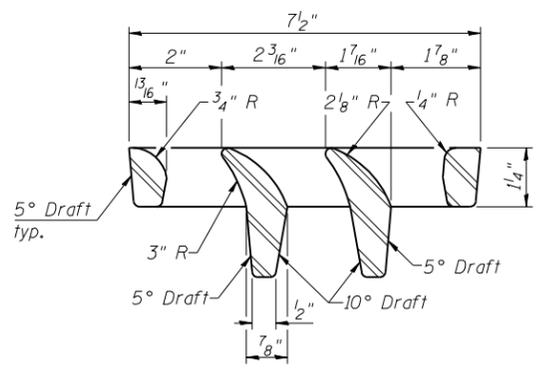
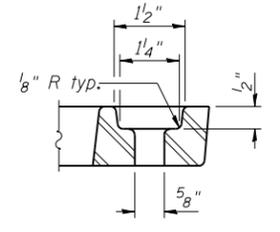


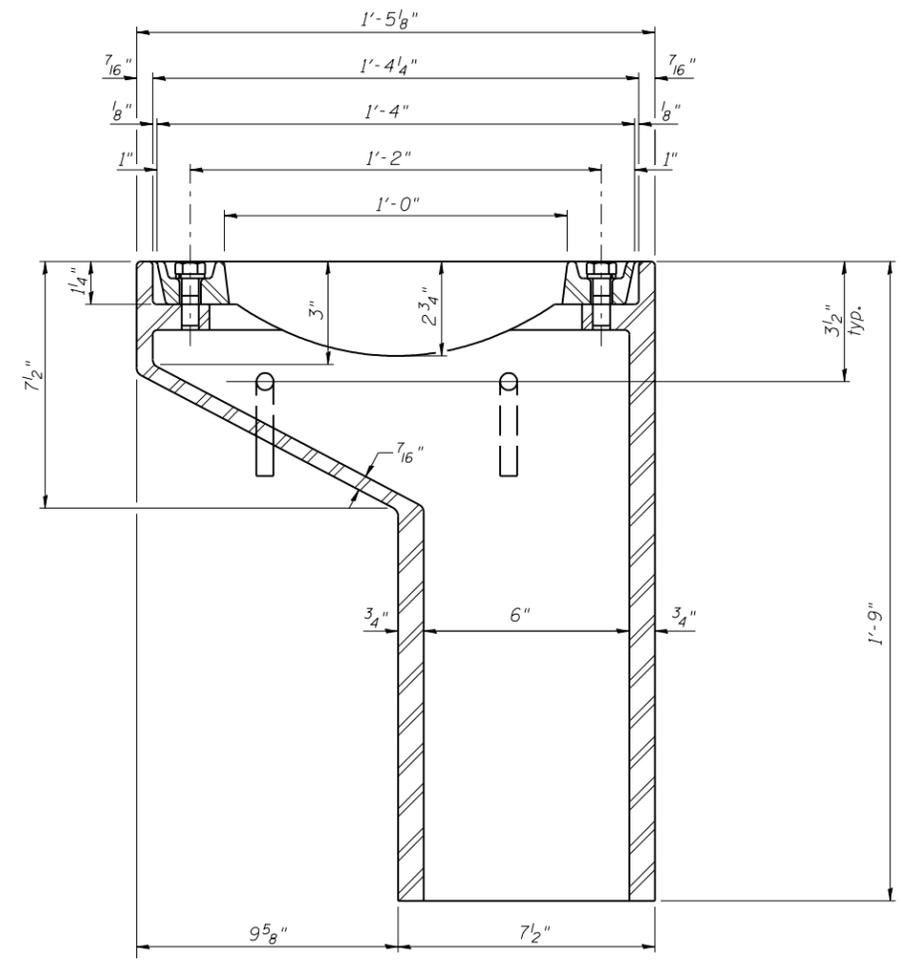
**PLAN**



**VANE GRATE DETAIL**

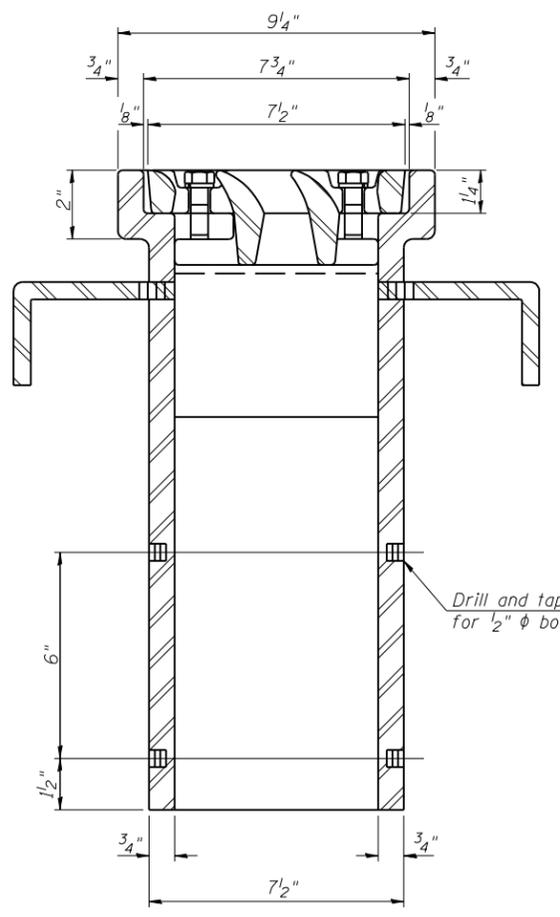


**BOLT HOLE DETAIL**



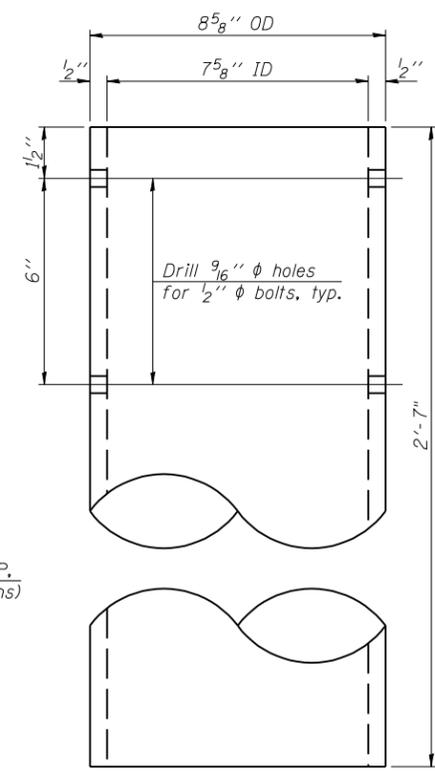
**SECTION A-A**

See sheet 8 of 19 for scupper location relative to parapet.

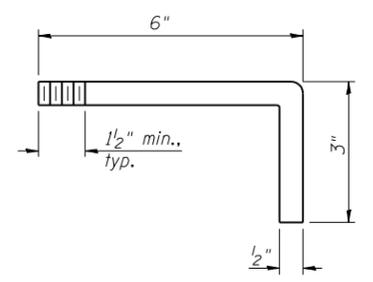


**SECTION B-B**

Drill and tap 1/2"-13x1/2" DP. for 1/2" φ bolts. (4 locations)



**DOWNSPOUT**



**ANCHOR STUD DETAIL**

**Notes:**  
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.  
Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.  
Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.  
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.  
Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.  
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.  
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scuppers, DS-11.  
Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-11	Each	4

DS-11

7-1-10

**LE** LIN ENGINEERING, LTD.  
Consulting Engineers  
Chatham, Illinois

USER NAME =	DESIGNED - TBP	REVISED -
FILE NAME =	CHECKED - ADB	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE =	CHECKED - MTH	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER, DS-11  
STRUCTURE NO. 029-0075**

SHEET NO. 17 OF 19 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	144-B-1 BR	FULTON	48	34
CONTRACT NO. 68778				
ILLINOIS FED. AID PROJECT				