REVISION HISTORY				
REV	DATE	DESCRIPTION	ECN	APPROVED BY
A	1/18/2012	RELEASE TO PRODUCTION	20110143	B. STONE
B	02/14/2014	REV'D PIT STEEL, 23.25" WAS 23"	20140014	G. PROFFITT
C	04/18/2014	23.25" WAS 23"	20140253	G. PROFFITT

THE FOLLOWING PIT DETAIL ONLY SHOWS THE REQUIREMENTS FOR INSTALLING THE VBR-600 VEHICLE RESTRAINT. BE SURE TO REFER TO THE APPROPRIATE LEVELER PIT DETAIL FOR LEVELER REQUIREMENTS, INCLUDING CONDUIT REQUIREMENTS AND CURB STEEL DIMENSIONS!

NEW CONSTRUCTION - REFER TO SHEET 3 FOR RETROFIT PIT INSTALLATION

IMPORTANT! READ AND UNDERSTAND ALL INSTRUCTIONS PRIOR TO START OF INSTALL. IF INSTRUCTIONS ARE NOT FOLLOWED, SERVICE RANGE MAY BE COMPROMISED AND STRUCTURAL INTEGRITY OF PRODUCT CAN NOT BE GUARANTEED.

1. INSTALL WALL BRACKET IF REQUIRED (SEE FIGURE 1). MUST BE CENTERED IN DOCK POSITION.
   - THE WALL BRACKET IS A FORM USED WHEN POURING DOCK FACE SECTIONS FOR DOCK LOCATIONS THAT WILL BE INCORPORATING A VBR-600 RESTRAINT.
   - WHEN USED, THE VBR-600 PAN ASSEMBLY MAY BE INSTALLED AND SECURED TO THE WALL BRACKET WITHOUT ANY ADDITIONAL FORMING FOR THE DOCK FACE WHEN PERFORMING THE POUR AROUND THE PAN.
   - CURB STEEL MUST BE WELDED TO WALL BRACKET (SEE DETAIL A), CONSULT LEVELER PIT DETAIL FOR CURB STEEL REQUIREMENTS.
   - IF NOT USED, A CUT IN THE DOCK WALL WILL BE REQUIRED (SEE STEP 2).

△B 2. MAKE SURE FOUNDATION WALL HAS A MINIMUM 23.25" WIDE OPENING IN CENTER OF LEVELER PIT TO APPROACH GRADE.

3. EXCAVATE TRENCH 40" WIDE AT THE FRONT TO 66" WIDE AT THE BACK OF THE PIT X 65" LONG-MEASURED FROM DOCK FACE.

4. INSERT REBAR (#6, INCLUDED WITH PAN), QUANTITY 3 INTO PAN REAR BRACKET HOLES AND CENTER. TIE IN PLACE (SEE SHEET 2, FIGURE 3).

5. PLACE THE PAN IN EXCAVATED PIT (SEE SHEET 2, FIGURE 4).
   A. A CONCRETE PAD IS NOT REQUIRED BENEATH THE PAN BUT MAY BE USED IF PREFERRED. PAN MAY BE SHIMMED USING BACKFILL.
   B. FRONT MUD HOOK TABS MAY NEED TO BE BENT OUT OF THE WAY DEPENDING ON FOUNDATION WALL THICKNESS (SEE SHEET 2, FIGURE 3).
   C. IF USING A WALL BRACKET; SECURE PAN TO WALL BRACKET BY INSTALLING AND TIGHTENING (4) 1/2"-13 X 2"LONG BOLTS (SUPPLIED LOCALLY) IN LUGS ON OUTSIDE OF PAN ONTO THE REAR OF WALL BRACKET (SEE SHEET 2, FIGURE 7).
   D. IF NOT USING A WALL BRACKET; PRIOR TO POUR, FRONT CURB STEEL MUST BE WELDED TO PAN (SEE SHEET 4, DETAIL C). IF GAP BETWEEN CURB STEEL AND PAN IS TO GREAT, A SMALL SECTION OF CURB ANGLE MUST BE INSTALLED TO FILL THE GAP.
   E. HOLES LOCATED IN REAR OF PAN BASE MAY BE USED FOR ANCHORING PAN DURING POUR AS REQUIRED.

IMPORTANT! MAKE SURE THE FOLLOWING DIMENSIONS ARE CORRECT PRIOR TO POURING CONCRETE AS PRODUCT SERVICE RANGE CAN BE AFFECTED!

   F. FRONT FLANGES OF PAN MUST BE FLUSH WITH DOCK FACE.
   G. MAKE SURE THE TOP FLANGE OF PAN IS LEVEL IN ALL DIRECTIONS AND FLUSH WITH FRONT OF LEVELER PIT FLOOR (SEE SHEET 2, FIGURE 5).

   AFTER POSITIONING PAN WHEN NOT USING A WALL BRACKET, A SMALL GAP MAY BE PRESENT BETWEEN THE BASE OF THE PAN AND APPROACH, THIS GAP MAY BE FILLED LATER OTHERWISE PROVISIONS MUST BE MADE TO ALLOW GAP TO BE FILLED DURING THE PRIMARY POUR.
   NOTE: BOTTOM OF PAN MUST BE AT OR ABOVE APPROACH LEVEL, NEVER BE BELOW APPROACH LEVEL.

6. IF WALL BRACKET NOT USED, PLACE EXTERIOR FORMS AS REQUIRED TO SHAPE DOCK FACE (SUPPLIED BY OTHERS).

IMPORTANT! IF A LEVELER IS BEING INSTALLED, REFER TO THE SPECIFIC LEVELER PIT DETAIL FOR LOCATION AND SIZE OF LEVELER JUNCTION BOX AND CONDUIT!

7. IF VBR-600 POWER UNIT WILL NOT BE MOUNTED IN LEVELER PIT, ROUTE 3" DIA PVC FROM VBR-600 PIT TERMINATING AT POWER UNIT MOUNTING LOCATION. ROUTE 1" DIA CONDUIT FROM VBR-600 PIT TERMINATING AT CONTROL BOX FURNISHED BY RITE-HITE. CONTROL WIRES WILL ROUTE THROUGH 1" CONDUIT AND HYDRAULIC HOSES WILL ROUTE THROUGH 3" CONDUIT (SEE SHEET 2, FIGURE 6).
   - RECOMMEND USING LONG SWEEP BENDS IN PVC AND CONDUIT.

8. IF VBR-600 POWER UNIT WILL BE MOUNTED IN LEVELER PIT, ROUTE 1" DIA CONDUIT FROM LEVELER PIT TERMINATING AT CONTROL BOX FURNISHED BY RITE-HITE.

9. POUR CONCRETE IN COMPLIANCE WITH ASTM C94, MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. HIGH EARLY CONCRETE TO INCLUDE A WATER REDUCING SUPER PLASTICIZER, SUCH AS EUCON 37 AS MANUFACTURED BY EUCLID CHEMICAL CO, PER ASTM C494 AND MANUFACTURER'S INSTRUCTIONS.

10. CONCRETE MUST BE WELL VIBRATED.

11. ALLOW APPROPRIATE CURE TIME FOR CLIMATE. REMOVE ALL FORMING.

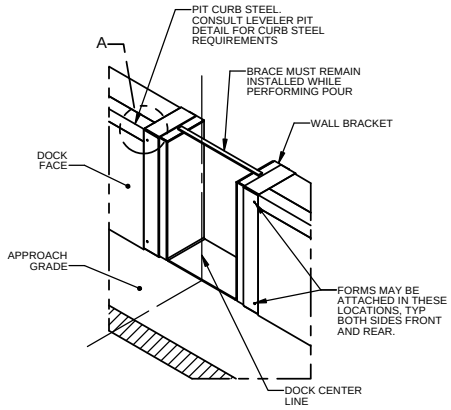
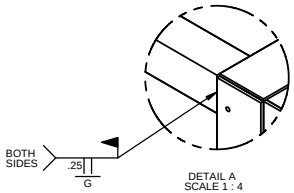


FIGURE 1
WALL BRACKET INSTALLATION



DETAIL A
SCALE 1 : 4

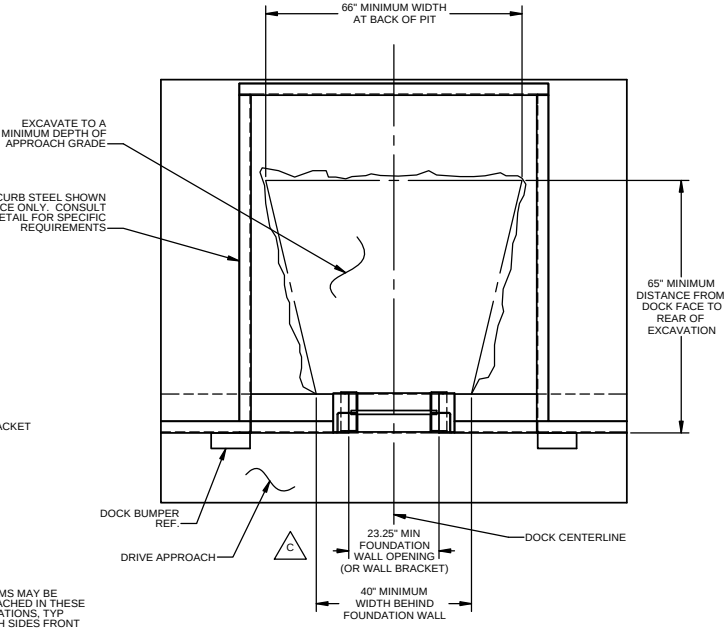
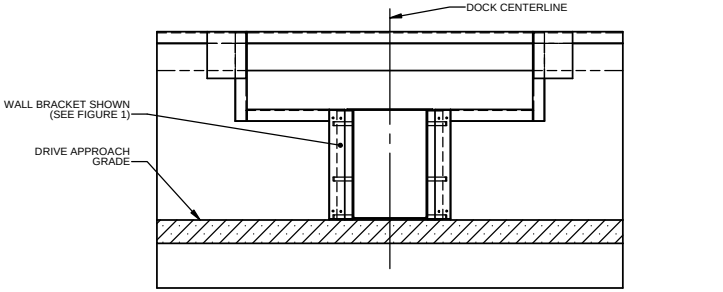


FIGURE 2
EXCAVATION DETAIL



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		MANUFACTURING ENGINEER	
	THIRD ANGLE PROJECTION	REFERENCE	SIZE: D; DWG NO: 0137424; REV: C
© 2012 RITE-HITE® PRODUCTS CORPORATION		ALL SHEETS ARE THE SAME REVISION STATUS	SCALE: 1:8; WEIGHT: ; SHEET: 1 OF 4
		DO NOT SCALE DRAWING	

REVISION HISTORY				
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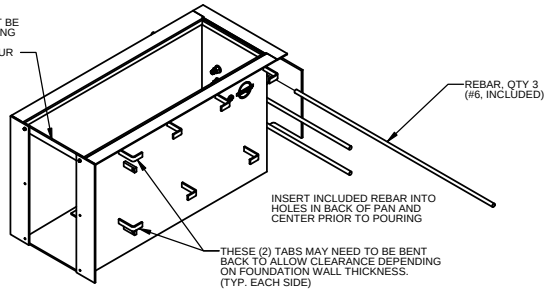
C	04/18/2014	23.25" WAS 23"	20140253	G. PROFFITT

FIGURE 3
(INSTALL REBAR)



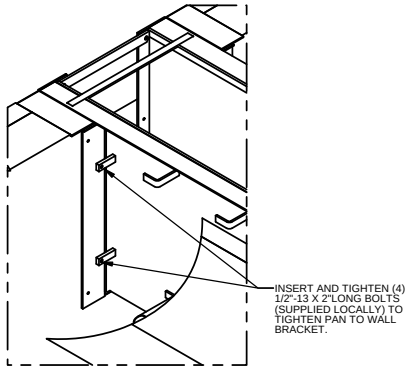


FIGURE 7
(SECURE PAN TO WALL BRACKET)

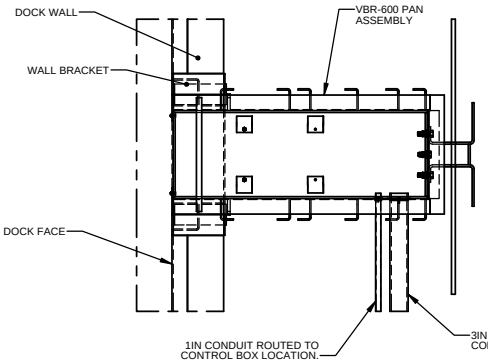


FIGURE 6
(ROUTE CONDUIT)

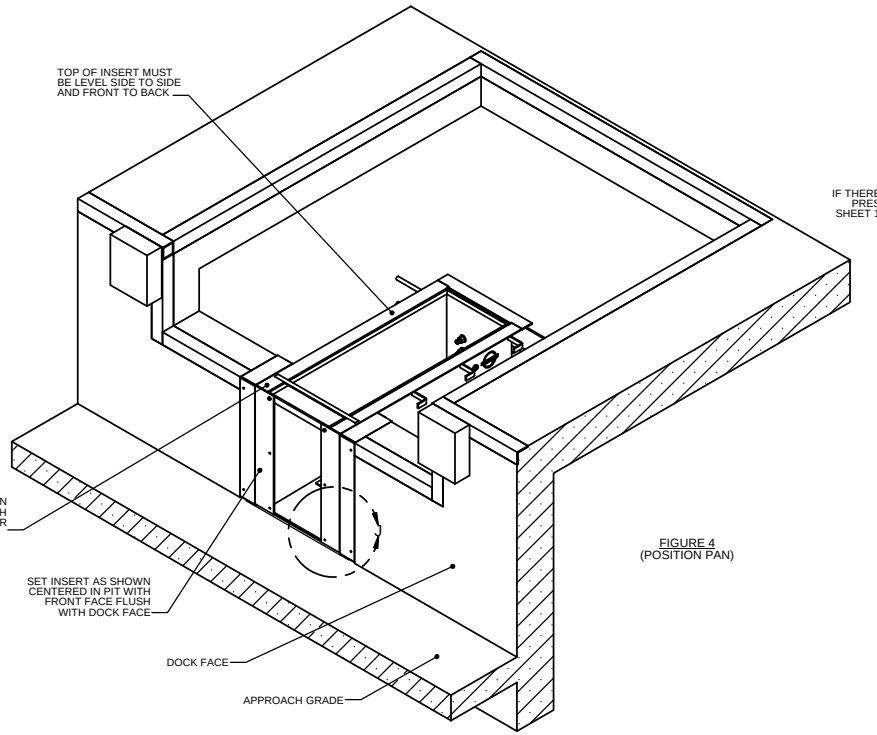
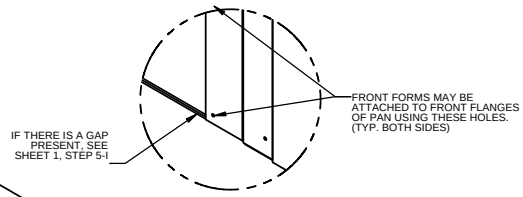


FIGURE 4
(POSITION PAN)



DETAIL J
SCALE 1 : 6

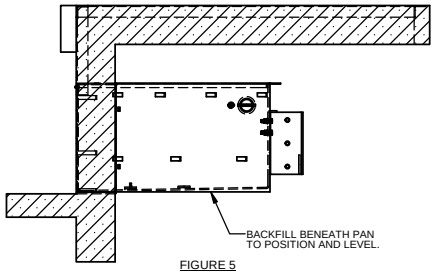


FIGURE 5
(POSITION PAN, CONT'D.)

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MATERIAL

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TOLERANCES:

.X = ±.120
.XX = ±.060
.XXX = ±.030
ANGLE = ±2.0°

THIRD ANGLE PROJECTION

DRAWN BY: A. BROOKS
RESPONSIBLE ENGINEER: B. STONE
MANUFACTURING ENGINEER:

REFERENCE

ALL SHEETS ARE THE SAME REVISION STATUS

DO NOT SCALE DRAWING

RITE-HITE ® PRODUCTS CORPORATION

TITLE: DWG PIT DET VBR6

SIZE: D | DWG NO: **0137424** | REV: **C**

SCALE 1:8 | WEIGHT | SHEET 2 OF 4

REVISION HISTORY				
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C	04/18/2014	23.25" WAS 23"	20140253	G. PROFFITT

RETROFIT IN EXISTING CONSTRUCTION:

IMPORTANT! READ AND UNDERSTAND ALL INSTRUCTIONS PRIOR TO START OF INSTALL. IF INSTRUCTIONS ARE NOT FOLLOWED, SERVICE RANGE MAY BE COMPROMISED AND STRUCTURAL INTEGRITY OF PRODUCT CAN NOT BE GUARANTEED.

1. SAW CUT A 23.25" (MINIMUM) WIDE OPENING CENTERED IN DOCK FACE, THROUGH THE FOUNDATION WALL. CURB STEEL MUST BE CUT FIRST WITH A CUTOFF WHEEL. NOTE, OPENING IN FOUNDATION WALL MUST BE WIDE ENOUGH TO ACCEPT THE 23" WIDE PAN. SAW CUT A TRENCH IN THE LEVELER PIT FLOOR BEHIND FOUNDATION WALL 40" WIDE AT FRONT OF PIT TO 66" WIDE AT BACK OF PIT X 65" LONG MEASURED FROM DOCK FACE.

2. EXCAVATE TRENCH TO A MINIMUM DEPTH OF APPROACH GRADE.

3. INSERT REBAR (#6, INCLUDED WITH PAN), QUANTITY 3 INTO PAN REAR BRACKET HOLES AND CENTER. TIE IN PLACE (SEE SHEET 4, FIGURE 8).

4. PLACE THE PAN IN EXCAVATED PIT (SEE SHEET 4, FIGURE 9).
   A. A CONCRETE PAD IS NOT REQUIRED BENEATH THE PAN BUT MAY BE USED IF PREFERRED. PAN MAY BE SHIMMED USING BACKFILL.
   B. FRONT MUD HOOK TABS MAY NEED TO BE BENT OUT OF THE WAY DEPENDING ON FOUNDATION WALL THICKNESS (SEE SHEET 4, FIGURE 8).
   C. PRIOR TO POUR, FRONT CURB STEEL MUST BE WELDED TO PAN (SEE SHEET 4, DETAIL C). IF GAP BETWEEN CURB STEEL AND PAN IS TO GREAT, A SMALL SECTION OF CURB ANGLE MUST BE INSTALLED TO FILL THE GAP.

IMPORTANT! MAKE SURE THE FOLLOWING DIMENSIONS ARE CORRECT PRIOR TO POURING CONCRETE AS PRODUCT SERVICE RANGE CAN BE AFFECTED!

   D. FRONT FLANGES OF PAN MUST BE FLUSH WITH DOCK FACE.
   E. MAKE SURE THE TOP FLANGE OF PAN IS LEVEL IN ALL DIRECTIONS AND FLUSH WITH FRONT OF LEVELER PIT FLOOR (SEE SHEET 4, FIGURE 9).

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   NOTE: BOTTOM OF PAN MUST BE AT OR ABOVE APPROACH LEVEL, NEVER BE BELOW APPROACH LEVEL.

5. PLACE EXTERIOR FORMS AS REQUIRED TO SHAPE DOCK FACE (SUPPLIED BY OTHERS).

IMPORTANT! IF A LEVELER IS BEING INSTALLED, REFER TO THE SPECIFIC LEVELER PIT DETAIL FOR LOCATION AND SIZE OF LEVELER JUNCTION BOX AND CONDUIT!

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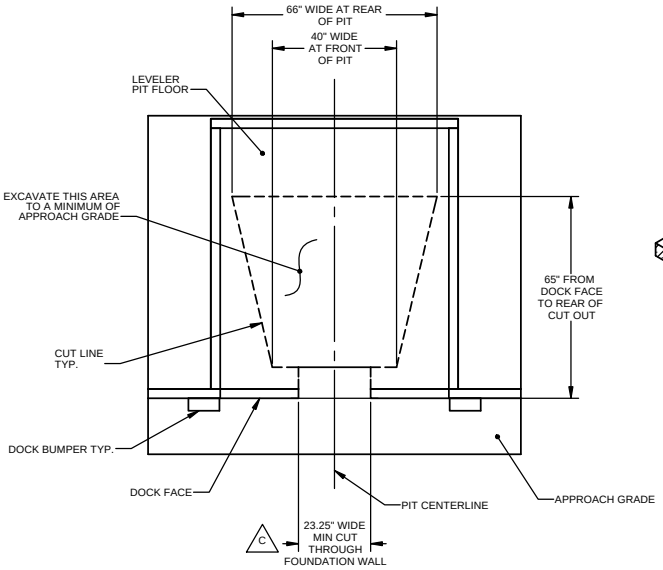
   - RECOMMEND USING LONG SWEEP BENDS IN PVC AND CONDUIT.

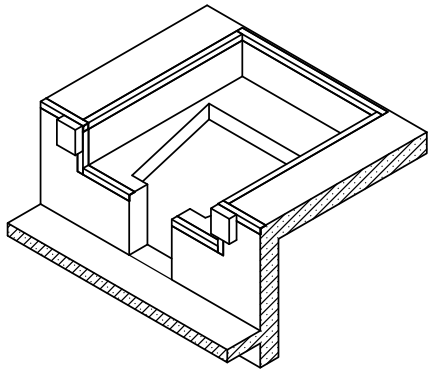
7. POUR CONCRETE IN COMPLIANCE WITH ASTM C94, MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. HIGH EARLY CONCRETE TO INCLUDE A WATER REDUCING SUPER PLASTICIZER, SUCH AS EUCON 37 AS MANUFACTURED BY EUCLID CHEMICAL CO, PER ASTM C494 AND MANUFACTURER'S INSTRUCTIONS.

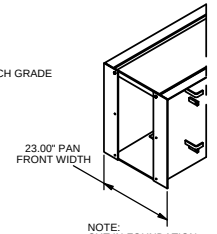
8. ALL CONCRETE MUST BE WELL VIBRATED.

9. ALLOW APPROPRIATE CURE TIME FOR CLIMATE. REMOVE ALL FORMING.

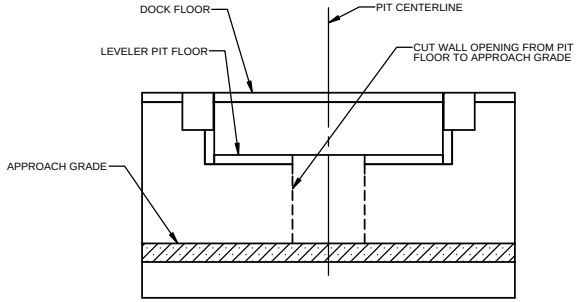
FIGURE 6
CUT DETAIL
(TOP VIEW)







NOTE:
CUT IN FOUNDATION WALL MUST BE WIDE ENOUGH TO FIT PAN



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RETROFIT IN EXISTING CONSTRUCTION

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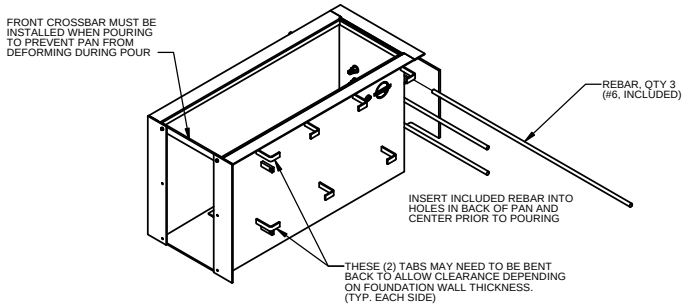
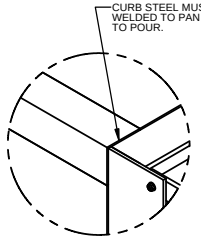
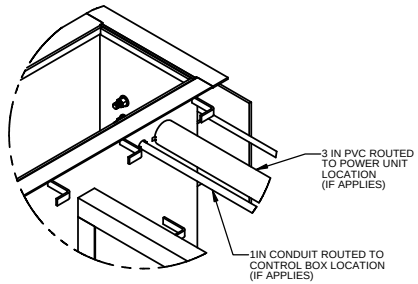
FIGURE 8
(INSTALL REBAR)





DETAIL C
SCALE 1 : 4



DETAIL B
SCALE 1 : 8

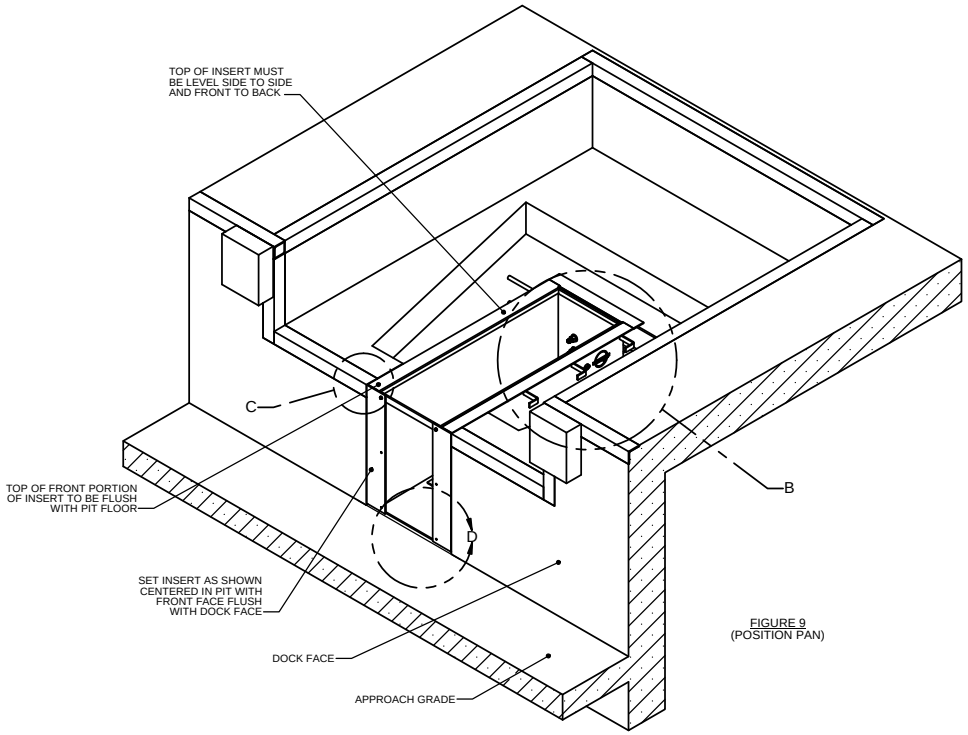
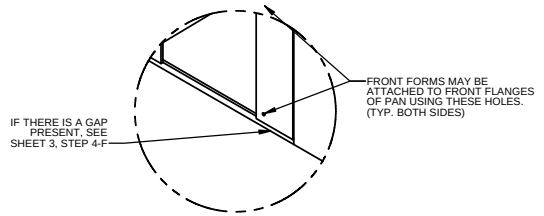


FIGURE 9
(POSITION PAN)



DETAIL D
SCALE 1 : 6

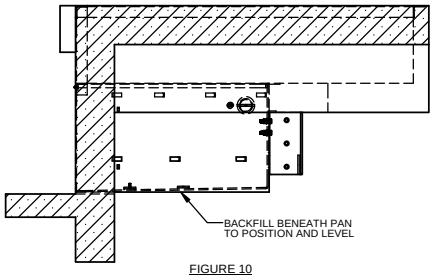


FIGURE 10
(POSITION PAN, CONT'D.)

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