

**NOTES**

Inserts for  $\frac{3}{4}$ "  $\phi$  threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be  $\frac{1}{2}$ " and the nominal cross-sectional area shall be 0.153 sq. in.

Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions). A minimum  $2\frac{1}{2}$ "  $\phi$  lifting pin shall be used to engage the lifting loops during handling.

~~Tilt G<sub>6</sub> bars when necessary to maintain  $\frac{1}{2}$ " clearance.~~

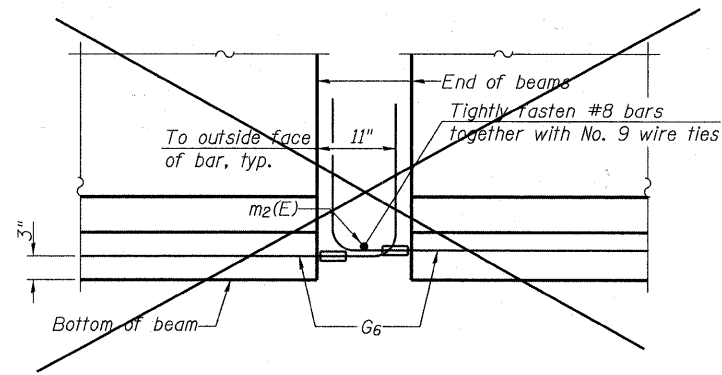
The top and bottom plates shall be AASHTO M270 Grade 50.

The bottom plates and studs shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized.

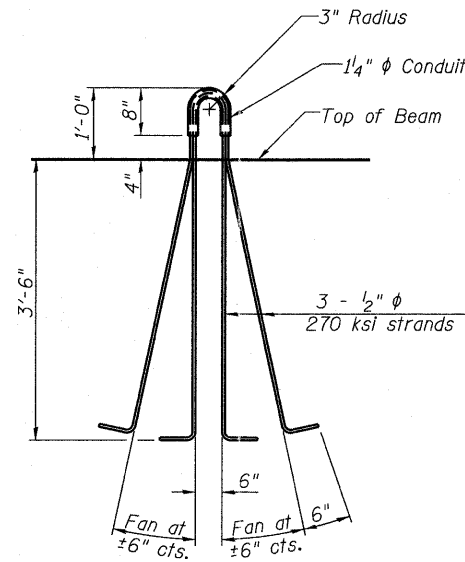
Threaded rods shall be ASTM F 1554 Grade 55.

~~The G<sub>6</sub> bar assembly shall have the threaded ends oversized to ensure no reduction in cross sectional area after threading. The coupler splice shall be capable of developing 125 percent of the yield strength of the reinforcement bar.~~

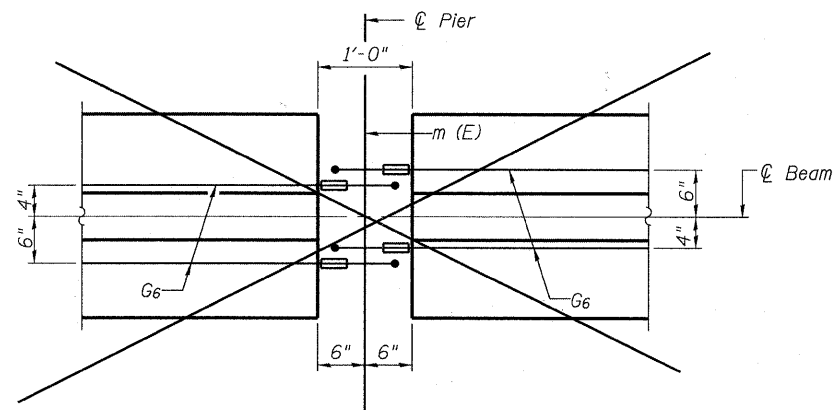
Beams requiring G<sub>6</sub> bar assemblies shall not be released from the fabricator until they have attained 45 days of age or older.



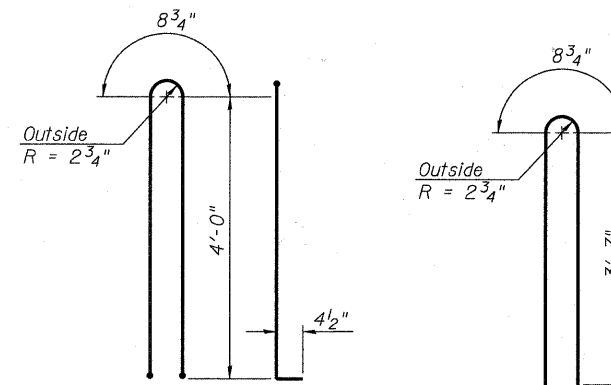
**ELEVATION OF BEAM AT PIER**



**LIFTING LOOP DETAIL**

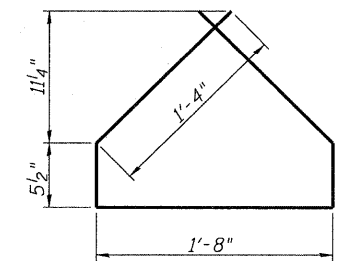


**PLAN OF BEAM AT PIER**

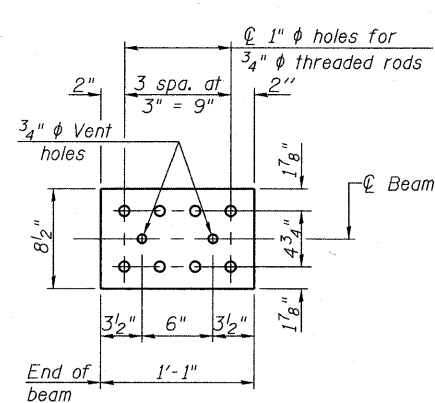


**BAR G<sub>1</sub>**

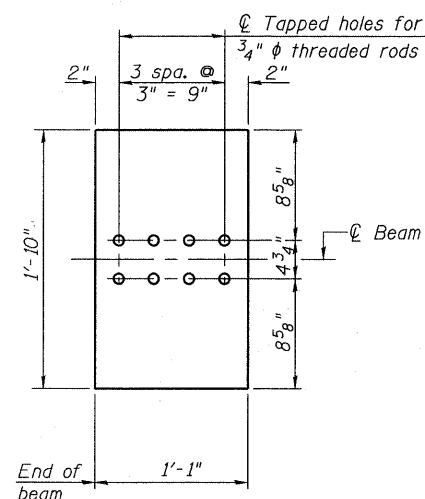
**BAR G<sub>2</sub>**



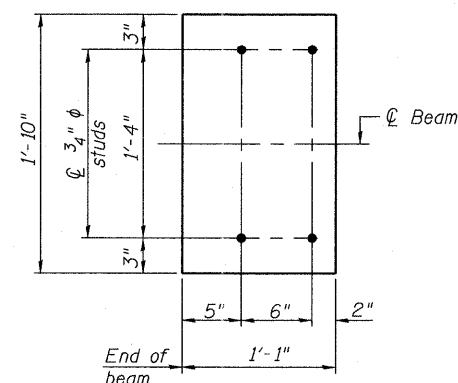
**BAR G<sub>4</sub>**



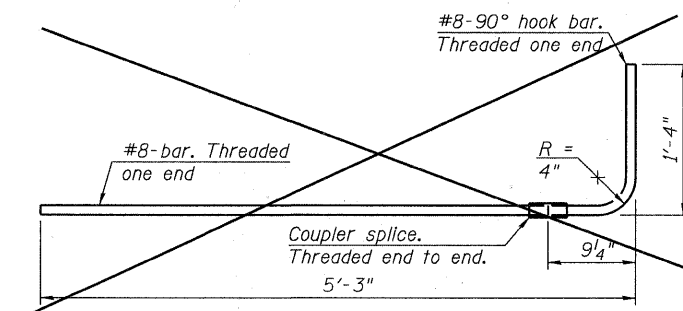
**TOP PLATE**



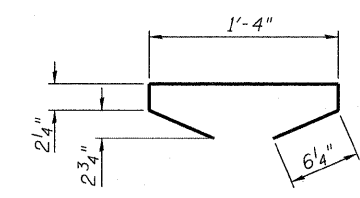
**BOTTOM PLATE**  
(Showing threaded rods)



**BOTTOM PLATE**  
(Showing studs)



**G<sub>6</sub> BAR ASSEMBLY**



**BAR G<sub>5</sub>**

See bearing details for pintle hole locations when required.

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 48"	Ft.	389

FILE NAME = w:\756-004-1onboard - gwt bridges phase 1\road\sheet\structural\pcc\0223120-011-48 I-BEAMDETAILS IL.dgn

PI-4-48D

7-1-10

**Bollinger, Lach & Associates, Inc.**  
ITASCA, ILLINOIS

USER NAME = gonzalo  
PLOT SCALE =  
PLOT DATE = 7/26/2011

DESIGNED JJI SRT  
CHECKED SRTJJI  
DRAWN GM GM  
CHECKED SRTJJI

REVISED -  
REVISED -  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
GREAT WESTERN TRAIL  
GRACE STREET**

**48" PPC I-BEAM DETAILS  
STRUCTURE NO. 022-3120**

SHEET NO. 11 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00151-00-BR	DuPAGE	201	63
			CONTRACT NO. 63568	

ILLINOIS FED. AID PROJECT