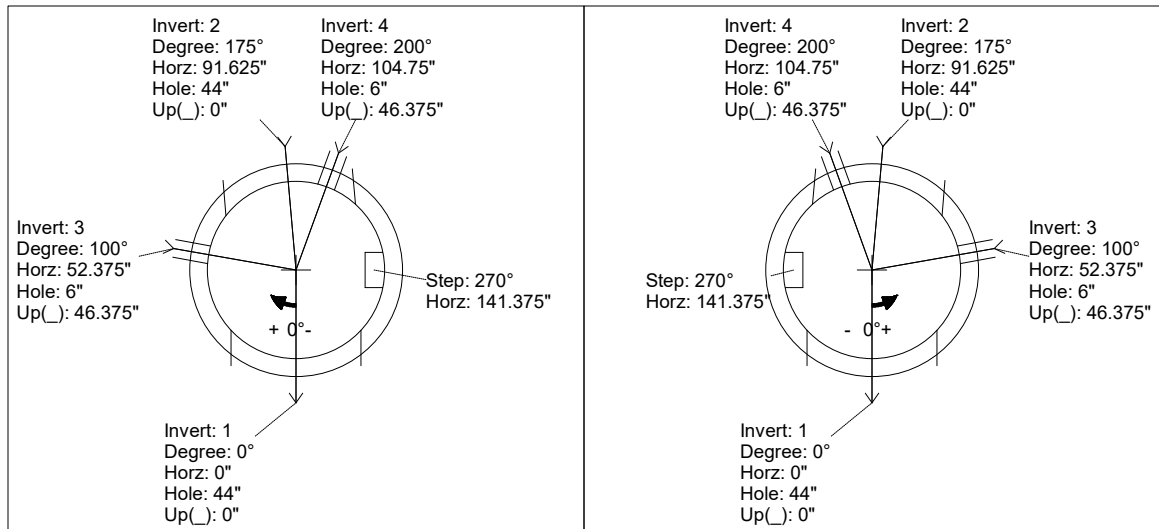
**Structure Notes:**  
 1. INDOT MH TYPE J / ASTM C478 SPEC'S.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO INVERT CHANNEL.  
 4. CASTING BY ICAST (EJ 6489 GRATE).  
 REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..  
 - RISER/WALLS (As .12)  
 - FLOOR (As .62) #5 BARS AT 6" C.C.E.W.

Rim: 384' Rim to Invert: 5.66' Slack: 0.795" Sump: 2.875" Step Position: 270°

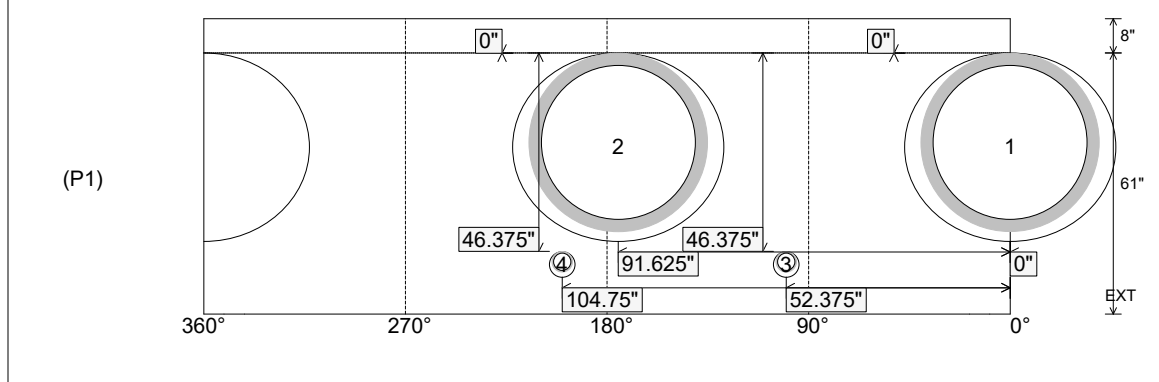
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	378.34'	0°	0"	36" HDPE	41.7"	Hole 44	44"	49.393"	0"	0"
Invert 2	378.34'	175°	110"	36" HDPE	41.7"	Hole 44	44"	49.393"	0"	0"
Invert 3	382'	100°	62.875"	4" HDPE (perf pipe)	4.8"	Hole 6	6"	6.01"	46.375"	0"
Invert 4	382'	200°	125.625"	4" HDPE (perf pipe)	4.8"	Hole 6	6"	6.01"	46.375"	0"
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: 6" Floor Height: 8"	Height (Int): 61" Height (Ext): 69"	Weight (Net): 7390 lb Volume (Net): 1.89cu.yd
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Job Name: 25-4279 - KYTC Christian Co (251031)  
 Job Location: Hopkinsville, KY  
 Contractor: CITCO Water

Plant: 100  
 5/8/2026 11:22:39 AM

Tech: Jared- F  
 PC: C. Goff



**Structure ID: VV**

**P2 MH060LD13SCDARED**

**MH FLAT TOP w/36"x42" Hatch w/ConBlock-CDA Red F/G**

- P2) 60" - MH FLAT TOP w/36"x42" Hatch w/ConBlock-CDA Red F/G - 13"
- P1) 60" - MH BASE w/ConBlock-CDA Red T/n - 54"
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) ADMIXTURE CONBLOCK CDA RED
- 1) 60" - Conseal CS-102 1.00" (Double)
- 4) Hole - 8
- 1) Hole - 4

1993 lb  
 8259 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb

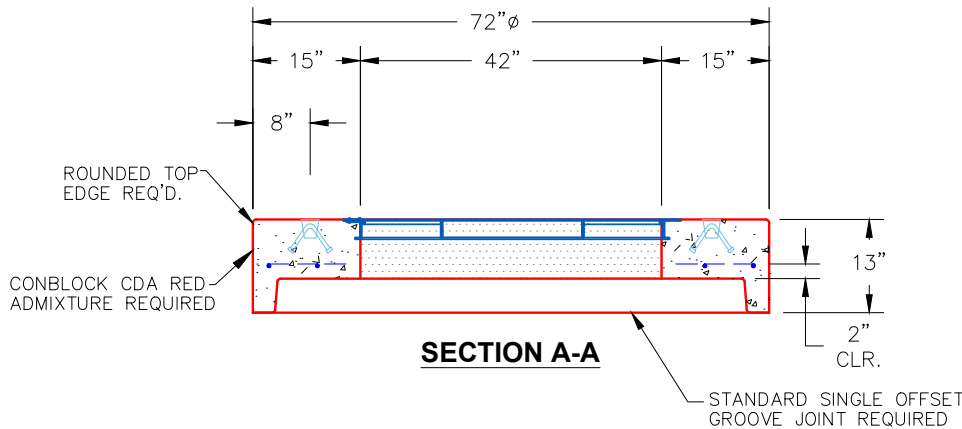
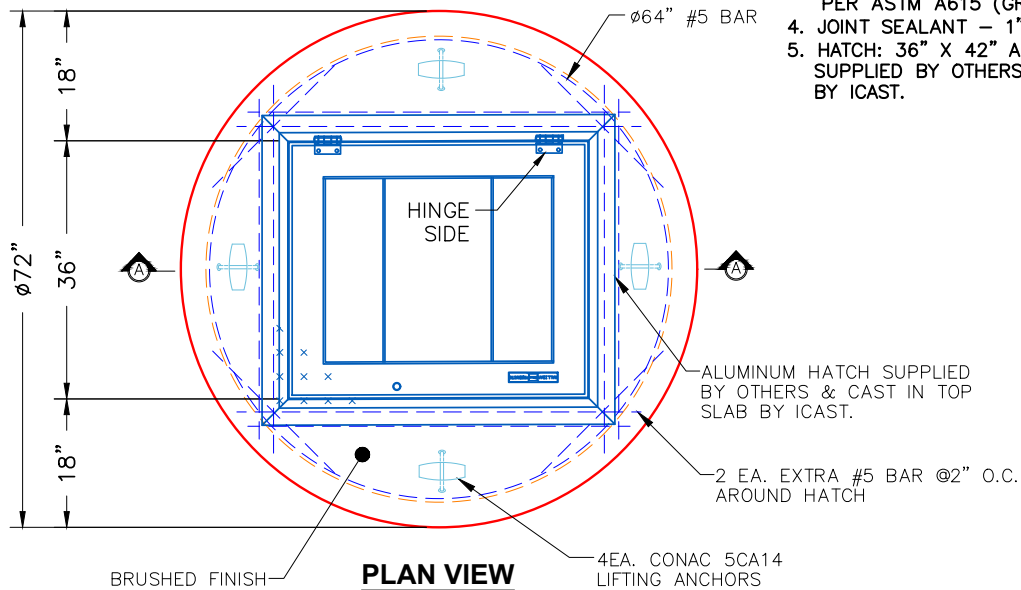
Structure Total: 10251 lb

- Structure Notes:**
1. PER ASCTM C478 SPECIFICATIONS.
  2. CONCRETE = 4,500 PSI AT 28 DAYS.
  3. NO STEPS.
  4. ADMIXTURE = CONBLOCK CDA RED.
  5. ALUMINUM HATCH SUPPLIED BY OTHERS & CAST IN TOP SLAB BY ICAST. CENTERED LOCATION TO BE VERIFIED.

- REINFORCING PER ASTM A615 (GRADE 60)**
- TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.
  - RISER/WALLS (As .18)
  - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

**GENERAL NOTES:**

1. MANUFACTURED TO ASTM C-478 (LATEST REVISION).
2. CONCRETE: 4,500 PSI AT 28 DAYS.
3. CONBLOCK CDA RED ADMIXTURE REQUIRED.
4. REINFORCMENT: #5 BAR @ 6" C.C.E.W. PER ASTM A615 (GRADE 60).
4. JOINT SEALANT - 1" CS-102- DOUBLE
5. HATCH: 36" X 42" ALUMINUM HATCH SUPPLIED BY OTHERS & CAST IN TOP SLAB BY ICAST.



Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Groove

Wall Thickness: 6"

Height (Ext): 13"

Weight (Net): 1993 lb  
 Volume (Net): 0.51cu.yd

Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/28/2026 11:25:33 AM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: 13**

**P1 MH072BAVF**

**MH BASE Custom Ht T/n**

- P3) 24" x 36" - CASTING HEIGHT - 6"
- P2) 72" - MH FLAT TOP w/24"x36" Hole F/G - 15"
- P1) 72" - MH BASE Custom Ht T/n - 67"
- 1) CASTING - HOE 470 SET LV (F/G/H)
- 1) 72" - Conseal CS-102 1.00"
- 1) 24" x 36" - Conseal CS-102 1.00"
- 1) Hole - 30
- 1) Hole - 20
- 2) Hole - 38

0 lb  
 4530 lb  
 11662 lb  
 394 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb

Structure Total: 16586 lb

- Structure Notes:**
1. PER ASTM C478 SPECIFICATIONS.
  2. CONCRETE = 4,000 PSI AT 28 DAYS.
  3. NO STEPS AND NO INVERT CHANNEL.
  4. CASTING BY ICAST (HOE 470 SET LV (F/G/H)).

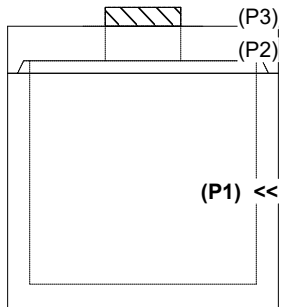
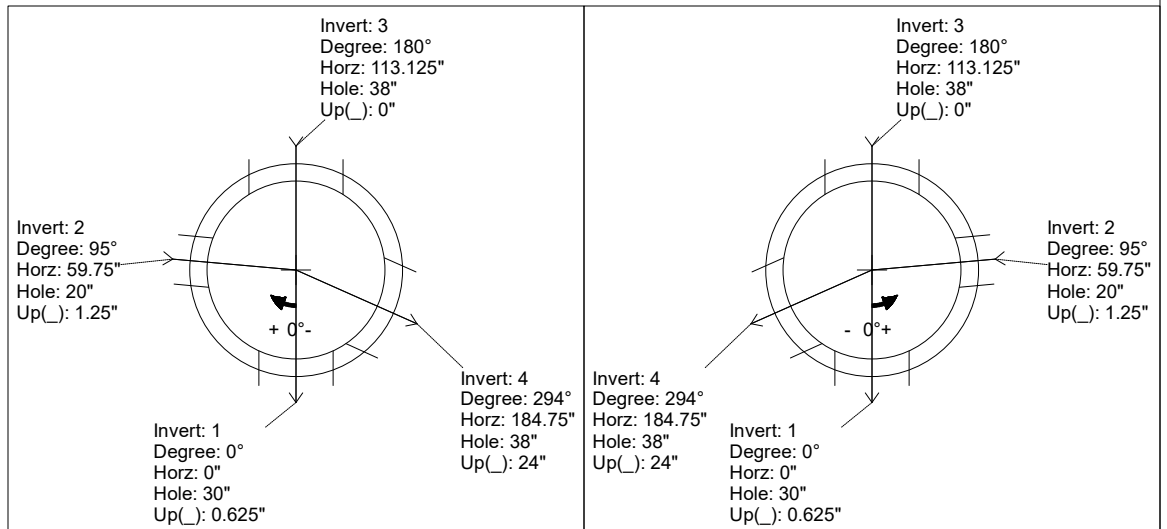
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..  
 - RISER/WALLS (As .18)  
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.

Rim: 871' Rim to Invert: 7.15' Slack: 0.35" Sump: 2.55" Step Position:

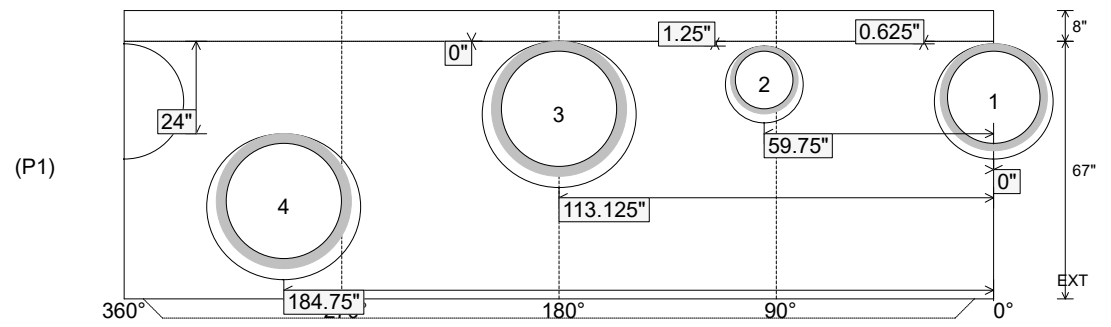
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (⌋)	Offset
Invert 1	863.85'	0°	0"	24" HDPE	27.8"	Hole 30	30"	30.944"	0.625"	0"
Invert 2	863.85'	95°	71.25"	15" HDPE	17.6"	Hole 20	20"	20.267"	1.25"	0"
Invert 3	863.85'	180°	135.125"	30" HDPE	35.1"	Hole 38	38"	40.031"	0"	0"
Invert 4	865.85'	294°	220.625"	30" HDPE	35.1"	Hole 38	38"	40.031"	24"	0"
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: 7" Floor Height: 8"	Height (Int): 67" Height (Ext): 75"	Weight (Net): 11662 lb Volume (Net): 2.98cu.yd
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Job Name: 25-4508 - Georgetown Commons Target  
 Job Location: Georgetown, KY  
 Contractor: Winwater Hartford KY Co.

Plant: 100  
 5/28/2026 11:25:39 AM

Tech: Jared - F  
 PC: A. Chambers



**Structure ID: 106 (28)**

**P1 MH072BAVF**

**MH BASE Custom Ht F/n**

- P3) 24" x 36" - CASTING HEIGHT - 6"
- P2) 72" - MH FLAT TOP w/24"x36" Hole F/F - 10"
- P1) 72" - MH BASE Custom Ht F/n - 65"
- 1) CASTING - HOE 470 SET LV (F/G/H)
- 1) 72" - Conseal CS-102 1.00"
- 1) 24" x 36" - Conseal CS-102 1.00"
- 1) Hole - 38
- 1) Hole - 20
- 2) Hole - 30

0 lb  
 4149 lb  
 11640 lb  
 394 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 Structure Total: 16184 lb

**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. CASTING BY ICAST (HOE 470 SET LV (F/G/H)).

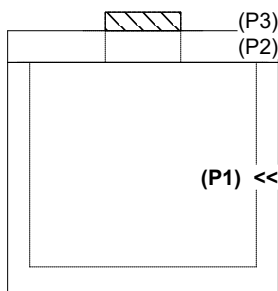
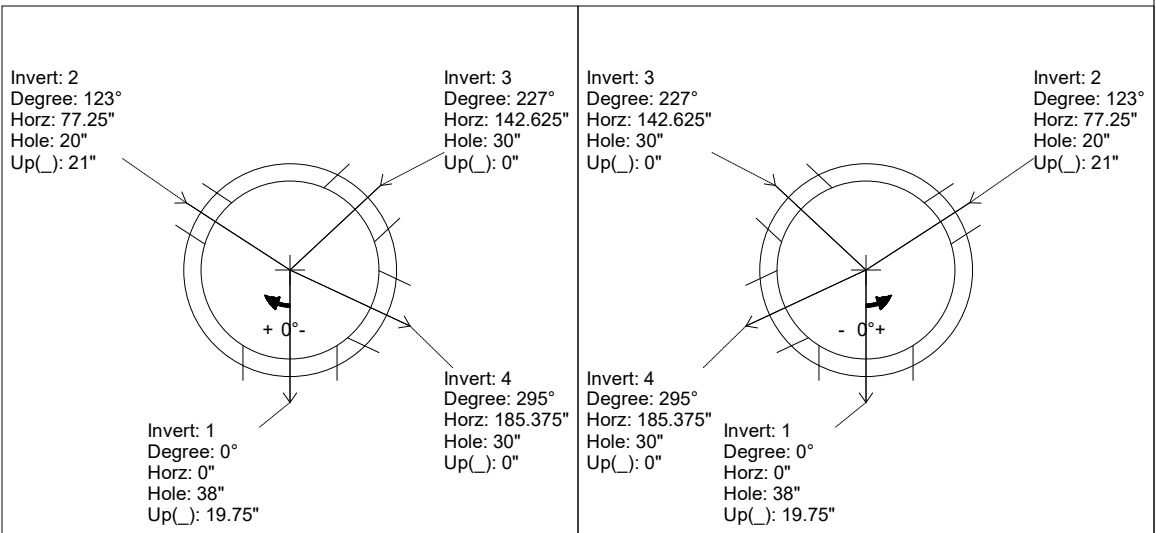
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W..  
 - RISER/WALLS (As .18)  
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.

Rim: 872' Rim to Invert: 6.6' Slack: 0.1" Sump: 1.9" Step Position:

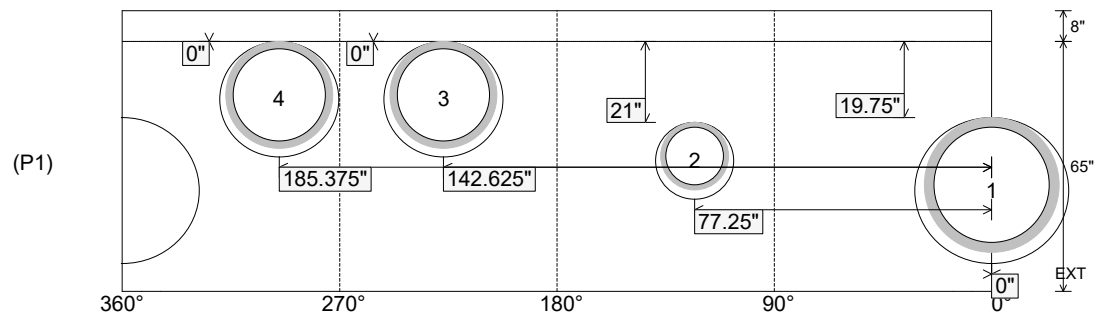
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (↓)	Offset
Invert 1	867.1'	0°	0"	30" HDPE	35.1"	Hole 38	38"	40.031"	19.75"	0"
Invert 2	867.1'	123°	92.25"	15" HDPE	17.6"	Hole 20	20"	20.267"	21"	0"
Invert 3	865.4'	227°	170.375"	24" HDPE	27.8"	Hole 30	30"	30.944"	0"	0"
Invert 4	865.4'	295°	221.375"	24" HDPE	27.8"	Hole 30	30"	30.944"	0"	0"
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS

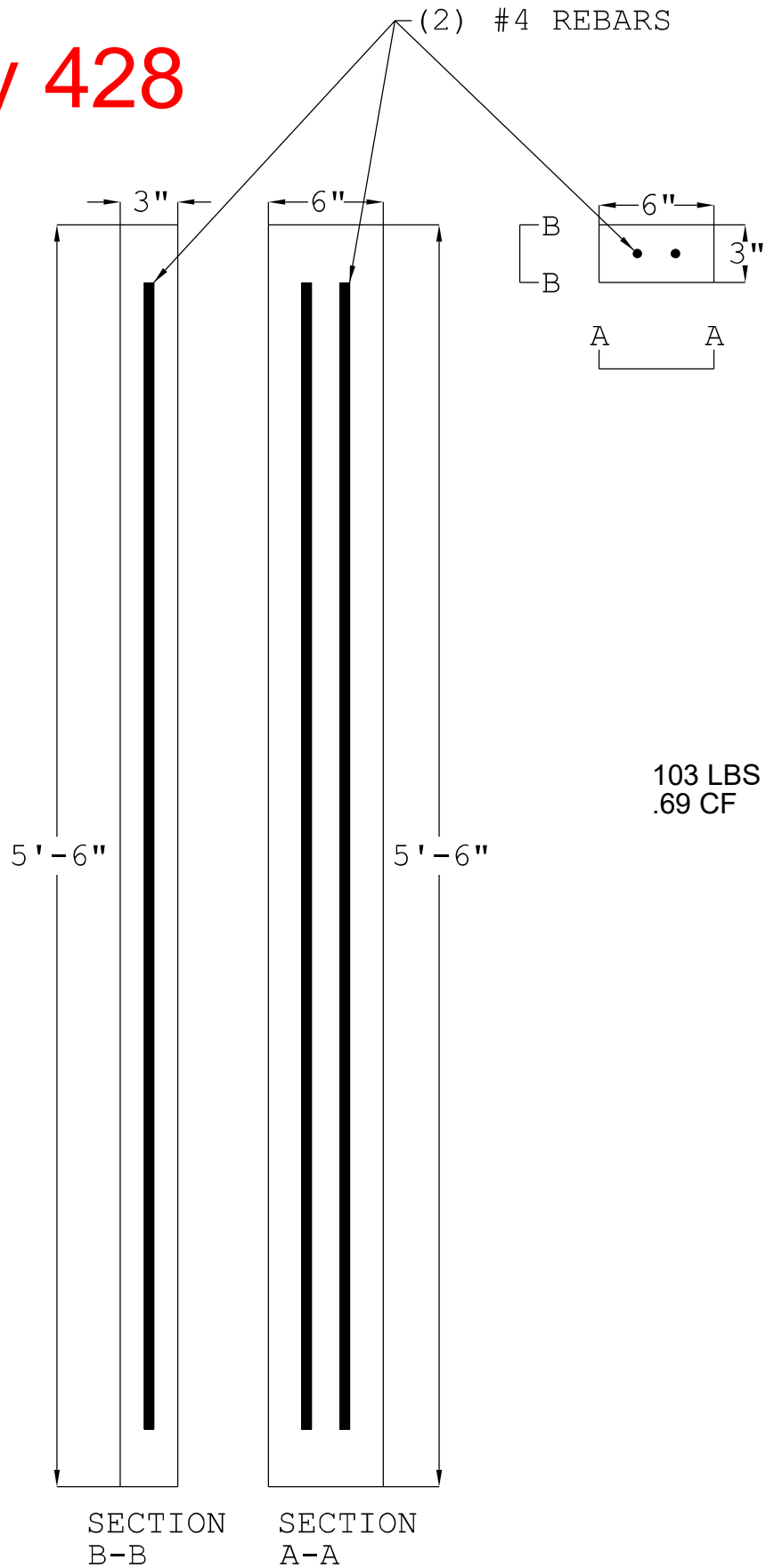


Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: n/a	Wall Thickness: 7" Floor Height: 8"	Height (Int): 65" Height (Ext): 73"	Weight (Net): 11640 lb Volume (Net): 2.97cu.yd
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# ALCOA CONCRETE LOGS

Quantity 428



**Structure ID: CBI-A2**

**P2 BX2436-08R36**

**BOX RISER 8inW T/G**

P4) 24" x 120" - CB INLET KY A 10' TOP SAG F/G - 10" P3) 24" x 120" - CB INLET KY A 10' BOTTOM SAG T/G - 18" P2) 24" x 36" - BOX RISER 8inW T/G - 36" P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht T/n - 29" 1) CASTING - HOE KY-206 F/C (KY CBI A) 1) SNOOT - BMP SNOOT 18F w/ KIT 2) 24" x 36" - Conseal CS-102 1.00" 1) Hole - 22	3398 lb 5270 lb 3418 lb 4355 lb 206 lb 25 lb 0 lb 0 lb ----- Structure Total: 16672 lb
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**Structure Notes:**

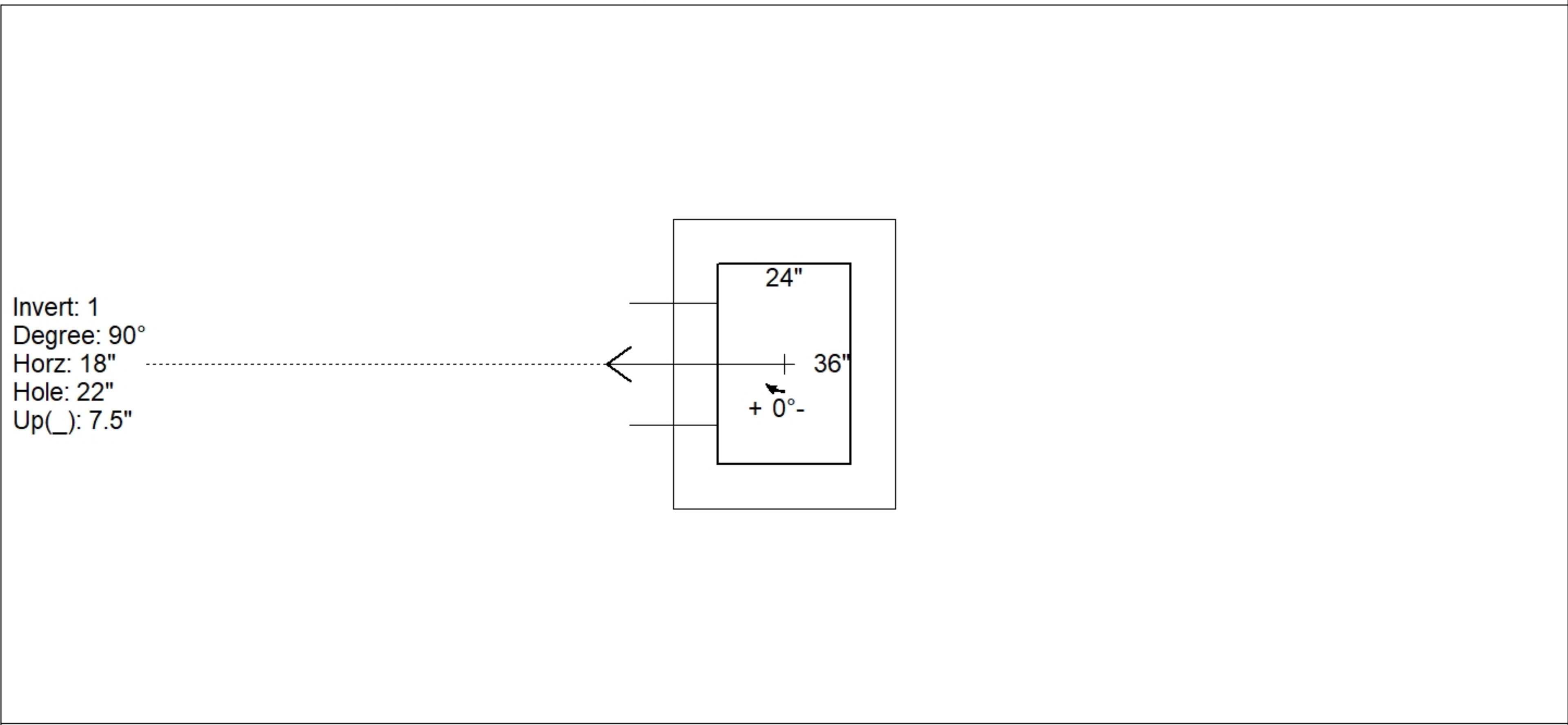
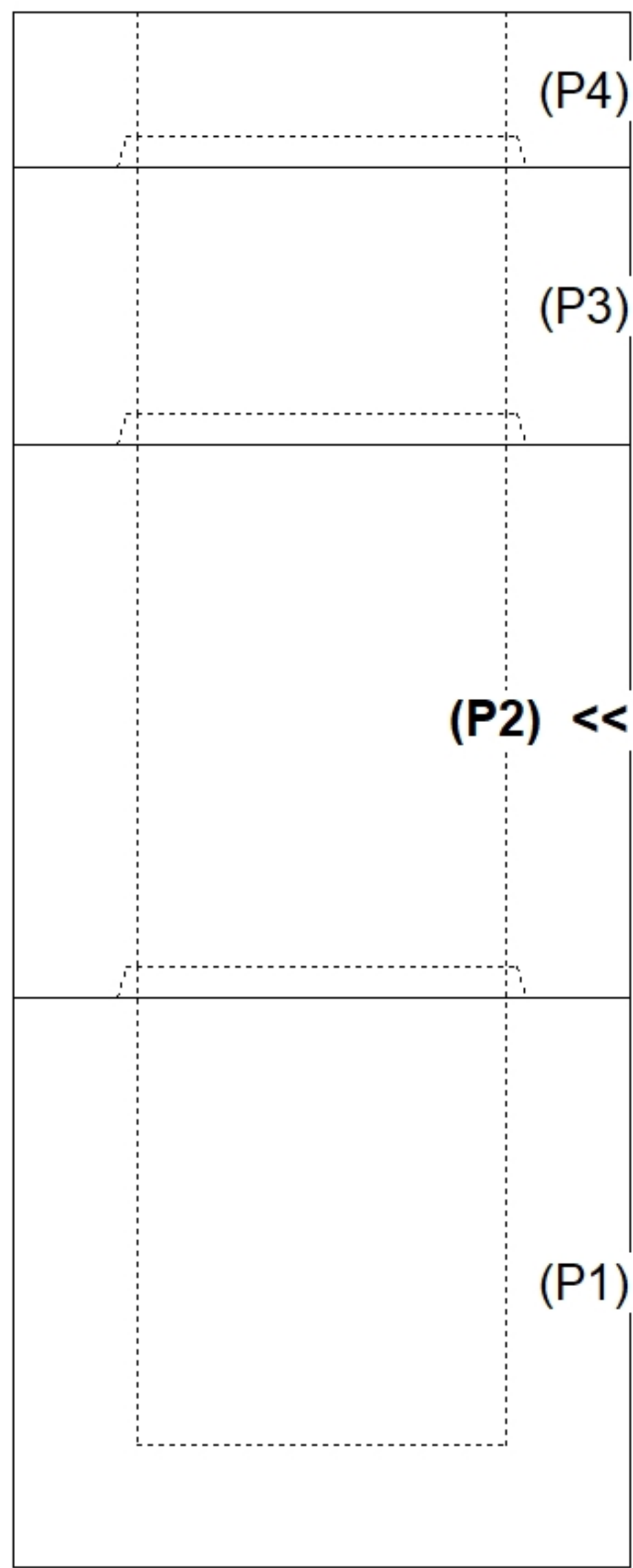
1. PER KYTC CBI A / ASTM C913 SPEC'S.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. CASTING (HOE KY-206) TO BE CAST INTO TOP PHASE.
4. BMP SNOOT 18F w/KIT.

REINFORCING PER ASTM AS615 (GRADE 60).  
 - TOP PHASE (As .62) #5 BARS AT 6" C.C.E.W.  
 - BASE WALLS (As .31) #5 BARS AT 12" C.C.E.W.  
 - BASE FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

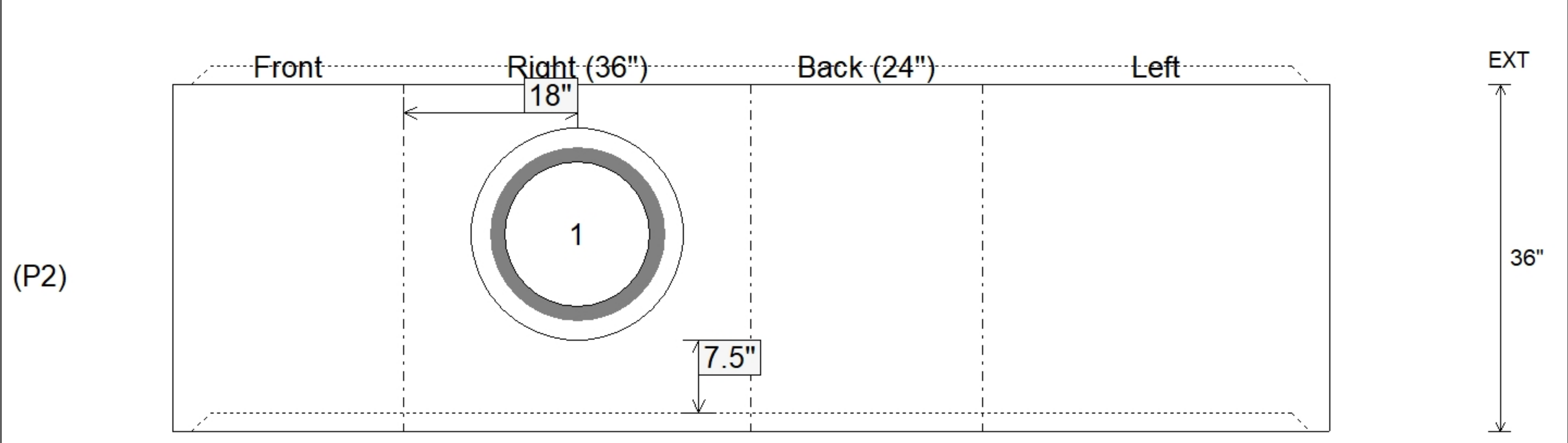
Rim: 877.77'    Rim to Invert: 4.25'    Slack: 0"    Sump: 42"    Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (⌋)	Offset
Invert 1	873.52'	90°	26"	15" ADS N-12	18"	Hole 22	22"	22"	7.5"	0"
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: 8" Floor Height: 0"	Height (Int): 36" Height (Ext): 36"	Weight (Net): 3418 lb Volume (Net): 0.87cu.yd
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Job Name: 26-2257 - 233 SE Third St.  
 Job Location: Evansville, IN  
 Contractor: Empire Contractors, Inc.

Plant: 100

6/1/2026 8:27:53 AM

Tech: Jared - A

PC: E. Bradley



**Structure ID: AD 500 ST-AD**

**P1 BX4848-08BAVF**

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

- P3) 30" x 30" - CASTING HEIGHT - 4"
- P2) 48" x 48" - CB FLAT TOP 8"W w/30"x30" HOLE F/F - 6"
- P1) 48" x 48" - BOX BASE 8inW, 8inF, Variable Ht F/n - 41"
- 1) CASTING - HOE 468 F/G
- 1) 48" x 48" - Conseal CS-102 1.00"
- 1) 30" x 30" - Conseal CS-102 1.00"
- 1) Hole - 12
- 2) Hole - 38

- Structure Notes:**
1. PER ASTM C-913 SPECIFICATIONS
  2. CONCRETE: 4,000 PSI AT 28 DAYS
  3. REINFORCEMENT: #5 BAR @ 12" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)
  4. NO STORM INVERT
  5. NO STEPS
  6. HOE 468 FRAME & GRATE SUPPLIED BY ICAST
  7. 8" FLAT GATE SUPPLIED BY OTHERS

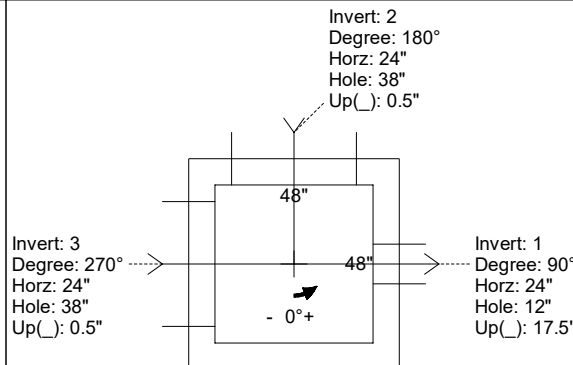
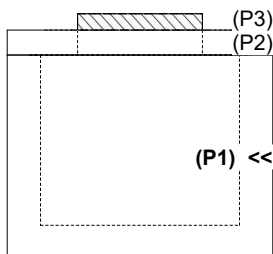
Structure Total: 9414 lb

Rim: 383.25' Rim to Invert: 4' Slack: 0.04" Sump: 3.04" Step Position:

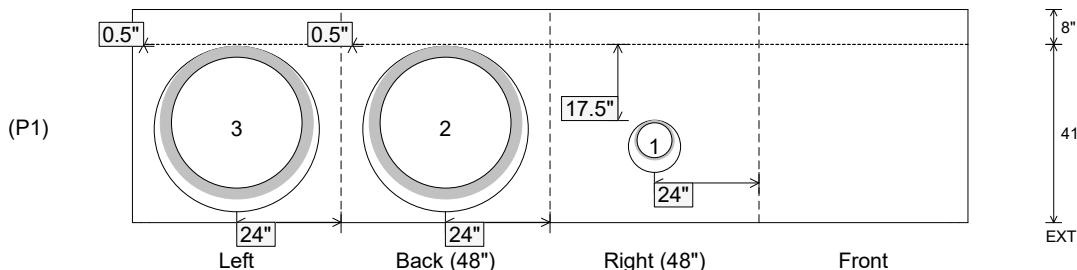
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	380.5'	90°	32"	8" HDPE	9.1"	Hole 12	12"	12"	17.5"	0"
Invert 2	379.25'	180°	32"	30" HDPE	35.1"	Hole 38	38"	38"	0.5"	0"
Invert 3	379.25'	270°	32"	30" HDPE	35.1"	Hole 38	38"	38"	0.5"	0"
Invert 4										
Invert 5										
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): 41"  
 Height (Ext): 49"

Weight (Net): 7316 lb  
 Volume (Net): 1.87cu.yd

**Structure ID: JB #1-6 JBB**

**P2 BX2430-08R24**

**BOX RISER 8inW F/G**

P4) CASTING (cast in) - 0 P3) 24" x 30" - BX FLAT LID 8inW SPEC. (KY JB-B1) F/F - 8" P2) 24" x 30" - BOX RISER 8inW F/G - 24" P1) 24" x 30" - BOX BASE 8inW, 8inF T/n - 48" 1) CASTING - HOE KY-206 F/C (KY TY1) 1) This Structure Includes a Cast-in Item 2) 24" x 30" - Conseal CS-102 1.00" 1) 24" - Conseal CS-102 1.00" 2) Hole - 24	0 lb 931 lb 2256 lb 5139 lb 206 lb 0 lb 0 lb 0 lb 0 lb ----- 0 lb	Structure Total: 8532 lb
---	---	--------------------------

**Structure Notes:**

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.
4. CASTING BY ICAST (HOE KY-206 F/C). CAST-IN.

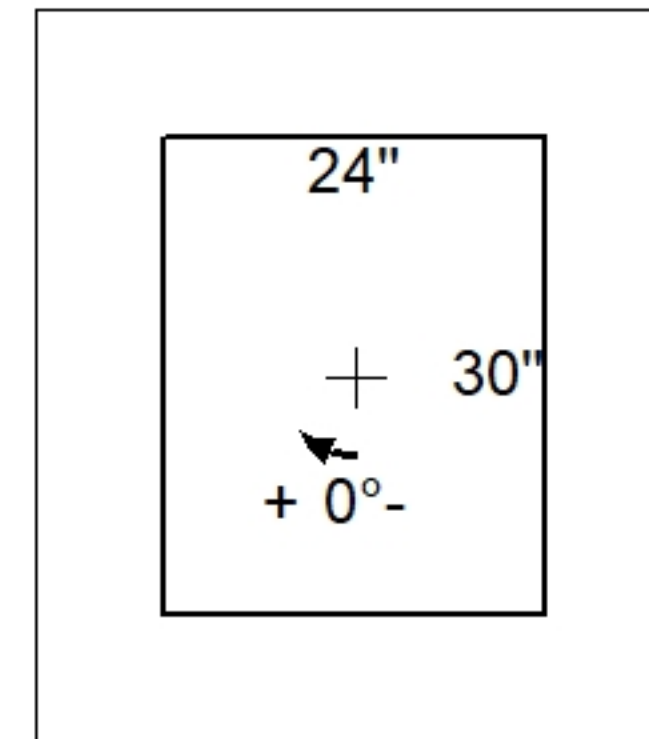
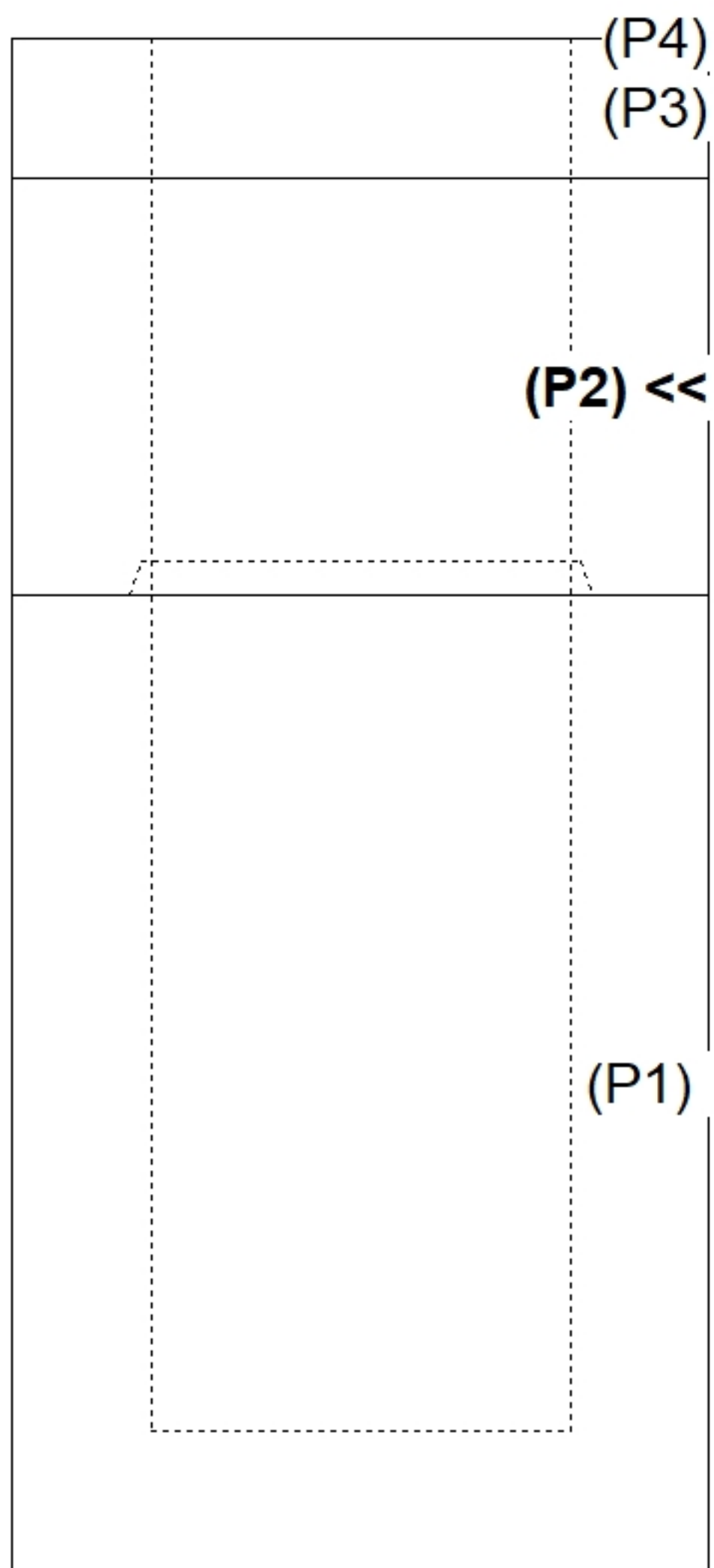
REINFORCING PER ASTM A615 (GRADE 60).

- 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.

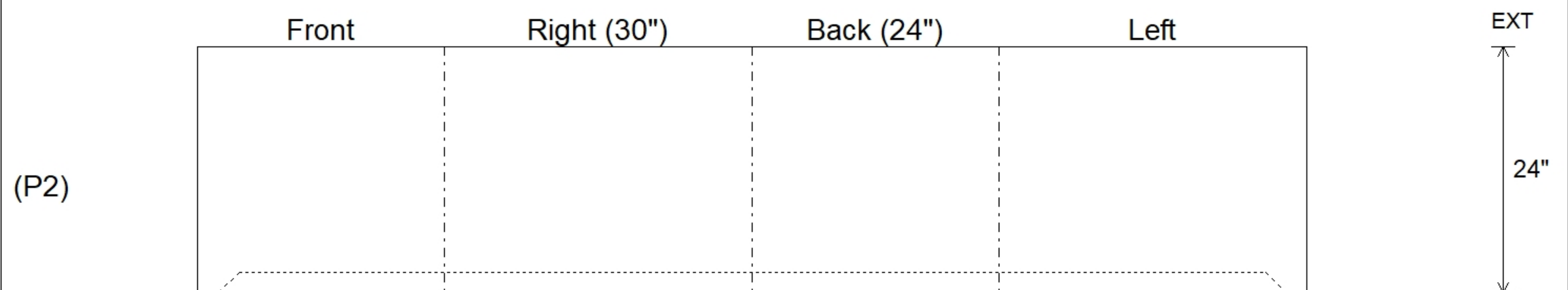
Rim: 779'      Rim to Invert: 7'      Slack: 4"      Sump: 0"      Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (L)	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):	Seam Up: Flat Seam Dn: Groove	Wall Thickness: 8" Floor Height: 0"	Height (Int): 24" Height (Ext): 24"	Weight (Net): 2256 lb Volume (Net): 0.58cu.yd
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Job Name: 26-1368 Freeman Lake Park Parking Lot Project  
 Job Location: Elizabethtown, KY  
 Contractor: Kauffeld Brothers Construction

Plant: Beaver Dam  
 5/28/2026 9:51:10 AM

Tech: S. Felletter  
 PC: T. Ryan



**Structure ID: YI #1-8 INE7**

**P1 BX3030-06W08F-BAVF**

**BOX BASE 6inW, 8inF, Variable Ht F/n**

- P2) 30" x 30" - CASTING HEIGHT - 0"
- P1) 30" x 30" - BOX BASE 6inW, 8inF, Variable Ht F/n - 33"
- 1) HOE R-4215-C INDOT Type 7 Convex Grate
- 1) 30" x 30" - Conseal CS-102 1.00"
- 1) Hole - 20

0 lb  
 3418 lb  
 250 lb  
 0 lb  
 0 lb  
 -----  
 0 lb  
 Structure Total: 3668 lb

- Structure Notes:**
1. INDOT INLET TYPE E / ASTM C913 SPEC'S.
  2. CONCRETE = 4,000 PSI AT 28 DAYS.
  3. NO INVERT CHANNEL.
  4. CASTING BY ICAST (INDOT TYPE 7 R-4215-C).
  5. 34 1/2" X 34 1/2" X 1" DEEP RECESS IN THE TOP OF THE WALLS

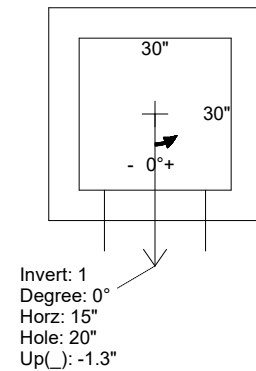
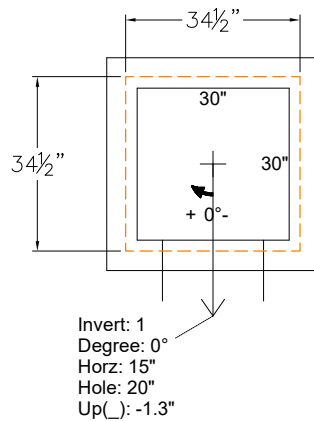
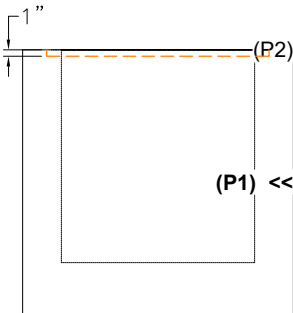
REINFORCING PER ASTM A615 (GRADE 60).  
 - WALLS (As .31) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 757' Rim to Invert: 2.75' Slack: 0" Sump: 0" Step Position:

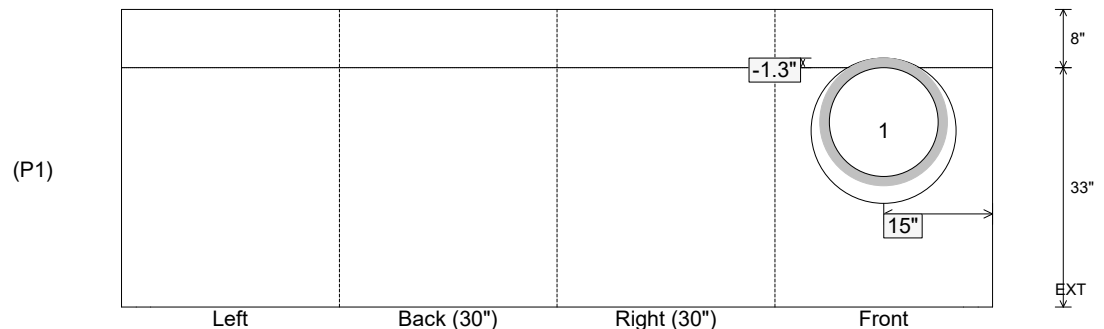
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	754.25'	0°	21"	15" HDPE	17.6"	Hole 20	20"	20"	-1.3"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: n/a

Wall Thickness: 6"  
 Floor Height: 8"

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

Weight (Net): 3418 lb  
 Volume (Net): 0.87cu.yd

**Structure ID: CI #1-2 CBIF**

**P1 BX2424-08BAVF BOX BASE 8inW, 8inF, Variable Ht T/n**

P3) 24" x 24" - CASTING HEIGHT - 5" P2) 24" x 24" - BOX RISER 8inW F/G - 24" P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht T/n - 43" 1) CASTING - HOE KY-465 SET (CBI TY F) 2) 24" x 24" - Conseal CS-102 1.00" 1) Hole - 20 1) Hole - 22	0 lb 2062 lb 4281 lb 465 lb 0 lb 0 lb 0 lb 0 lb ----- Structure Total: 6808 lb
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**Structure Notes:**  
 1. KYTC CBI TYPE F / ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. CASTING BY ICAST (HOE KY-465 SET)

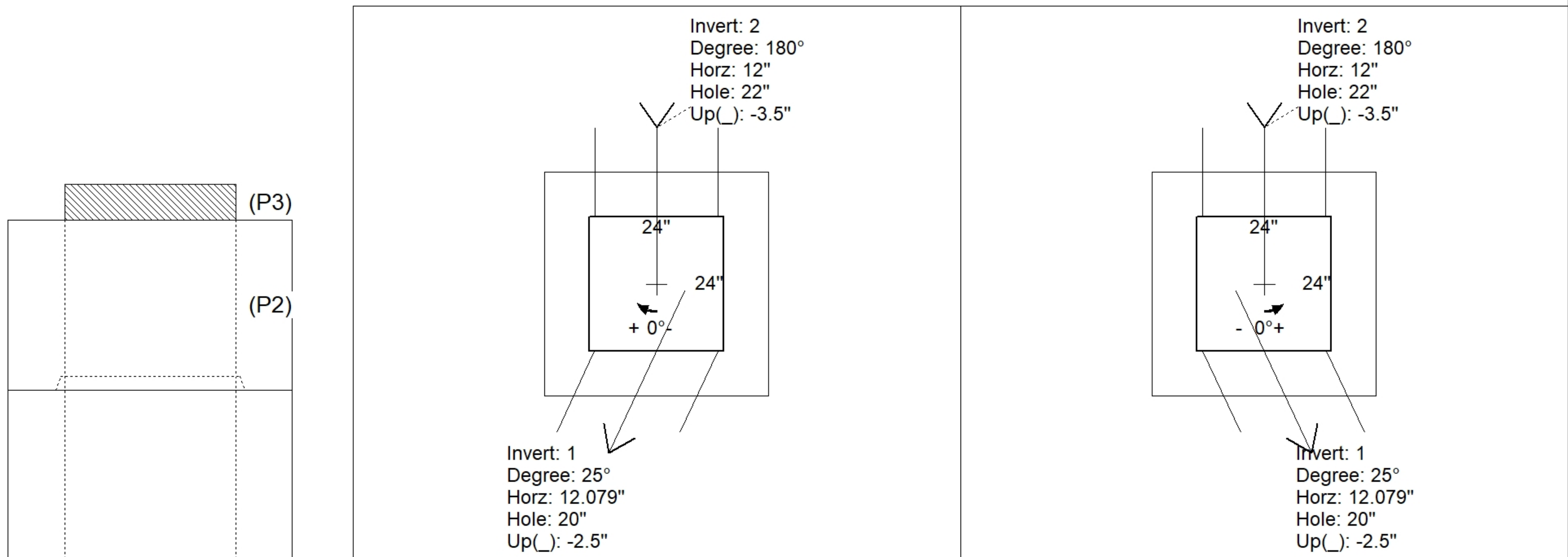
REINFORCING PER ASTM A615 (GRADE 60).  
 - WALLS (As .31) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 761.62'    Rim to Invert: 6'    Slack: 0"    Sump: 0"    Step Position:

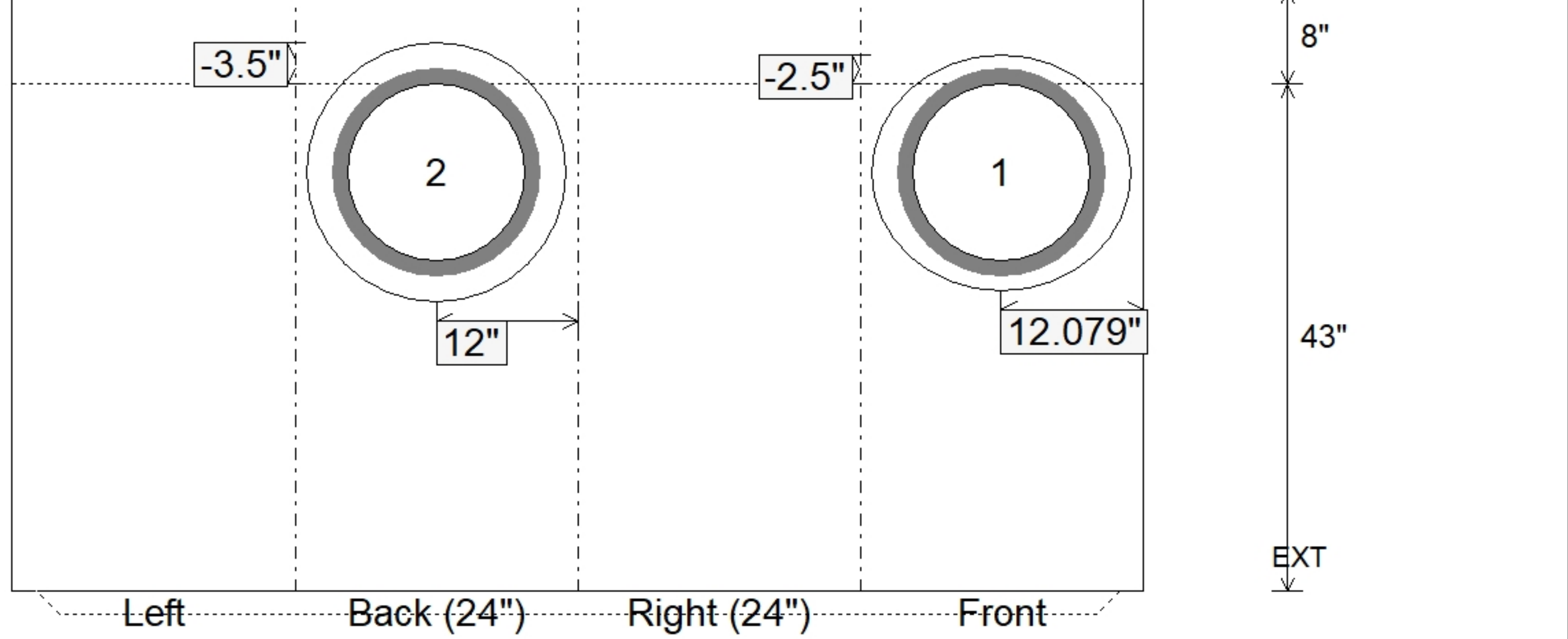
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	755.62'	25°	23.809"	15" HDPE	17.6"	Hole 20	20"	22.068"	-2.5"	-5"
Invert 2	755.62'	180°	20"	15" HDPE	17.6"	Hole 22	22"	22"	-3.5"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 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: 8" Floor Height: 8"	Height (Int): 43" Height (Ext): 51"	Weight (Net): 4281 lb Volume (Net): 1.09cu.yd
----------------------------------	---------------------------------	--	--	--

Job Name: 26-1554 - Wawa Jeffersonville  
 Job Location: Jeffersonville, IN 47130  
 Contractor: Stewart Richey

Plant: 100

5/30/2026 3:41:18 PM

Tech: Jared - A

PC: T. Lewis



**Structure ID: C1-3 ST-CI**

**P1 BX24300808VF**

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

- P2) 24" x 30" - CASTING HEIGHT - 6"
- P1) 24" x 30" - BOX BASE 8inW, 8inF, Variable Ht F/n - 21"
- 1) CASTING - HOE 360 L Vane Set (F/G/H)
- 1) 24" x 30" - Conseal CS-102 1.00"
- 1) Hole - 18
- 1) Hole - 10

0 lb  
 2985 lb  
 362 lb  
 0 lb  
 0 lb  
 0 lb  
 ---0 lb  
 Structure Total: 3347 lb

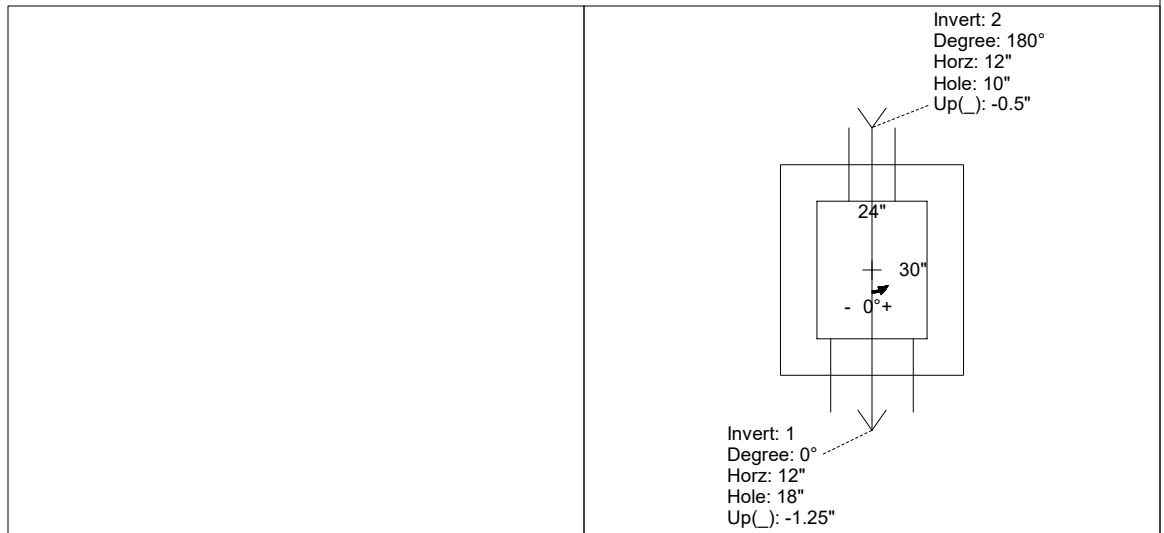
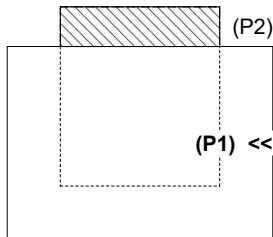
- Structure Notes:
1. PER ASTM C-913 SPECIFICATIONS
  2. CONCRETE: 4,000 PSI AT 28 DAYS
  3. REINFORCEMENT: #5 BAR @ 12" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)
  4. NO STORM INVERT
  5. NO STEPS
  6. HOE 360 FRAME, L-VANE GRATE, & CURB HOOD SUPPLIED BY ICAST

Rim: 523.791'    Rim to Invert: 2.331'    Slack: 0.972"    Sump: 0"    Step Position:

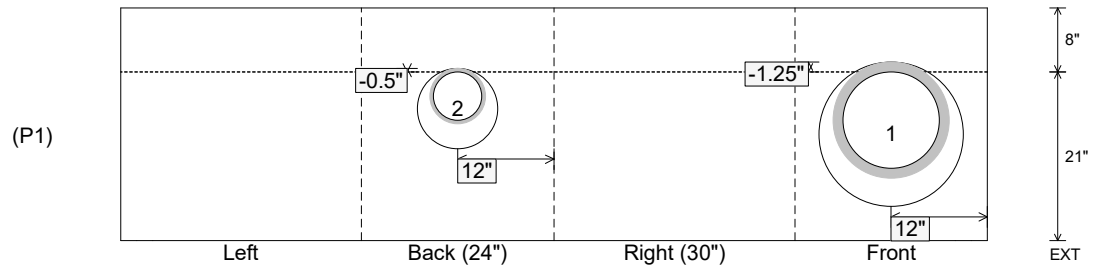
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	521.46'	0°	20"	12" HDPE	14.5"	Hole 18	18"	18"	-1.25"	0"
Invert 2	521.46'	180°	20"	6" HDPE	6.9"	Hole 10	10"	10"	-0.5"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
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): 21"  
 Height (Ext): 29"

Weight (Net): 2985 lb  
 Volume (Net): 0.76cu.yd

Job Name: 23-2404 Hampton Hills (Phase 1)	Plant: 100	Tech: J. Horsley	
Job Location: Richmond, KY	5/19/2026 12:59:16 PM	PC: C. Golf	
Contractor: Seven Earthmovers LLC			

**Structure ID: CBI-B2**

**P1 BX2436-08BVF**

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

P4) 24" x 120" - CB INLET KY A 10' TOP SAG F/G - 10"	3398 lb
P3) 24" x 120" - CB INLET KY A 10' BOTTOM SAG T/G - 18"	5270 lb
P2) 24" x 36" - BOX RISER 8inW T/G - 60"	5867 lb
P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht T/n - 26"	4049 lb
1) CASTING - HOE KY-206 F/C (KY CBI A)	206 lb
1) SNOOT - BMP SNOOT 18F w/ KIT	25 lb
2) 24" x 36" - Conseal CS-102 1.00"	0 lb
1) Hole - 22	0 lb
Structure Total:	18815 lb

**Structure Notes:**

- PER KYTC CBI A / ASTM C913 SPEC'S.
- CONCRETE = 4,000 PSI AT 28 DAYS.
- CASTING (HOE KY-206) TO BE CAST INTO TOP PHASE.
- BMP SNOOT 18F w/KIT.

REINFORCING PER ASTM AS615 (GRADE 60).

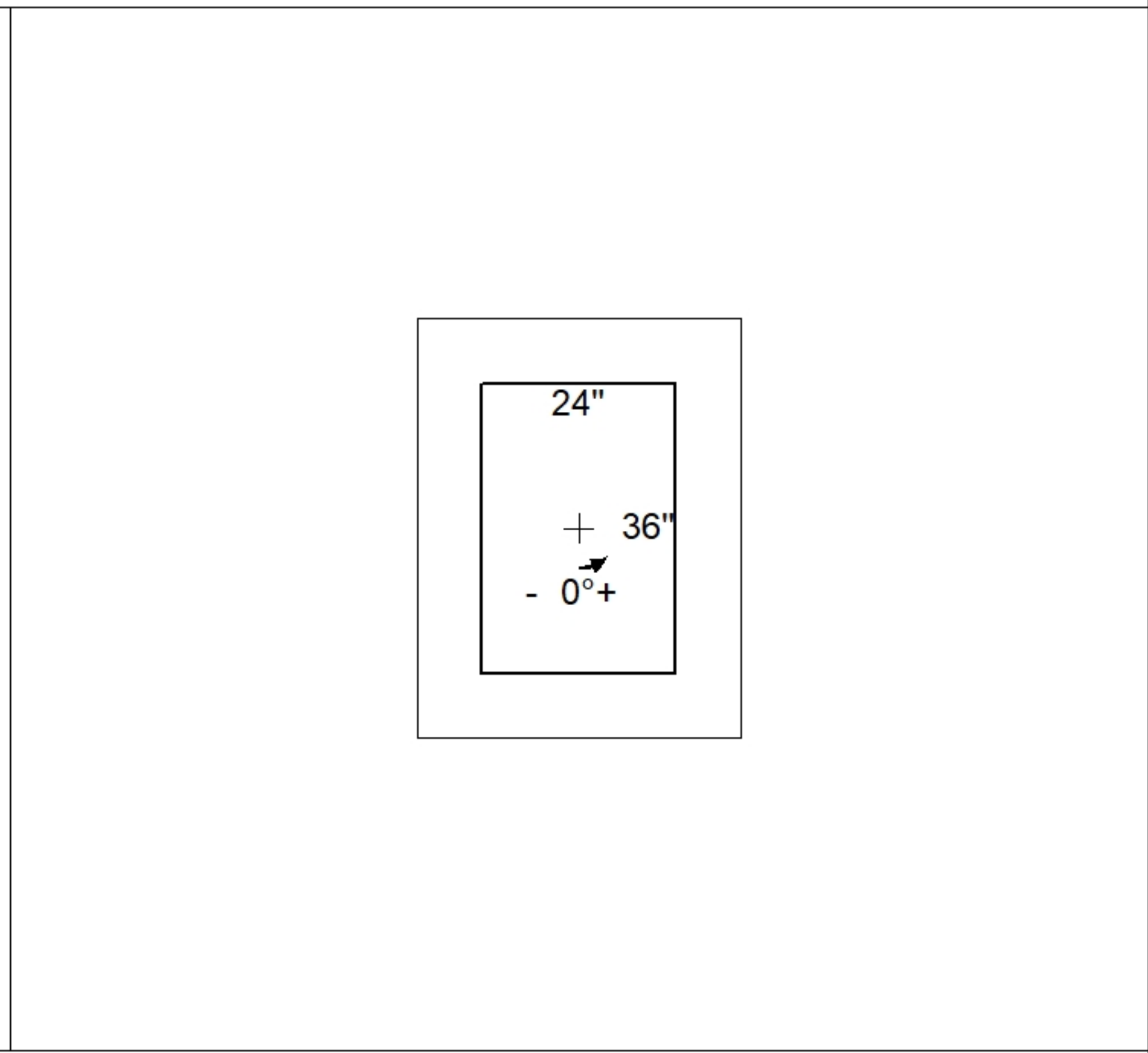
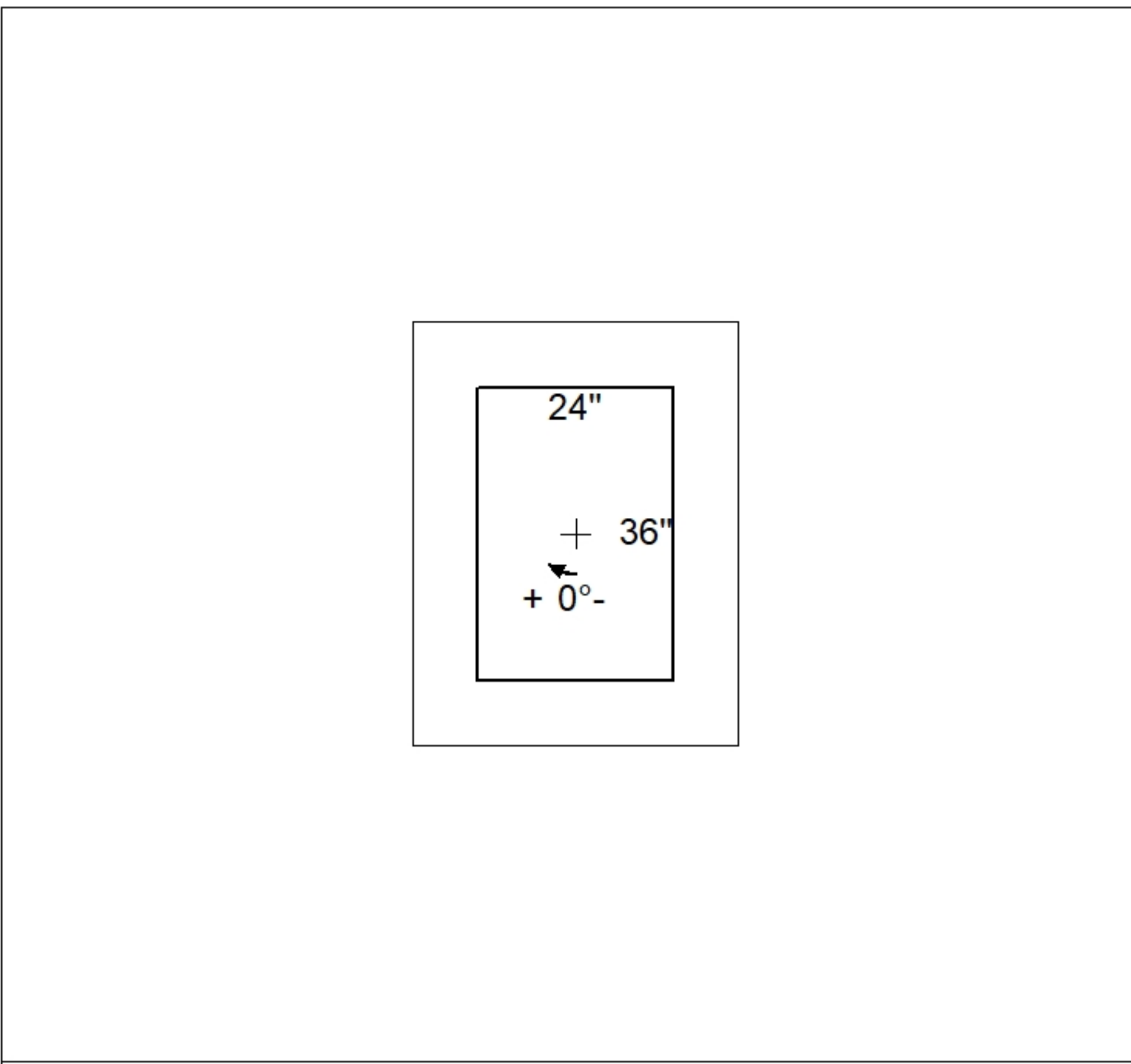
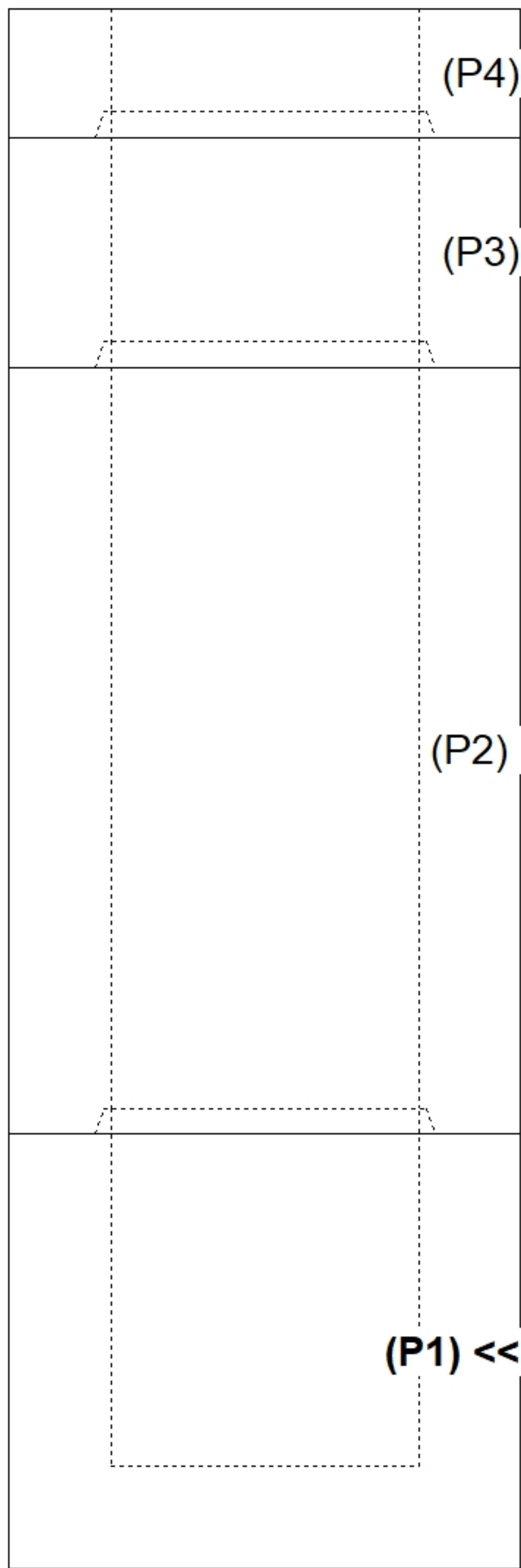
- TOP PHASE (As .62) #5 BARS AT 6" C.C.E.W.
- BASE WALLS (As .31) #5 BARS AT 12" C.C.E.W.
- BASE FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 874.33'      Rim to Invert: 6'      Slack: 0"      Sump: 42"      Step Position:

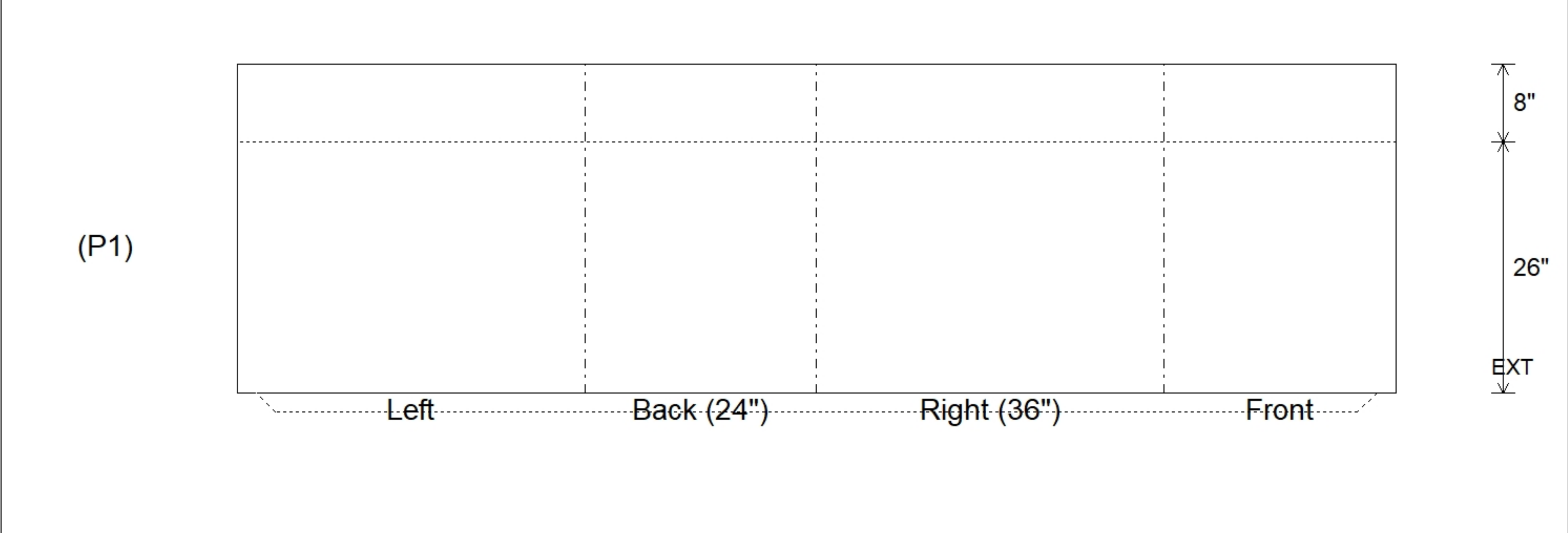
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up (L)	Offset
Invert 1										
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):	Seam Up: Tongue	Wall Thickness: 8"	Height (Int): 26"	Weight (Net): 4049 lb
Coating (Ext):	Seam Dn: n/a	Floor Height: 8"	Height (Ext): 34"	Volume (Net): 1.03cu.yd

Job Name: 23-2404 Hampton Hills (Phase 1)	Plant: 100	Tech: J. Horsley	
Job Location: Richmond, KY	5/19/2026 12:59:15 PM	PC: C. Golf	
Contractor: Seven Earthmovers LLC			

**Structure ID: CBI-A2**

**P1 BX2436-08BVF**

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

P4) 24" x 120" - CB INLET KY A 10' TOP SAG F/G - 10"	3398 lb
P3) 24" x 120" - CB INLET KY A 10' BOTTOM SAG T/G - 18"	5270 lb
P2) 24" x 36" - BOX RISER 8inW T/G - 36"	3418 lb
P1) 24" x 36" - BOX BASE 8inW, 8inF, Variable Ht T/n - 29"	4355 lb
1) CASTING - HOE KY-206 F/C (KY CBI A)	206 lb
1) SNOOT - BMP SNOOT 18F w/ KIT	25 lb
2) 24" x 36" - Conseal CS-102 1.00"	0 lb
1) Hole - 22	0 lb
Structure Total:	16672 lb

**Structure Notes:**

- PER KYTC CBI A / ASTM C913 SPEC'S.
- CONCRETE = 4,000 PSI AT 28 DAYS.
- CASTING (HOE KY-206) TO BE CAST INTO TOP PHASE.
- BMP SNOOT 18F w/KIT.

REINFORCING PER ASTM AS615 (GRADE 60).

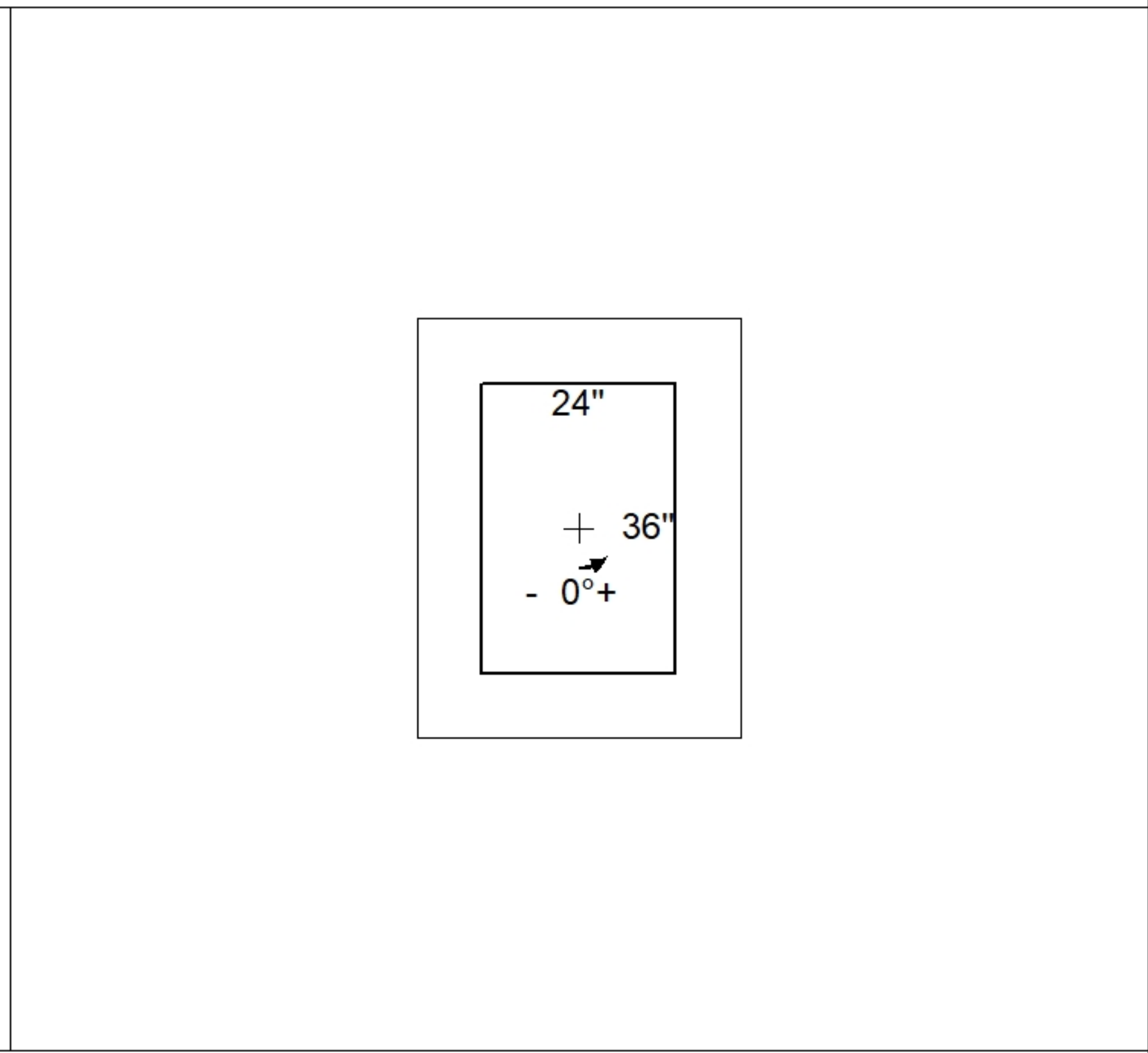
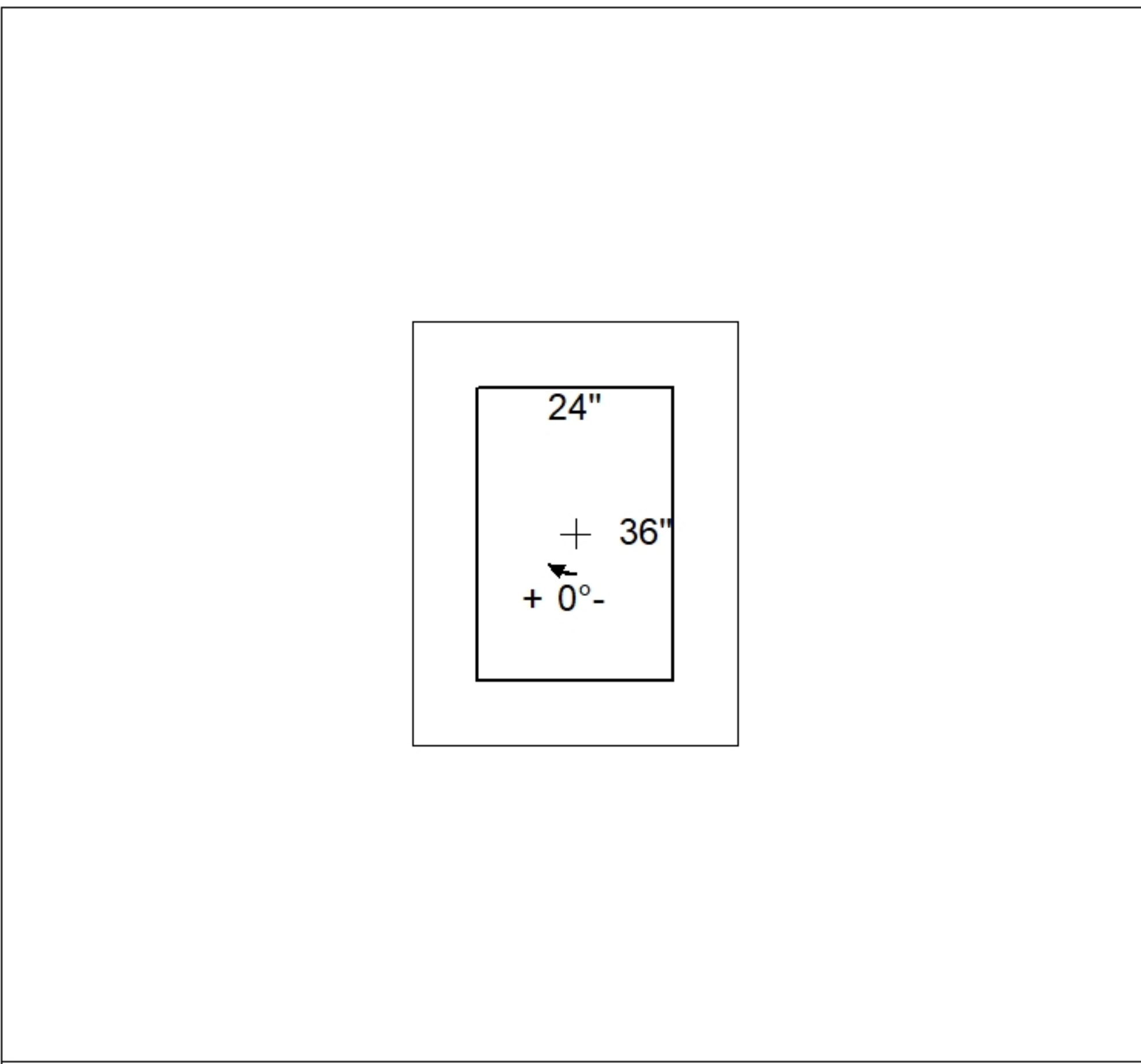
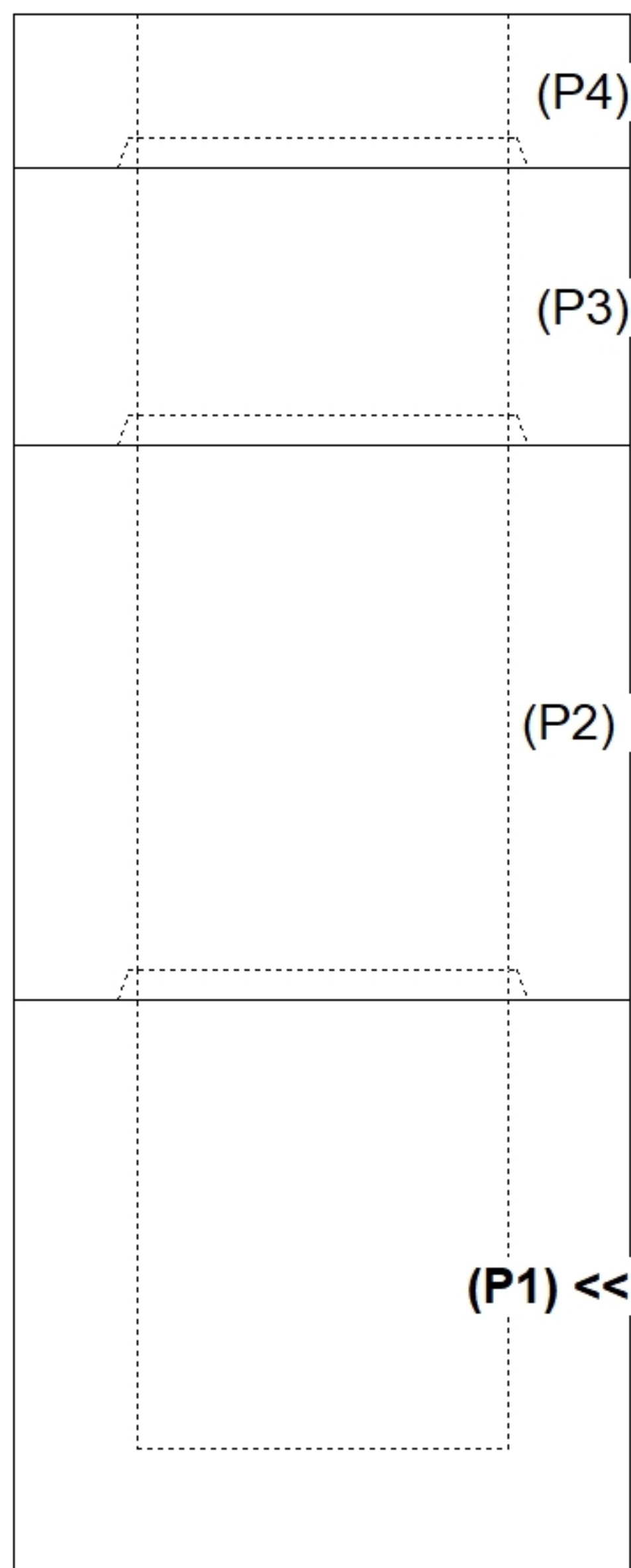
- TOP PHASE (As .62) #5 BARS AT 6" C.C.E.W.
- BASE WALLS (As .31) #5 BARS AT 12" C.C.E.W.
- BASE FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 877.77'    Rim to Invert: 4.25'    Slack: 0"    Sump: 42"    Step Position:

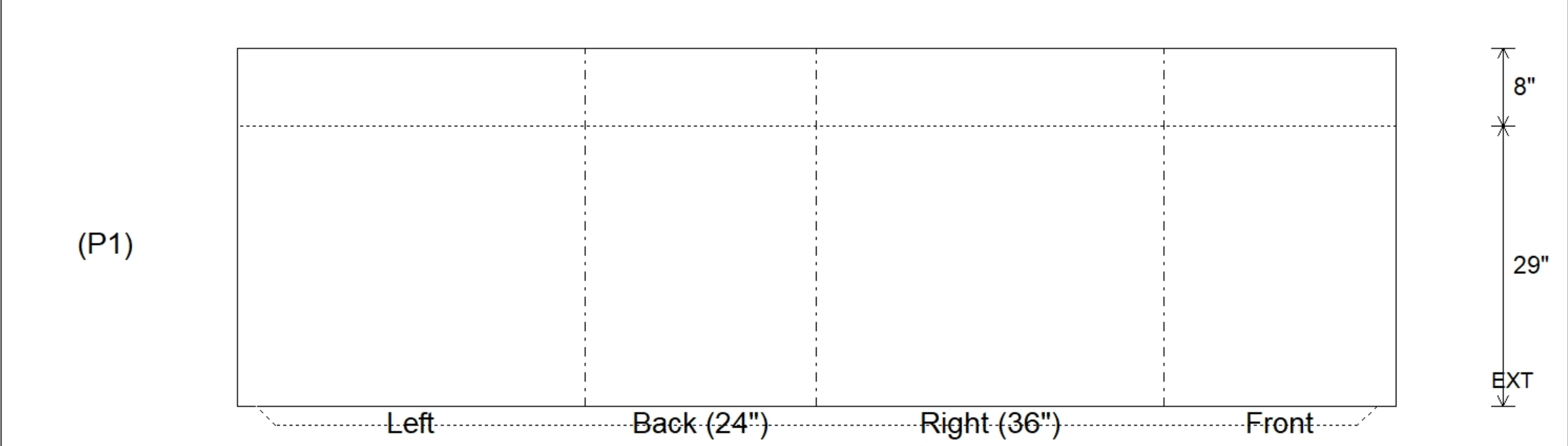
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1										
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



INSIDE WALL DIMENSIONS



Coating (Int):	Seam Up: Tongue	Wall Thickness: 8"	Height (Int): 29"	Weight (Net): 4355 lb
Coating (Ext):	Seam Dn: n/a	Floor Height: 8"	Height (Ext): 37"	Volume (Net): 1.11cu.yd

Job Name: 23-2792 - Teal Dr. Development  
 Job Location: Gallatin, TN  
 Contractor: Stewart Richey

Plant: 100

Tech: J. Horsley - F

3/25/2026 1:41:42 PM

PC: C. Goff



**Structure ID: STM-E4**

**P1 BX28280606VH**

**BOX BASE 6inW, 6inF, Variable Ht F/n**

- P2) 28" x 28" - CASTING HEIGHT - 6"
- P1) 28" x 28" - BOX BASE 6inW, 6inF, Variable Ht F/n - 45"
- 1) CASTING - JBS 3101 Single Set (F/G/H)
- 1) 28" x 28" - Conseal CS-102 1.00"
- 2) Hole - 22

0 lb  
 3504 lb  
 619 lb  
 0 lb  
 0 lb  
 -----  
 0 lb  
 Structure Total: 4123 lb

**Structure Notes:**  
 1. PER ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. CASTING BY ICAST (JBS 3101 SINGLE SET (F/G/H)).

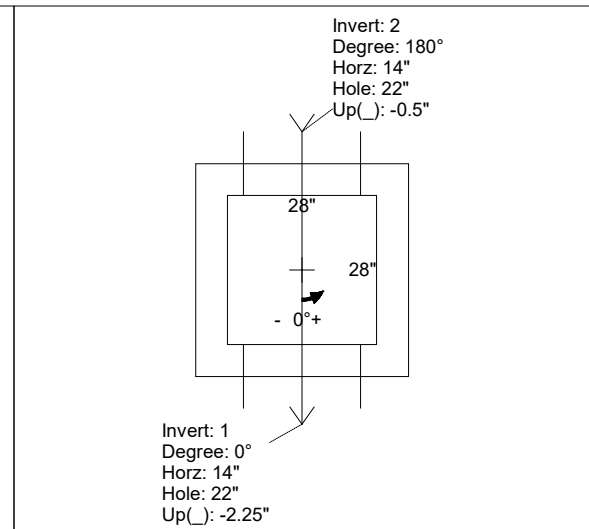
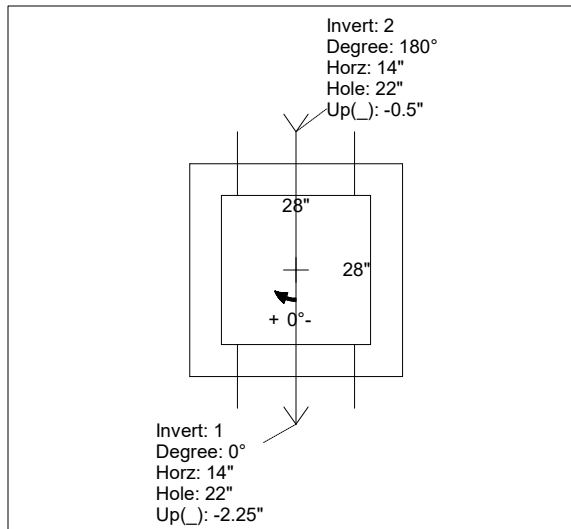
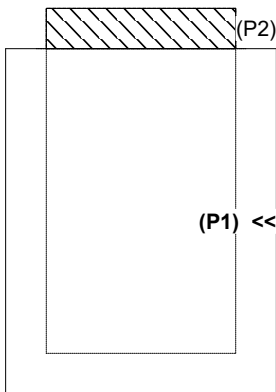
REINFORCING PER ASTM A615 (GRADE 60).  
 - WALLS (As .31) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .31) #5 BARS AT 12" C.C.E.W.

Rim: 472.43' Rim to Invert: 4.29' Slack: 0.48" Sump: 0" Step Position:

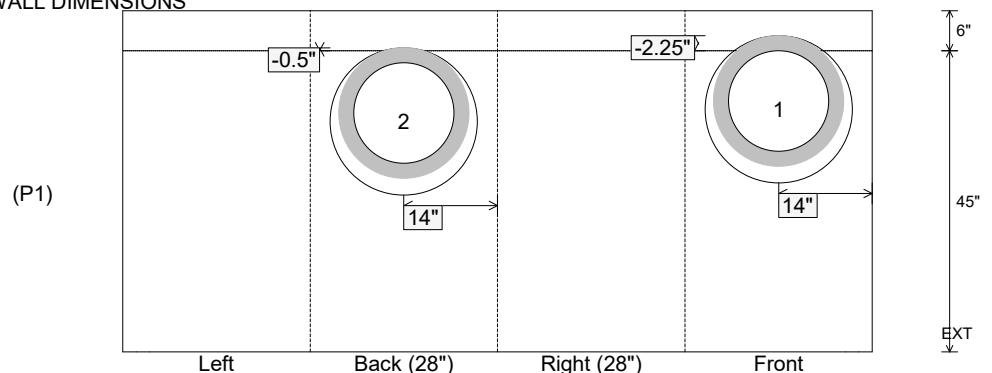
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	468.14'	0°	20"	15" RCP B WALL	19.5"	Hole 22	22"	22"	-2.25"	0"
Invert 2	468.29'	180°	20"	15" RCP B WALL	19.5"	Hole 22	22"	22"	-0.5"	0"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
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: 6"  
 Floor Height: 6"

Height (Int): 45"  
 Height (Ext): 51"

Weight (Net): 3504 lb  
 Volume (Net): 0.9cu.yd

Job Name: 23-2792 - Teal Dr. Development  
 Job Location: Gallatin, TN  
 Contractor: Stewart Richey

Plant: 100  
 3/26/2026 11:42:46 AM

Tech: J. Horsley - F  
 PC: C. Goff



**Structure ID: STM-B1**

**P1 BX3030-06VH**

**BOX BASE 6inW, 6inF, Variable Ht F/n**

- P2) 30" x 30" - CASTING HEIGHT - 6"
- P1) 30" x 30" - BOX BASE 6inW, 6inF, Variable Ht F/n - 39"
- 1) CASTING - JBS 3101 Single Set (F/G/H)
- 1) 30" x 30" - Conseal CS-102 1.00"
- 2) Hole - 26"

0 lb  
 3164 lb  
 619 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 3783 lb

**Structure Notes:**  
 1. PER ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. CASTING BY ICAST (JBS 3101 SINGLE SET (F/G/H)).

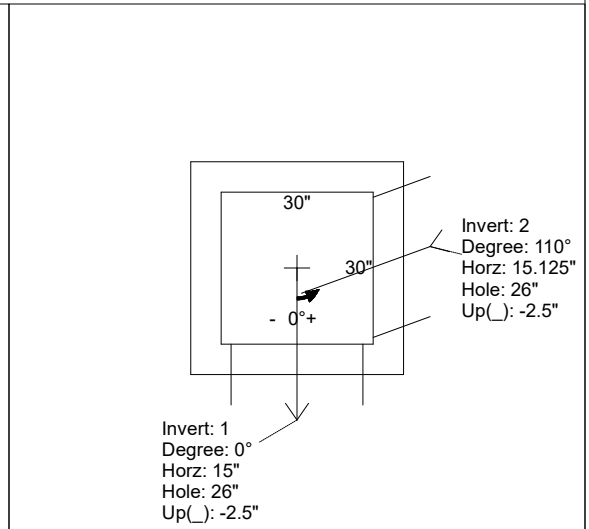
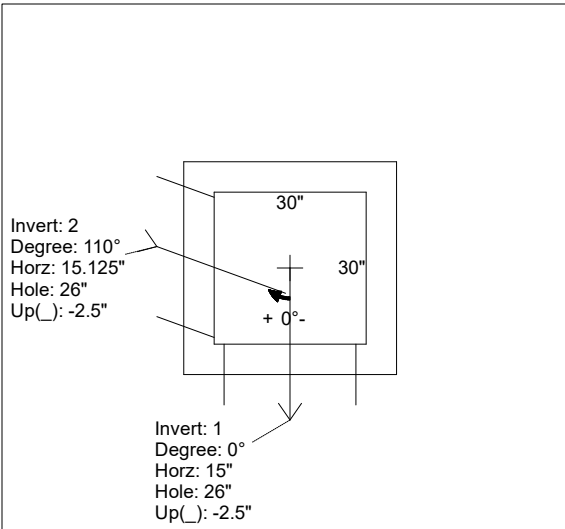
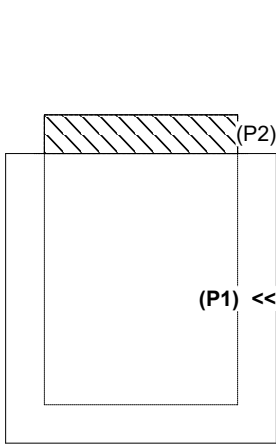
REINFORCING PER ASTM A615 (GRADE 60).  
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

Rim: 469.2' Rim to Invert: 3.82' Slack: 0.84' Sump: 0' Step Position:

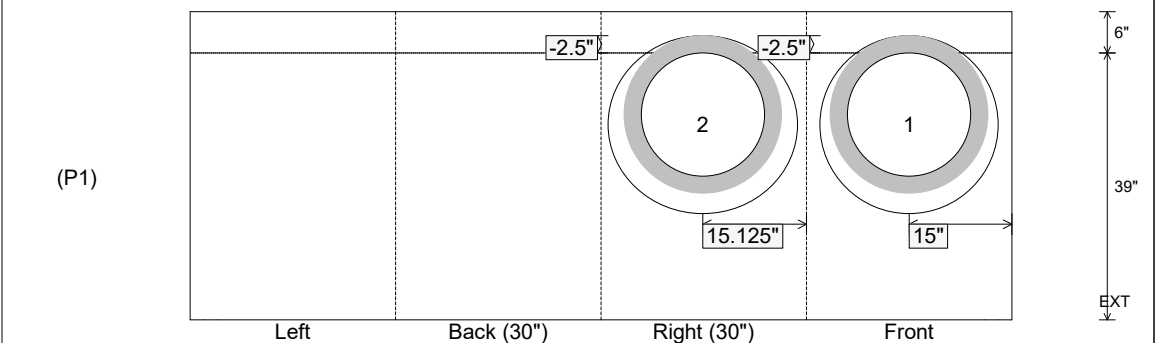
Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	465.38'	0°	21"	18" RCP B WALL	23"	Hole 26	26"	26"	-2.5"	0"
Invert 2	465.38'	110°	23.375"	18" RCP B WALL	23"	Hole 26	26"	27.669"	-2.5"	-5"
Invert 3										
Invert 4										
Invert 5										
Invert 6										
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: 6"  
 Floor Height: 6"

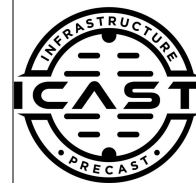
Height (Int): 39"  
 Height (Ext): 45"

Weight (Net): 3164 lb  
 Volume (Net): 0.81cu.yd

Job Name: 25-4299 - Seneca High School  
 Job Location: Louisville, KY  
 Contractor: Dan Cristiani Excavating Co. Inc.

Plant: 100  
 2/16/2026 8:56:38 AM

Tech: J. Horsley  
 PC: J. Jarvis



**Structure ID: D5**

**P1 BX2424-08BAVF**

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

P2) 24" x 24" - CASTING HEIGHT - 4"  
 P1) 24" x 24" - BOX BASE 8inW, 8inF, Variable Ht F/n - 20"  
 1) 24" x 24" - Conseal CS-102 1.00"  
 1) Hole - 12

0 lb  
 2717 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 2717 lb

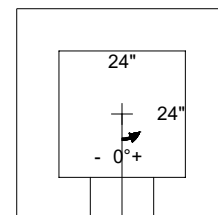
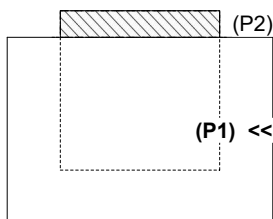
- Structure Notes:**
1. PER LOUISVILLE MSD / ASTM C-913 SPECIFICATIONS
  2. CONCRETE: 4,000 PSI AT 28 DAYS
  3. REINFORCEMENT: #5 BAR @ 12" C.C. E.W. (GRADE 60) - 2" MIN. REBAR CLEARANCE (TYP)
  4. NO STORM INVERT
  5. NO STEPS
  6. HOE 280T FRAME & GRATE SUPPLIED BY OTHERS

Rim: 486.5' Rim to Invert: 2' Slack: 0" Sump: 0" Step Position:

Position	Elev	Angle	Ext. (cw)	Pipe	Pipe OD	Connector	Hole	Horz Size	Up ( )	Offset
Invert 1	484.5'	0°	20"	8" HDPE	9.1"	Hole 12	12"	12"	-0.55"	0"
Invert 2										
Invert 3										
Invert 4										
Invert 5										
Invert 6										
Invert 7										
Invert 8										

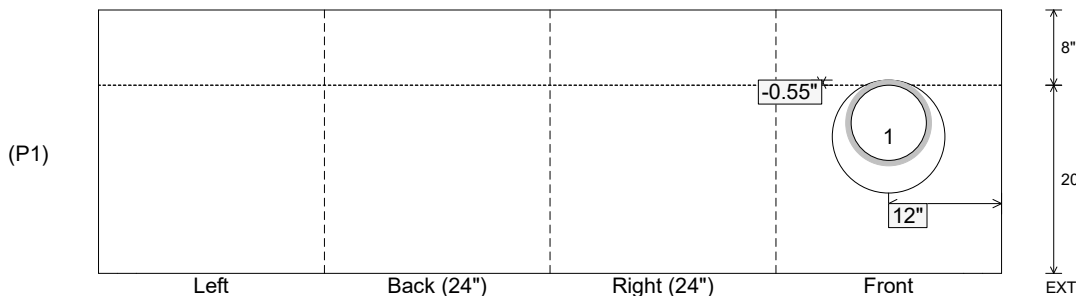
RIGHT-SIDE UP VIEW (int. dimensions)

UPSIDE-DOWN VIEW (int. dimensions)



Invert: 1  
 Degree: 0°  
 Horz: 12"  
 Hole: 12"  
 Up( ): -0.55"

INSIDE WALL DIMENSIONS



Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: n/a

Wall Thickness: 8"  
 Floor Height: 8"

Height (Int): 20"  
 Height (Ext): 28"

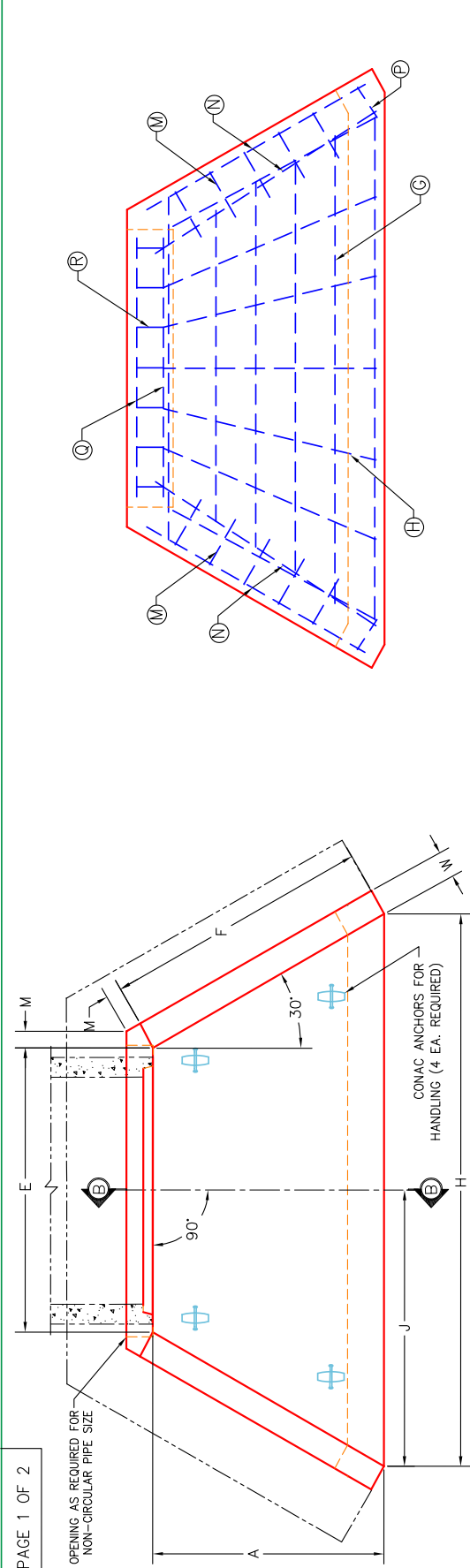
Weight (Net): 2717 lb  
 Volume (Net): 0.69cu.yd



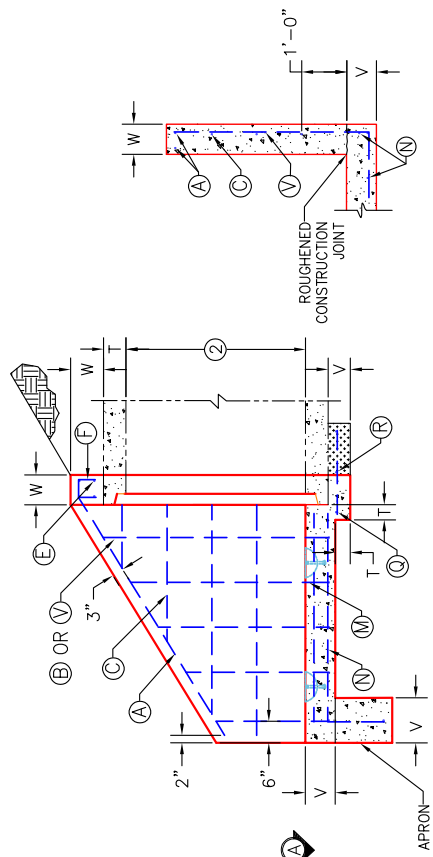
**Structure ID: 2 HW**

**P1 HWPC4468**

**68" x 44" - PIPE CULVERT HEADWALL (ELL.RCP) F/F**



**SECTION A-A**



**SECTION B-B**

**WING SECTION**  
 30" TO 72" NON-CIRCULAR,  
 EQUIVALENT PIPE

<b>INFRASTRUCTURE PRECAST, INC.</b>	
981 WEST 7TH ST., BEAVER DAM, KY. 42320	
PHONE: (270) 363-2236, FAX: (270) 298-7424	
KYTC 30" - 72" EQ. PRECAST PIPE	
CULVERT HEADWALLS - 0° SKEW	
(FOR NON-CIRCULAR, EQUIVALENT PIPE)	
DRAWING NO.: ET-KYTC-110	DATE: 06-05-25
REVIEWED BY: J.H. ROSS, PE	DRAWN BY: N. RICHARDS
WEB: WWW.ICASTINC.COM	SCALE: NTS

**NOTES:**

- SPAN OF NON-CIRCULAR PIPE.
- RISE OF NON-CIRCULAR PIPE.
- APPLIES TO 66" Ø EQ. AND GREATER.
- FOR DIMENSIONS, QUANTITIES AND BILL OF REINFORCEMENT, SEE CURRENT STANDARD DRAWINGS: RDH-200 AND RDH-300 SERIES
- DIMENSIONS FROM FACE OF CONCRETE TO STEEL SHALL BE 2" CLEAR DISTANCE.
- ENCIRCLED LETTERS, ○, INDICATE STEEL BAR LOCATIONS.
- BARS ○, ○, ○, ○, ○ ARE PLACED IN ORDER OF INCREASING LENGTHS, BEGINNING AT END OF EACH WING.
- BARS ○, ○, ○, ○ ARE PLACED IN ORDER OF INCREASING LENGTHS, BEGINNING AT THE TOP OF EACH WING.
- HEADWALLS LOCATED AT SHOULDER EDGE SHALL BE PARALLEL TO THE CENTERLINE OF ROADWAY.
- APRON BETWEEN WINGS SHALL BE SLOPED IN DIRECTION OF FLOW EQUAL TO SLOPE OF PIPE. FRONT FACE OF HEADWALL AND ENDS OF WINGS SHALL REMAIN VERTICAL.

THIS DRAWING IS THE PROPERTY OF INFRASTRUCTURE PRECAST, INC. ANY USE OR DUPLICATION OF THIS DRAWING WITHOUT PRIOR AUTHORIZATION IS STRICTLY PROHIBITED.

OPENING AS REQUIRED FOR NON-CIRCULAR PIPE SIZE

CONAC ANCHORS FOR HANDLING (4 EA. REQUIRED)

**PLAN VIEW**


**FRONT ELEVATION**



**Structure ID: 2 HW**

**P1 HWPC4468**

**68" x 44" - PIPE CULVERT HEADWALL (ELL.RCP) F/F**



**INFRASTRUCTURE PRECAST, INC.**  
 981 WEST 7TH ST., BEAVER DAM, KY. 42320  
 PHONE: (270) 363-2238, FAX: (270) 298-7424

KYTC 30" - 72" PRECAST PIPE CULVERT  
 HEADWALLS - 0' SKEW  
 (FOR NON-CIRCULAR, EQUIVALENT PIPE)

DRAWING NO.: ET-KYTC-110      DATE: 06-05-25  
 REVIEWED BY: J.H. ROSS, PE      DRAWN BY: N. RICHARDS  
 WEB: WWW.ICASTINC.COM      SCALE: NTS

DIMENSIONS	NON-CIRCULAR PIPE; EQUIVALENT ROUND SIZES										DIMENSIONS
	30" (24"x38")	36" (29"x45")	42" (34"x53")	48" (38"x60")	54" (43"x68")	60" (48"x76")	66" (53"x83")	72" (58"x91")			
A	3'-4"	3'-10"	4'-4"	4'-9"	5'-3"	5'-9"	6'-3"	6'-9"	6'-9"	6'-9"	A
B	1'-0"	1'-3"	1'-5"	1'-7"	1'-10"	2'-0"	2'-3"	2'-5"	2'-5"	2'-5"	B
C	3'-0"	3'-6"	3'-11"	4'-4"	4'-9"	5'-3"	5'-8"	6'-2"	6'-2"	6'-2"	C
E	3'-10"	4'-6"	5'-3"	5'-11"	6'-8"	7'-5"	8'-1"	8'-10"	8'-10"	8'-10"	E
F	3'-10"	4'-5"	5'-0"	5'-6"	6'-1"	6'-8"	7'-3"	7'-10"	7'-10"	7'-10"	F
G	3'-10"	4'-5"	5'-0"	5'-6"	6'-1"	6'-8"	7'-3"	7'-10"	7'-10"	7'-10"	G
H	7'-8"	9'-0"	10'-4"	11'-4"	12'-8"	14'-0"	15'-4"	16'-8"	16'-8"	16'-8"	H
J	3'-10"	4'-6"	5'-2"	5'-8"	6'-4"	7'-0"	7'-8"	8'-4"	8'-4"	8'-4"	J
M	0'-5"										M
N	0'-5"										N
T	0'-3.75"	0'-4.5"	0'-5"	0'-5.5"	0'-6"	0'-6.5"	0'-7"	0'-7.5"	0'-7.5"	0'-7.5"	T
V	0'-8"										V
W	0'-8"										W
Y	2'-0"										Y
CONCRETE (LBS.)	6,030	7,712	9,514	11,275	13,507	15,975	18,557	21,454	21,454	21,454	CONCRETE (LBS.)
REINFORCING STEEL (LBS.)	137	157	197	220	261	305	341	401	401	401	REINFORCING STEEL (LBS.)

DIMENSIONS AND QUANTITIES ARE BASED ON ONE HEADWALL & OPENING FOR ELLIPTICAL CONCRETE PIPE.



**Structure ID: QL3 HW (5)**

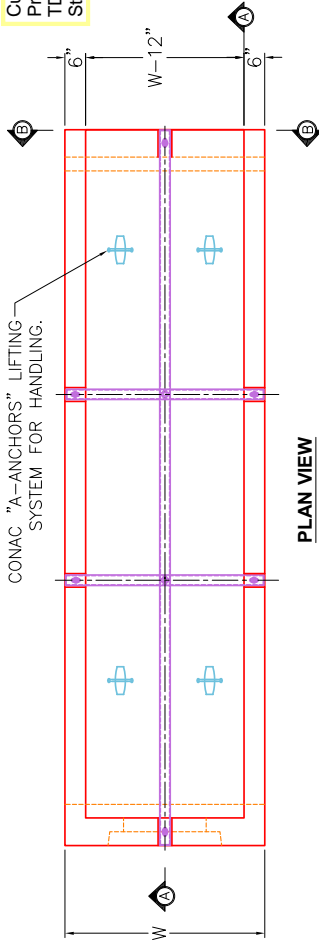
**P1 HWT DOT3-1TU36**

**36" - HW TDOT 3:1 Type U Cross Drain Endwall F/F**

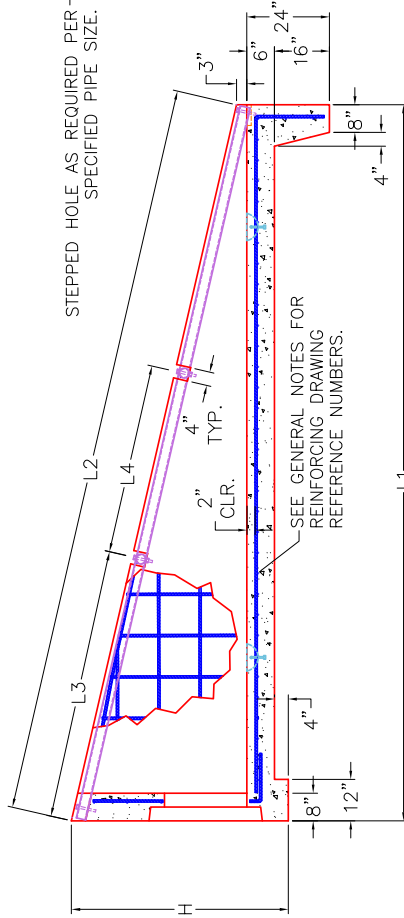
**GENERAL NOTES**

1. DRAWING TO BE USED FOR ALL 12" THROUGH 48" SIDE DRAIN CONCRETE ENDWALLS. MANUFACTURING FOR CROSS DRAINS ONLY.
2. CONCRETE:  $F_c' = 4,500$  PSI @ 28 DAYS.
3. REINFORCING STEEL: ASTM A615,  $F_y = 60,000$  PSI. SEE STD. DWGS D-PE-15A, D-PE-18, D-PE-24A, D-PE-30A, D-PE-36A, D-PE-42A & D-PE-48A FOR BILL OF STEEL.
4. SPLICING OF REINFORCEMENT IS ACCEPTABLE PROVIDED THAT A MINIMUM 21" SPLICE LENGTH IS USED.
5. APPROPRIATE SIZING AND LOCATIONS OF THE LIFTING INSERTS WILL BE THE RESPONSIBILITY OF INFRASTRUCTURE PRECAST, INC.
6. LIFTING INSERT POCKETS SHALL BE GROUTED ON SITE BY THE CONTRACTOR AFTER THE ENDWALL IS SET AS PER TDOT REQUIREMENTS.
7. DIMENSIONAL AND REINFORCING TOLERANCES WILL BE AS SHOWN IN STANDARD OPERATING PROCEDURE (SOP) 5-3.
8. PIPE OPENINGS FOR HEADWALLS ARE BASED ON REINFORCED CONCRETE PIPE WITH TYPE "B" WALL AS PER AMERICAN CONCRETE PIPE ASSOCIATION (ACPA). OUTSIDE DIAMETER + 3" - 4". TOE WALL BACK SLOPE MAY BE CONSTRUCTED VARIABLE FROM VERTICAL UP TO 15'.

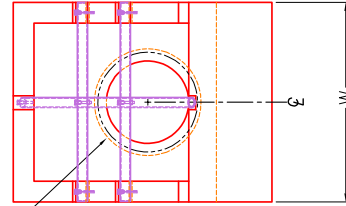
Customer: Rinker Underground  
 Project: TDOT EW's  
 TDOT PIN#: 207036.00  
 State Project#: 79LPLM-F3-034



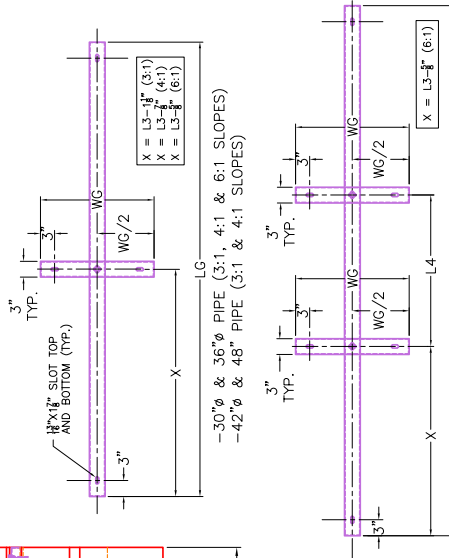
**PLAN VIEW**



**SECTION A-A**



**ELEVATION B-B**



**STEEL PIPE GRATE PLAN VIEWS**

(SEE D-PE-99 FOR MOUNTING STEEL GRATES)

\*Pipe grates supplied by others

PIPE DIA. (D)	CONCRETE ENDWALL DIMENSIONS				GRATE DISPLACEMENT DIMENSIONS				STRUCT. STEEL		WEIGHT	
	H	W	L1	L2	L3	L4	LBS.	LBS.	LBS.	LBS.		
15"	2'-11"	2'-8"	8'-0"	8'-3"	N/A	N/A	N/A	N/A	N/A	3,484		
18"	3'-2"	2'-11"	8'-8"	8'-11"	N/A	N/A	N/A	N/A	N/A	4,228		
24"	3'-9"	3'-6"	11'-0"	11'-4"	N/A	N/A	N/A	N/A	N/A	6,303		
30"	4'-5"	4'-1"	13'-8"	14'-1"	6'-1"	N/A	137	9,083				
36"	5'-0"	4'-8"	16'-0"	16'-3"	8'-2"	N/A	160	12,058				
42"	5'-6"	5'-3"	18'-0"	18'-6"	9'-2"	N/A	180	15,073				
48"	6'-1"	5'-10"	20'-4"	20'-11"	10'-3"	N/A	203	18,910				

PIPE DIA. (D)	CONCRETE ENDWALL DIMENSIONS				GRATE DISPLACEMENT DIMENSIONS				STRUCT. STEEL		WEIGHT	
	H	W	L1	L2	L3	L4	LBS.	LBS.	LBS.	LBS.		
15"	2'-11"	2'-8"	6'-0"	6'-3"	N/A	N/A	N/A	N/A	N/A	2,819		
18"	3'-2"	2'-11"	6'-8"	7'-0"	N/A	N/A	N/A	N/A	N/A	3,406		
24"	3'-9"	3'-6"	8'-5"	8'-10"	N/A	N/A	N/A	N/A	N/A	5,011		
30"	4'-5"	4'-1"	10'-5"	10'-11"	5'-2"	N/A	114	7,204				
36"	5'-0"	4'-8"	12'-2"	12'-9"	6'-4"	N/A	132	9,513				
42"	5'-6"	5'-3"	13'-8"	14'-4"	7'-4"	N/A	148	11,862				
48"	6'-1"	5'-10"	15'-5"	16'-3"	7'-4"	N/A	167	14,838				

PIPE DIA. (D)	CONCRETE ENDWALL DIMENSIONS				GRATE DISPLACEMENT DIMENSIONS				STRUCT. STEEL		WEIGHT	
	H	W	L1	L2	L3	L4	LBS.	LBS.	LBS.	LBS.		
15"	2'-11"	2'-8"	11'-2"	11'-3"	N/A	N/A	N/A	N/A	N/A	4,737		
18"	3'-2"	2'-11"	12'-8"	12'-10"	N/A	N/A	N/A	N/A	N/A	5,833		
24"	3'-9"	3'-6"	16'-2"	16'-4"	N/A	N/A	N/A	N/A	N/A	8,848		
30"	4'-5"	4'-1"	20'-2"	20'-3"	10'-1"	N/A	166	12,880				
36"	5'-0"	4'-8"	23'-8"	23'-11"	12'-0"	N/A	217	17,186				
42"	5'-6"	5'-3"	26'-8"	27'-0"	9'-1"	N/A	284	21,532				
48"	6'-1"	5'-10"	30'-2"	30'-7"	10'-0"	N/A	320	27,092				

PIPE DIA. (D)	CONCRETE ENDWALL DIMENSIONS				GRATE DISPLACEMENT DIMENSIONS				STRUCT. STEEL		WEIGHT	
	H	W	L1	L2	L3	L4	LBS.	LBS.	LBS.	LBS.		
15"	2'-11"	2'-8"	8'-0"	8'-3"	N/A	N/A	N/A	N/A	N/A	3,484		
18"	3'-2"	2'-11"	8'-8"	8'-11"	N/A	N/A	N/A	N/A	N/A	4,228		
24"	3'-9"	3'-6"	11'-0"	11'-4"	N/A	N/A	N/A	N/A	N/A	6,303		
30"	4'-5"	4'-1"	13'-8"	14'-1"	6'-1"	N/A	137	9,083				
36"	5'-0"	4'-8"	16'-0"	16'-3"	8'-2"	N/A	160	12,058				
42"	5'-6"	5'-3"	18'-0"	18'-6"	9'-2"	N/A	180	15,073				
48"	6'-1"	5'-10"	20'-4"	20'-11"	10'-3"	N/A	203	18,910				

**INFRASTRUCTURE PRECAST, INC.**  
 981 WEST 7TH ST., BEAVER DAM, KY. 42320  
 PHONE: (270) 363-2238, FAX: (270) 298-7424

TDOT TYPE "U" CROSS DRAIN ENDWALL WITH STEEL PIPE GRATE FOR 15" THROUGH 48" PIPES

DRAWING NO.: ET-TDOT-202  
 DATE: 11-24-25  
 DRAWN BY: N. RICHARDS  
 SCALE: NTS

WEB: WWW.ICASTING.COM



**Structure ID: STM-H0**

**P1 HAW18F**

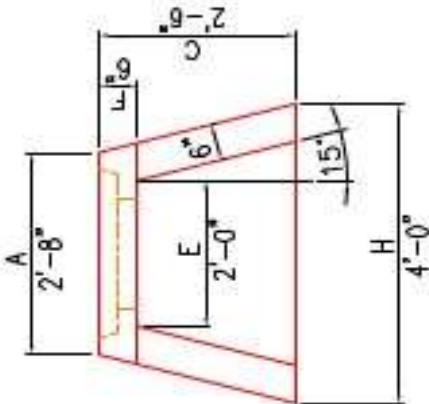
**18" - HW AW w/FLAT BOTTOM**

**DIMENSIONS & QUANTITIES**

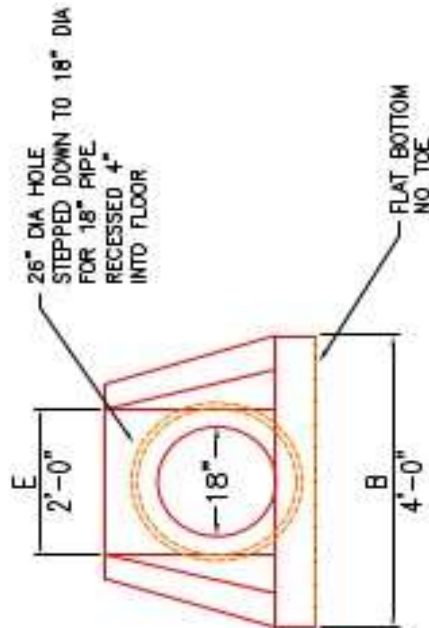
TYPE	PIPE Ø	A	B	C	D	E	F	C	H	WEIGHT	W/TOE	WEIGHT
AW	18"	2'-8"	2'-8"	2'-6"	2'-2"	2'-0"	6"	0"	4'-0"	1,380 LBS.	1,380 LBS.	1,380 LBS.

**NOTES:**

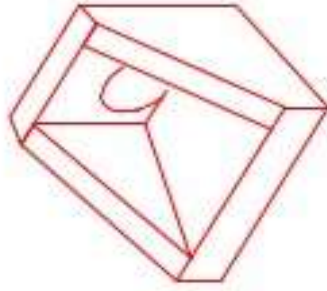
1. CONCRETE: 4500 PSI AT 28 DAYS MINIMUM COMPRESSIVE STRENGTH.
2. REINFORCING: #4 BAR @ 12" C/C E.W. -GRADE 60, (WITH 2" CONCRETE COVER MINIMUM)
3. REINFORCING BARS TO BE TACK WELDED OR TIED.
4. PIPE AND LIFTING ANCHOR POCKETS TO BE GROUTED WITH NON-SHRINK GROUT AFTER SETTING.
5. PREFORMED STEPPED HOLE SIZED AS PER O.D. OF PIPE + 3" -4".
6. OPTIONAL FOOTING (TOE) AVAILABLE FOR ALL SIZES.



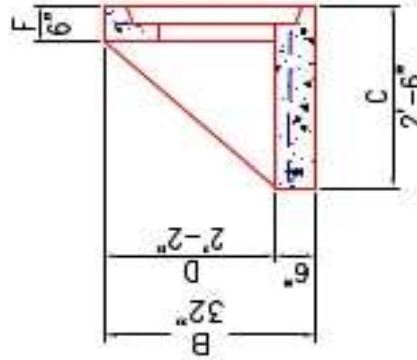
**PLAN VIEW**



**FRONT ELEVATION**



**ISOMETRIC VIEW**



**SECTION A-A**

**PRODUCTION WORK ORDER**

- QUALITY CONTROL CHECKLIST
- ALL DIMENSIONS CORRECT.
  - LIFTERS INSTALLED.
  - STEPPED HF CORRECT SIZE.
  - REINFORCING CORRECT.
  - CLEARANCE ON REINFORCING CORRECT.
  - EDGES CHAMFERED.
  - ALL PATCHWORK ACCEPTABLE.



PRODUCT I.D.: HAW18F	DESCRIPTION: 18in AW WINGED HEADWALL, FLAT
PRODUCT VIEW: RIGHT SIDE UP	CUSTOMER: STOCK
PLANT: BEAVER DAM, KY.	PROJECT: STOCK
WEIGHT: 1,380 LBS.	STRUCTURE ID.: T.B.D.
TOP SECTION JOINT: N/A	SALES ORDER NO: T.B.D.
BASE SECTION JOINT: N/A	PC: B. KELLY
QC CHECK INITIALS:	DRAWING: J. HORSLEY
	DATE: 10/30/23
	SCALE: NTS
	PG. 1 of 1

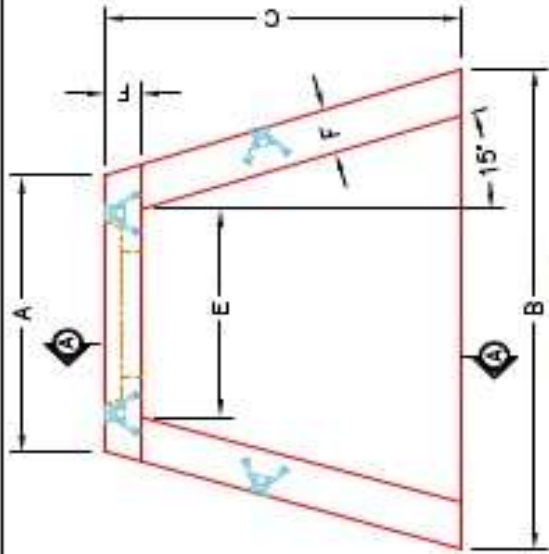


**Structure ID: STM-G4**

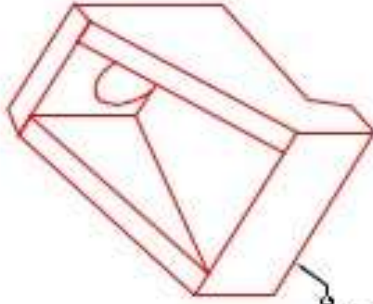
**P1 HAWA15F**

**15" - HW AW w/FLAT BOTTOM**

DIMENSIONS & QUANTITIES									
TYPE	PIPE Ø	A	B	C	D	E	F	G	WEIGHT
AW	15"	2'-8"	4'-0"	2'-6"	2'-2"	2'-0"	6"	0"	1,380 LBS.

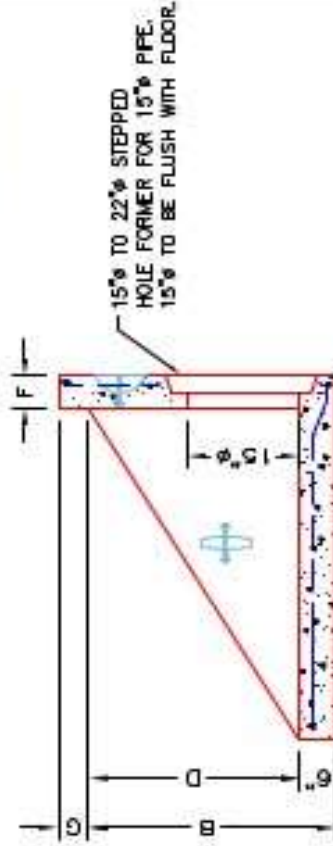


PLAN VIEW

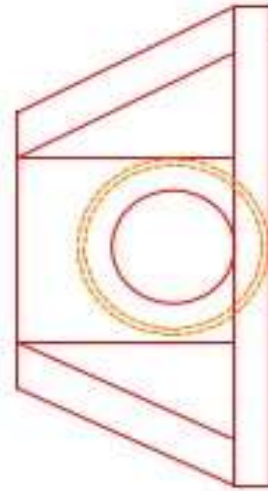


ISOMETRIC VIEW

WITH FOOTING  
(SEE DETAIL)



SECTION A-A



FRONT ELEVATION

NOTES:

1. CONCRETE: 4500 PSI AT 28 DAYS MIN. STRENGTH.
2. REINFORCING: #4 BAR @ 12" C/C E.W. - GRADE 60, (WITH 2" CONCRETE COVER MINIMUM)
3. REINFORCING BARS TO BE TACK WELDED OR TIED.

PRODUCTION WORK ORDER

QUALITY CONTROL CHECKLIST

- ALL DIMENSIONS CORRECT.
- LIFTERS INSTALLED.
- STEPPED HF CORRECT SIZE.
- REINFORCING CORRECT.
- CLEARANCE ON REINFORCING CORRECT.
- EDGES CHAMFERED.
- ALL PATCHWORK ACCEPTABLE.



DESCRIPTION: AW WINGED HEADWALL FOR 15" PIPE
CUSTOMER: STOCK
PROJECT: STOCK
STRUCTURE ID: STOCK
SALES ORDER NO: T.B.D.
CHECK: A. WELLS
DRAWING: J. HORSLEY
DATE: 09/25/24
SCALE: NTS
PG. 1 of 1

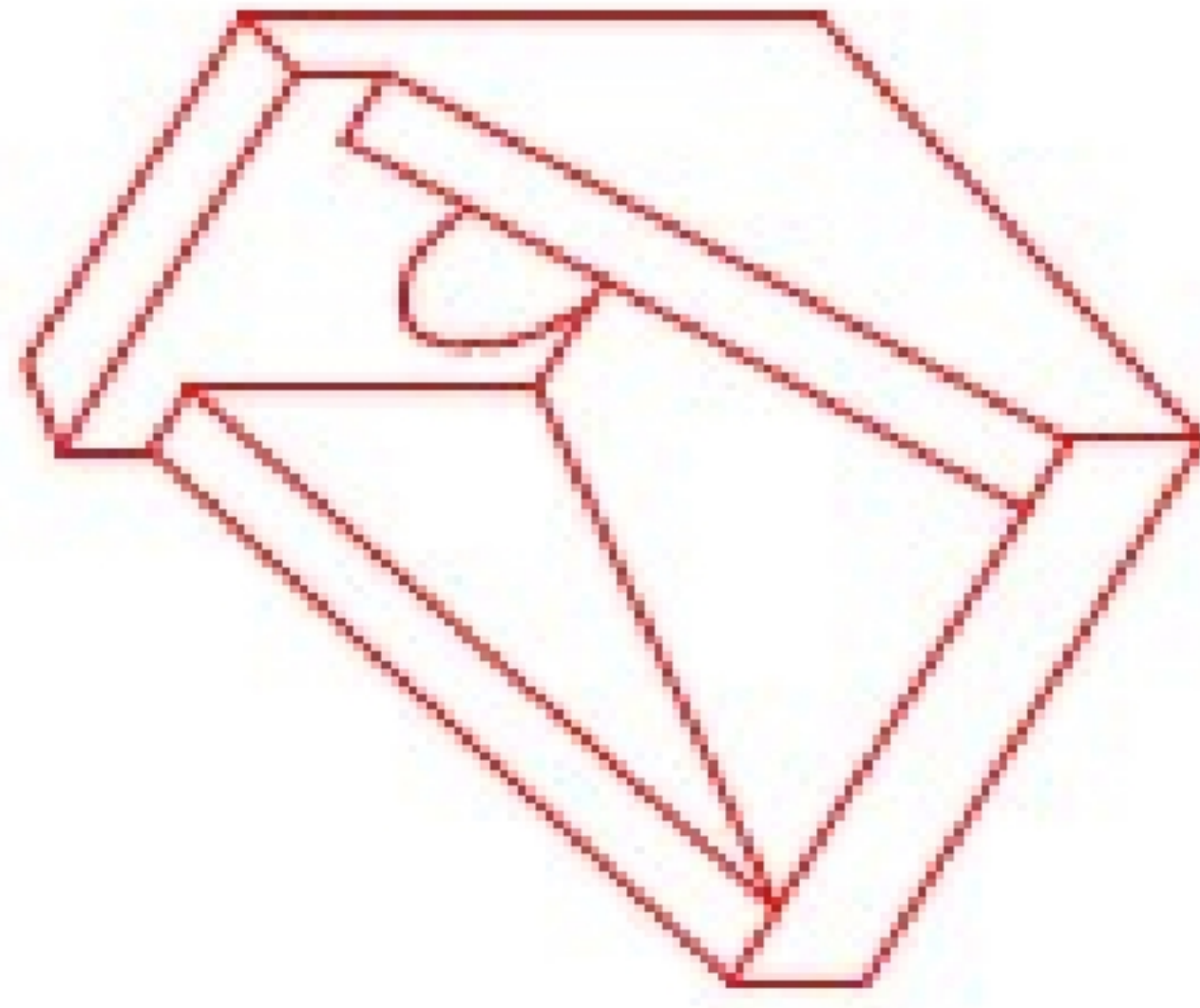
PRODUCT I.D.: HWA15F
PRODUCT VIEW: RIGHT SIDE UP
PLANT: BEAVER DAM, KY.
WEIGHT: 1,630 LBS.
TOP SECTION JOINT: N/A
BASE SECTION JOINT: N/A
QC CHECK INITIALS:

**Structure ID: L**

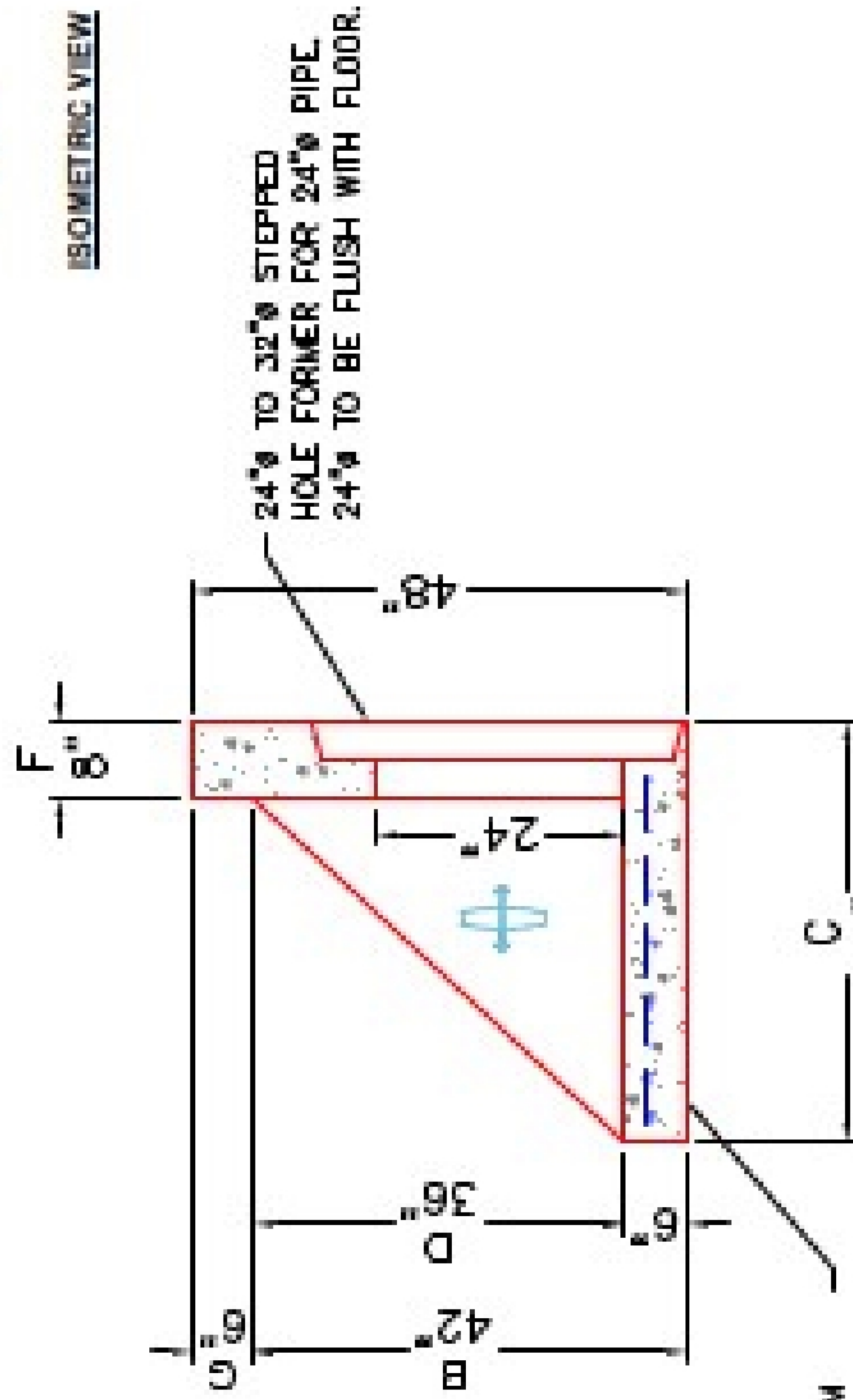
**P1 HWBW24F**

**24" - HW BW w/FLAT BOTTOM F/F**

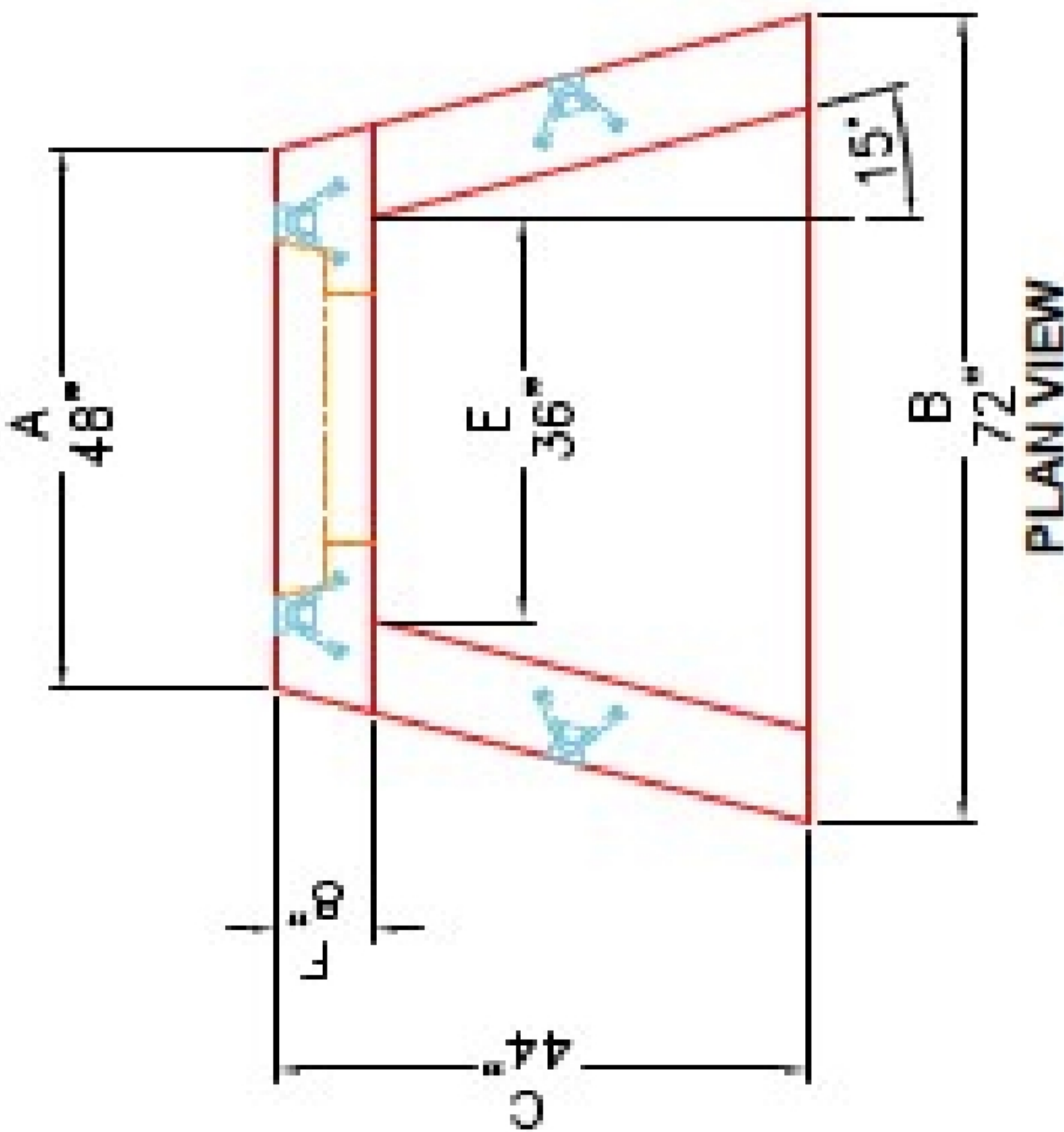
DIMENSIONS & QUANTITIES									
TYPE	PIPE Ø	A	B	C	D	E	F	G	WEIGHT
BW	24"	4'-0"	6'-0"	3'-8"	3'-0"	3'-0"	8"	8"	3,100 LBS.



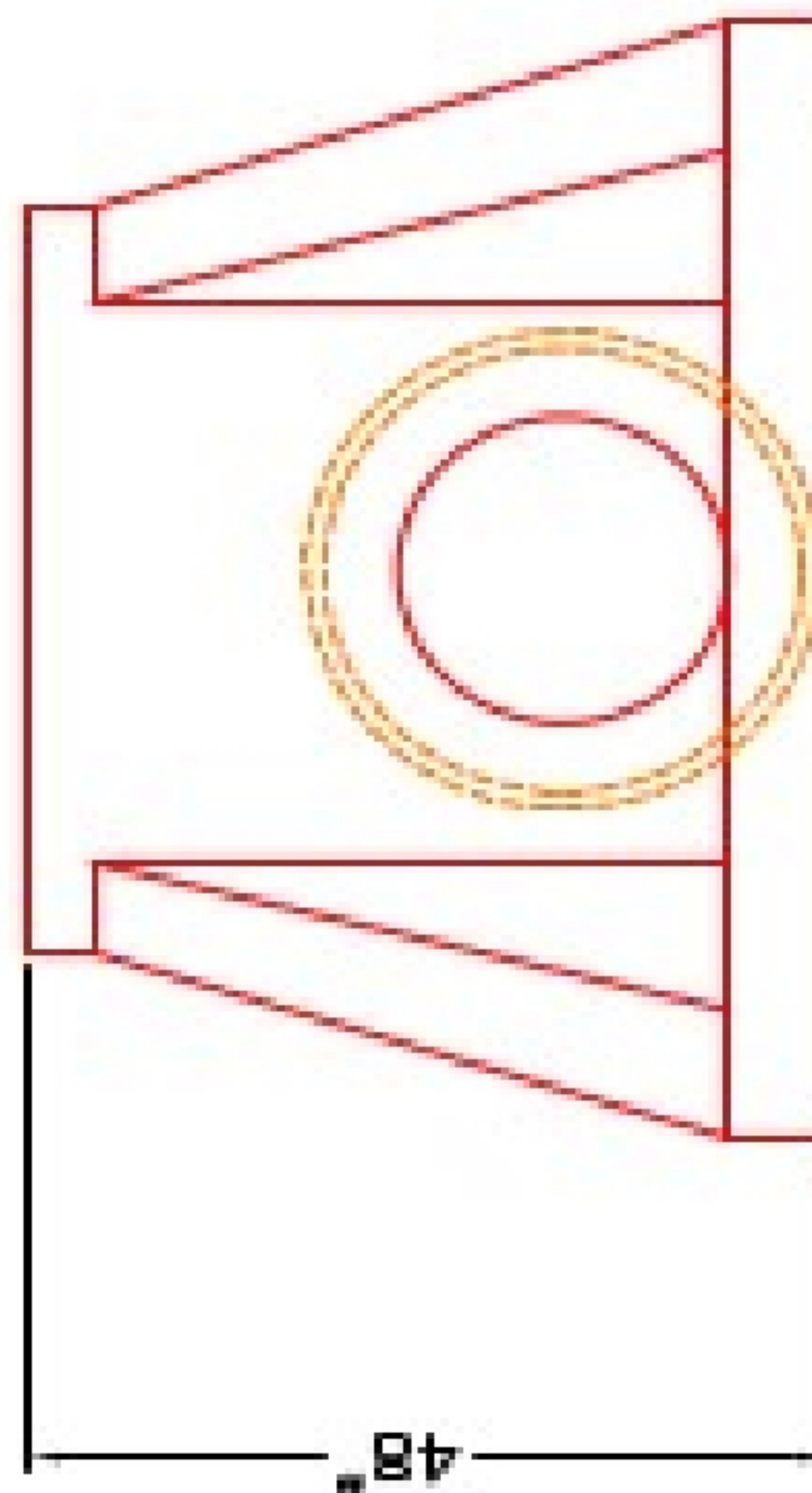
ISOMETRIC VIEW



SECTION A-A



PLAN VIEW



FRONT ELEVATION

NOTES:

1. CONCRETE: 4500 PSI AT 28 DAYS MIN. STRENGTH.
2. REINFORCING: #4 BAR @ 12" C/C E.W.-GRADE 60, (WITH 2" CONCRETE COVER MINIMUM)
3. REINFORCING BARS TO BE TACK WELDED OR TIED.

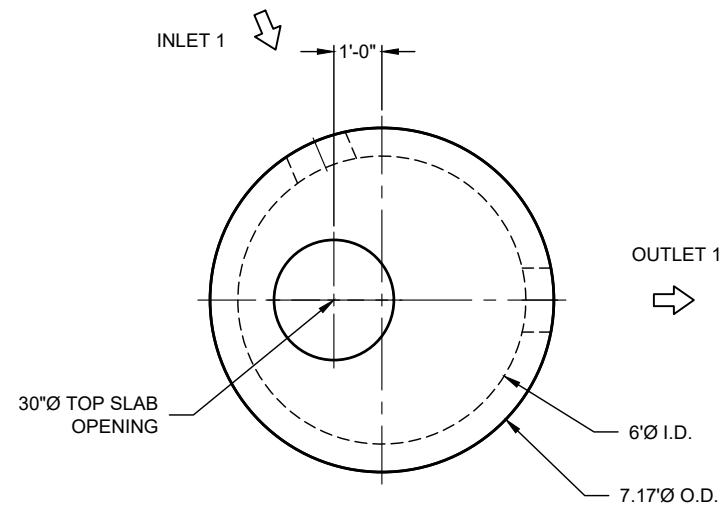
**PRODUCTION WORK ORDER**

- QUALITY CONTROL CHECKLIST
- ALL DIMENSIONS CORRECT.
  - LIFTERS INSTALLED.
  - STEPPED HF CORRECT SIZE.
  - REINFORCING CORRECT.
  - CLEARANCE ON REINFORCING CORRECT.
  - EDGES CHAMFERED.
  - ALL PATCHWORK ACCEPTABLE.

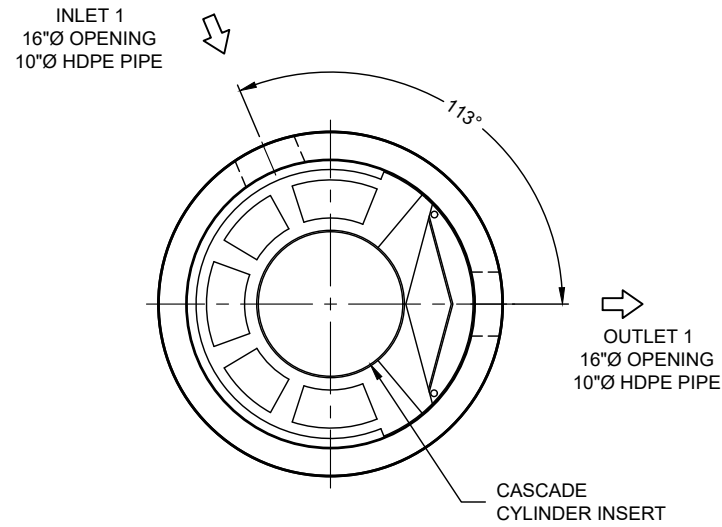


DESCRIPTION: 24in BW HEADWALL FLAT BOTTOM
CUSTOMER: STOCK
PROJECT: T.B.D.
STRUCTURE ID.: T.B.D.
SALES ORDER NO: STOCK
CHECK: B. SMITH
DATE: 06/04/24
DRAWING: J. HORSLEY
SCALE: NTS
PG. 1 of 1

# 26-2366 840323 Churchill Downs Skye Terrace Improvements



**PLAN VIEW**  
INTERNALS NOT SHOWN



**PLAN VIEW FOR PIPE ORIENTATION**  
TOP SLAB NOT SHOWN

## MATERIAL LIST

COUNT	DESCRIPTION	PART NUMBER	PROVIDED BY	INSTALLED BY
1	CS-6 CYLINDER INSERT, STD.	325-003951	CONTECH	PRECASTER
5	CS-6 ALUMINUM INSTALLATION BRACKETS	325-003956	CONTECH	PRECASTER
1	CS-6 HARDWARE KIT	325-003965	CONTECH	PRECASTER
1	SEALANT FOR JOINTS		PRECASTER	CONTRACTOR
1	30"Ø X 4" FRAME AND COVER, EJ #41600483, OR EQUIV.	325-000332	CONTECH	CONTRACTOR

## GENERAL NOTES

- DESIGN LOADING - AASHTO HS-20
- ALL PRECAST CONCRETE MANUFACTURED PARTS SHALL CONFORM TO ASTM C-478, WITH MINIMUM CONCRETE STRENGTH OF 4000 PSI AT 28 DAYS
- JOINT SEALANT SHALL CONFORM TO ASTM C-990 OR ASTM C-443
- GROUND WATER ELEVATION ASSUMED AT OUTLET INVERT
- MANUFACTURING TOLERANCE = +/- 1/2-INCH
- SOME HIDDEN LINES MAY BE OMITTED FOR CLARITY

## INSTALLATION NOTES

- PRECASTER TO SHIP ACCESS CASTINGS WITH STRUCTURE
- REFER TO CONTECH ASSEMBLY INSTRUCTIONS FOR ADDITIONAL INFORMATION.
- PRECASTER TO INSTALL INTERNAL COMPONENTS PRIOR TO SHIPPING UNLESS INSTRUCTED OTHERWISE BY CONTECH
- PIPE OPENINGS SHALL BE STENCILED "INLET" OR "OUTLET" AS APPROPRIATE
- APPLYING ALIGNMENT MARKS ON ALL PIECES OF MULTIPLE PIECE ASSEMBLIES IS ENCOURAGED
- IF STRUCTURE IS DELIVERED IN MULTIPLE SECTIONS, EACH PIECE SHALL BE LABELED WITH THE CONTECH PROJECT NUMBER, SEQUENCE NUMBER AND SITE DESIGNATION

## SITE INFORMATION

RIM ELEV. = 455.84+/-  
 TOP OF STRUCTURE = 454.58  
 INLET PIPE 1 INVERT ELEV. = 445.08  
 INLET PIPE 1 DIAMETER AND MATERIAL = 10"Ø HDPE  
 OUTLET PIPE INVERT ELEV. = 445.08  
 OUTLET PIPE DIAMETER AND MATERIAL = 10"Ø HDPE  
 OUTSIDE BOTTOM OF STRUCTURE ELEV. = 438.66

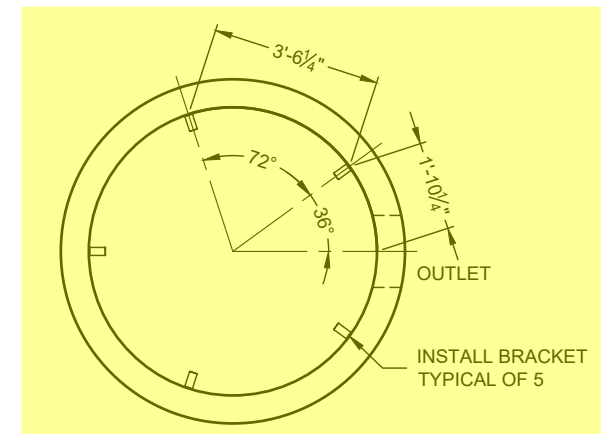
## STRUCTURE WEIGHT

APPROXIMATE HEAVIEST PICK = 13500 LBS.  
 STRUCTURE IS DELIVERED IN 4 PIECES

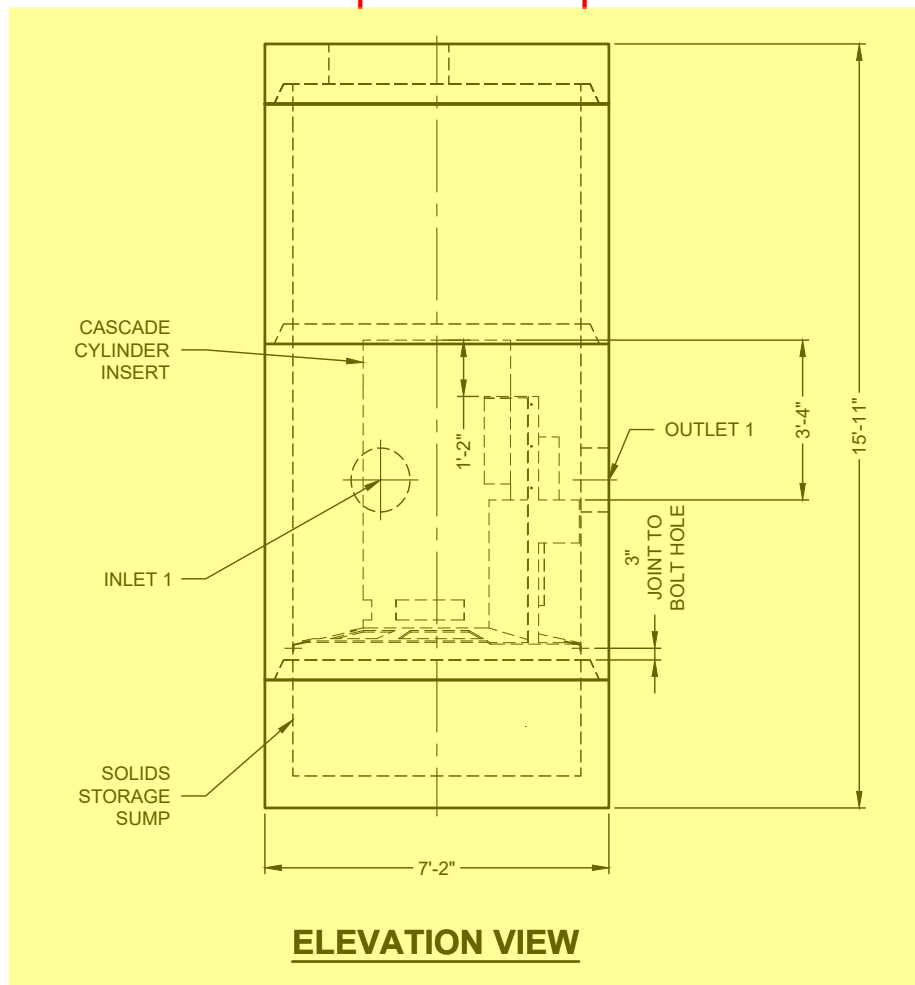
TOP SLAB = 5000 LBS.  
 RISER 2 = 9500 LBS.  
 CONTROL RISER = 13500 LBS.  
 BASE SECTION = 8500 LBS.

CONTECH  
**FABRICATION**  
 DRAWING

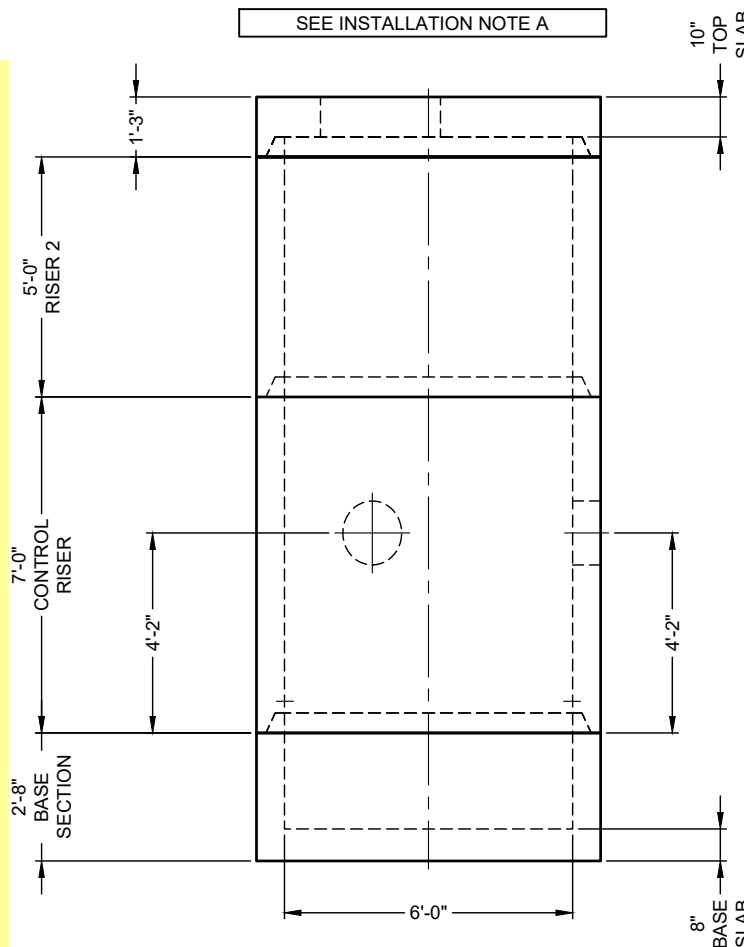
## SUPPORT BRACKET LAYOUT PLAN VIEW



**10-CS-6**  
**ICAST to fully pre-assemble internal materials prior to shipment**



**ELEVATION VIEW**



**PRECAST COMPONENTS**  
INTERNALS NOT SHOWN

ICAST  
 5888 / 757440  
 LAYOUT 1A  
 17.15TS

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MARK	DATE	REVISION DESCRIPTION	BY

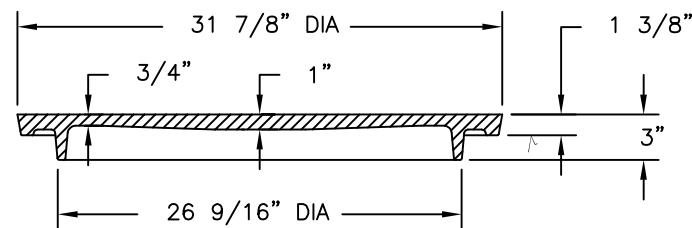
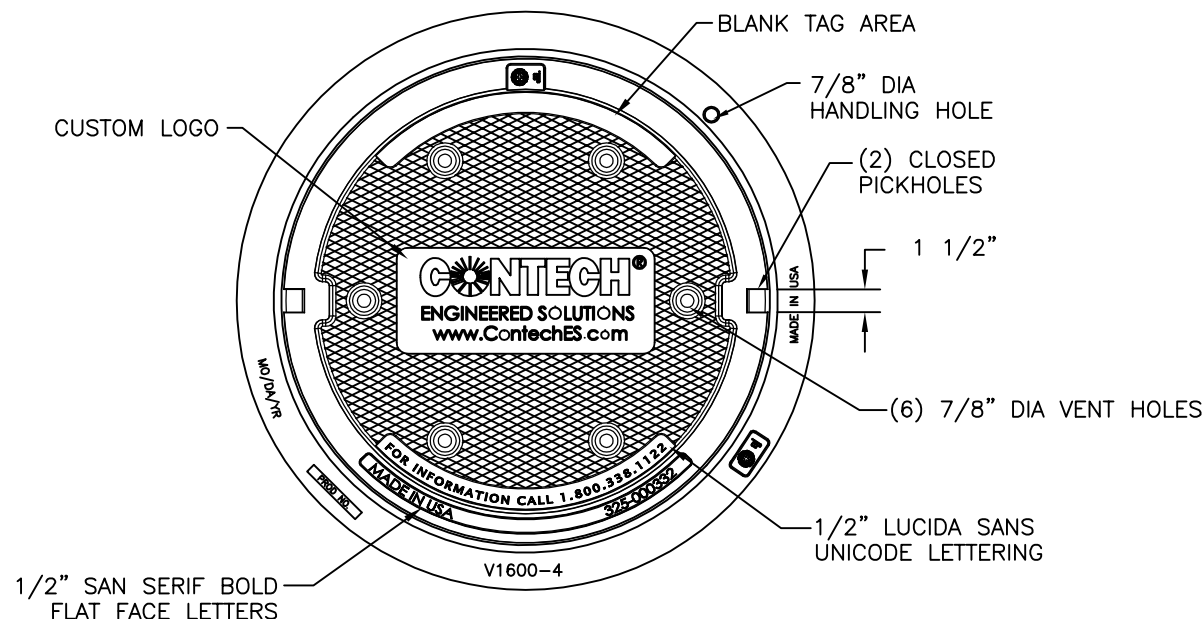
CS-6 - 840323-10  
**CHURCHILL DOWNS SKYE TERRACE IMPROVEMENTS**  
 LOUISVILLE, KY  
 SITE DESIGNATION: WQU

**CONTECH**  
 ENGINEERED SOLUTIONS LLC  
 A CONTECH COMPANY  
 810 Centre Pointe Dr., Suite 400, West Chester, OH 45380  
 800.338.1122 513.645.7000 513.645.7803 FAX  
**CASCADE separator**  
 FOR PATENT INFORMATION, GO TO www.contech.com/P

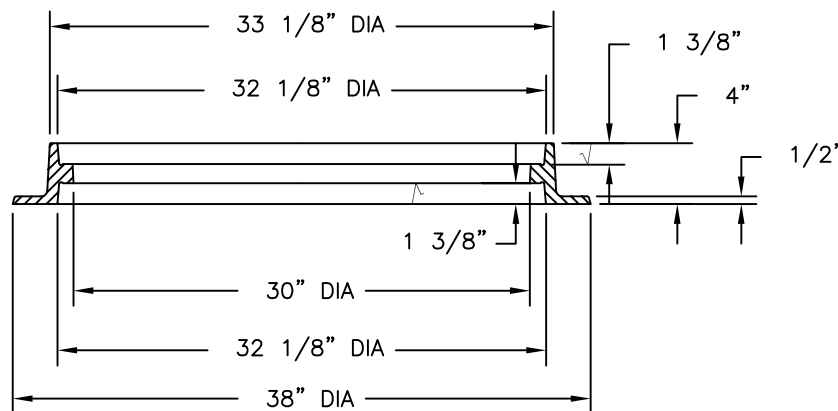
DATE:	5/7/2026		
DESIGNED:	MDB	DRAWN:	MDB
CHECKED:	MSB	APPROVED:	MDB
PROJECT No.:	840323	SEQUENCE No.:	10
SHEET:	1	OF	1

C:\USERS\MICHAEL.BEAVER\ONE DRIVE - THE QUIKRETE COMPANIES\DYNAMICS\865 - CONTECH - PROJECTS\840323\PRODUCTS\10-CASCADE 6\DRAWINGS\840323-10-CS-6-CONFAB.DWG 5/7/2026 10:19 AM

# 1810B4 V1600-4 Assembly



**COVER SECTION**



**FRAME SECTION**

**Product Number**  
41600483

**Design Features**

- Materials
- Cover
- Gray Iron (CL35B)
- Frame
- Gray Iron (CL35B)

- Design Load
- Heavy Duty
- Open Area
- n/a
- Coating
- Undipped
- √ Designates Machined Surface

**Certification**

- ASTM A48
- Country of Origin: USA

**Major Components**

00180783  
41600410

**Drawing Revision**

05/09/2007 Designer: SMH  
6/26/2017 Revised By: DAE

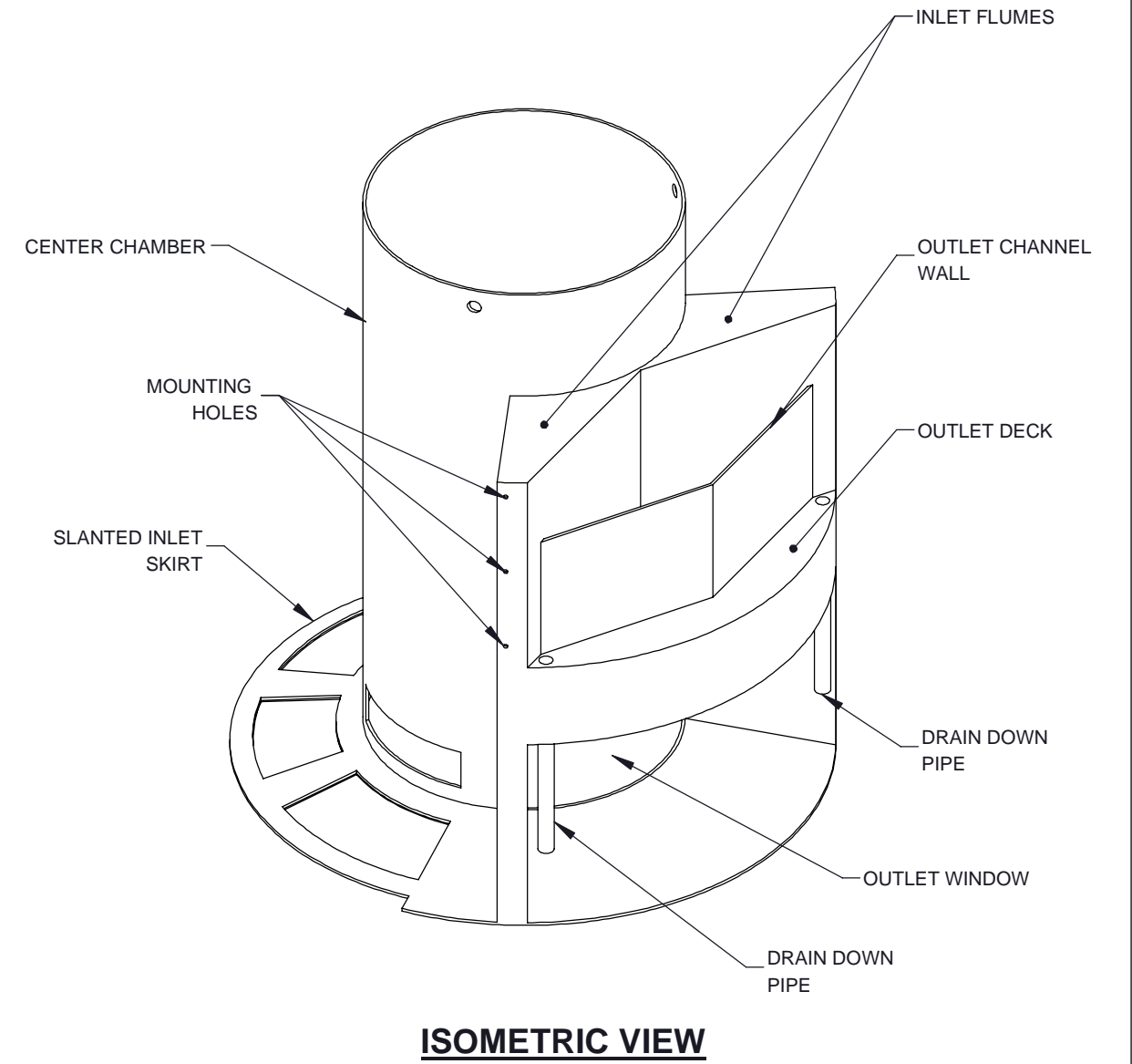
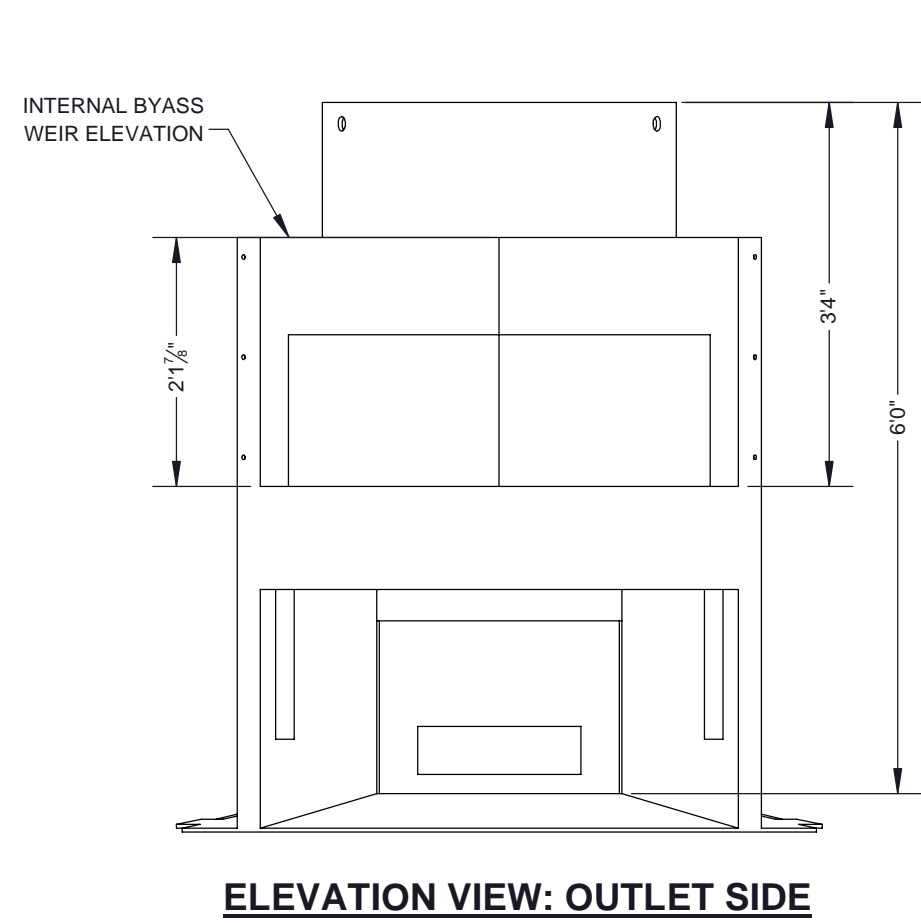
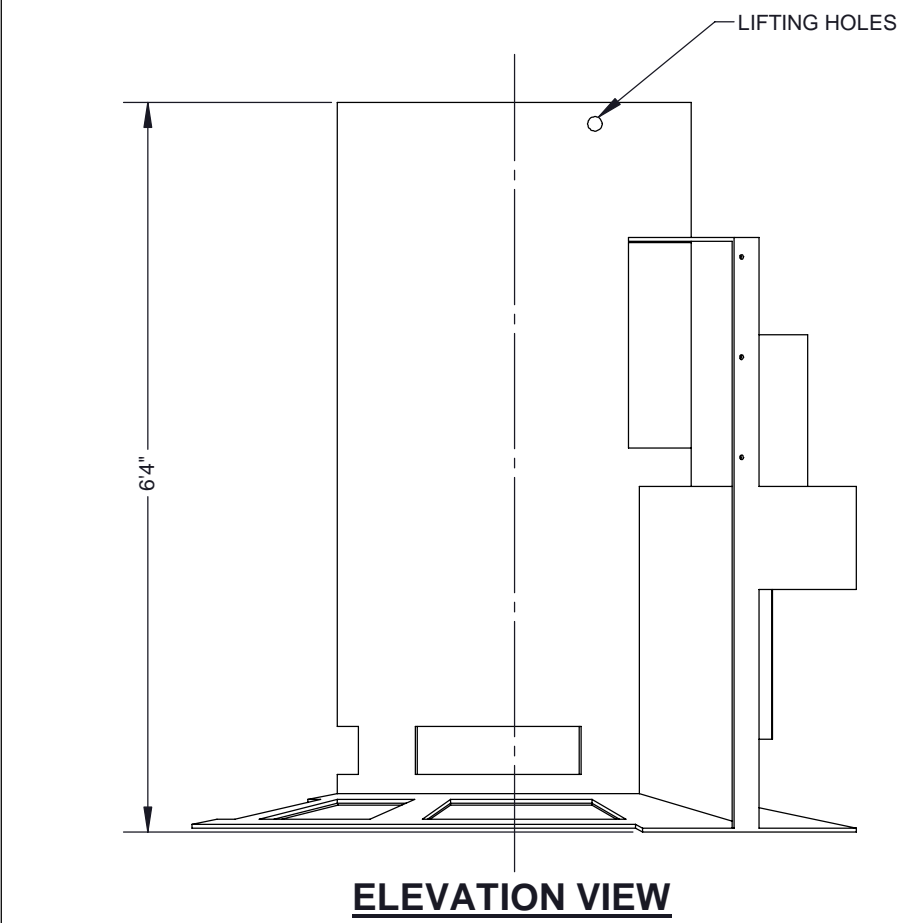
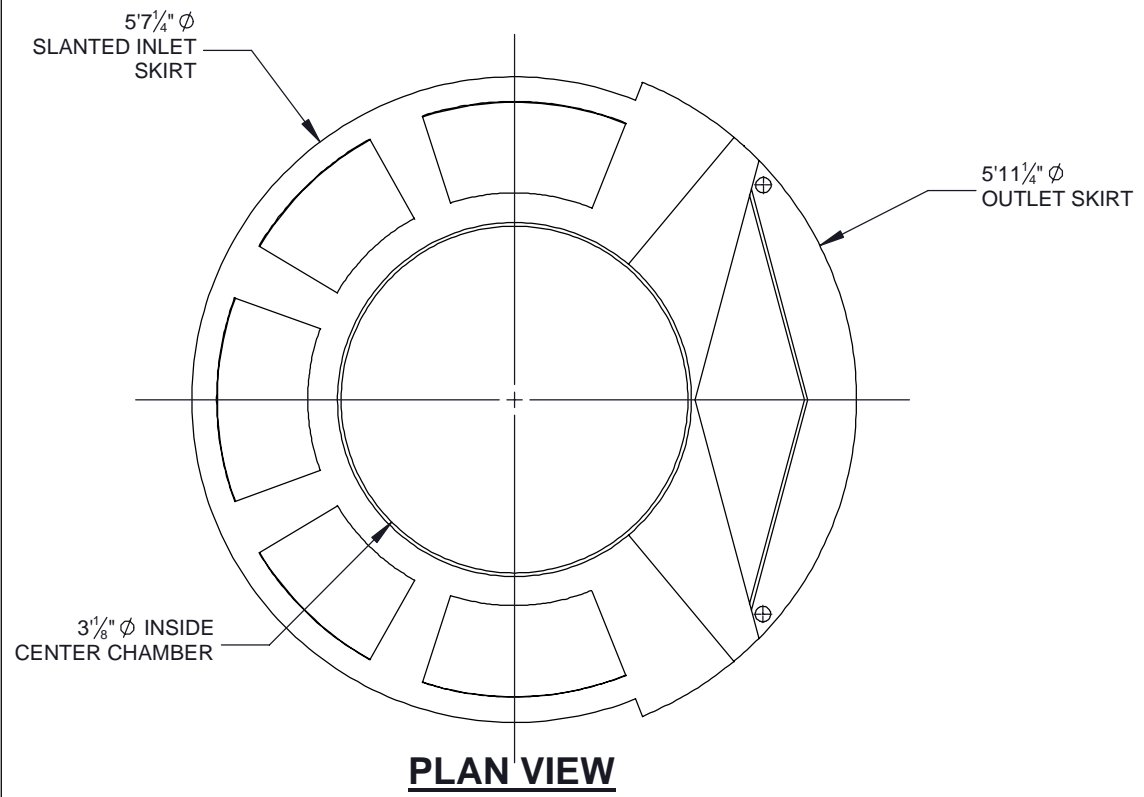
**Disclaimer**

Weights (lbs./kg) dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

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**Contact**

800 626 4653  
ejco.com



NOTES:  
1. SEE CASCADE SEPARATOR INSTALLATION GUIDE FOR ADDITIONAL INFORMATION

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REFERENCE DETAIL  
INTERNALS CS-6  
CASCADE SEPARATOR

THIRD ANGLE PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES:  
FRACTIONAL ± 1/16  
ANGLES ± 1 DEGREE  
TWO PLACE DECIMAL ± 0.06  
THREE PLACE DECIMAL ± 0.030

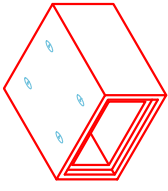
PART NUMBER: 325-003951		
APPROVED BY: M. BROOKS	DRAWN BY: J. BELL	
APPROVED BY DATE: 2021.10.21	DRAWN BY DATE: 2021.09.15	REV: B
SCALE: N/A	SHEET 1 OF 1	



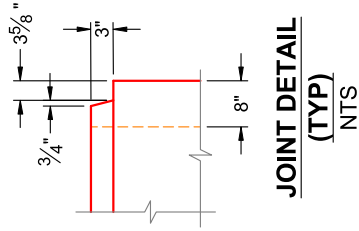
**Structure ID: BC 4 x 2 (PC 20)**

**P1 BC048024-08WLF**

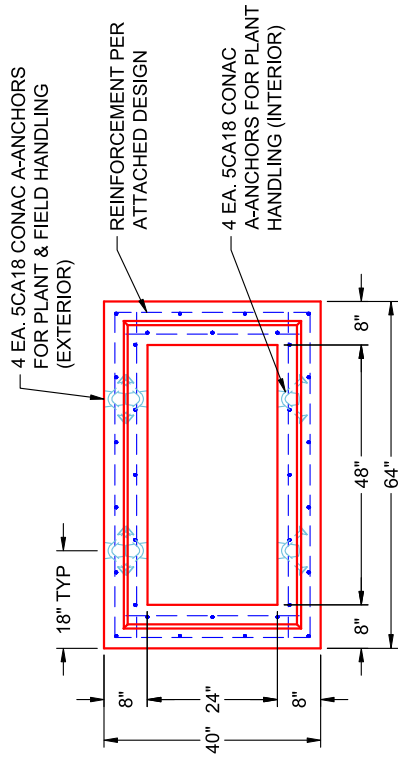
**BOX CULVERT (08W/08F/08T) No Haunch G/T**



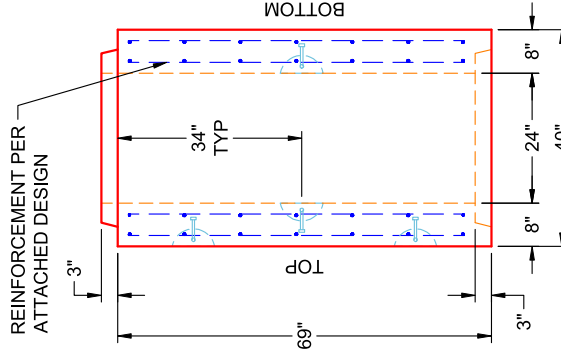
**COMPONENT ISOMETRIC VIEW**



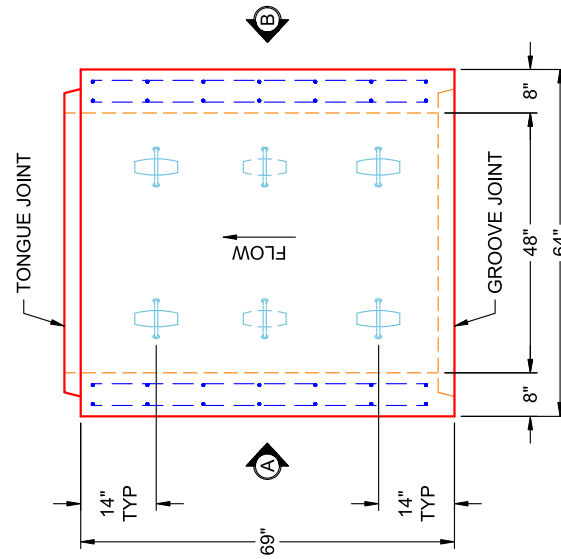
**JOINT DETAIL (TYP) NTS**



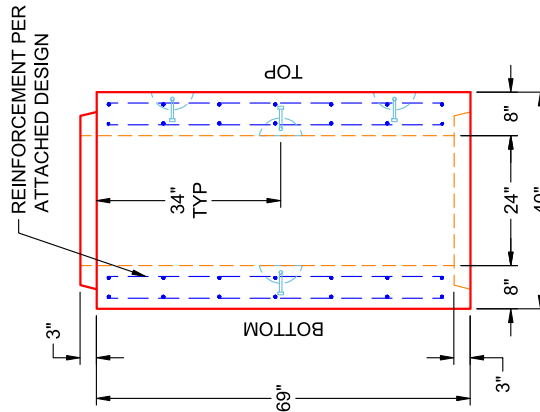
**END VIEW TYPICAL**



**VIEW B PC 20 (UPRIGHT IN MOLD)**



**PLAN VIEW PC 20 (UPRIGHT IN MOLD)**



**VIEW A PC 20 (UPRIGHT IN MOLD)**

**GENERAL NOTES:**

1. MANUFACTURED TO ASTM C-1577 & SECTION 714 OF INDOT STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE BOX STRUCTURES
2. LOAD REQUIREMENTS: HL93
3. REINFORCEMENT PER ATTACHED DESIGN
4. COVER DEPTH: 4'-8"
5. CONCRETE: 5,000 PSI AT 28 DAYS
6. JOINT SEALANT: 1" BUTYL MASTIC (CS-102) EXTERIOR JOINT WRAP: 12" WIDE (CS-212)
7. WEIGHT: 4' X 2' (48" X 24") RCBC = 1,418 LBS / LF (69" LONG SECTION = 8,152 LBS)

# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_  
 By: J. Horsley  
 Ck: \_\_\_\_\_  
 5/11/2026 4:10:17 PM  
 1 of 3

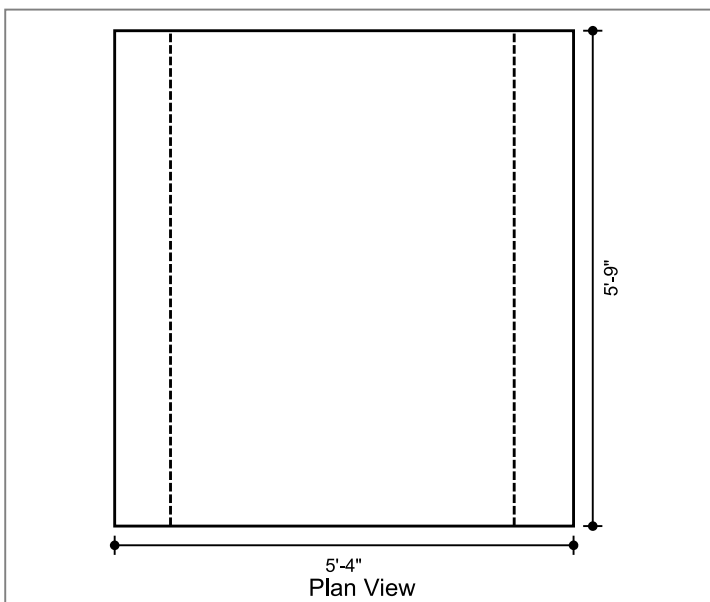
Project : Alcoa Outfall  
 Task :  
 Job No. : 25-2073

Client: Bowen Engineering Co  
 File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

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

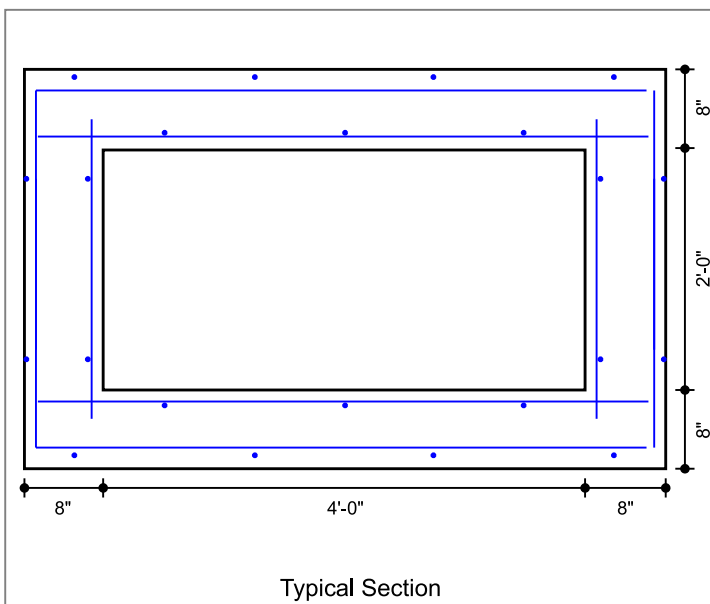
## Physical Dimensions

Clear Span: 4'-0"  
 Clear Height: 2'-0"  
 Top Slab: 8"  
 Bottom Slab: 8"  
 Ext. Wall: 8"  
 Fill Depth Range  
 Maximum: 7.99 ft  
 Minimum: 4.00 ft  
 Increment: 0.50 ft  
 Length: 5'-9"  
 Skew Angle: 0.00 deg  
 Bottom Slab Support: Full Slab  
 Top Haunch, Width: 0"  
 Top Haunch, Height: 0"  
 Bottom Haunch, Width: 0"  
 Bottom Haunch, Height: 0"



## Material Properties

Concrete  
 Strength, f<sub>c</sub>: 5.000 ksi  
 Density: 0.150 kcf  
 Elasticity, E<sub>c</sub>: 3834 ksi  
 Type: Normal wt  
 Steel  
 Yield, f<sub>y</sub>: 60 ksi  
 Allow Stress: 36 ksi  
 Elasticity, E<sub>s</sub>: 29000 ksi  
 Soil  
 Density: 0.120 kcf  
 Exposure Factor  
 Class 2 Exposure  
 Reinforcement Covers  
 Ext. Cover Top Slab: 2"  
 Ext. Cover Bottom Slab: 1"  
 Ext. Cover Walls: 1"  
 Int. Cover Walls: 1"  
 Int. Cover Top Slab: 1"  
 Int. Cover Bottom Slab: 1"



## Controlling Ratings

Inventory Rating: NaN  
 Operating Rating: NaN

## Loads

Live Load  
 Vehicle Names: HL-93  
 Traffic Direction: Parallel  
 Eq. Height of Soil: Calculated  
 Dead Load  
 Future Wearing Surface: 0.000 klf  
 Additional Dead Load: 0.000 klf  
 Concentrated Loads: none

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

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

# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_

By: J. Horsley

Ck: \_\_\_\_\_

5/11/2026 4:10:17 PM

etc of 3

Project : Alcoa Outfall

Task :

Client: Bowen Engineering Co

Job No. : 25-2073

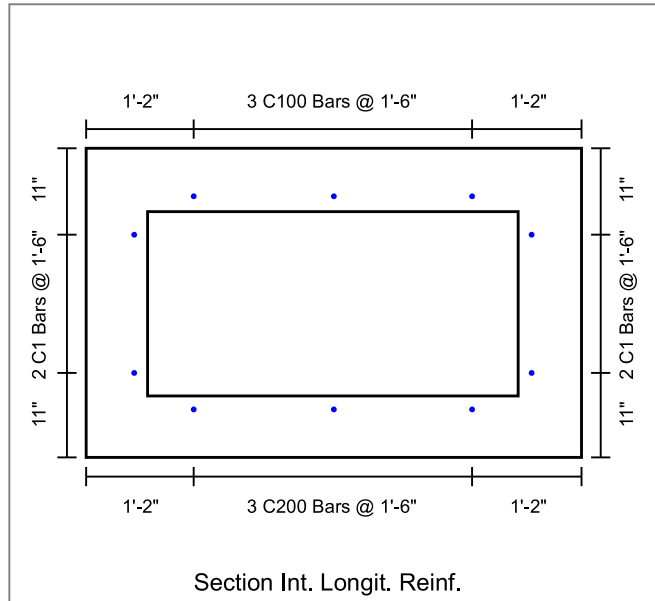
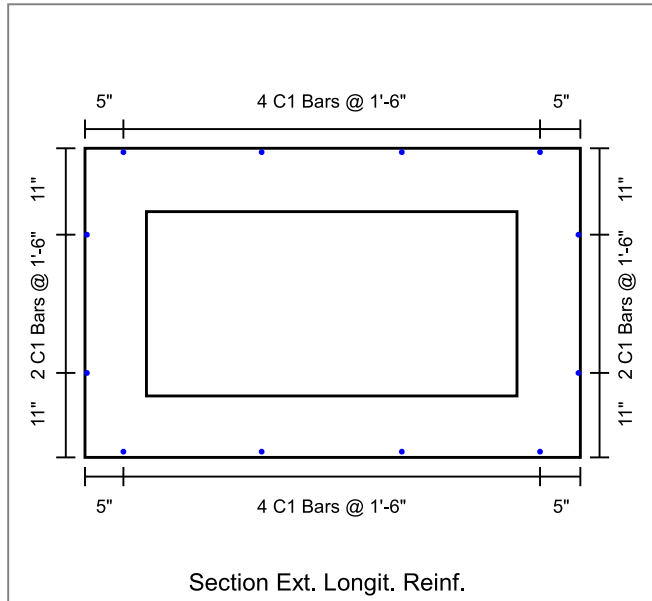
File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

## Concrete Summary

Volume of Concrete: 0.362 cy/ft Total Volume of Concrete: 2.082 cy

## Reinforcing Steel Bar Schedule (lb)

Location	Mark	Qty	Size	Spacing	Type	Length	Center	Ver.Leg	Tot.Weight
Top Slab(Int)	A100 (AS2)	6	4	1'-0"	S	5'-1"	--	--	20.0
Bot Slab(Int)	A200 (AS3)	6	4	1'-0"	S	5'-1"	--	--	20.0
Corner(Top)	A1 (AS1)	6	4	1'-0"	U	9'-5"	5'-1"	2'-2"	38.0
Corner(Bot)	A2 (AS1)	6	4	1'-0"	U	9'-7"	5'-1"	2'-3"	38.0
Wall(Int)	B1 (AS4)	12	4	1'-0"	S	2'-6"	--	--	20.0
Longit. Top (Int)	C100 (AS5)	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Bot (Int)	C200	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Top (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Bot (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Int)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
									182



# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_

By: J. Horsley

Ck: \_\_\_\_\_

5/11/2026 4:10:17 PM

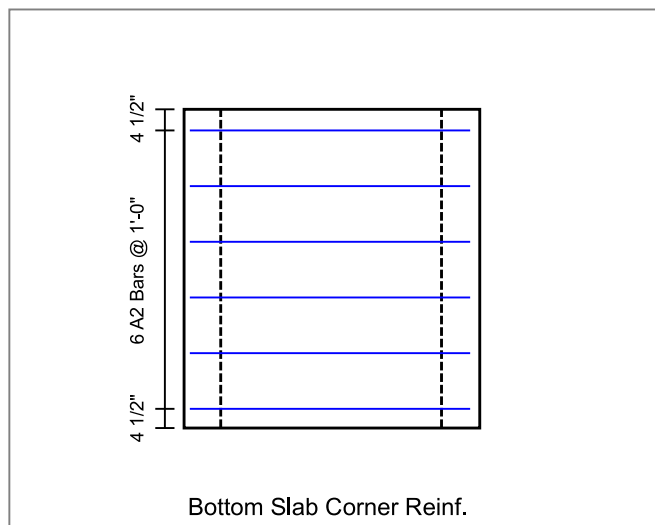
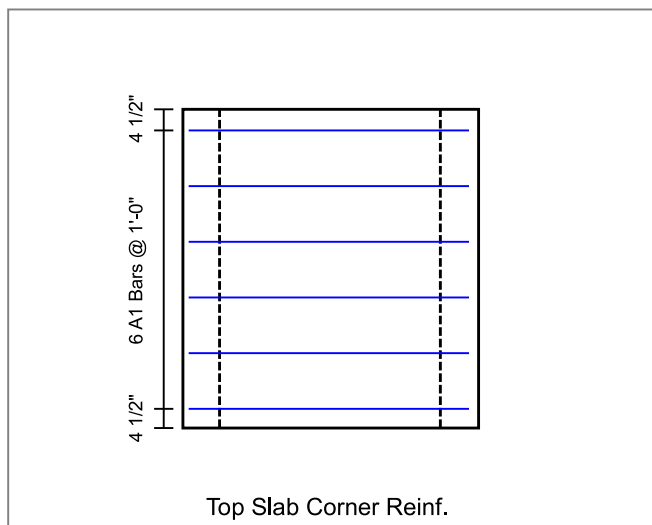
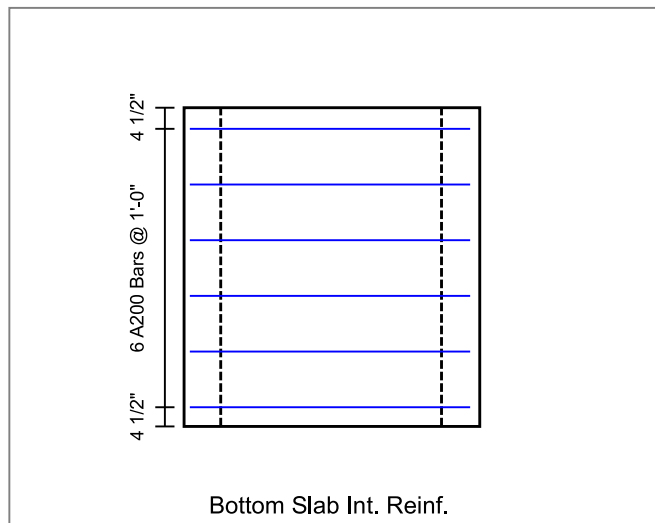
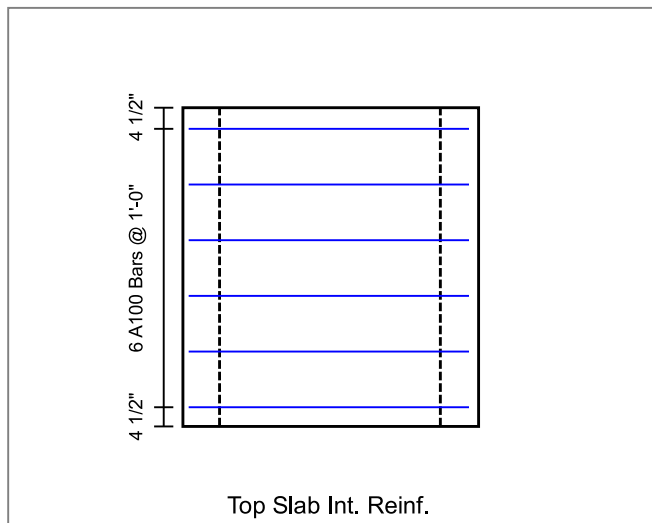
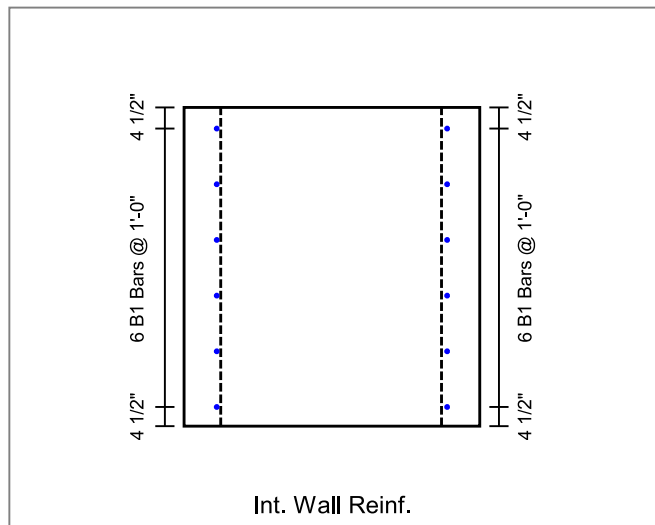
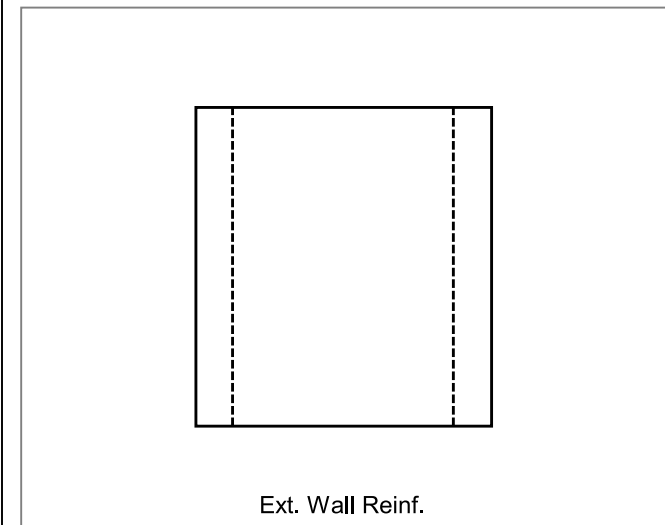
Project : Alcoa Outfall

Client: Bowen Engineering Co

Task :

File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Page 3 of 3

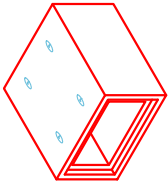




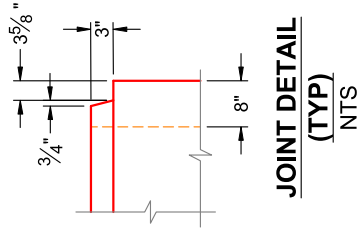
**Structure ID: BC 4 x 2 (PC 18)**

**P1 BC048024-08WLF**

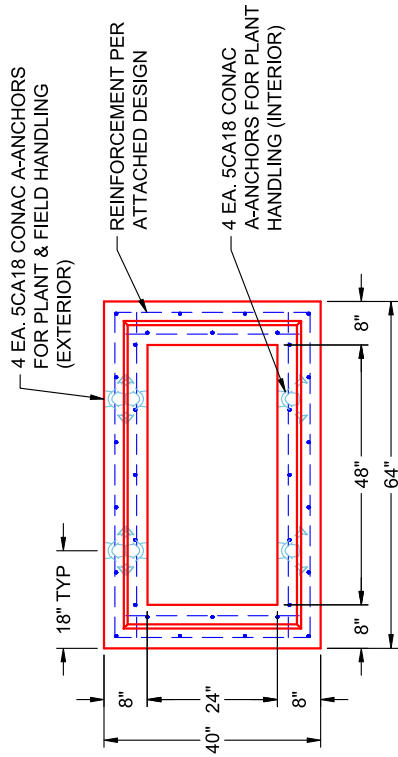
**BOX CULVERT (08W/08F/08T) No Haunch G/T**



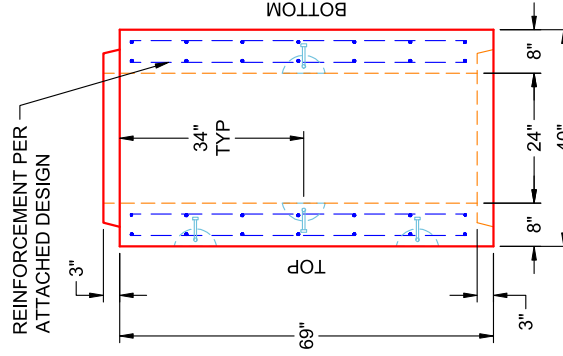
**COMPONENT ISOMETRIC VIEW**



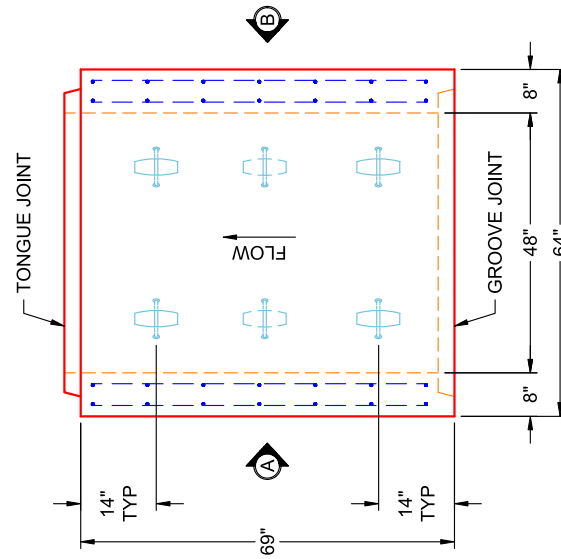
**JOINT DETAIL (TYP) NTS**



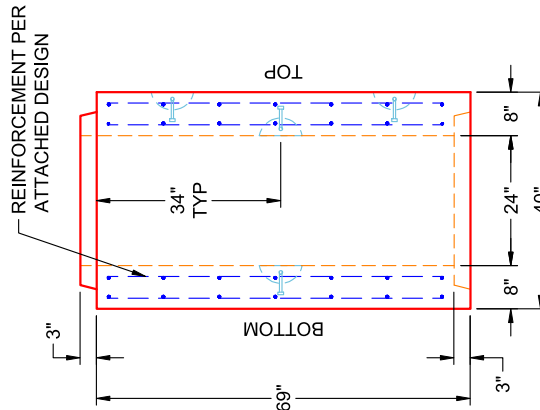
**END VIEW TYPICAL**



**VIEW B PC 18 (UPRIGHT IN MOLD)**



**PLAN VIEW PC 18 (UPRIGHT IN MOLD)**



**VIEW A PC 18 (UPRIGHT IN MOLD)**

**GENERAL NOTES:**

1. MANUFACTURED TO ASTM C-1577 & SECTION 714 OF INDOT STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE BOX STRUCTURES
2. LOAD REQUIREMENTS: HL93
3. REINFORCEMENT PER ATTACHED DESIGN
4. COVER DEPTH: 4'-8"
5. CONCRETE: 5,000 PSI AT 28 DAYS
6. JOINT SEALANT: 1" BUTYL MASTIC (CS-102) EXTERIOR JOINT WRAP: 12" WIDE (CS-212)
7. WEIGHT: 4' X 2' (48" X 24") RCBC = 1,418 LBS / LF (69" LONG SECTION = 8,152 LBS)

# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_  
 By: J. Horsley  
 Ck: \_\_\_\_\_  
 5/11/2026 4:10:17 PM  
 p. 1 of 3

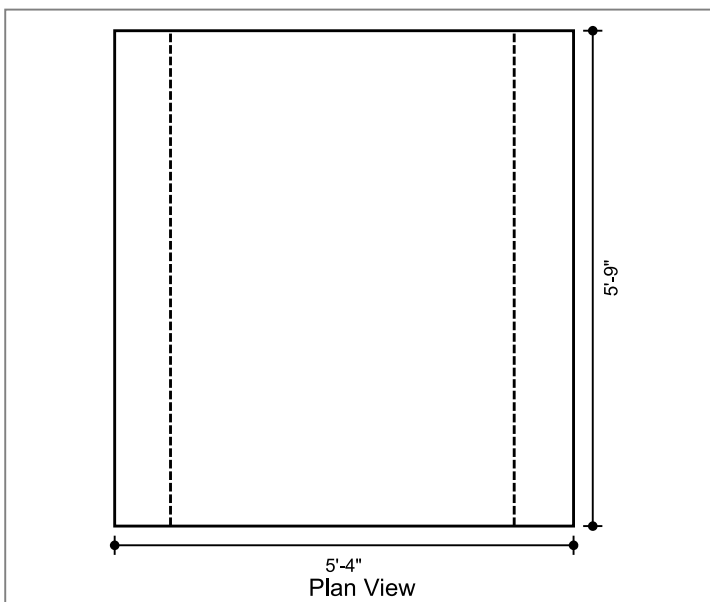
Project : Alcoa Outfall  
 Task :  
 Job No. : 25-2073

Client: Bowen Engineering Co  
 File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

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

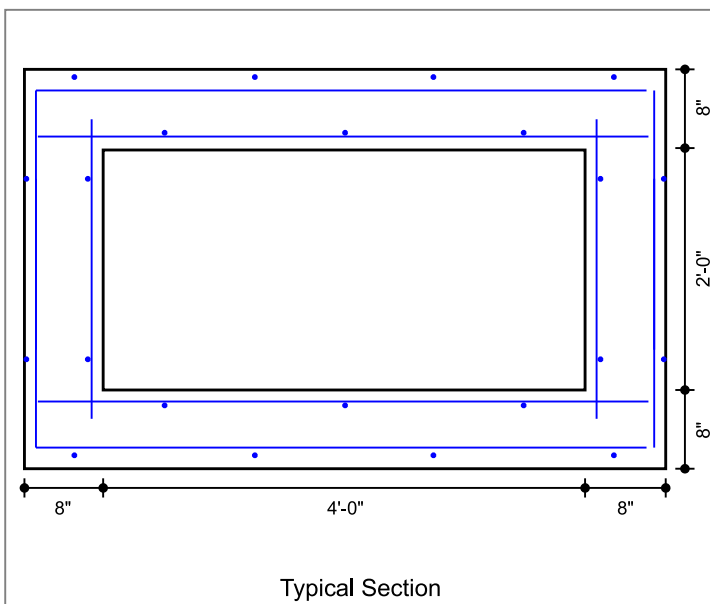
## Physical Dimensions

Clear Span: 4'-0"  
 Clear Height: 2'-0"  
 Top Slab: 8"  
 Bottom Slab: 8"  
 Ext. Wall: 8"  
 Fill Depth Range  
 Maximum: 7.99 ft  
 Minimum: 4.00 ft  
 Increment: 0.50 ft  
 Length: 5'-9"  
 Skew Angle: 0.00 deg  
 Bottom Slab Support: Full Slab  
 Top Haunch, Width: 0"  
 Top Haunch, Height: 0"  
 Bottom Haunch, Width: 0"  
 Bottom Haunch, Height: 0"



## Material Properties

Concrete  
 Strength, f<sub>c</sub>: 5.000 ksi  
 Density: 0.150 kcf  
 Elasticity, E<sub>c</sub>: 3834 ksi  
 Type: Normal wt  
 Steel  
 Yield, f<sub>y</sub>: 60 ksi  
 Allow Stress: 36 ksi  
 Elasticity, E<sub>s</sub>: 29000 ksi  
 Soil  
 Density: 0.120 kcf  
 Exposure Factor  
 Class 2 Exposure  
 Reinforcement Covers  
 Ext. Cover Top Slab: 2"  
 Ext. Cover Bottom Slab: 1"  
 Ext. Cover Walls: 1"  
 Int. Cover Walls: 1"  
 Int. Cover Top Slab: 1"  
 Int. Cover Bottom Slab: 1"



## Controlling Ratings

Inventory Rating: NaN  
 Operating Rating: NaN

## Loads

Live Load  
 Vehicle Names: HL-93  
 Traffic Direction: Parallel  
 Eq. Height of Soil: Calculated  
 Dead Load  
 Future Wearing Surface: 0.000 klf  
 Additional Dead Load: 0.000 klf  
 Concentrated Loads: none

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

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

# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_

By: J. Horsley

Ck: \_\_\_\_\_

5/11/2026 4:10:17 PM

etc of 3

Project : Alcoa Outfall

Task :

Client: Bowen Engineering Co

Job No. : 25-2073

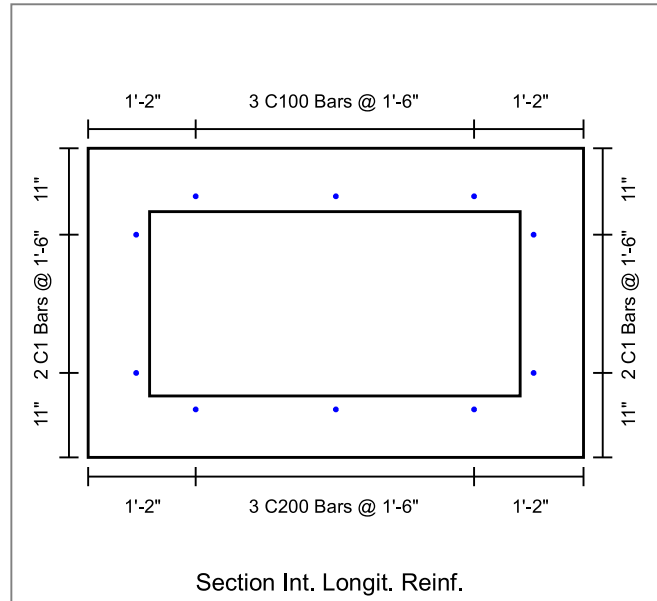
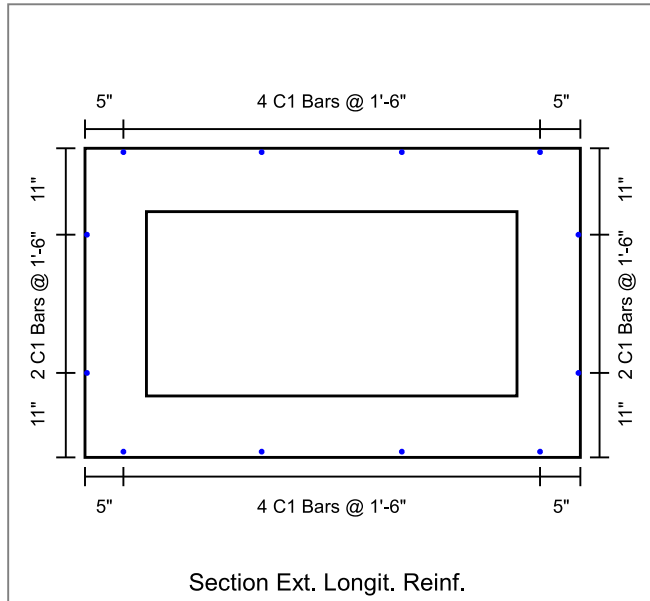
File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

## Concrete Summary

Volume of Concrete: 0.362 cy/ft Total Volume of Concrete: 2.082 cy

## Reinforcing Steel Bar Schedule (lb)

Location	Mark	Qty	Size	Spacing	Type	Length	Center	Ver.Leg	Tot.Weight
Top Slab(Int)	A100 (AS2)	6	4	1'-0"	S	5'-1"	--	--	20.0
Bot Slab(Int)	A200 (AS3)	6	4	1'-0"	S	5'-1"	--	--	20.0
Corner(Top)	A1 (AS1)	6	4	1'-0"	U	9'-5"	5'-1"	2'-2"	38.0
Corner(Bot)	A2 (AS1)	6	4	1'-0"	U	9'-7"	5'-1"	2'-3"	38.0
Wall(Int)	B1 (AS4)	12	4	1'-0"	S	2'-6"	--	--	20.0
Longit. Top (Int)	C100 (AS5)	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Bot (Int)	C200	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Top (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Bot (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Int)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
									182



# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_

By: J. Horsley

Ck: \_\_\_\_\_

5/11/2026 4:10:17 PM

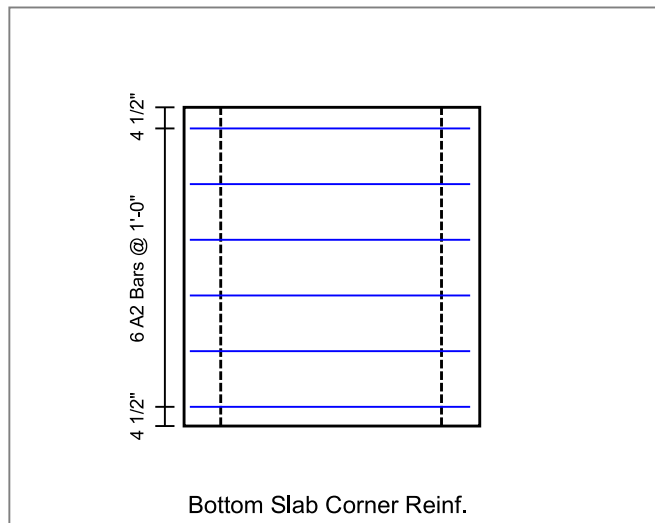
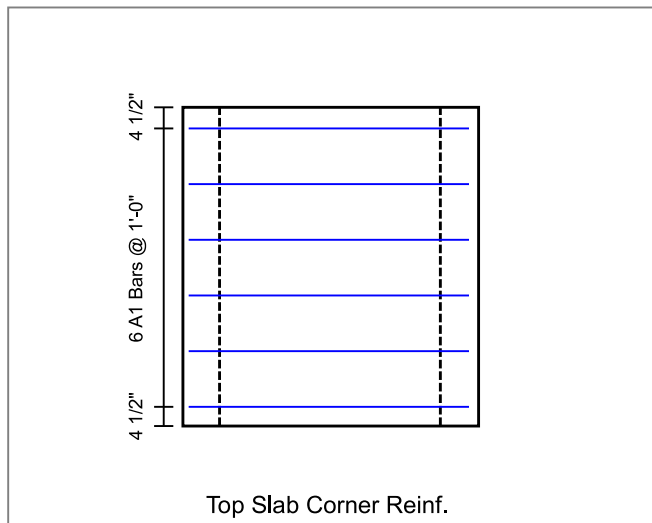
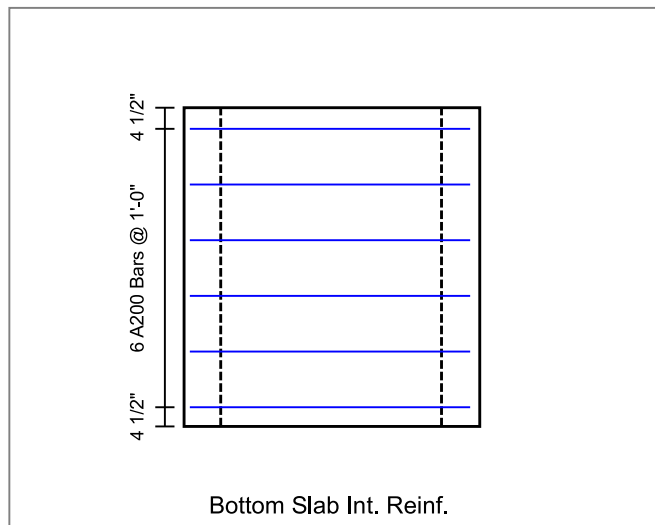
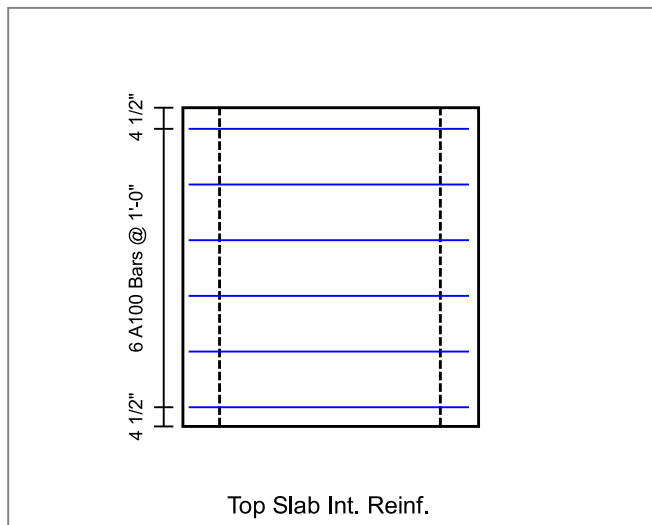
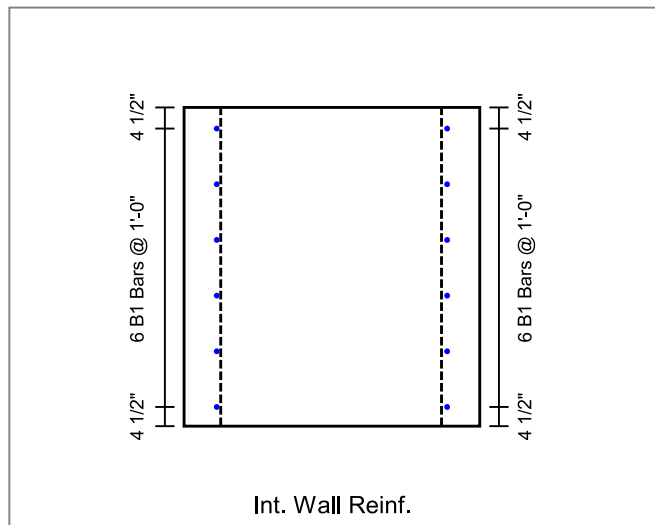
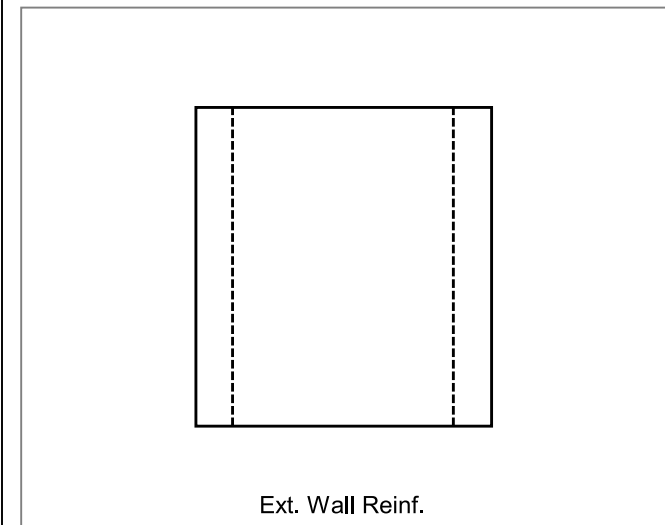
Project : Alcoa Outfall

Client: Bowen Engineering Co

Task :

File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Page 3 of 3

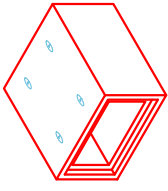




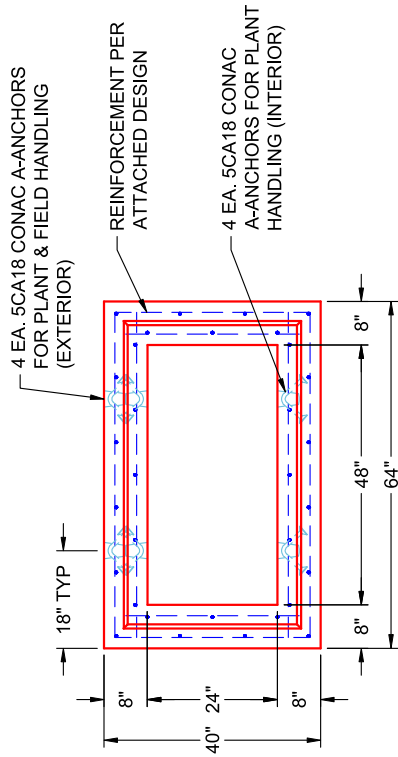
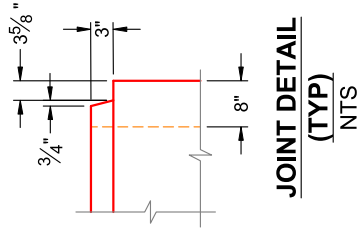
**Structure ID: BC 4 x 2 (PC 16)**

**P1 BC048024-08WLF**

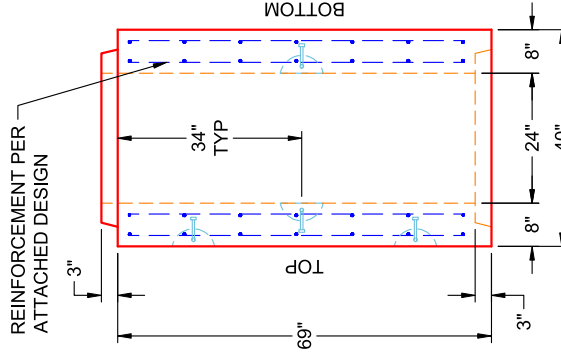
**BOX CULVERT (08W/08F/08T) No Haunch G/T**



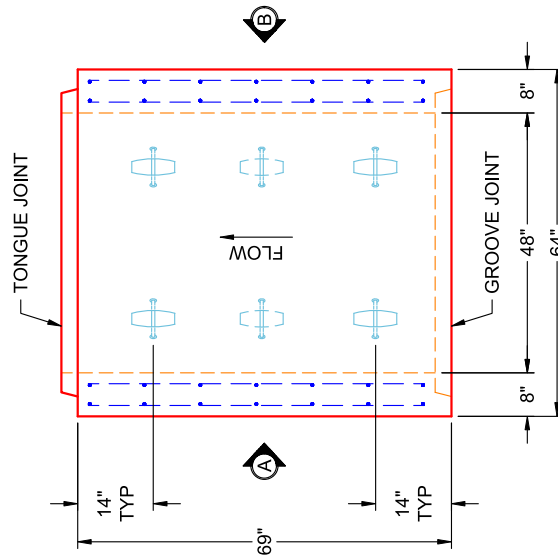
**COMPONENT ISOMETRIC VIEW**



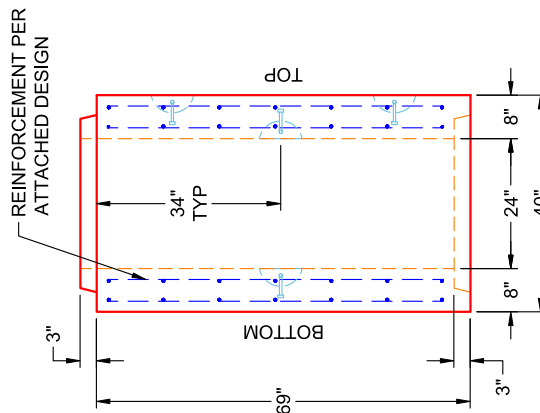
**END VIEW TYPICAL**



**VIEW B**  
PC 16  
(UPRIGHT IN MOLD)



**PLAN VIEW**  
PC 16  
(UPRIGHT IN MOLD)



**VIEW A**  
PC 16  
(UPRIGHT IN MOLD)

**GENERAL NOTES:**

1. MANUFACTURED TO ASTM C-1577 & SECTION 714 OF INDOT STANDARD SPECIFICATIONS FOR REINFORCED CONCRETE BOX STRUCTURES
2. LOAD REQUIREMENTS: HL93
3. REINFORCEMENT PER ATTACHED DESIGN
4. COVER DEPTH: 4'-8"
5. CONCRETE: 5,000 PSI AT 28 DAYS
6. JOINT SEALANT: 1" BUTYL MASTIC (CS-102) EXTERIOR JOINT WRAP: 12" WIDE (CS-212)
7. WEIGHT: 4' X 2' (48" X 24") RCBC = 1,418 LBS / LF (69" LONG SECTION = 8,152 LBS)

# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_  
 By: J. Horsley  
 Ck: \_\_\_\_\_  
 5/11/2026 4:10:17 PM  
 p. 1 of 3

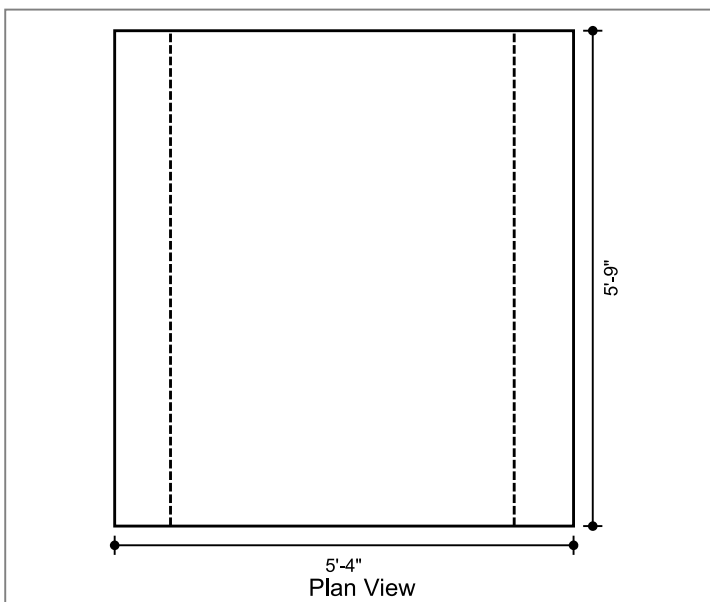
Project : Alcoa Outfall  
 Task :  
 Job No. : 25-2073

Client: Bowen Engineering Co  
 File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

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

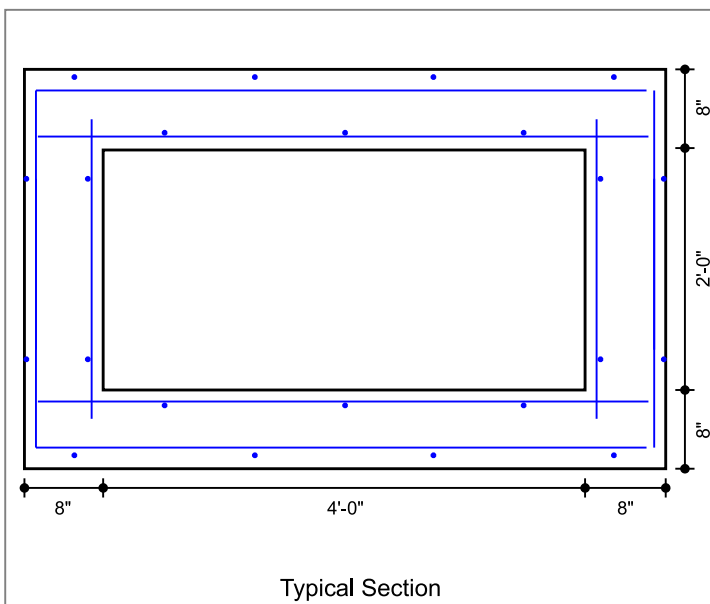
## Physical Dimensions

Clear Span: 4'-0"  
 Clear Height: 2'-0"  
 Top Slab: 8"  
 Bottom Slab: 8"  
 Ext. Wall: 8"  
 Fill Depth Range  
 Maximum: 7.99 ft  
 Minimum: 4.00 ft  
 Increment: 0.50 ft  
 Length: 5'-9"  
 Skew Angle: 0.00 deg  
 Bottom Slab Support: Full Slab  
 Top Haunch, Width: 0"  
 Top Haunch, Height: 0"  
 Bottom Haunch, Width: 0"  
 Bottom Haunch, Height: 0"



## Material Properties

Concrete  
 Strength, f<sub>c</sub>: 5.000 ksi  
 Density: 0.150 kcf  
 Elasticity, E<sub>c</sub>: 3834 ksi  
 Type: Normal wt  
 Steel  
 Yield, f<sub>y</sub>: 60 ksi  
 Allow Stress: 36 ksi  
 Elasticity, E<sub>s</sub>: 29000 ksi  
 Soil  
 Density: 0.120 kcf  
 Exposure Factor  
 Class 2 Exposure  
 Reinforcement Covers  
 Ext. Cover Top Slab: 2"  
 Ext. Cover Bottom Slab: 1"  
 Ext. Cover Walls: 1"  
 Int. Cover Walls: 1"  
 Int. Cover Top Slab: 1"  
 Int. Cover Bottom Slab: 1"



## Controlling Ratings

Inventory Rating: NaN  
 Operating Rating: NaN

## Loads

Live Load  
 Vehicle Names: HL-93  
 Traffic Direction: Parallel  
 Eq. Height of Soil: Calculated  
 Dead Load  
 Future Wearing Surface: 0.000 klf  
 Additional Dead Load: 0.000 klf  
 Concentrated Loads: none

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

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

# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_

By: J. Horsley

Ck: \_\_\_\_\_

5/11/2026 4:10:17 PM

etc of 3

Project : Alcoa Outfall

Task :

Client: Bowen Engineering Co

Job No. : 25-2073

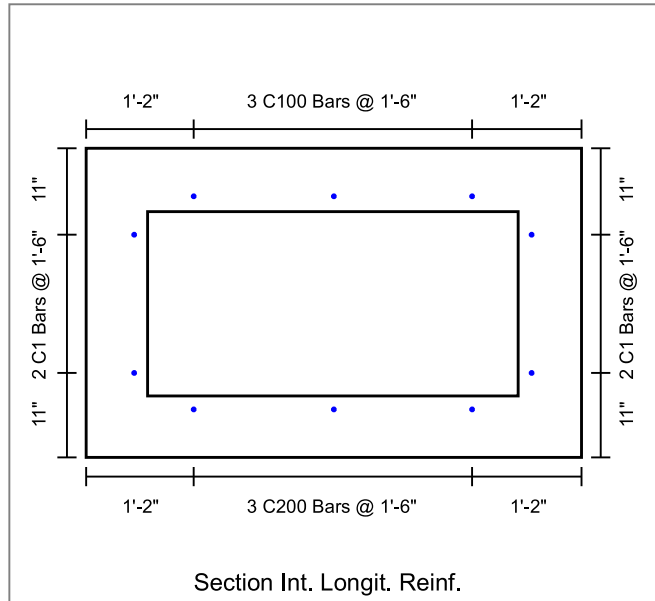
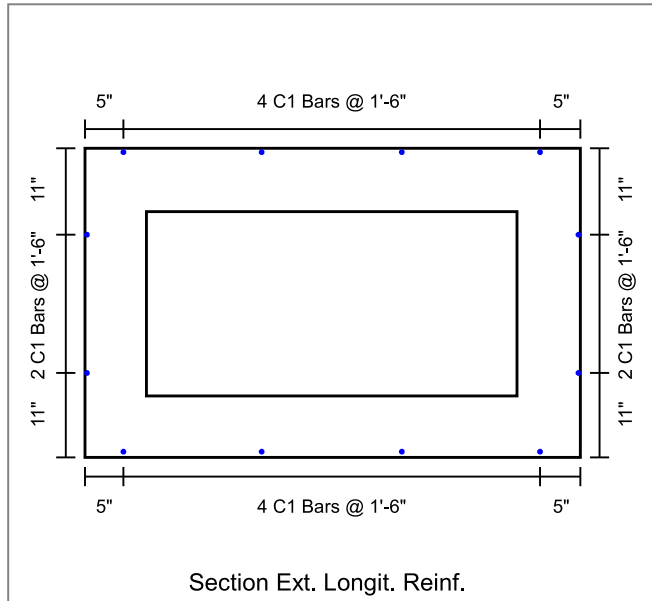
File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

## Concrete Summary

Volume of Concrete: 0.362 cy/ft Total Volume of Concrete: 2.082 cy

## Reinforcing Steel Bar Schedule (lb)

Location	Mark	Qty	Size	Spacing	Type	Length	Center	Ver.Leg	Tot.Weight
Top Slab(Int)	A100 (AS2)	6	4	1'-0"	S	5'-1"	--	--	20.0
Bot Slab(Int)	A200 (AS3)	6	4	1'-0"	S	5'-1"	--	--	20.0
Corner(Top)	A1 (AS1)	6	4	1'-0"	U	9'-5"	5'-1"	2'-2"	38.0
Corner(Bot)	A2 (AS1)	6	4	1'-0"	U	9'-7"	5'-1"	2'-3"	38.0
Wall(Int)	B1 (AS4)	12	4	1'-0"	S	2'-6"	--	--	20.0
Longit. Top (Int)	C100 (AS5)	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Bot (Int)	C200	3	3	1'-6"	S	5'-8"	--	--	6.0
Longit. Top (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Bot (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Ext)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
Longit. Wall (Int)	C1 (AS6)	4	3	1'-6"	S	5'-8"	--	--	8.6
									182



# INFRASTRUCTURE PRECAST (ICAST)

Sht \_\_\_\_\_ of \_\_\_\_\_

By: J. Horsley

Ck: \_\_\_\_\_

5/11/2026 4:10:17 PM

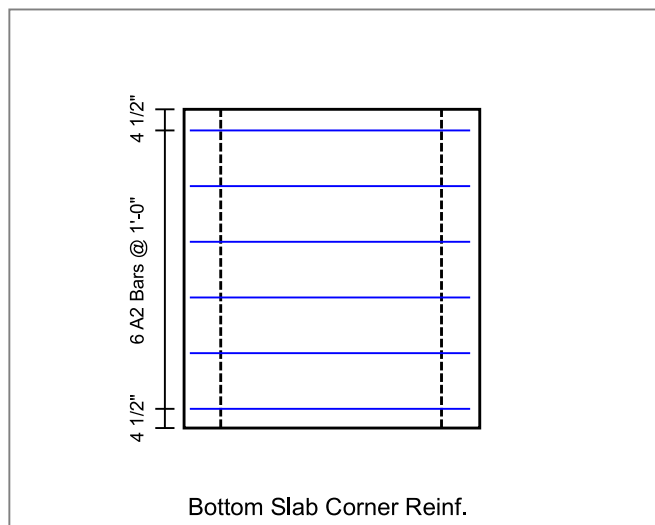
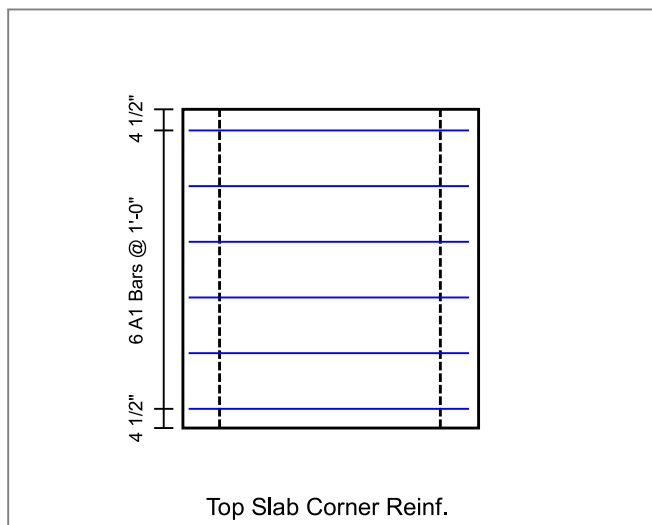
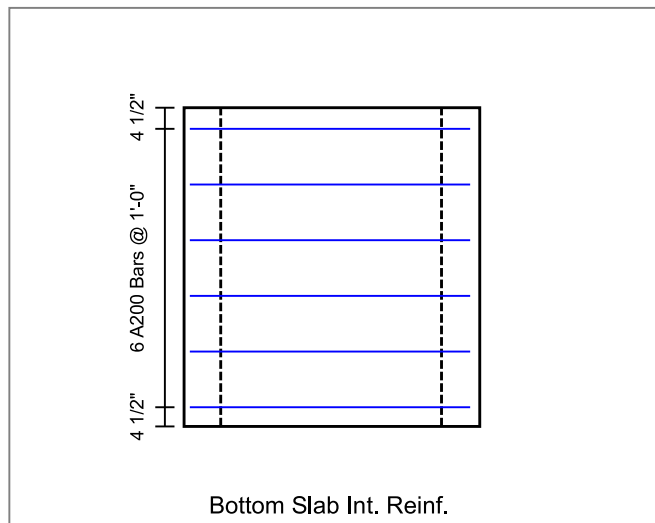
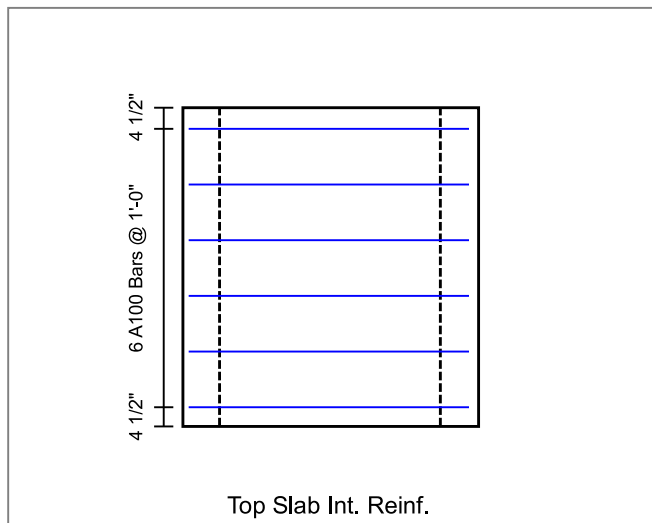
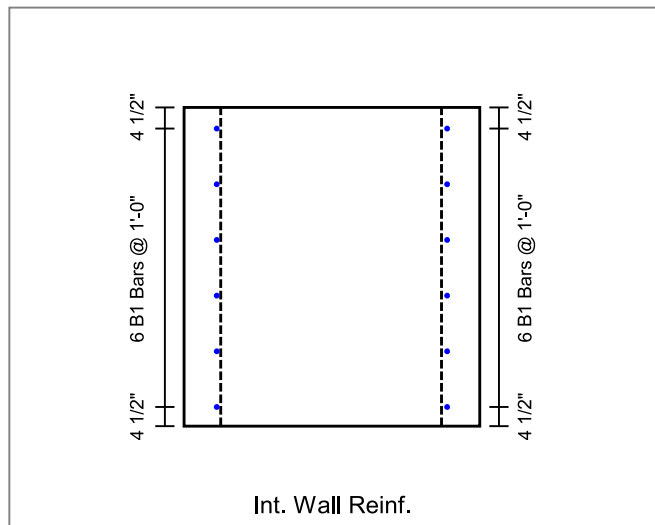
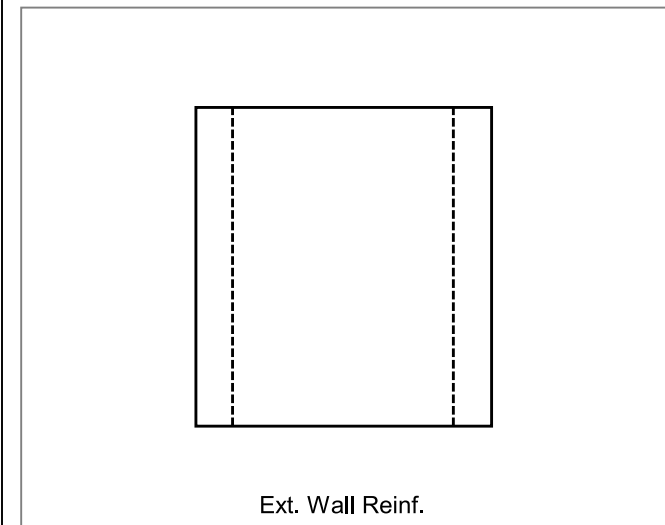
Project : Alcoa Outfall

Client: Bowen Engineering Co

Task :

File: 4x2 BC Four Sided (no haunch) - 25-2073 Alcoa Outfall

Page 3 of 3



Job Name: 26-1763 - MSU Commons Vault  
 Job Location: Murray, KY  
 Contractor: West Kentucky Industrial & Plumbing

Plant: 100  
 5/22/2026 5:04:04 PM

Tech: Jared - F  
 PC: T. Lewis



**Structure ID: QL2 MV**

**P2 BX048108-08LD08S**

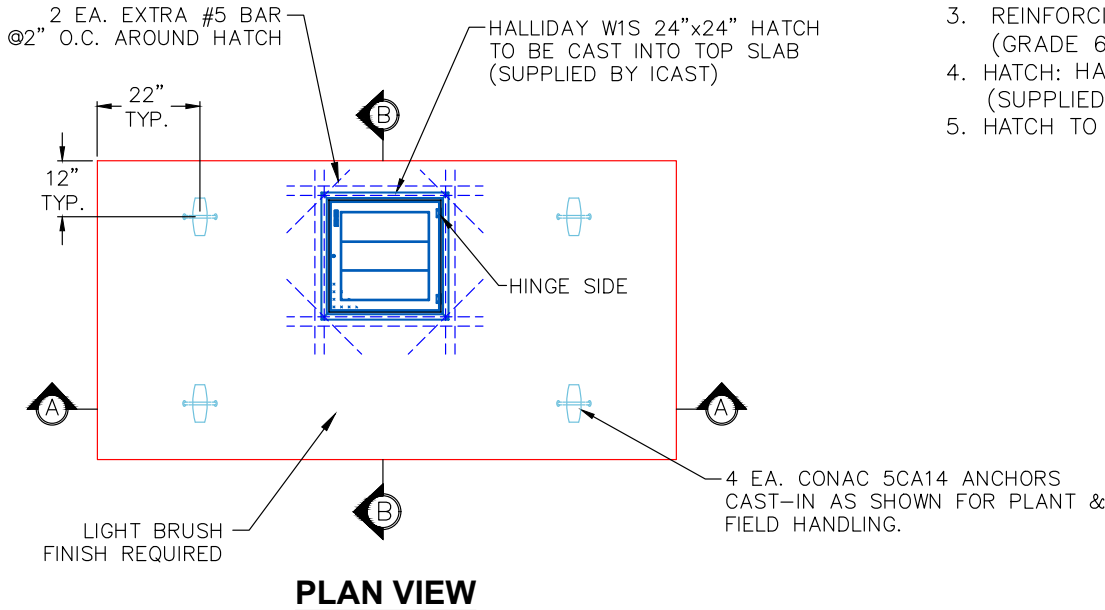
**BX FLAT TOP 8"W w/24"x24" HATCH F/F**

- P3) 24" x 24" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 108" - BX FLAT TOP 8"W w/24"x24" HATCH - 8"
- P1) 48" x 108" - BOX BASE 8inW, 8inF, Variable Ht - 72"
- 1) JOINT WRAP - 0.065"x6"x50' CONSEAL CS212
- 1) JOINT WRAP PRIMER - CONSEAL CS-75 (1 gal.)
- 1) HATCH (Alum.) - HALLIDAY W1S 24"x24"
- 1) SECONDARY POUR - WALLS
- 1) 24" x 24" - Conseal CS-102 1.00" (Double)
- 2) Hole - 8

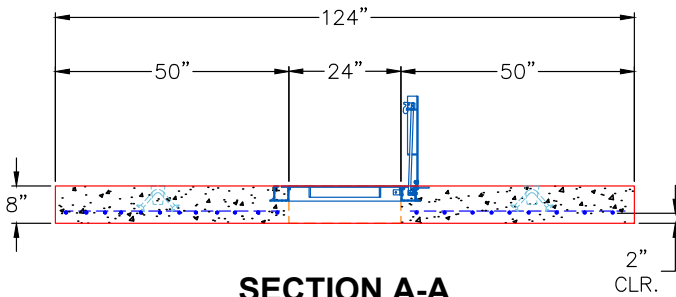
100 lb  
 4941 lb  
 21887 lb  
 0 lb  
 0 lb  
 46 lb  
 0 lb  
 0 lb  
 0 lb

Structure Total: 26973 lb

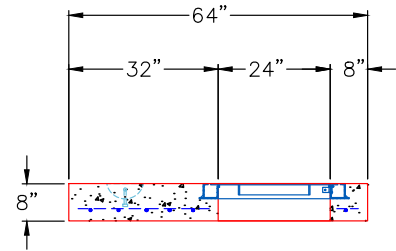
- Structure Notes:**
1. PER ASTM C913 SPECIFICATIONS.
  2. CONCRETE = 4,000 PSI AT 28 DAYS.
  3. HATCH PROVIDED BY ICAST (HALLIDAY W1S 24"x24")
  - REINFORCING PER ASTM A615 (GRADE 60).
  - TOP SLAB #5 BAR @ 6" C.C.E.W.
  - WALLS #5 BAR @ 12" C.C.E.W.
  - FLOOR #5 BAR @ 12" C.C.E.W.



- 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).
  4. HATCH: HALLIDAY W1S 24"x24" HATCH (SUPPLIED BY ICAST)
  5. HATCH TO BE CAST INTO TOP OF LID.



**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): 4941 lb Volume (Net): 1.26cu.yd
----------------------------------	--------------------------------	--------------------	------------------	--

Job Name: 26-1230 - Wheelwright WWTP & LS Improvements  
 Job Location: Wheelwright, KY  
 Contractor: Endesol, Inc.

Plant: 100  
 5/6/2026 5:09:02 PM

Tech: Jared - F  
 PC: E. Bradley



**Structure ID: 4-B**

**P1 CVBS**

**Base Slab F/n**

P1) 84" x 84" - Base Slab F/n - 8"

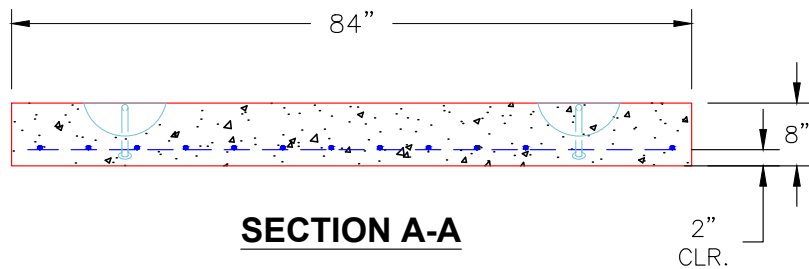
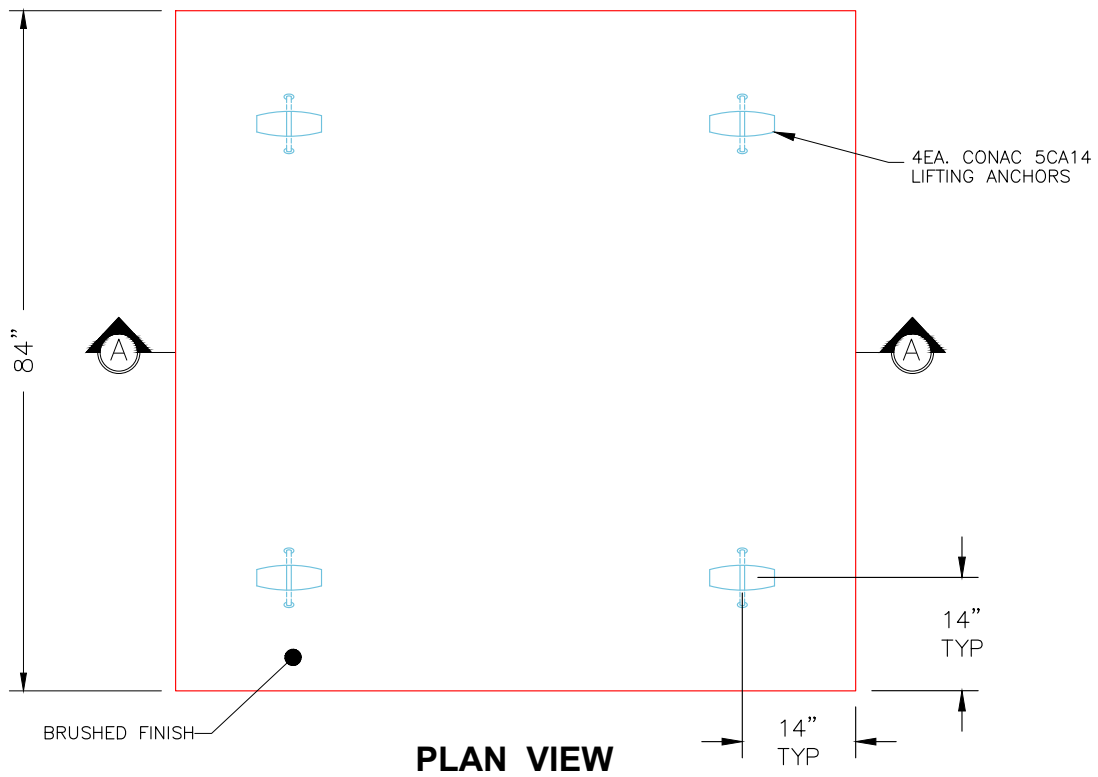
Structure Total: 4737 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.

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

Rim: 0.667' Rim to Invert: 0' Slack: 0" Sump: 0" Step Position:



NOTES:

1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 12" O.C. E.W. (GRADE 60).

Coating (Int): Coating (Ext):	Seam Up: Flat Seam Dn: n/a	Wall Thickness: 0" Floor Height: 8"	Height (Int): 0" Height (Ext): 0"	Weight (Net): 4737 lb Volume (Net): 1.21cu.yd
----------------------------------	-------------------------------	--	--------------------------------------	--

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2  
 Job Location: Stanford, KY  
 Contractor: Frederick and May Construction

Plant: 100  
 5/5/2026 8:17:54 PM

Tech: Jared - F  
 PC: E. Bradley



**Structure ID: METER VAULT - 3**

**P2 BX4884-06LD08-SP**

**CB FLAT TOP 6"W w/36"x60" HATCH F/F**

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

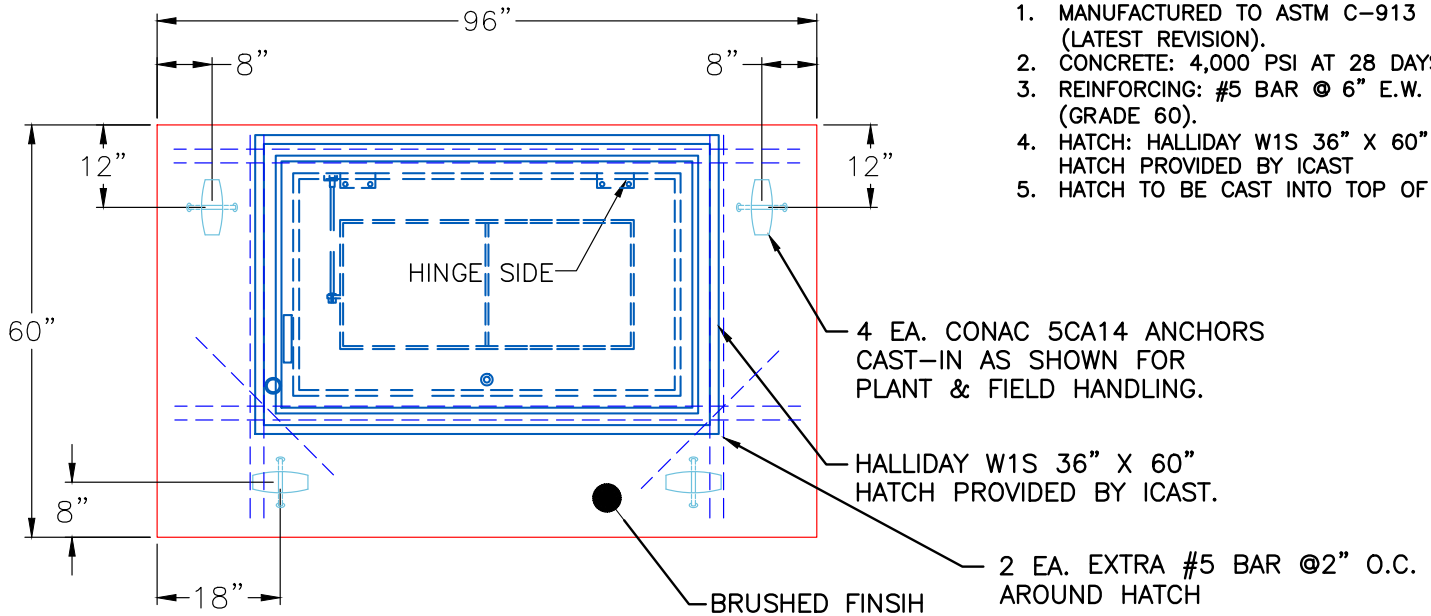
100 lb  
 2417 lb  
 10702 lb  
 116 lb  
 0 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 13334 lb

**Structure Notes:**  
 1. PER ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

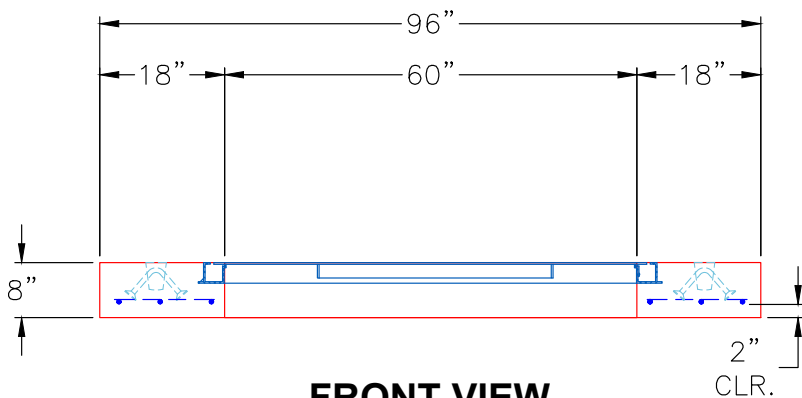
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.  
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

**GENERAL NOTES:**

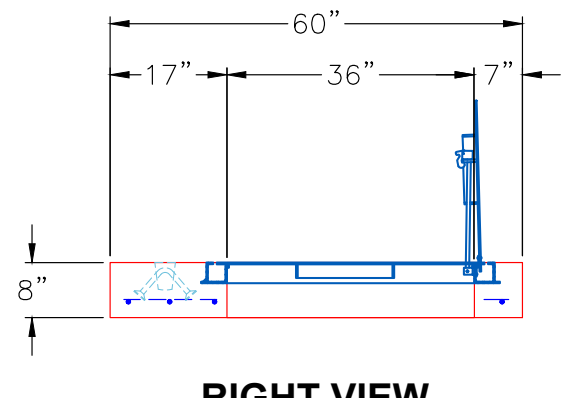
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



**PLAN VIEW**



**FRONT VIEW**



**RIGHT VIEW**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb  
 Volume (Net): 0.62cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2  
 Job Location: Stanford, KY  
 Contractor: Frederick and May Construction

Plant: 100  
 5/5/2026 8:17:40 PM

Tech: Jared - F  
 PC: E. Bradley



**Structure ID: METER VAULT - 2**

**P1 BX4884-06BAVF-FLAT**

**BOX BASE 6inW, 6inF, Variable Ht F/n**

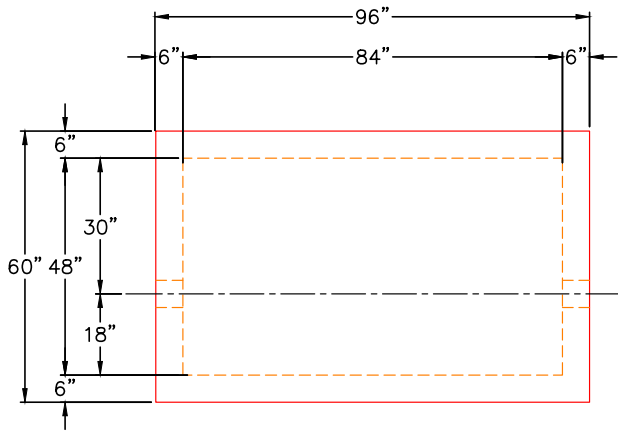
- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

100 lb  
 2417 lb  
 10702 lb  
 116 lb  
 0 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 13334 lb

**Structure Notes:**  
 1. PER ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

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

Rim: 5.167' Rim to Invert: 4' Slack: 0" Sump: 14" Step Position:



**PLAN VIEW**

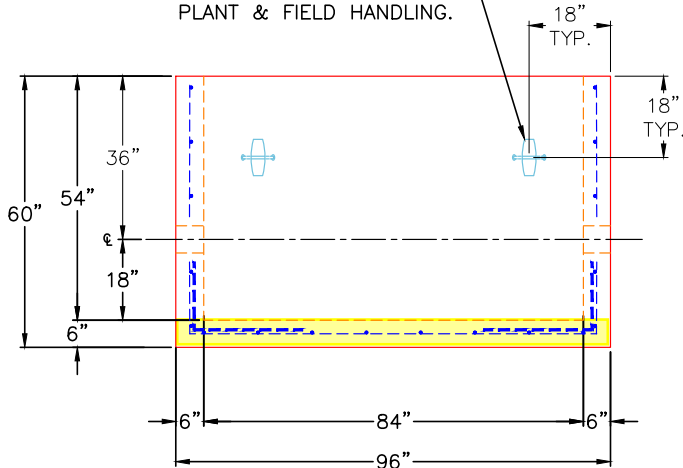
**GENERAL NOTES:**

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).
4. WEIGHT:  
 FIRST POUR - 2,900 LBS.  
 SECOND POUR - 7,830 LBS.  
 TOTAL - 10,730 LBS.

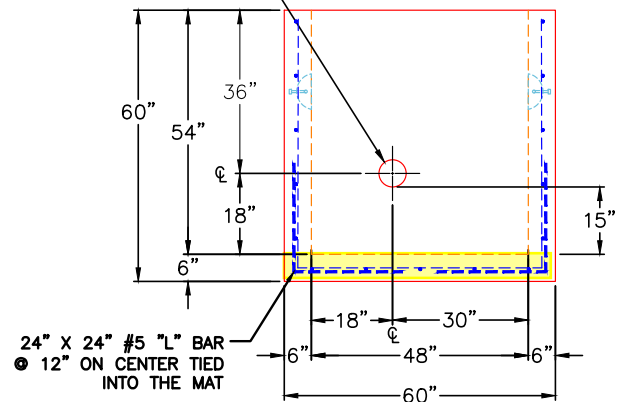
**FIRST POUR DRAWING**

4 EA. CONAC 6CA14 ANCHORS CAST IN AS SHOWN FOR PLANT & FIELD HANDLING.

6" HOLE FOR 2" DIA. PIPE UP 15" FROM TOP OF FLOOR TO BTM OF HOLE NEAR WALL AND FAR WALL



**FRONT VIEW**



**RIGHT VIEW**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: n/a

Wall Thickness: 6"  
 Floor Height: 6"

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

Weight (Net): 10702 lb  
 Volume (Net): 2.73cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2  
 Job Location: Stanford, KY  
 Contractor: Frederick and May Construction

Plant: 100

5/5/2026 8:17:40 PM

Tech: Jared - F

PC: E. Bradley



**Structure ID: METER VAULT - 2**

**P1 BX4884-06BAVF-FLAT**

**BOX BASE 6inW, 6inF, Variable Ht F/n**

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

100 lb  
 2417 lb  
 10702 lb  
 116 lb  
 0 lb  
 0 lb  
 0 lb

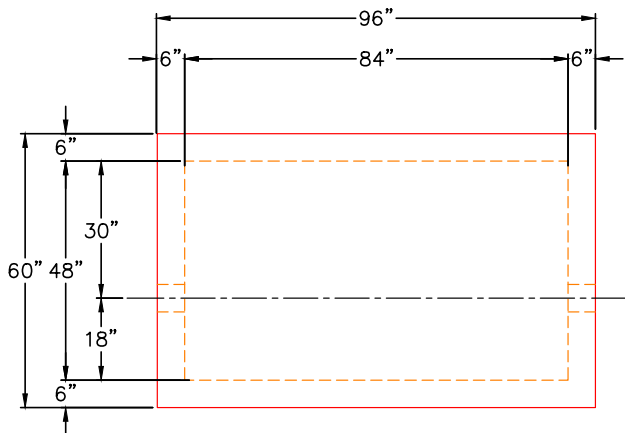
Structure Total: 13334 lb

Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS AND NO INVERT CHANNEL.
4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

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

Rim: 5.167' Rim to Invert: 4' Slack: 0" Sump: 14" Step Position:



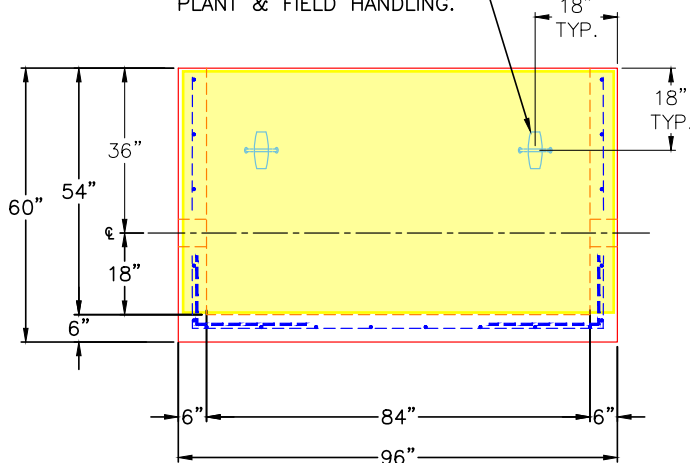
**PLAN VIEW**

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).
4. WEIGHT:  
 FIRST POUR - 2,900 LBS.  
 SECOND POUR - 7,830 LBS.  
 TOTAL - 10,730 LBS.

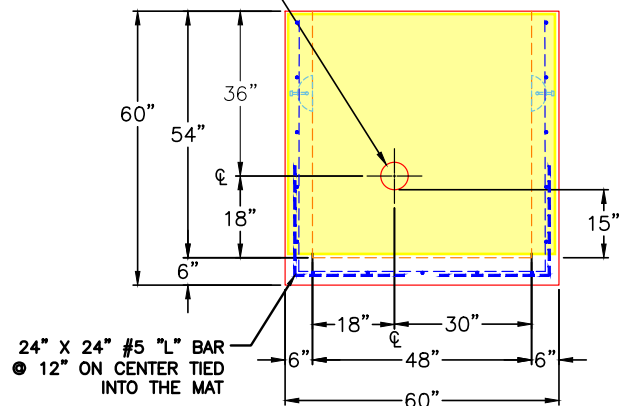
**SECOND POUR DRAWING**

4 EA. CONAC 6CA14 ANCHORS  
 CAST IN AS SHOWN FOR  
 PLANT & FIELD HANDLING.



**FRONT VIEW**

6" HOLE FOR 2" DIA. PIPE  
 UP 15" FROM TOP OF  
 FLOOR TO BTM OF HOLE  
 NEAR WALL AND FAR WALL



**RIGHT VIEW**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: n/a

Wall Thickness: 6"  
 Floor Height: 6"

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

Weight (Net): 10702 lb  
 Volume (Net): 2.73cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2  
 Job Location: Stanford, KY  
 Contractor: Frederick and May Construction

Plant: 100  
 5/5/2026 8:17:54 PM

Tech: Jared - F  
 PC: E. Bradley



**Structure ID: METER VAULT - 2**

**P2 BX4884-06LD08-SP**

**CB FLAT TOP 6"W w/36"x60" HATCH F/F**

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

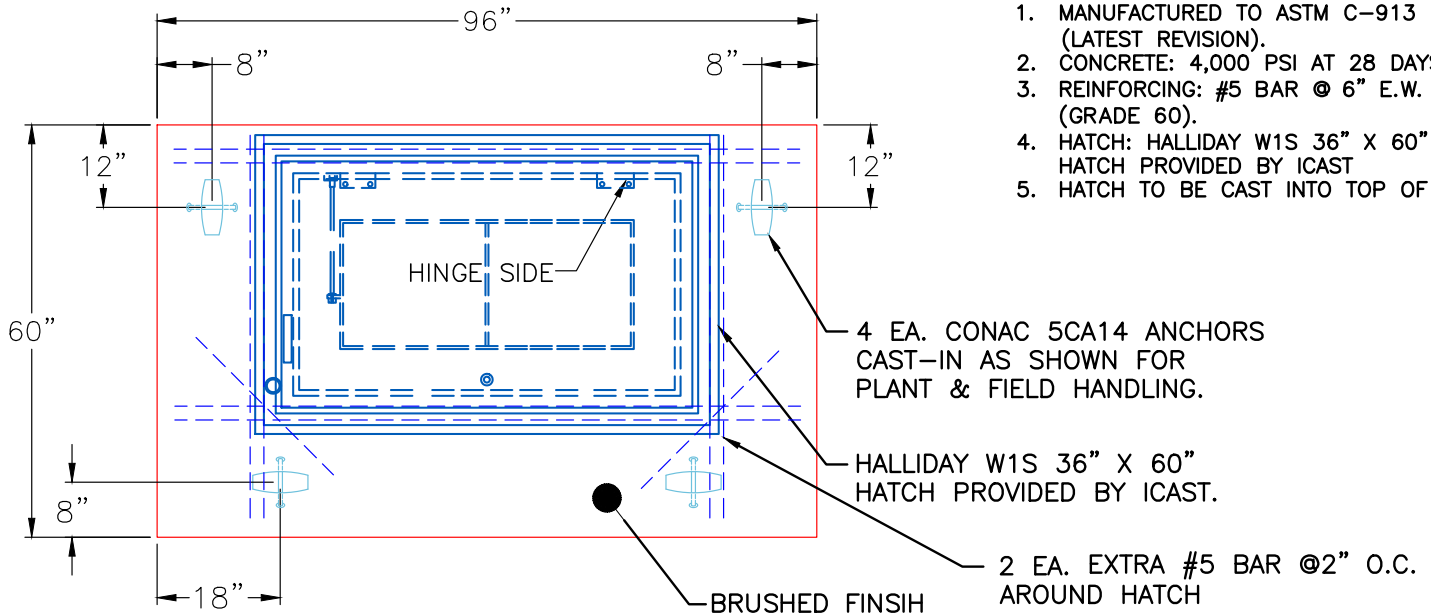
100 lb  
 2417 lb  
 10702 lb  
 116 lb  
 0 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 13334 lb

**Structure Notes:**  
 1. PER ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

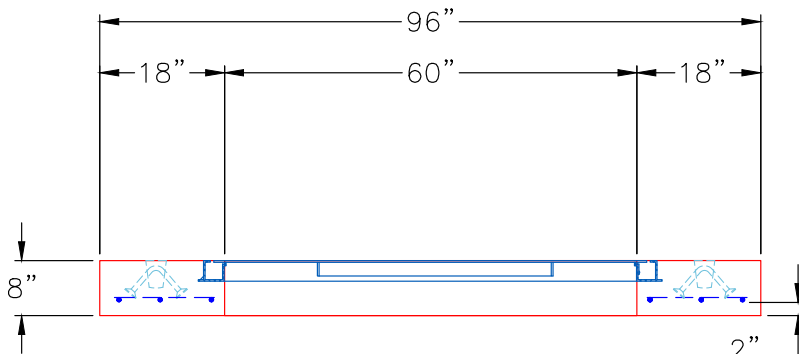
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.  
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

**GENERAL NOTES:**

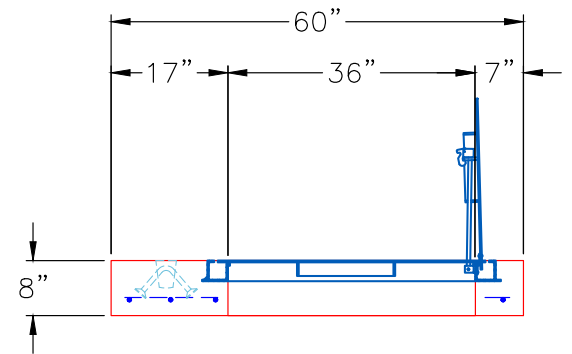
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



**PLAN VIEW**



**FRONT VIEW**



**RIGHT VIEW**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb  
 Volume (Net): 0.62cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2  
 Job Location: Stanford, KY  
 Contractor: Frederick and May Construction

Plant: 100

5/5/2026 8:17:54 PM

Tech: Jared - F

PC: E. Bradley



**Structure ID: METER VAULT - 11**

**P2 BX4884-06LD08-SP**

**CB FLAT TOP 6"W w/36"x60" HATCH F/F**

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

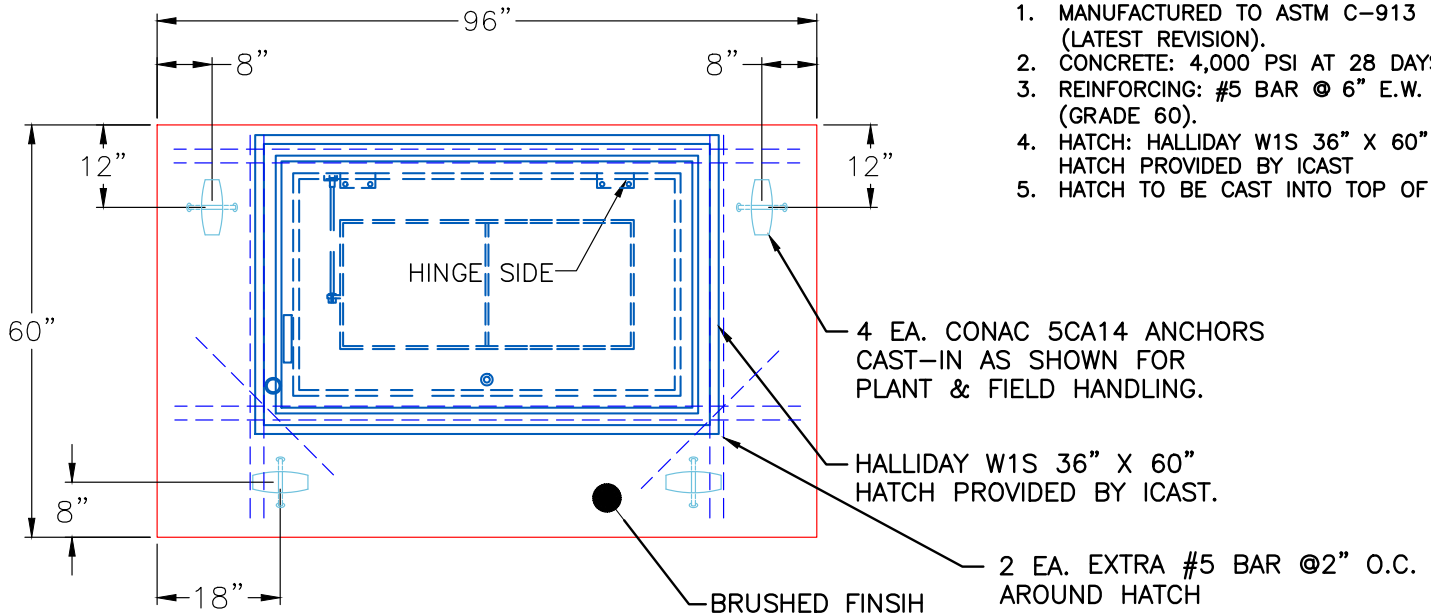
100 lb  
 2417 lb  
 10702 lb  
 116 lb  
 0 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 13334 lb

**Structure Notes:**  
 1. PER ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

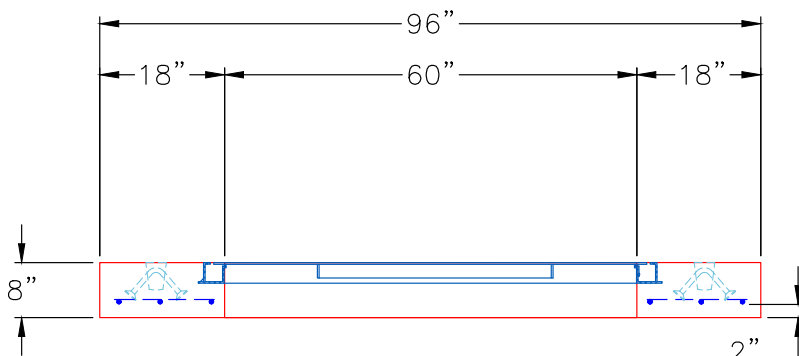
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.  
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

**GENERAL NOTES:**

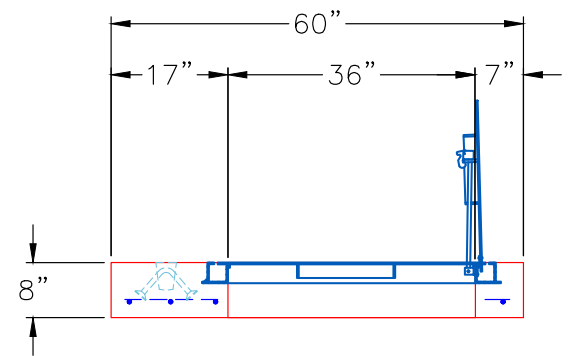
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



**PLAN VIEW**



**FRONT VIEW**



**RIGHT VIEW**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb  
 Volume (Net): 0.62cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2  
 Job Location: Stanford, KY  
 Contractor: Frederick and May Construction

Plant: 100

5/5/2026 8:17:54 PM

Tech: Jared - F

PC: E. Bradley



**Structure ID: METER VAULT - 5**

**P2 BX4884-06LD08-SP**

**CB FLAT TOP 6"W w/36"x60" HATCH F/F**

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

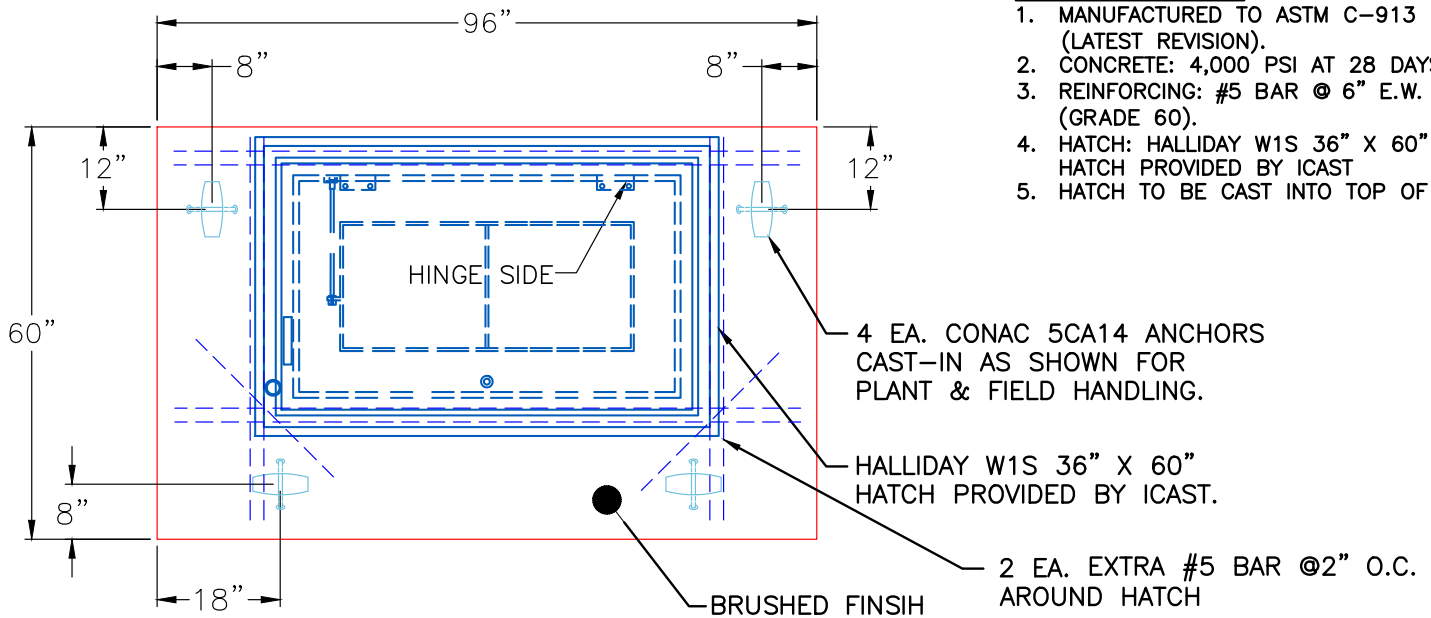
100 lb  
 2417 lb  
 10702 lb  
 116 lb  
 0 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 13334 lb

**Structure Notes:**  
 1. PER ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

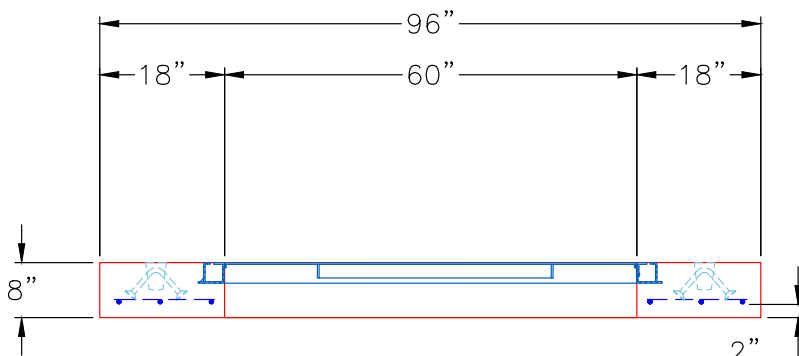
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.  
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

**GENERAL NOTES:**

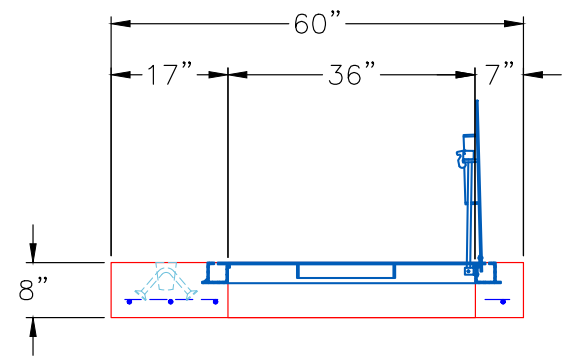
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



**PLAN VIEW**



**FRONT VIEW**



**RIGHT VIEW**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb  
 Volume (Net): 0.62cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2  
 Job Location: Stanford, KY  
 Contractor: Frederick and May Construction

Plant: 100

Tech: Jared - F

5/5/2026 8:17:54 PM

PC: E. Bradley



**Structure ID: METER VAULT - 4**

**P2 BX4884-06LD08-SP**

**CB FLAT TOP 6"W w/36"x60" HATCH F/F**

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

100 lb  
 2417 lb  
 10702 lb  
 116 lb  
 0 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 13334 lb

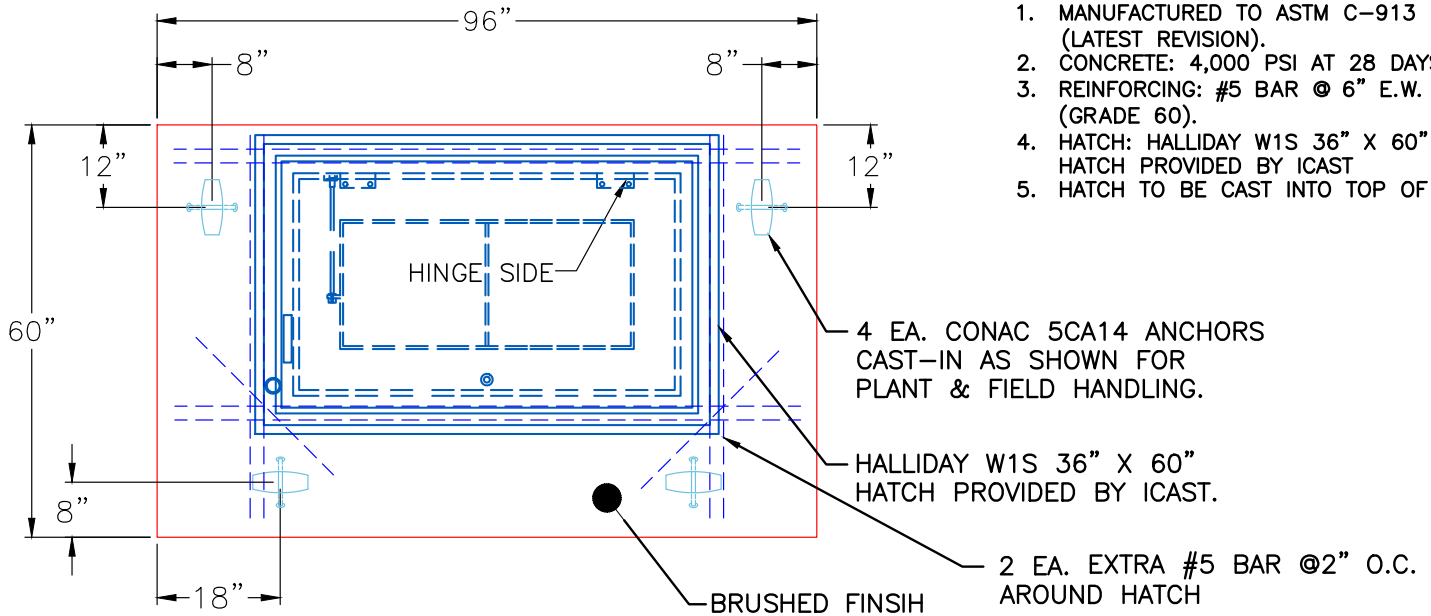
Structure Notes:

1. PER ASTM C913 SPECIFICATIONS.
2. CONCRETE = 4,000 PSI AT 28 DAYS.
3. NO STEPS AND NO INVERT CHANNEL.
4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

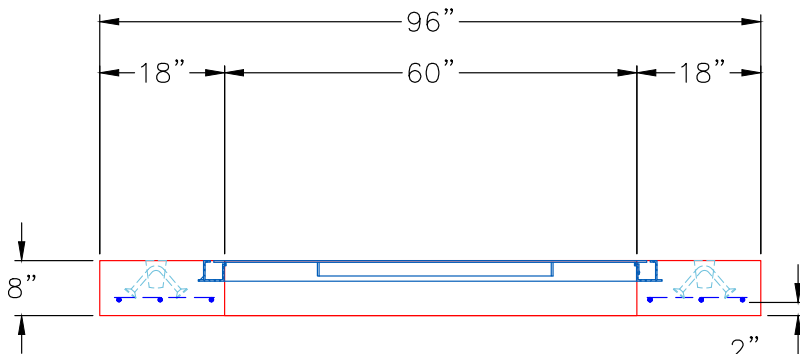
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.  
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

GENERAL NOTES:

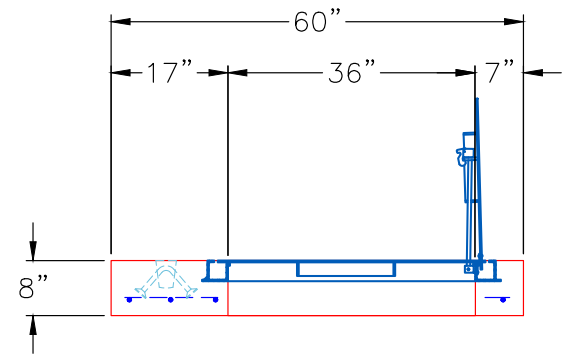
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



**PLAN VIEW**



**FRONT VIEW**



**RIGHT VIEW**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb  
 Volume (Net): 0.62cu.yd

Job Name: 24-4171 - McKinney Water District Contract 1B Phase 2  
 Job Location: Stanford, KY  
 Contractor: Frederick and May Construction

Plant: 100

5/5/2026 8:17:54 PM

Tech: Jared - F

PC: E. Bradley



**Structure ID: METER VAULT - 1**

**P2 BX4884-06LD08-SP**

**CB FLAT TOP 6"W w/36"x60" HATCH F/F**

- P3) 36" x 60" - HATCH (CAST FLUSH) - 3"
- P2) 48" x 84" - CB FLAT TOP 6"W w/36"x60" HATCH F/F - 8"
- P1) 48" x 84" - BOX BASE 6inW, 6inF, Variable Ht F/n - 54"
- 1) HATCH (Alum.) - HALLIDAY W1S 36"x60"
- 1) 48" x 84" - Conseal CS-102 1.00" (Double)
- 1) 36" x 60" - Conseal CS-102 1.00" (Double)
- 2) Hole - 6

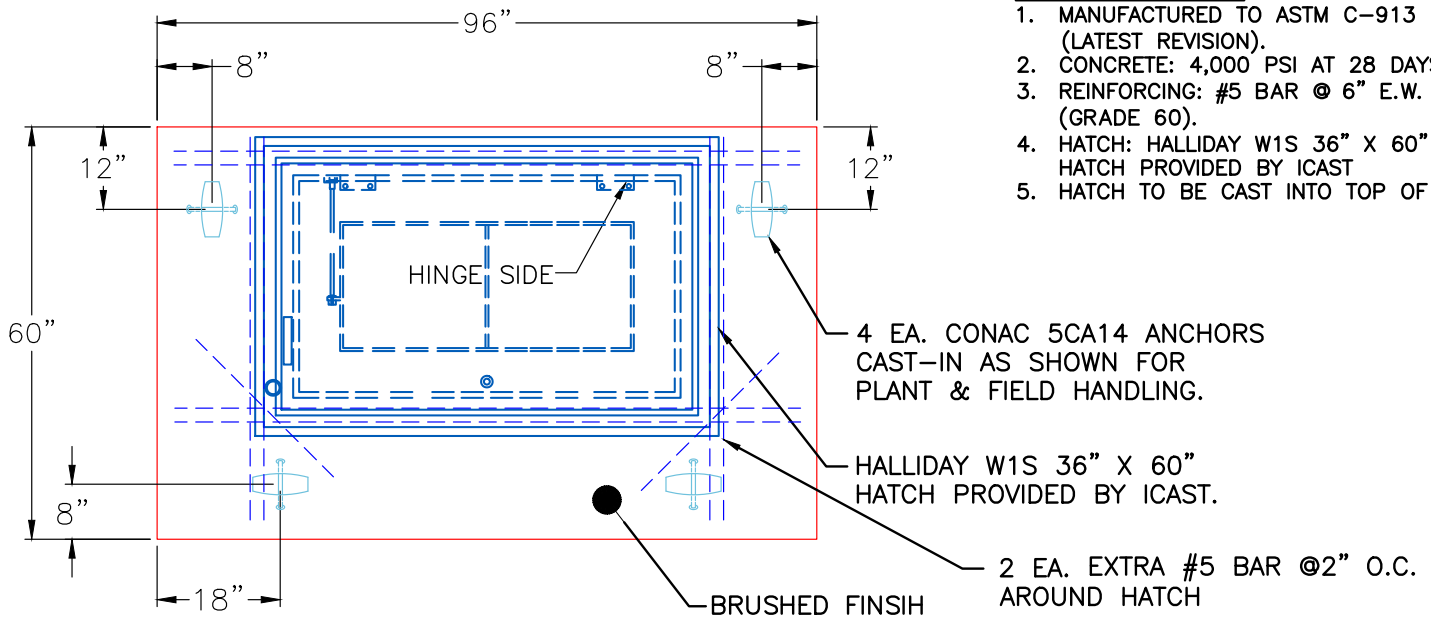
100 lb  
 2417 lb  
 10702 lb  
 116 lb  
 0 lb  
 0 lb  
 0 lb  
 -----  
 Structure Total: 13334 lb

**Structure Notes:**  
 1. PER ASTM C913 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. NO STEPS AND NO INVERT CHANNEL.  
 4. HATCH SUPPLIED BY ICAST (HALLIDAY W1S 36"x60").

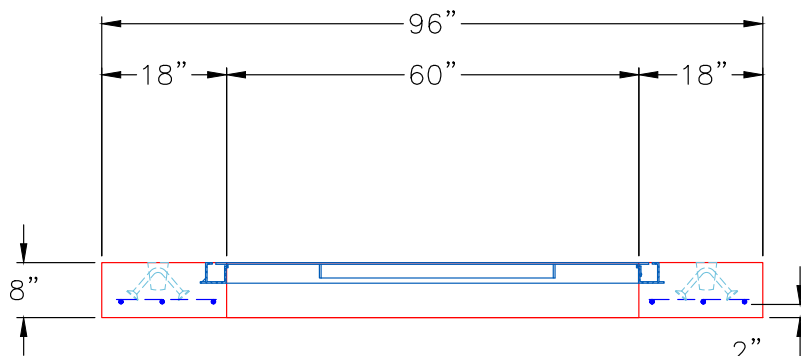
REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .62) #5 BARS AT 6" C.C.E.W.  
 - WALLS (As .12) #5 BARS AT 12" C.C.E.W.  
 - FLOOR (As .12) #5 BARS AT 12" C.C.E.W.

**GENERAL NOTES:**

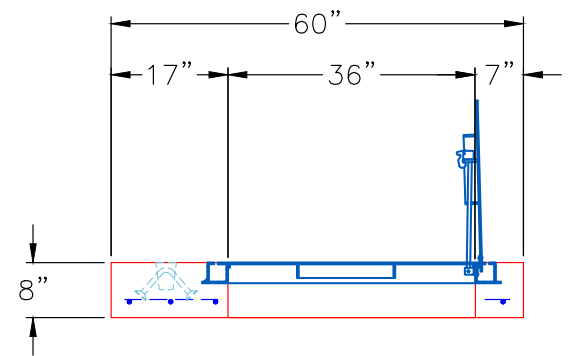
1. MANUFACTURED TO ASTM C-913 (LATEST REVISION).
2. CONCRETE: 4,000 PSI AT 28 DAYS.
3. REINFORCING: #5 BAR @ 6" E.W. O.C. (GRADE 60).
4. HATCH: HALLIDAY W1S 36" X 60" HATCH PROVIDED BY ICAST
5. HATCH TO BE CAST INTO TOP OF LID.



**PLAN VIEW**



**FRONT VIEW**



**RIGHT VIEW**

Coating (Int):  
 Coating (Ext):

Seam Up: Flat  
 Seam Dn: Flat

Wall Thickness: 6"

Height (Ext): 8"

Weight (Net): 2417 lb  
 Volume (Net): 0.62cu.yd

Job Name: 26-1098 LUC Sinking Creek Lift Station  
 Job Location: London, KY  
 Contractor: Endesol, Inc.

Plant: Beaver Dam  
 1/16/2026 1:22:43 PM

Tech: J. Coppage  
 PC: E. Bradley



**Structure ID: Lift Station**

**P3 CTRS-X**

**Combined Lift Station Walls/Floor w/XYPEX**

- P5) 36" x 36" - CASTING HEIGHT - 0"
- P4) 72" - Combined Lift Station Top Slab Custom w/Xypex - 12"
- P3) 72" - Combined Lift Station Walls/Floor w/XYPEX - 71"
- P2) 72" - MH RISER Custom Ht, w/XYPEX - 36.5"
- P1) 72" - MH BASE SQ EF Cust. Ht. 12"F (EF =102"SQ) w/ XYPEX - 72"
- 1) This Structure Includes a Cast-in Item
- 1) HATCH (Alum.) - HALLIDAY W1R 34"x52"
- 1) HATCH (Alum.) - HALLIDAY W1R 36"x36"
- 1) SECONDARY POUR - EXTENDED BASE SLAB
- 1) SECONDARY POUR - WALLS FOR VAULT SECTION
- 1) SECONDARY POUR - VAULT SECTION EXTENSION
- 1) ASSEMBLY REQUIRED
- 2) 72" - DBL 1"x14.5' Butyl (2x)
- 2) PSX - 12-08 NYLO

0 lb  
 8108 lb  
 29429 lb  
 5188 lb  
 20973 lb  
 0 lb  
 46 lb  
 46 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 16 lb  
 -----  
 63806 lb

**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .31) #5 BARS AT 6" C.C.E.W.  
 - RISER/WALLS (As .18)  
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.  
 CONCRETE MIX DESIGN:  
 5,000 PSI @ 28 DAYS  
 XYPEX RED ADMIXTURE  
 CARBOLINE 300M COATING, TWO COATS:  
 ALL INTERIOR WALLS  
 BOTTOM OF TOP SLAB IN WET WELL AREA  
 BOTTOM OF COMBO SECTION IN WET WELL AREA

GREEN - FIRST POUR      FIRST POUR - 2,048 LBS  
 YELLOW - SECOND POUR      SECOND POUR - 4,277 LBS  
 CYAN - THIRD POUR      THIRD POUR - 23,104 LBS

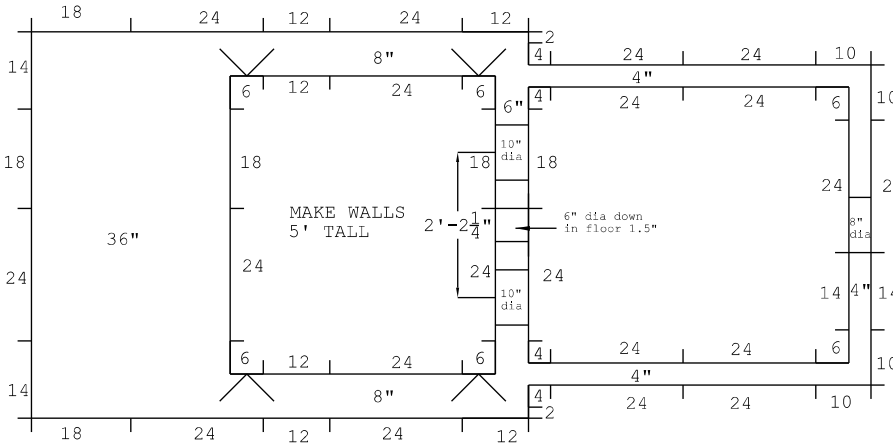
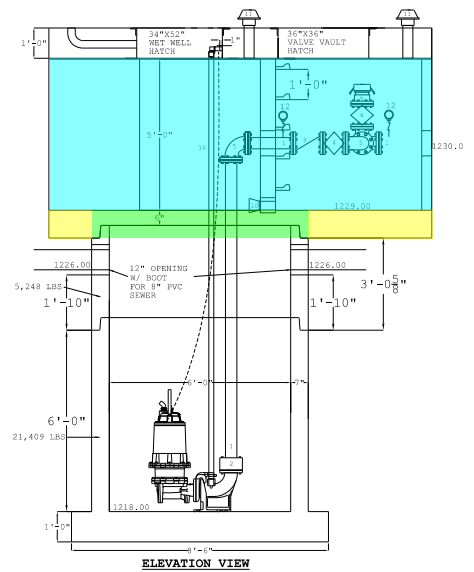
Structure Total:

**First Pour Drawing**

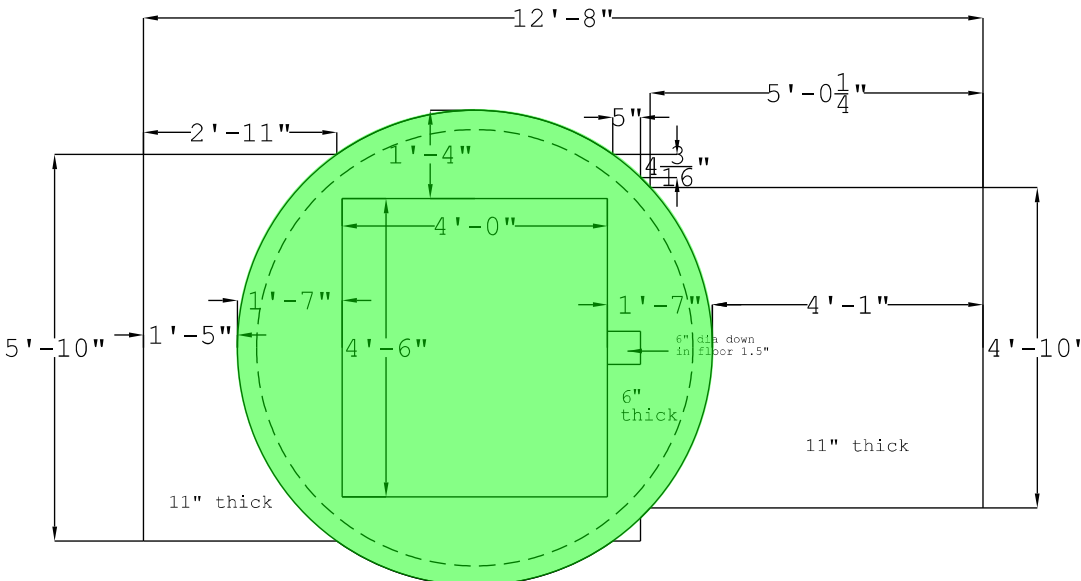
1ST pour use the 6' dia. jacket, make middle area 6" thick (rather than 12") and wet stick verticals and countersink 6" hole x 1.5" down

2nd pour add the extensions to the sides, 11" thick and wet stick verticals

3rd pour is the 5' tall walls with holes



**Walls/Forms**



**Base Slab**

Base  
 Walls:  
 #5@6" OC EW  
 Lid:  
 #5@8" OC EW T&B

Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Groove	Wall Thickness: 7"	Height (Ext): 71"	Weight (Net): 29429 lb Volume (Net): 7.52cu.yd
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Job Name: 26-1098 LUC Sinking Creek Lift Station  
 Job Location: London, KY  
 Contractor: Endesol, Inc.

Plant: Beaver Dam  
 1/16/2026 1:22:43 PM

Tech: J. Coppage  
 PC: E. Bradley



**Structure ID: Lift Station**

**P3 CTRS-X**

**Combined Lift Station Walls/Floor w/XYPEX**

- P5) 36" x 36" - CASTING HEIGHT - 0"
- P4) 72" - Combined Lift Station Top Slab Custom w/Xypex - 12"
- P3) 72" - Combined Lift Station Walls/Floor w/XYPEX - 71"
- P2) 72" - MH RISER Custom Ht. w/XYPEX - 36.5"
- P1) 72" - MH BASE SQ EF Cust. Ht. 12"F (EF =102"SQ) w/ XYPEX - 72"
- 1) This Structure Includes a Cast-in Item
- 1) HATCH (Alum.) - HALLIDAY W1R 34"x52"
- 1) HATCH (Alum.) - HALLIDAY W1R 36"x36"
- 1) SECONDARY POUR - EXTENDED BASE SLAB
- 1) SECONDARY POUR - WALLS FOR VAULT SECTION
- 1) SECONDARY POUR - VAULT SECTION EXTENSION
- 1) ASSEMBLY REQUIRED
- 2) 72" - DBL 1"x14.5' Butyl (2x)
- 2) PSX - 12-08 NYLO

0 lb  
 8108 lb  
 29429 lb  
 5188 lb  
 20973 lb  
 0 lb  
 46 lb  
 46 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 16 lb  
 -----  
 63806 lb

**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .31) #5 BARS AT 6" C.C.E.W.  
 - RISER/WALLS (As .18)  
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.  
 CONCRETE MIX DESIGN:  
 5,000 PSI @ 28 DAYS  
 XYPEX RED ADMIXTURE  
 CARBOLINE 300M COATING, TWO COATS:  
 ALL INTERIOR WALLS  
 BOTTOM OF TOP SLAB IN WET WELL AREA  
 BOTTOM OF COMBO SECTION IN WET WELL AREA

GREEN - FIRST POUR      FIRST POUR - 2,048 LBS  
 YELLOW - SECOND POUR      SECOND POUR - 4,277 LBS  
 CYAN - THIRD POUR      THIRD POUR - 23,104 LBS

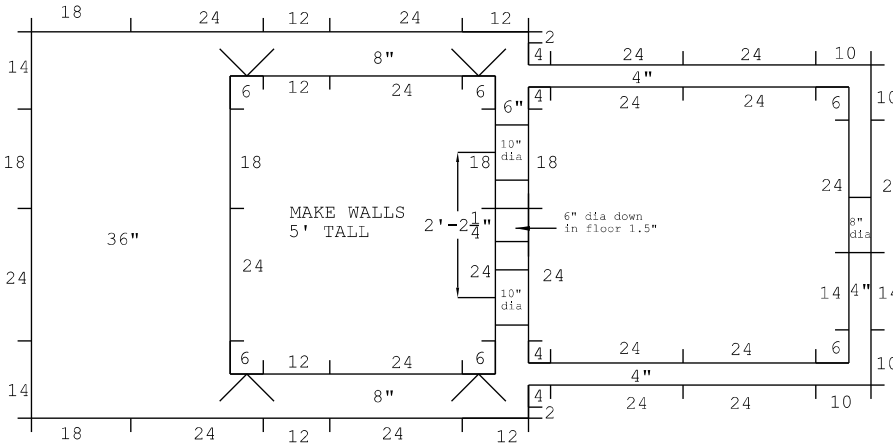
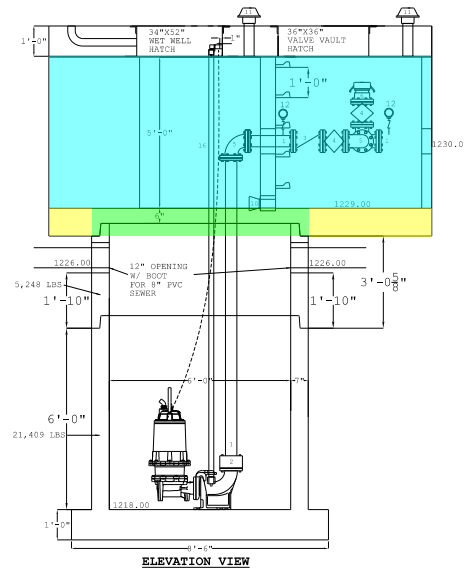
Structure Total:

**Second Pour Drawing**

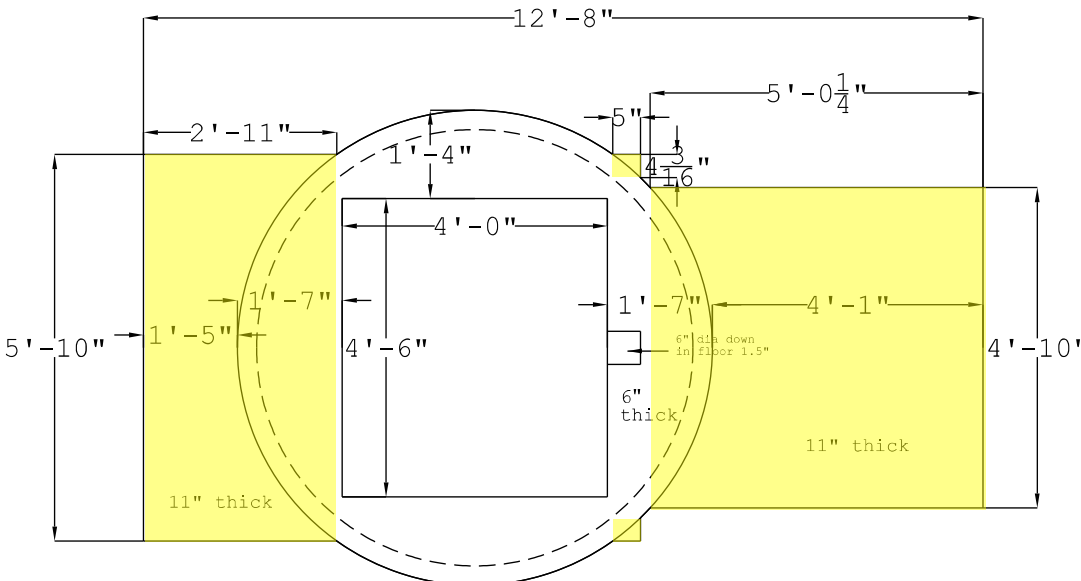
1ST pour use the 6' dia. jacket, make middle area 6" thick (rather than 12") and wet stick verticals and countersink 6" hole x 1.5" down

2nd pour add the extensions to the sides, 11" thick and wet stick verticals

3rd pour is the 5' tall walls with holes



**Walls/Forms**



**Base Slab**

Base  
 Walls:  
 #5@6" OC EW  
 Lid:  
 #5@8" OC EW T&B

Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Groove	Wall Thickness: 7"	Height (Ext): 71"	Weight (Net): 29429 lb Volume (Net): 7.52cu.yd
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Job Name: 26-1098 LUC Sinking Creek Lift Station  
 Job Location: London, KY  
 Contractor: Endesol, Inc.

Plant: Beaver Dam  
 1/16/2026 1:22:43 PM

Tech: J. Coppage  
 PC: E. Bradley



**Structure ID: Lift Station**

**P3 CTRS-X**

**Combined Lift Station Walls/Floor w/XYPEX**

- P5) 36" x 36" - CASTING HEIGHT - 0"
- P4) 72" - Combined Lift Station Top Slab Custom w/Xypex - 12"
- P3) 72" - Combined Lift Station Walls/Floor w/XYPEX - 71"
- P2) 72" - MH RISER Custom Ht, w/XYPEX - 36.5"
- P1) 72" - MH BASE SQ EF Cust. Ht. 12"F (EF =102"SQ) w/ XYPEX - 72"
- 1) This Structure Includes a Cast-in Item
- 1) HATCH (Alum.) - HALLIDAY W1R 34"x52"
- 1) HATCH (Alum.) - HALLIDAY W1R 36"x36"
- 1) SECONDARY POUR - EXTENDED BASE SLAB
- 1) SECONDARY POUR - WALLS FOR VAULT SECTION
- 1) SECONDARY POUR - VAULT SECTION EXTENSION
- 1) ASSEMBLY REQUIRED
- 2) 72" - DBL 1"x14.5' Butyl (2x)
- 2) PSX - 12-08 NYLO

0 lb  
 8108 lb  
 29429 lb  
 5188 lb  
 20973 lb  
 0 lb  
 46 lb  
 46 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 0 lb  
 16 lb  
 -----  
 63806 lb

**Structure Notes:**  
 1. PER ASTM C478 SPECIFICATIONS.  
 2. CONCRETE = 4,000 PSI AT 28 DAYS.  
 3. REINFORCING PER ASTM A615 (GRADE 60).  
 - TOP SLAB (As .31) #5 BARS AT 6" C.C.E.W.  
 - RISER/WALLS (As .18)  
 - FLOOR (As .37) #5 BARS AT 10" C.C.E.W.  
 CONCRETE MIX DESIGN:  
 5,000 PSI @ 28 DAYS  
 XYPEX RED ADMIXTURE  
 CARBOLINE 300M COATING, TWO COATS:  
 ALL INTERIOR WALLS  
 BOTTOM OF TOP SLAB IN WET WELL AREA  
 BOTTOM OF COMBO SECTION IN WET WELL AREA

GREEN - FIRST POUR      **FIRST POUR - 2,048 LBS**  
 YELLOW - SECOND POUR    **SECOND POUR - 4,277 LBS**  
 CYAN - THIRD POUR        **THIRD POUR - 23,104 LBS**

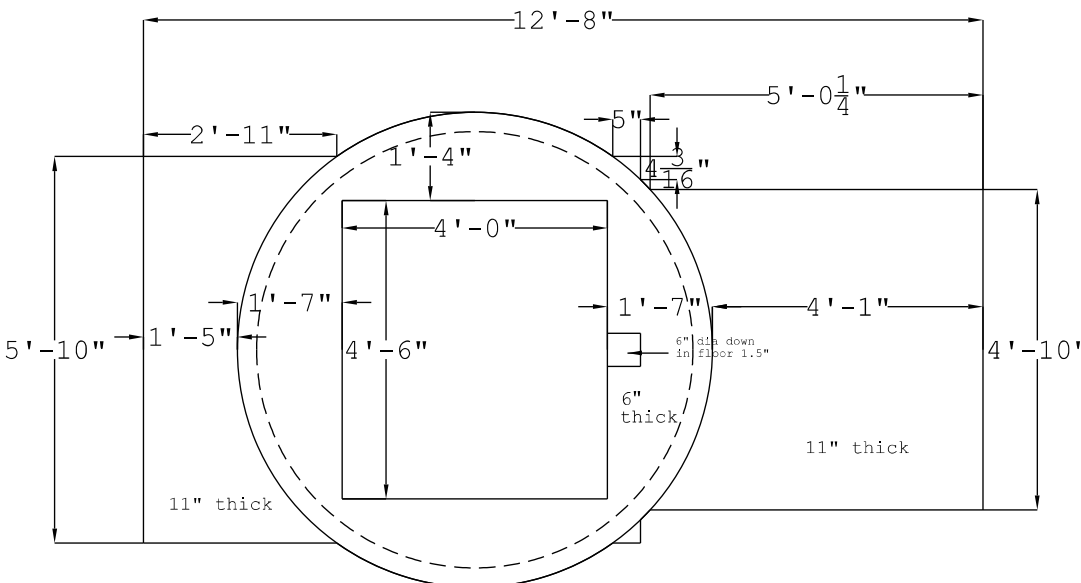
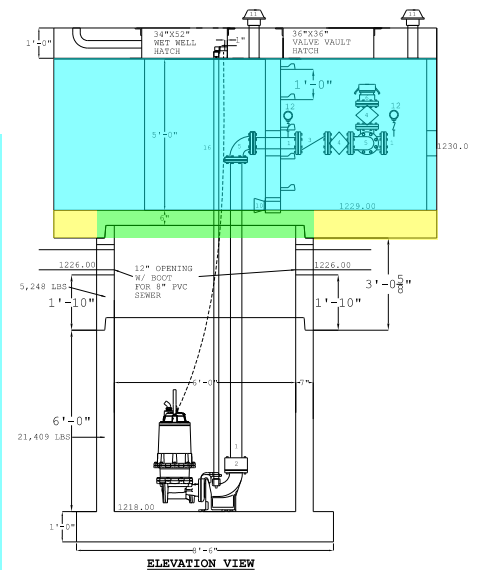
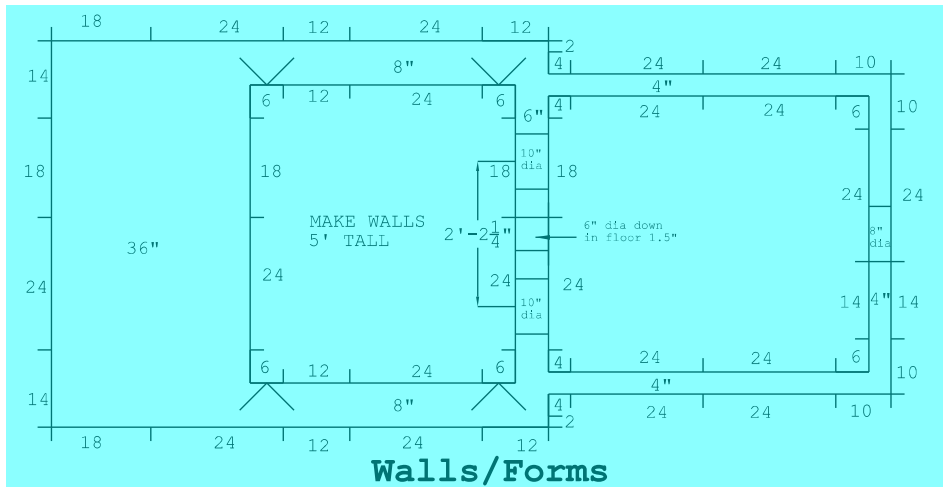
Structure Total:

**Third Pour Drawing**

1st pour use the 6' dia. jacket, make middle area 6" thick (rather than 12") and wet stick verticals and countersink 6" hole x 1.5" down

2nd pour add the extensions to the sides, 11" thick and wet stick verticals

3rd pour is the 5' tall walls with holes



Base  
 Walls:  
 #5@6" OC EW  
 Lid:  
 #5@8" OC EW T&B

Coating (Int): Coating (Ext):	Seam Up: Tongue Seam Dn: Groove	Wall Thickness: 7"	Height (Ext): 71"	Weight (Net): 29429 lb Volume (Net): 7.52cu.yd
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