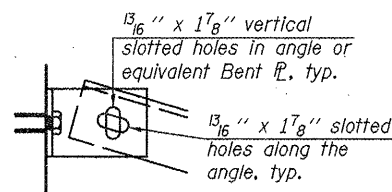


** Connection angle shall be adjusted to match bridge skew.

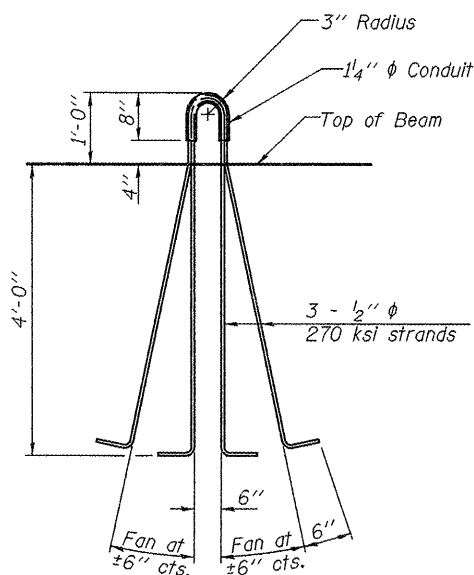
* Fabricator shall locate to miss strands within permissible tolerances.

Notes:

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted. Two hardened washers are required for each set of oversized holes. All holes shall be 15/16 inch diameter unless otherwise noted. 5/16 inch x 3 inch x 3 inch plate washers are required over all slotted holes. All bolts shall be galvanized according to AASHTO M232. Bracing shall be installed as beams are erected and tightened as soon as possible during erection.



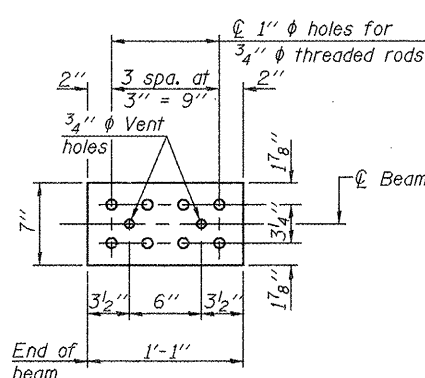
DETAIL A



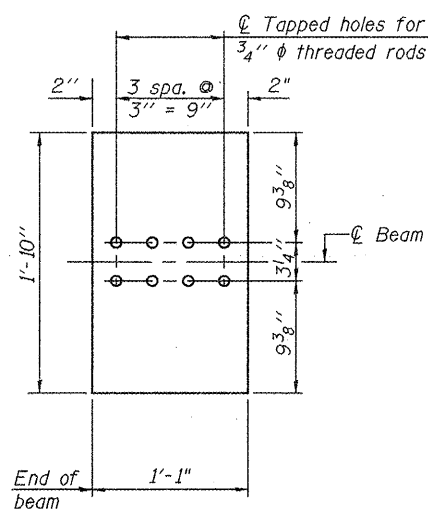
LIFTING LOOP DETAIL

PERMANENT BRACING DETAILS

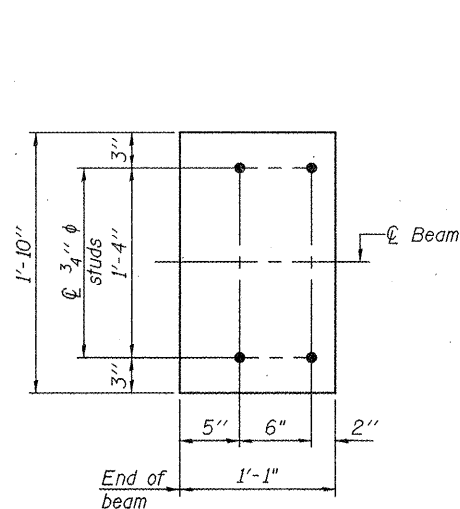
Cost of permanent bracing included with furnishing and erecting precast prestressed concrete I-beams, 54"



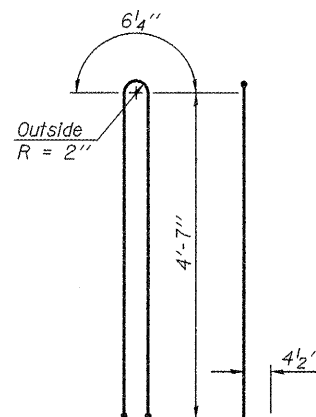
TOP PLATE



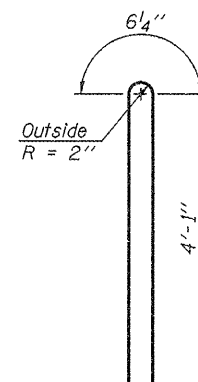
BOTTOM PLATE
(Showing threaded rods)



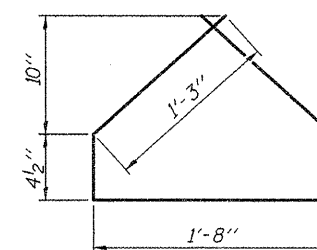
BOTTOM PLATE
(Showing studs)



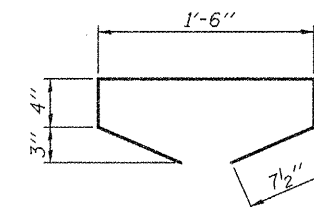
BAR G1



BAR G2



BAR G4



BAR G5

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 54"	Ft.	558.5

54" PPC I-BEAM DETAILS
STRUCTURE NO. 055-0079

DESIGNED	PMM
CHECKED	CTW
DRAWN	SEC
CHECKED	CTW

PI-4-54D

10-1-08

SHEET NO. 16 21 SHEETS	EFK Moen, LLC Civil Engineering Design		331 Salem Place Suite 225 Fairview Heights, IL 62208		Phone 618-206-4250 Fax 618-206-4253	
	F.A.P. RTE. 685	SECTION 37BR-1	COUNTY MCDONOUGH	TOTAL SHEETS 138	SHEET NO. 71	
FED. ROAD DIST. NO.			ILLINOIS		FED. AID PROJECT	
CONTRACT NO. 68352						