

**Table of Dimensions And Weights**

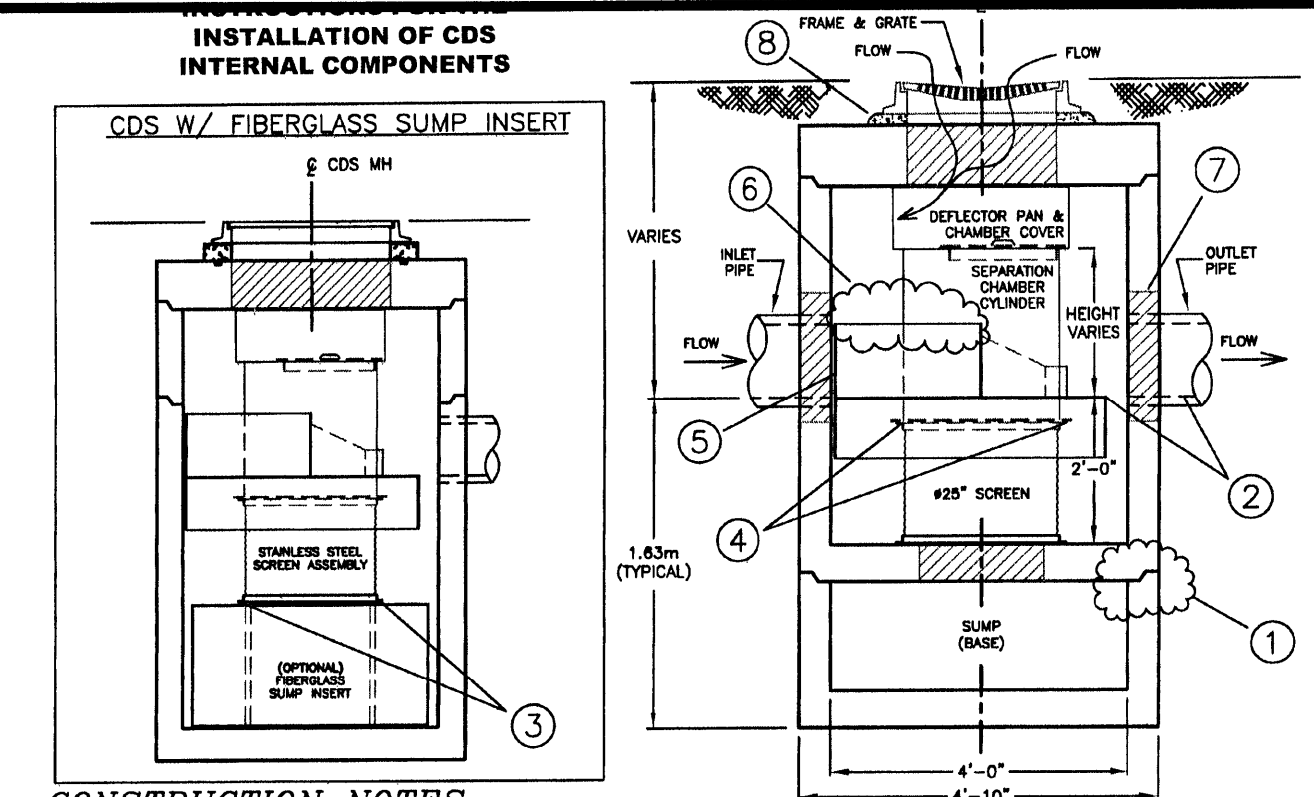
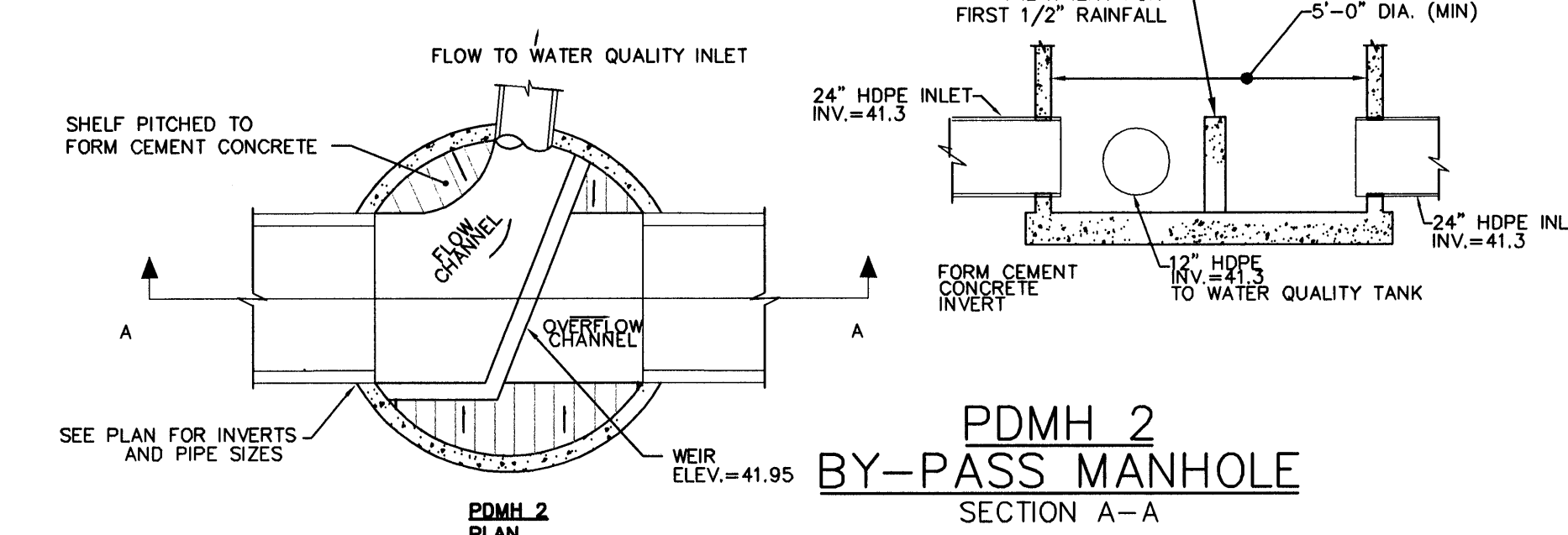
Round Equivalent (Inches)	Inside Dimension (Inches)	Wall Thickness (Inches)	C (Inches)	D (Inches)	Full Flow Water Area (Sq. Ft.)	Approx. Weight (Lbs./L.)	
15	11	18	3	1 1/4	2 1/4	1.1	130
18	13 1/2	22	3 1/8	1 7/16	2 1/4	1.65	190
24	19	29 1/2	3 1/2	1 1/2	2 3/4	2.8	350
30	22 1/2	36 1/4	3 1/2	1 5/8	3	4.4	468
36	28 5/8	43 3/4	4	1 3/4	3 1/2	6.4	638
42	31 5/16	51 1/8	4 1/2	1 15/16	3 1/2	8.8	878
48	36	58 1/2	5	2 1/4	3 1/2	11.4	1,110
54	40	65	5 1/2	2 5/8	5	14.3	1,375
60	45	73	6	2 15/16	5	17.7	1,513
72	54	88	7	3 3/16	6	25.6	2,113

Pipe dimensions may vary depending upon equipment availability.

**NOTE:**  
1. PRODUCT TO MEET ASTM SPECIFICATIONS.

**CONCRETE PIPE ARCH**  
NOT TO SCALE

- NOTES:**
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO OWNER'S ENGINEER FOR APPROVAL.
  - MAINE D.E.P. REGULATIONS REQUIRE 400 C.F. PERMANENT STORAGE PER ACRE OF CONTRIBUTING AREA. THE MAX. CONTRIBUTING AREA = 3.68 AC. THEREFORE, 1,472 C.F. STORAGE REQUIRED. THIS WQ PROVIDES 1,812 CF OF STORAGE. THE CHAMBER IS OVER 4' DEEP.

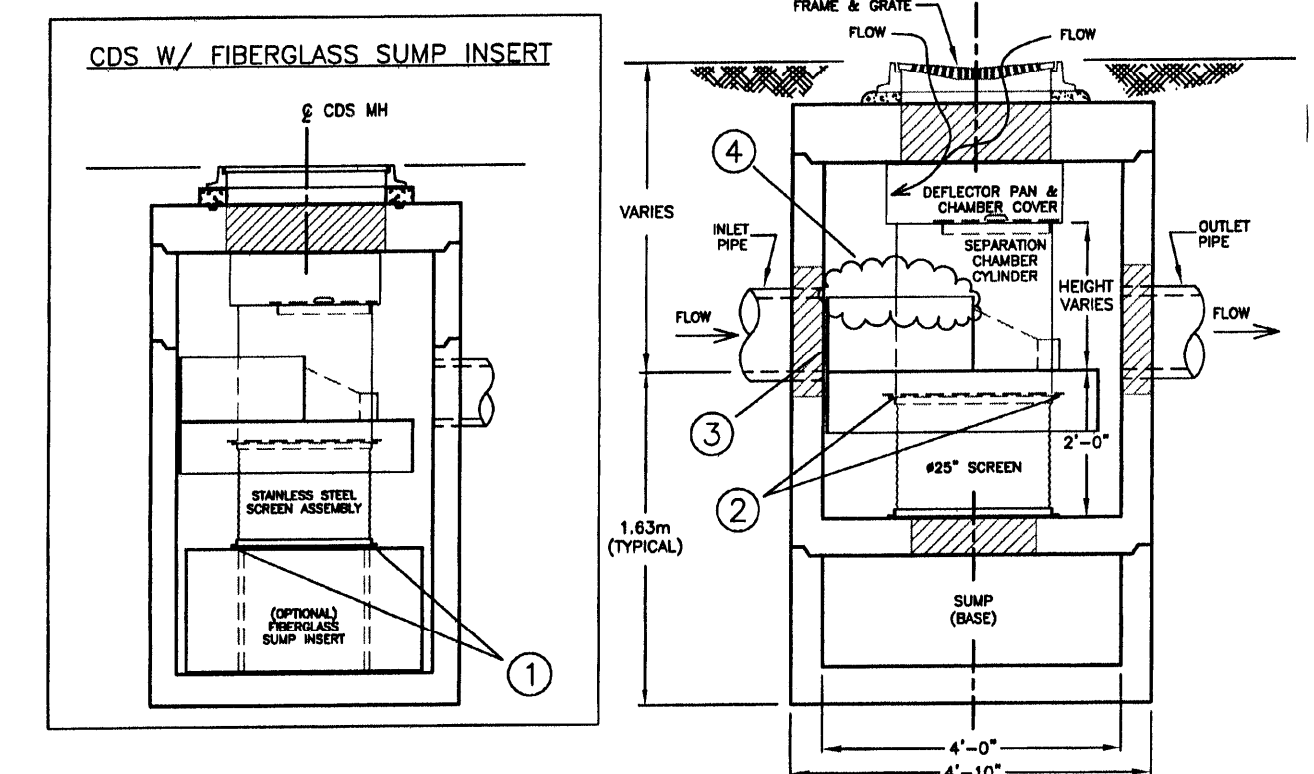


- CONSTRUCTION NOTES:**
- APPLY BUTYL MASTIC AND/OR GROUT TO SEAL JOINTS OF MANHOLE STRUCTURE. APPLY LOAD TO MASTIC SEAL IN JOINTS OF MH SECTIONS TO COMPRESS SEALANT IF NECESSARY. UNIT MUST BE WATER TIGHT UP TO FLOWLINE INVERT (MINIMUM).
  - BEFORE PLACING MORE PRECAST COMPONENTS OR BACKFILLING, ENSURE 24" FROM THE TOP OF THE SEPARATION SLAB TO PIPE INVERT.
  - (OPTIONAL FIBERGLASS SUMP INSERT ASSEMBLY) IF APPLICABLE, PLACE STAINLESS STEEL SCREEN CYLINDER WITH THE CORRECT ORIENTATION (GREEN PAINTED FLANGE SHALL FACE UP & RED PAINTED FLANGE SHALL FACE DOWN) OVER THE SUMP OPENING & MATCH-DRILL FOUR (4) 9/16" DIAMETER HOLES THRU SCREEN FLANGE & TOP OF SUMP INSERT; BOLT SCREEN CYLINDER TO SUMP INSERT W/ PROVIDED 1/2" BOLTS & LOCKING HARDWARE.
  - ENSURE THAT STAINLESS STEEL SCREEN CYLINDER IS PROPERLY ORIENTED (GREEN PAINTED FLANGE SHALL FACE UP W/ RED FLANGE FASTENED TO SEPARATION SLAB). MATCH-DRILL FOUR (4) 9/16" DIAMETER HOLES THRU SCREEN & CDS INLET FLANGES & BOLT TOGETHER W/ PROVIDED 1/2" BOLTS & LOCKING HARDWARE.
  - MARK & TRIM AWAY THE INLET FLANGE WHERE FIBERGLASS MATERIAL BLOCKS THE INLET PIPE ENTRANCE.
  - PLACE SEPARATION SCREEN & FIBERGLASS INLET/BAFFLE ASSEMBLY (& SUMP INSERT, IF APPLICABLE) IN MH & POSITION WITH INLET FLANGE AGAINST THE INSIDE WALL (ROTATE TO MATCH FLANGE OPENINGS) WITH PIPE (OR GRACE AS NEEDED); DRILL & INSERT 3/8" CONC. ANCHORS AT APPROXIMATELY 90° O.C. TO FASTEN CDS INLET TO MANHOLE; FILL ANY GAPS BETWEEN FIBERGLASS INLET FLANGE & MANHOLE WALL WITH WATER-PROOF SEALANT AS NEEDED.
  - GROUT OR USE FLEXIBLE GASKETING TO SEAL OUTLET (& INLET, IF APPLICABLE) PIPE CONNECTION(S).
  - ENSURE THAT TOP SLAB IS PLACED CORRECTLY AS SHOWN ON DRAWINGS; USE GRADE RINGS, BLOCKS AND/OR GROUT TO MATCH FINISHED GRADE - SEAL AS REQ'D.

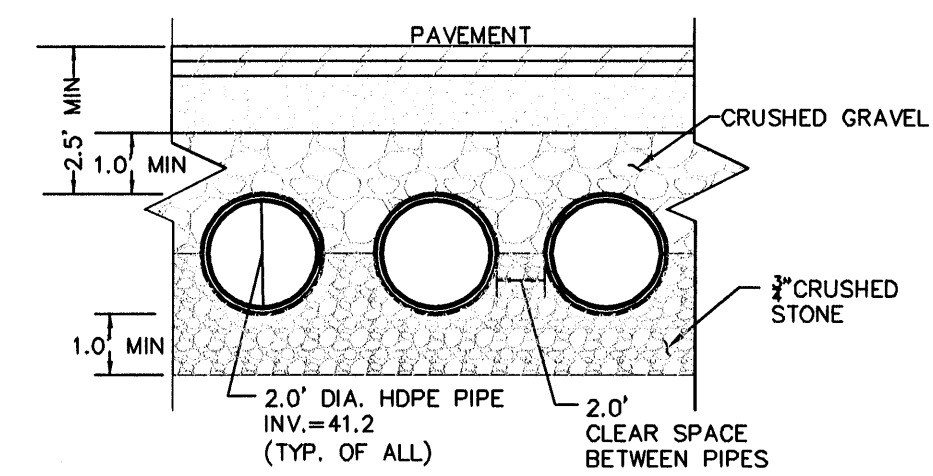
**GENERAL NOTES:**

- INSTALL UNIT PER CDS INSTALLATION SPECIFICATIONS.
- CONTRACTOR TO BE EQUIPPED TO HANDLE THE HEAVIEST PICK SECTIONS.

**INSTRUCTIONS FOR THE INSTALLATION OF CDS INTERNAL COMPONENTS**



- CDS UNIT ASSEMBLY NOTES:**
- (OPTIONAL FIBERGLASS SUMP INSERT ASSEMBLY) IF APPLICABLE, PLACE STAINLESS STEEL SCREEN CYLINDER WITH THE CORRECT ORIENTATION (GREEN PAINTED FLANGE SHALL FACE UP & RED PAINTED FLANGE SHALL FACE DOWN) OVER THE SUMP OPENING & MATCH-DRILL FOUR (4) 9/16" DIAMETER HOLES THRU SCREEN FLANGE & TOP OF SUMP INSERT; BOLT SCREEN CYLINDER TO SUMP INSERT W/ PROVIDED 1/2" BOLTS & LOCKING HARDWARE.
  - ENSURE THAT STAINLESS STEEL SCREEN CYLINDER IS PROPERLY ORIENTED (GREEN PAINTED FLANGE SHALL FACE UP W/ RED PAINTED FLANGE SHALL FACE DOWN). MATCH-DRILL FOUR (4) 9/16" DIAMETER HOLES THRU SCREEN & CDS INLET FLANGES & BOLT TOGETHER W/ PROVIDED 1/2" BOLTS & LOCKING HARDWARE.
  - MARK & TRIM AWAY THE INLET FLANGE WHERE FIBERGLASS MATERIAL BLOCKS THE INLET PIPE ENTRANCE.
  - PLACE SEPARATION SCREEN & FIBERGLASS INLET/BAFFLE ASSEMBLY (& SUMP INSERT, IF APPLICABLE) IN MH & POSITION WITH INLET FLANGE AGAINST THE INSIDE WALL (ROTATE TO MATCH OPENINGS IN FLANGE WITH PIPE OR GRACE AS NEEDED); DRILL & INSERT 3/8" CONC. ANCHORS AT APPROXIMATELY 90° O.C. TO FASTEN CDS INLET TO MANHOLE; FILL ANY GAPS BETWEEN FIBERGLASS INLET FLANGE & MANHOLE WALL WITH WATER-STOP SEALANT AS NEEDED.

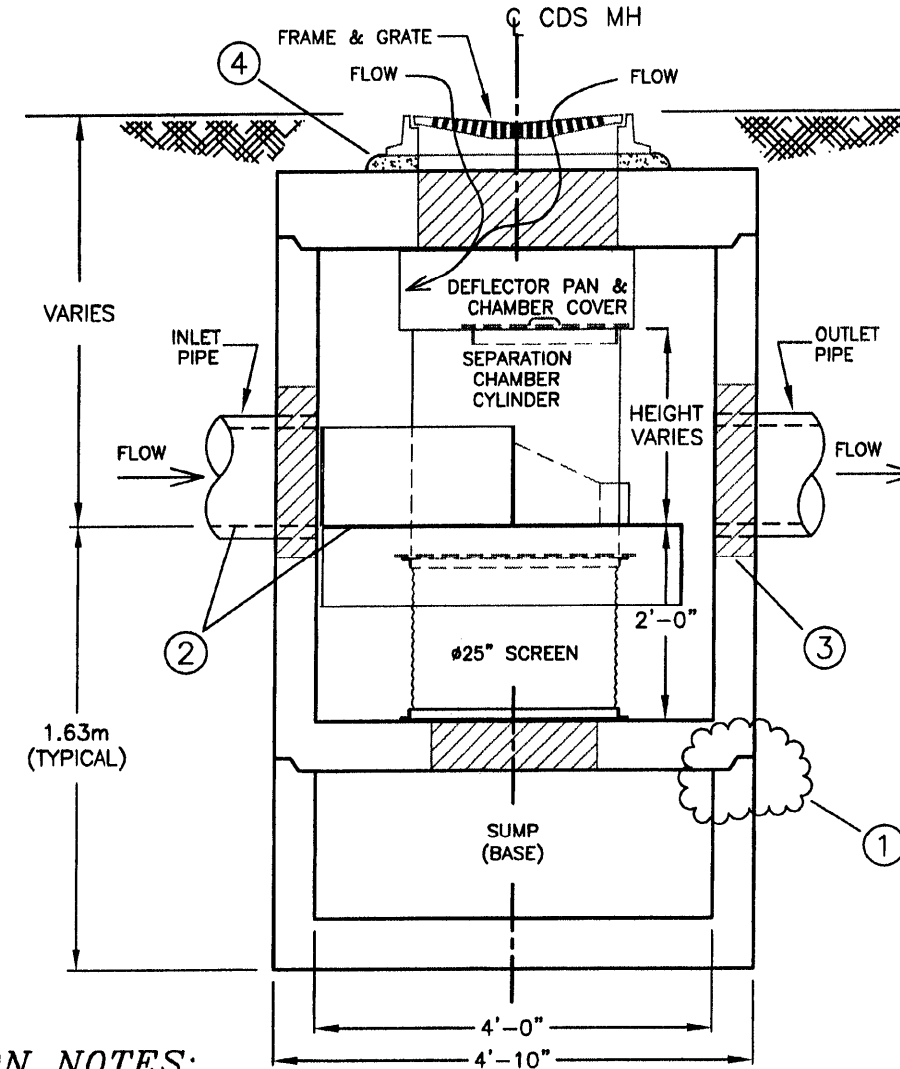
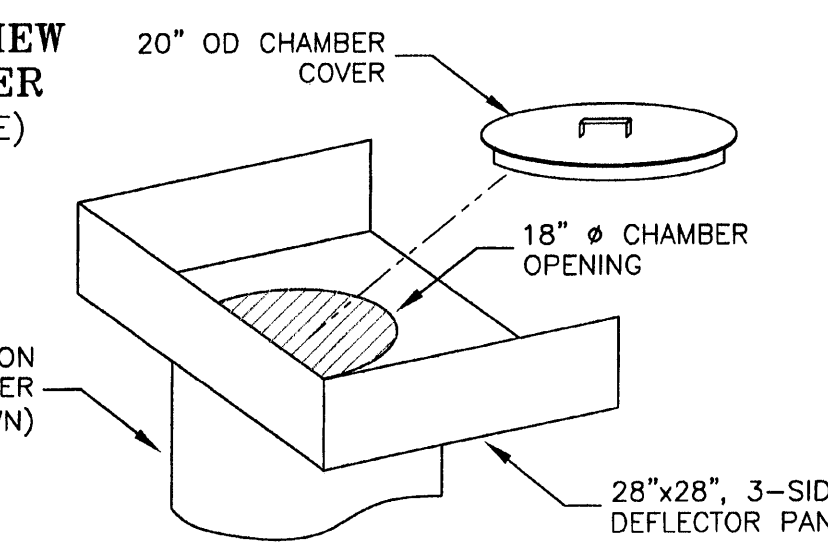


- NOTES:**
- CONTRACTOR SHALL OBTAIN STAMPED DETAILS AND SPECIFICATIONS FOR UNDERGROUND DETENTION BASIN FROM AN ENGINEER LICENSED IN THE STATE OF MAINE.
  - CONTRACTOR SHALL PROVIDE ACCESS MANHOLES OR RISERS PER MANUFACTURERS SPECIFICATIONS.

**UNDERGROUND DETENTION BASIN**  
NOT TO SCALE

**DEFLECTOR PAN & COVER DETAILS**

**ISOMETRIC VIEW PAN & COVER (NOT TO SCALE)**



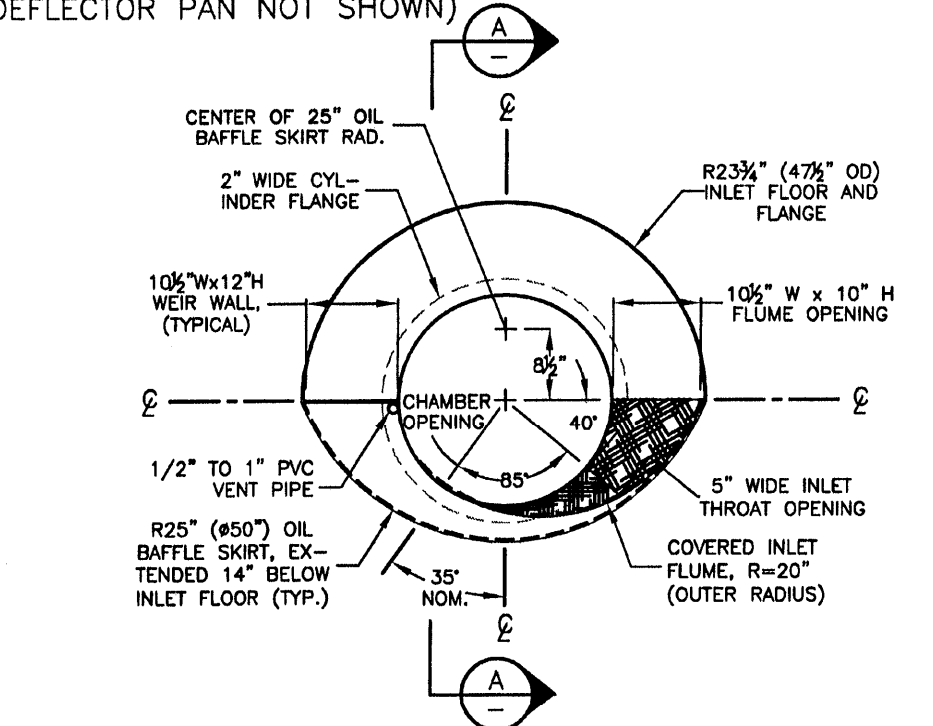
- CONSTRUCTION NOTES:**
- APPLY BUTYL MASTIC AND/OR GROUT TO SEAL JOINTS OF MANHOLE STRUCTURE. APPLY LOAD TO MASTIC SEAL IN JOINTS OF MH SECTIONS TO COMPRESS SEALANT IF NECESSARY. UNIT MUST BE WATER TIGHT, HOLDING WATER UP TO FLOWLINE INVERT (MINIMUM).
  - BEFORE PLACING MORE PRECAST COMPONENTS OR BACKFILLING, ENSURE FIBERGLASS INLET AND PIPE INLET INVERT ELEVATIONS MATCH.
  - USE FLEXIBLE GASKETING OR GROUT TO SEAL INLET & OUTLET PIPE CONNECTIONS.
  - ENSURE THAT TOP SLAB IS PLACED CORRECTLY AS SHOWN ON DRAWINGS; USE GRADE RINGS, BLOCKS AND/OR GROUT TO MATCH FINISHED GRADE - SEAL AS REQ'D.

**GENERAL NOTES:**

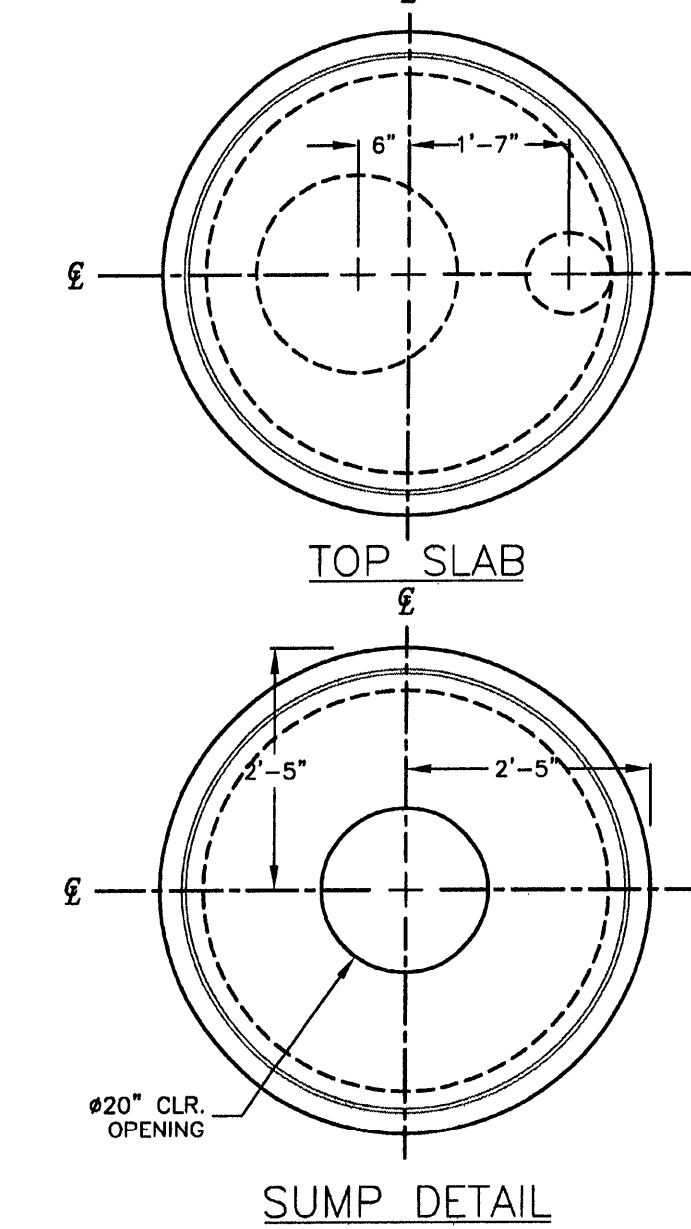
- CDS UNIT COMES COMPLETE W/ FIBERGLASS INLET/OIL BAFFLE & SEPARATION SCREEN ASSEMBLY PRE-INSTALLED AND PARTIALLY DISASSEMBLED FOR SHIPPING; CONTRACTOR TO RE-FASTEN ASSEMBLIES WHERE APPLICABLE.
- INSTALL CDS UNIT PER CDS INSTALLATION SPECIFICATIONS.
- CONTRACTOR TO BE EQUIPPED TO HANDLE THE HEAVIEST PICK SECTION.

**PLAN VIEW**

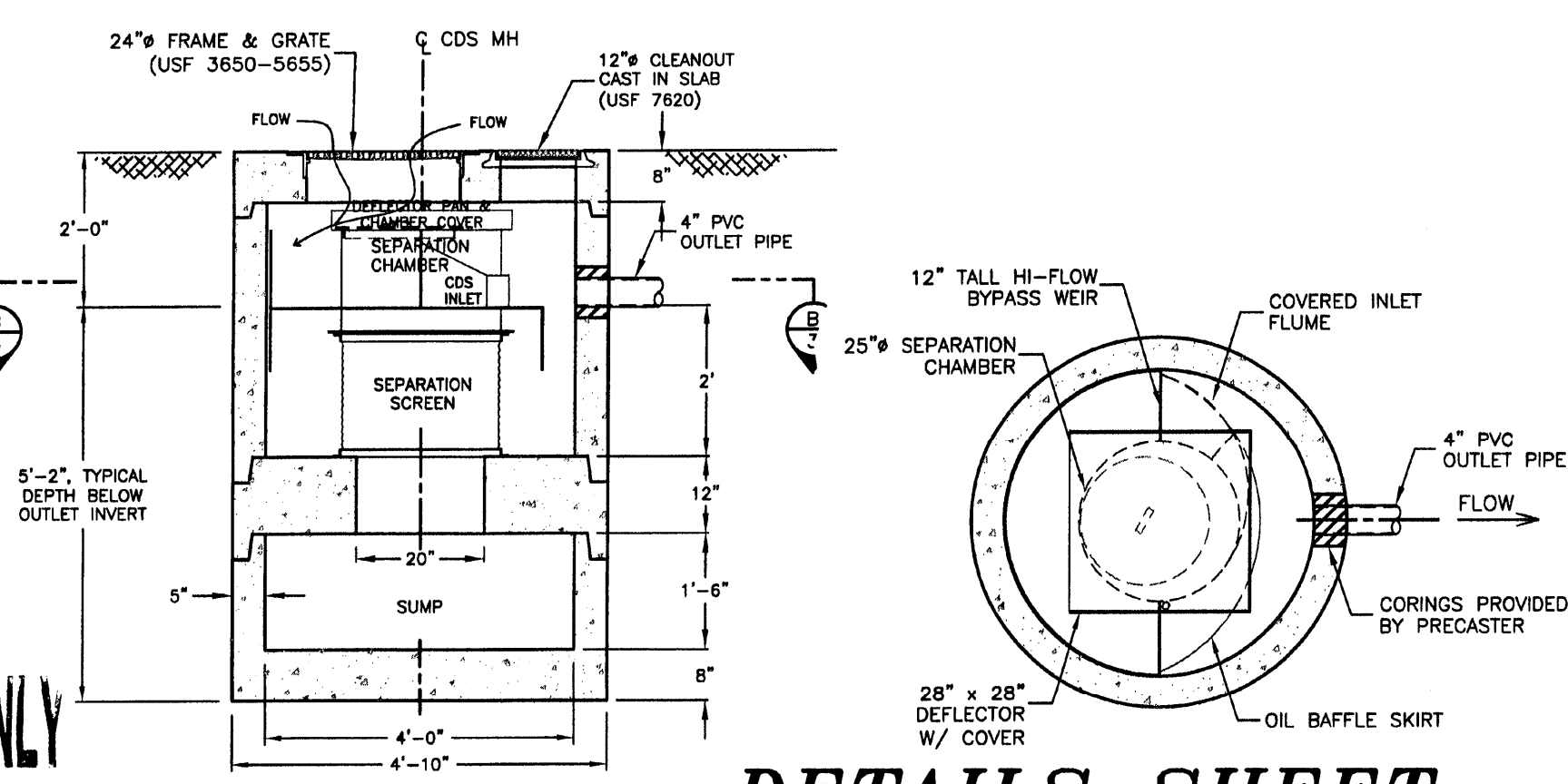
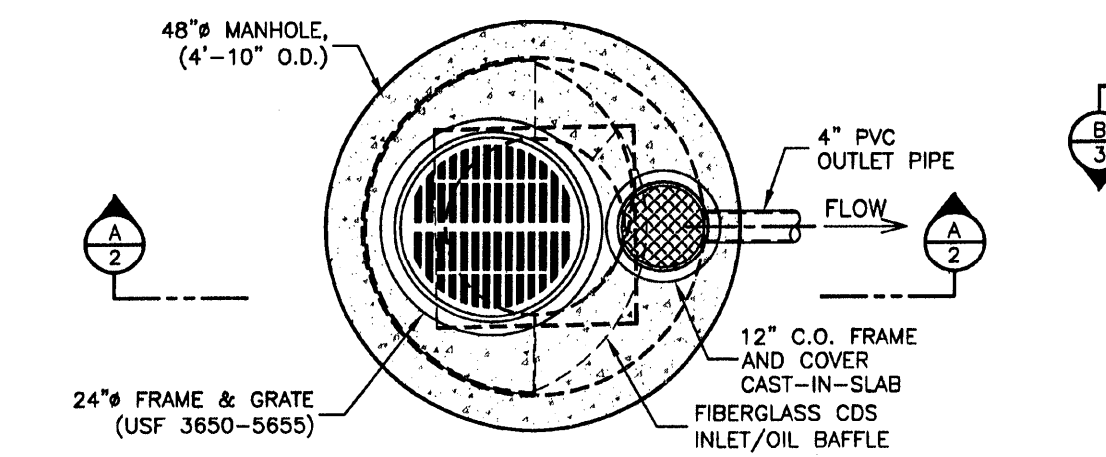
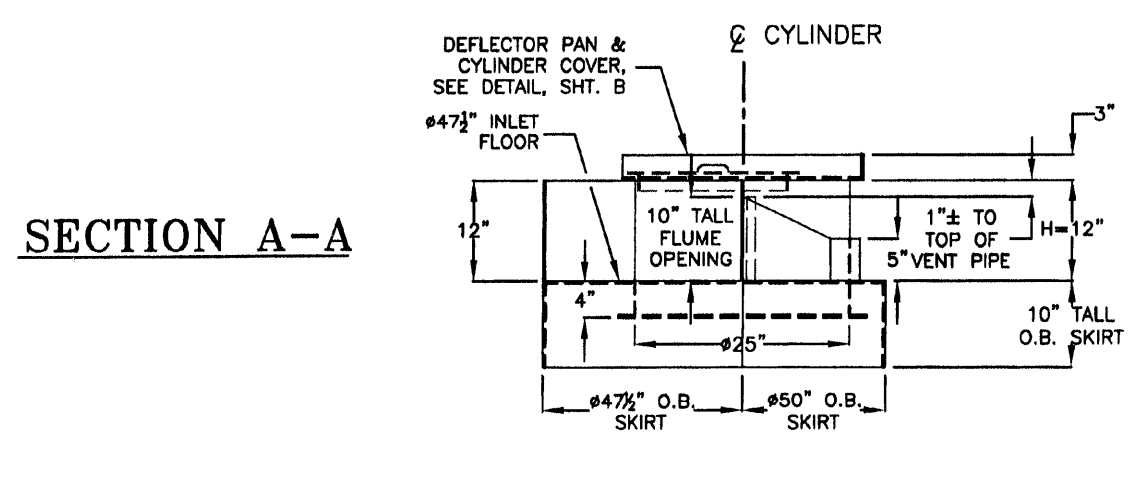
**INLET DETAIL (DEFLECTOR PAN NOT SHOWN)**



**TOP SLAB & SEPARATION SLAB DETAILS**



**SECTION A-A**



CDS MODEL PMSU20\_15\_4i  
NOT TO SCALE

**FOR BIDDING PURPOSES ONLY**

**DETAILS SHEET**

DATE: JUNE 6, 2008	SCALE: AS SHOWN	DESIGNED BY: BLM/GY	DRAWN BY: SAM/KAM	APPROVED BY: BLM	PROJECT NO.: 2256	FILE NO.: 2256-CETALS.DWG
<b>WESTGATE PLAZA</b>						
<b>CONGRESS STREET</b>						
<b>PORTLAND, ME</b>						
<b>Appledore Engineering Inc.</b>						
Please International Tradeport 15 Rye Street, Suite 305 Portland, New Hampshire 03801 (603) 433-8818 ae@appledoreeng.com						
<b>C-11</b>						