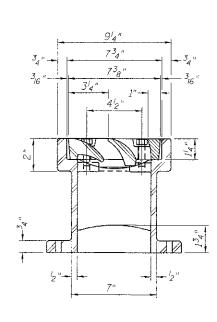
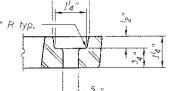


SECTION A-A See sheet S-13 of S-41 for scupper location relative to parapet.

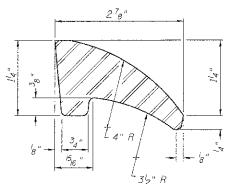


SECTION C-C

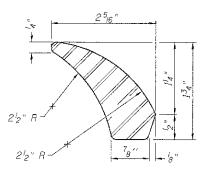


BOLT HOLE DETAIL

			_
ons. Ibi	DESIGNED	SSM	
÷	CHECKED	RGD	
parniar standard-	DRAWN	WJH	
RIVER:	CHECKED	RGD	
	DS-33		11-1-09



FIRST VANE DETAIL



SECOND VANE DETAIL

BILL OF MATERIAL

		
ITEM	UNIT	QUANTITY
Drainage Scupper, DS-33	Each	4

DRAINAGE SCUPPER, DS-33 STRUCTURE NO. 056-3190



WB CHARLES J. MILLER ROAD BRIDGE DATE: 7/23/12 TOTAL SHEET SHEETS NO. SECTION COUNTY SHEET NO. S-15 3860 09-00372-00-PW MCHENRY 252 138 5-41 SHEETS CONTRACT NO. 63633 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT



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 Scupper, DS-33.

All cast Iron parts shall be gray iron conforming to the

Bolts, anchor studs, washers and nuts shall conform to the

requirements of ASTM A 307 and shall be galvanized according

of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

stainless steel according to Article 1006.29(d) of the Standard

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,

As an alternate, bolts, anchor studs, washers and nuts may be

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper

The Contractor shall take appropriate measures to assure that

requirements of AASHTO M 105, Class 358.

Downspouts located on the exterior side

to AASHTO M 232.

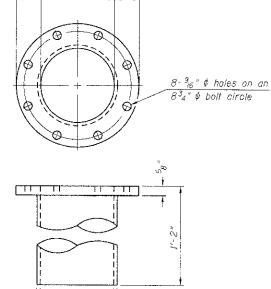
Specifications.

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.

See Sheet S-13 of S-41 for Drainage System Details.

11" O.D.

6" I.D.



DOWNSPOUT

7" O.D.