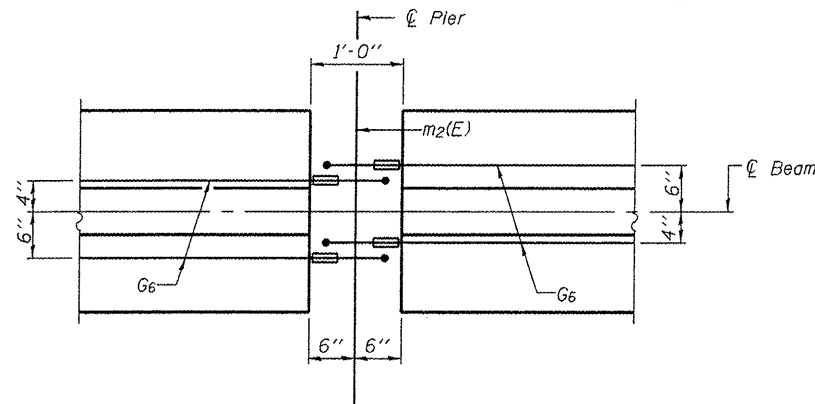
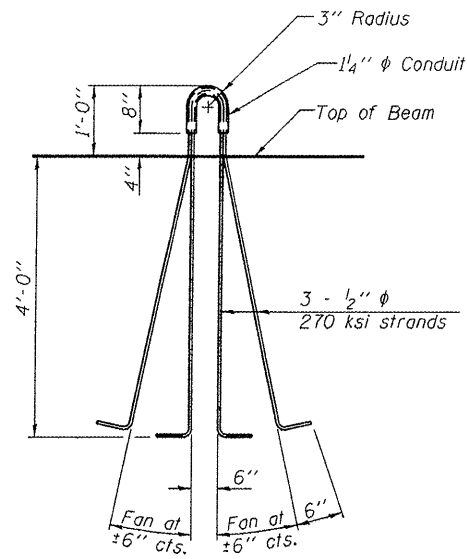


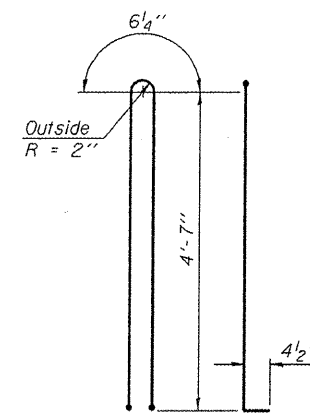
ELEVATION OF BEAM AT PIER



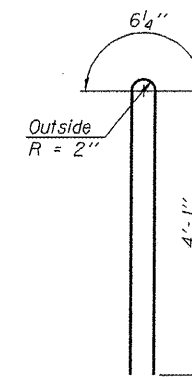
PLAN OF BEAM AT PIER



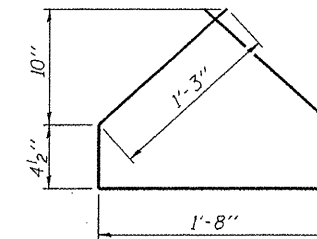
LIFTING LOOP DETAIL



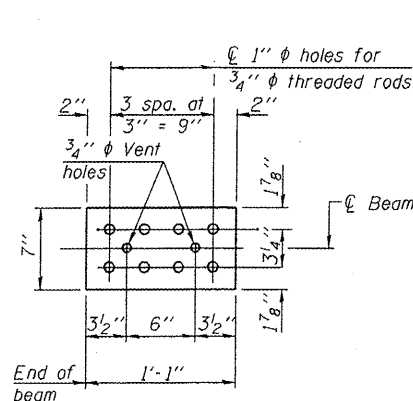
BAR G1



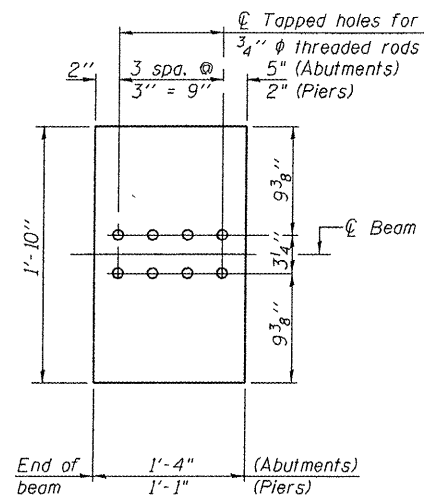
BAR G2



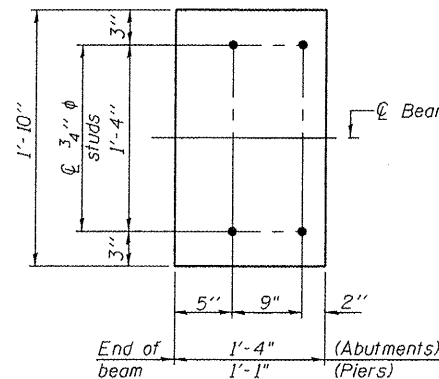
BAR G4



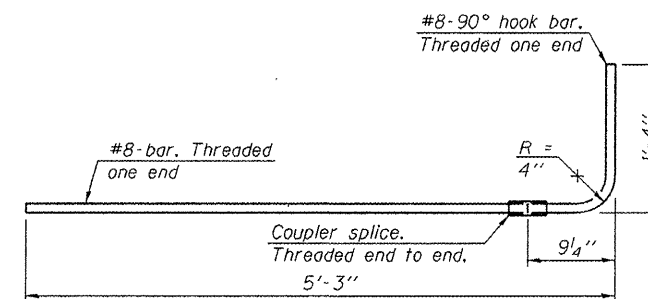
TOP PLATE



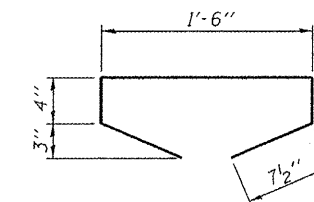
BOTTOM PLATE (Showing threaded rods)



BOTTOM PLATE (Showing studs)



G6 BAR ASSEMBLY



BAR G5

NOTES

Inserts for 3/4" ϕ 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" ϕ 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 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 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, 54" | Fl. | 2,814 |

PI-4-54D 7-1-10

| | | |
|-------------------------------|--------------------|-----------|
| USER NAME = dhaberling | DESIGNED - BRD/FLL | REVISED - |
| FILE NAME = 0550003-68482.dgn | CHECKED - SDS/JHP | REVISED - |
| PLOT DATE = 12/21/2010 | DRAWN - DLH | REVISED - |
| PLOT TIME = 10:30:53 AM | CHECKED - CWC/SDS | REVISED - |

WHKS & CO.
ENGINEERING
7018 KINGSMILL CT.,
SPRINGFIELD, IL
(217) 483-9457
DESIGN FIRM #184001036

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

54" PPC I-BEAM DETAILS
S.N. 055-0083

SHEET NO. 22 OF 41 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-------------|---------|-----------|--------------|-----------|
| 542 | 105BR-1 | MCDONOUGH | 117 | 62 |

CONTRACT NO. 68482
ILLINOIS FED. AID PROJECT