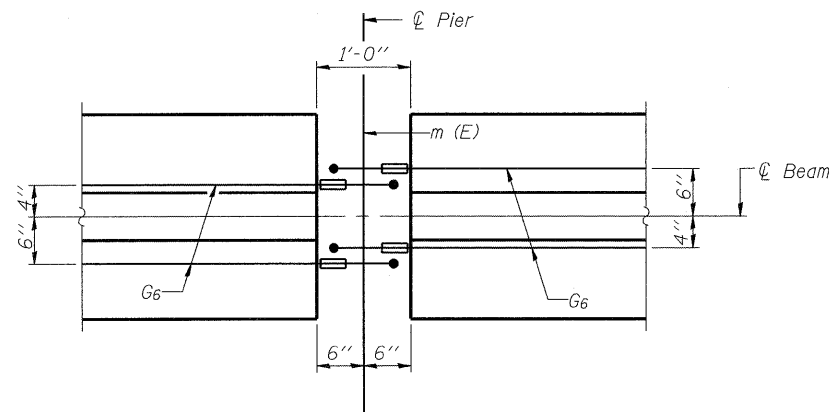
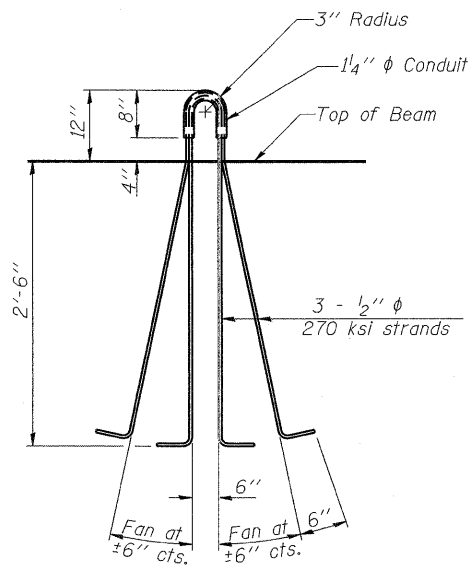


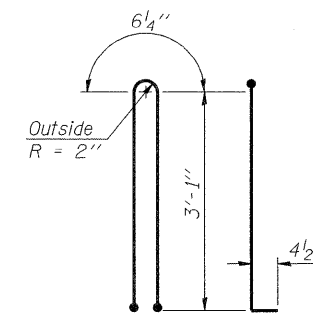
**ELEVATION OF BEAM AT PIER**



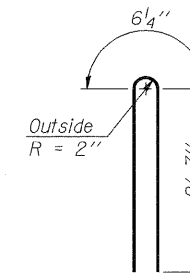
**PLAN OF BEAM AT PIER**



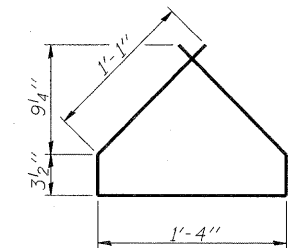
**LIFTING LOOP DETAIL**



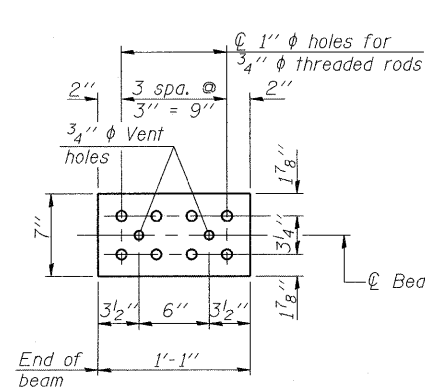
**BAR G1**



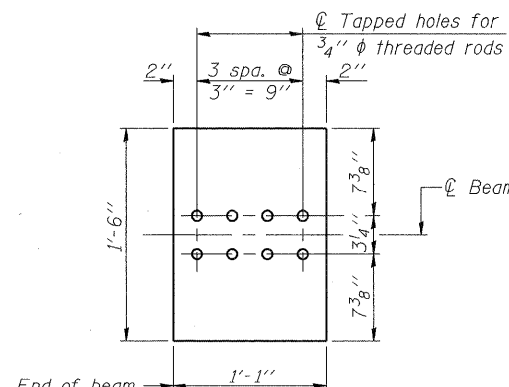
**BAR G2**



**BAR G4**

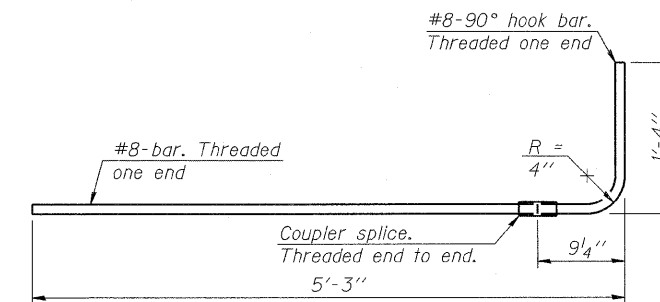


**TOP PLATE**



**BOTTOM PLATE**

See bearing details for pintle hole locations when required.



**G6 BAR ASSEMBLY**

**NOTES**

Inserts for 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 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 1/2"  $\phi$  lifting pin shall be used to engage the lifting loops during handling. Tilt G6 bars when necessary to maintain 1 1/2" clearance.  
 The top and bottom plates shall be AASHTO M270 Grade 50.  
 The bottom plates 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 G6 bar assembly shall be capable of developing 125 percent of the yield strength of the grade 60 reinforcement bar components. The assembly shall allow completion of the splice without turning of the hook bar. The hook bar shall be threaded such that the entire coupler can be threaded onto the hook bar.  
 Beams requiring G6 bar assemblies shall not be released from the fabricator until they have attained 45 days of age or older.

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36"	Ft.	709

**PRESTRESSED BEAM DETAILS - 36" 12SU  
STRUCTURE NO. 047-0051**

SHEET NO. S-24 OF S-43 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
591	14BR-1	KENDALL	429	274
			CONTRACT NO. 66985	
ILLINOIS FED. AID PROJECT				

PI-4-36D 1-28-11



**PB Americas, Inc.**  
230 WEST MONROE STREET,  
SUITE 900  
CHICAGO, IL. 60606

USER NAME = whood	DESIGNED - MGH	REVISED -
PLOT SCALE =	CHECKED - SSM	REVISED -
PLOT DATE = 10/14/2011	DRAWN - RCB	REVISED -
	CHECKED - RGD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

COMPANY NAME: SEC GROUP, INC.  
PROJECT CONTACT: Robert G. Davies  
CLIENT: ILLINOIS DEPARTMENT OF TRANSPORTATION  
DATE PLOTTED: 10/14/2011 11:00:09 AM  
FILE NAME: 0470051-Pbd02.dgn  
PLOT DRIVER: Pbd02f  
PEN TABLE: S:\Project\20-34-41