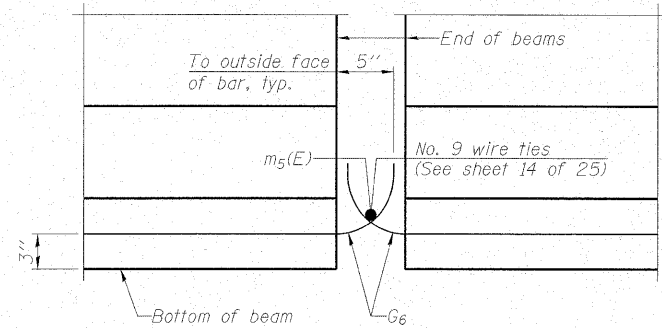


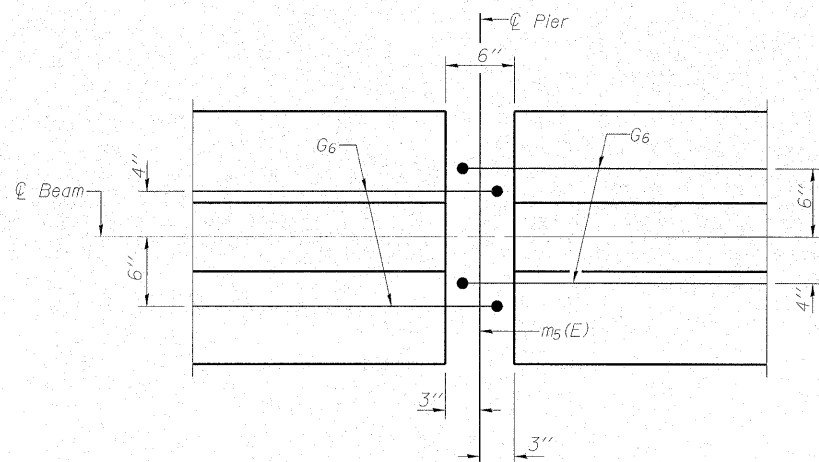
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 18 25 SHEETS
FA 773 IL 121	(109B) B-1	CUMBERLAND	96	75	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

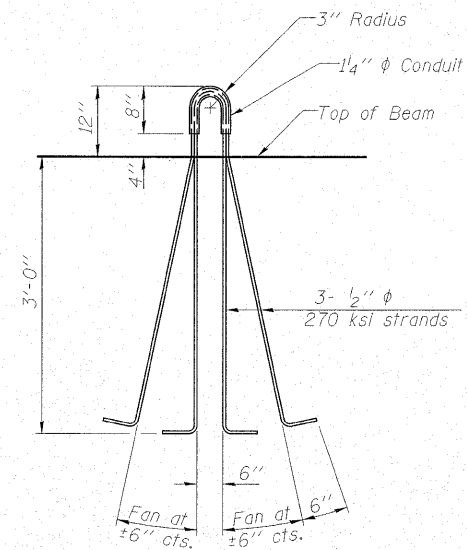
Contract # 74237



ELEVATION OF BEAM AT PIER



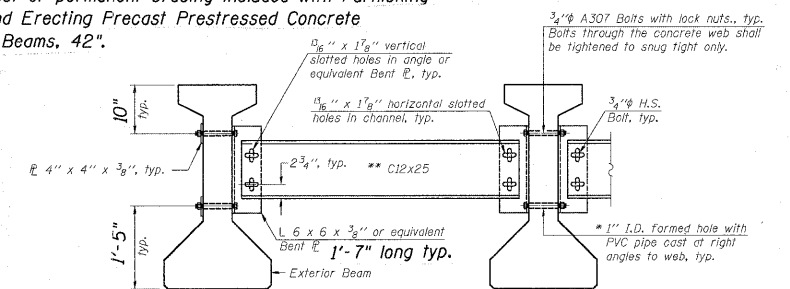
PLAN OF BEAM AT PIER



LIFTING LOOP DETAIL

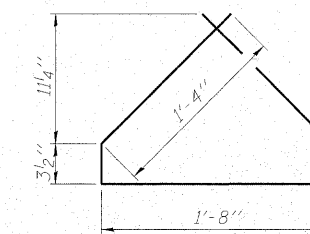
NOTES

- Inserts for $\frac{3}{4}$ " ϕ threaded dowel rods, when specified, are to be two strut, coil type for interior beams and single coil, 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.
- Non-prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.
- A minimum $2\frac{1}{2}$ " ϕ lifting pin shall be used to engage the lifting loops during handling.
- Cut G_6 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.
- Threaded rods shall be ASTM F 1554 Grade 55.
- Cost of permanent bracing included with Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42".

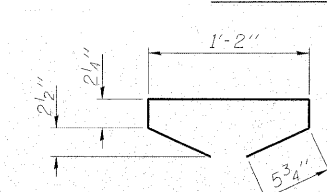


- Notes:
- All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
 - Two hardened washers are required for each set of oversized holes.
 - All holes shall be $\frac{5}{16}$ " ϕ unless otherwise noted.
 - $\frac{5}{16}$ " x 3" x 3" plate washers are required 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.
 - Fabricator shall locate to miss strands within permissible tolerances.
 - Alternate C12x30 channels are permitted to facilitate material acquisition.
 - The alternate, if utilized, shall be provided at no extra cost to the Department.

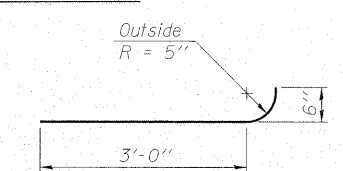
PERMANENT BRACING DETAILS



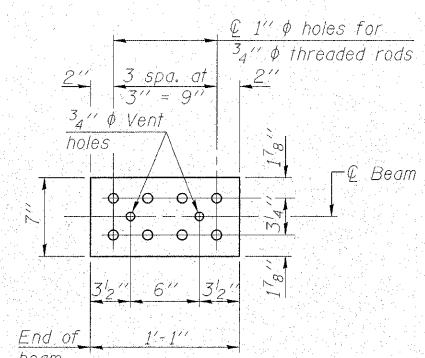
BAR G4



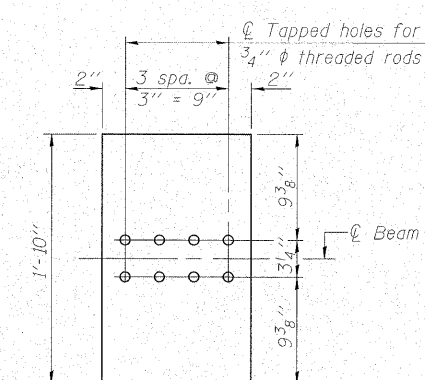
BAR G5



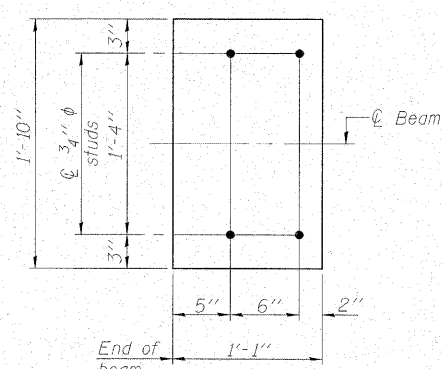
BAR G6



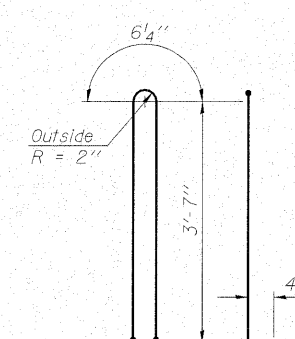
TOP PLATE



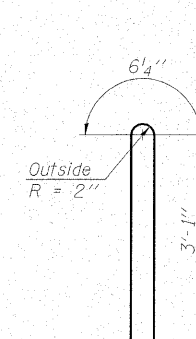
BOTTOM PLATE
(Showing threaded rods)



BOTTOM PLATE
(Showing studs)



BAR G1



BAR G2

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42"	Ft.	1137

42" PPC I-BEAM DETAILS
IL ROUTE 121 OVER BIG MUDDY CREEK
F.A.P. RTE. 773 - SECTION (109B)B-1
CUMBERLAND COUNTY
STATION 574+84.00
STRUCTURE NO. 018-0063



DESIGNED - BAS
CHECKED - KEF
DRAWN - SGM
CHECKED - RJA