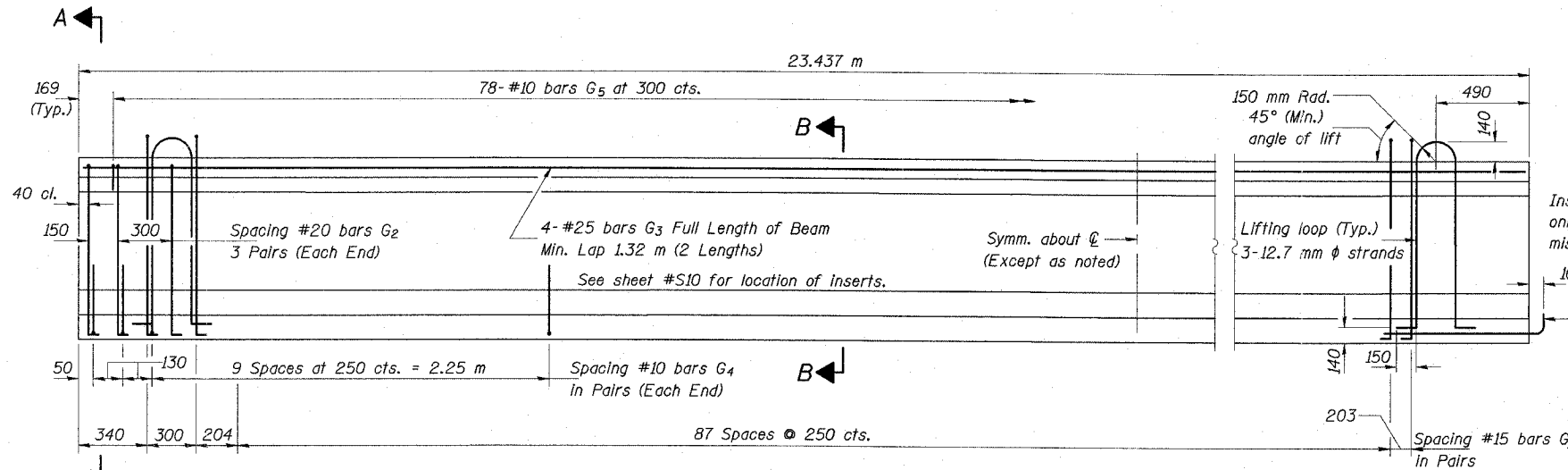
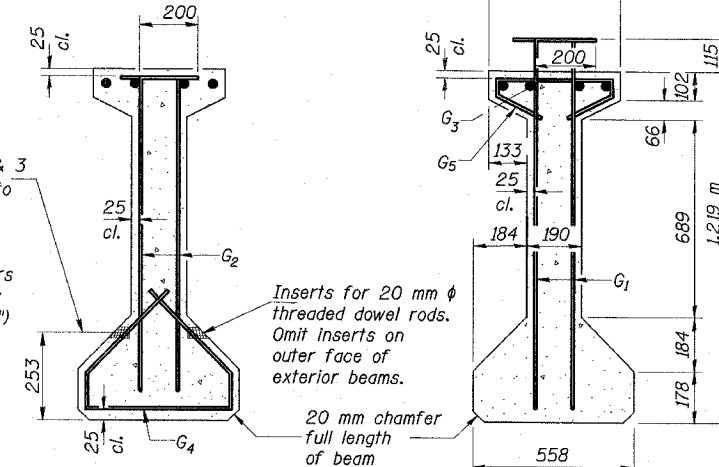


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. S22
FAU 2783	1314B	COOK	160	100	S40 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROGRAM			
CONTRACT 60293					

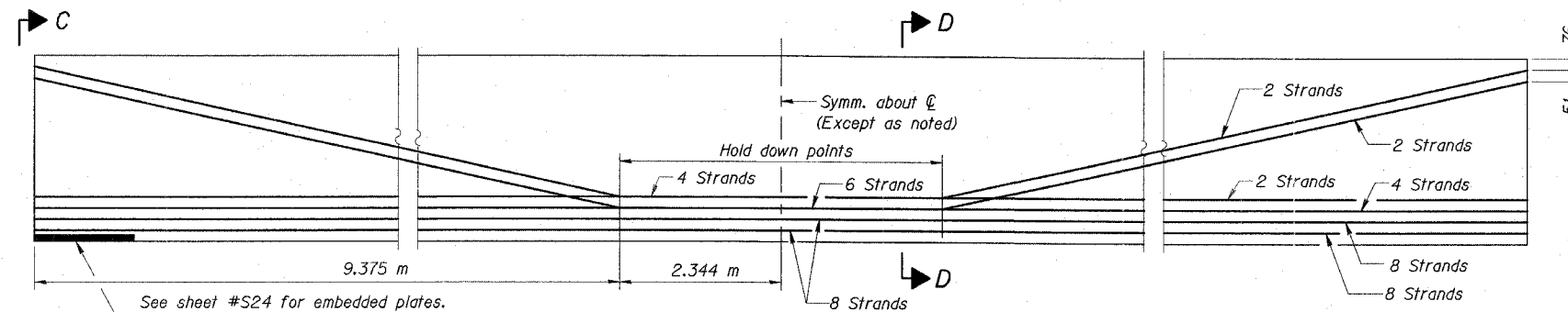


**ELEVATION OF BEAM**  
(Showing Reinforcement & Dimensions)

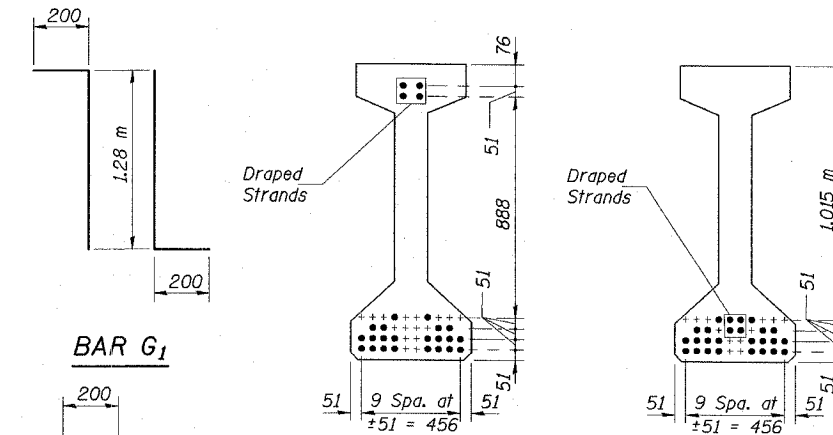


**SECTION A-A**

**SECTION B-B**



**ELEVATION OF BEAM**  
(Showing Prestressing Steel-Beam 26-A with 26 Strands)



**BAR G1**

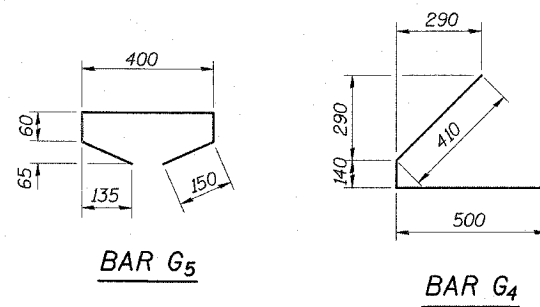
**SECTION C-C**  
(26-A Strand pattern)

**SECTION D-D**  
(26-A Strand pattern)

**\* BAR LIST**

Bar No.	Size	Length (m)	Shape
G1	#15	1.68	7L
G2	#20	1.42	7L
G3	#25	12.34	—
G4	#10	1.05	—
G5	#10	0.82	—
G6	#25	1.07	—

\* For one beam only.



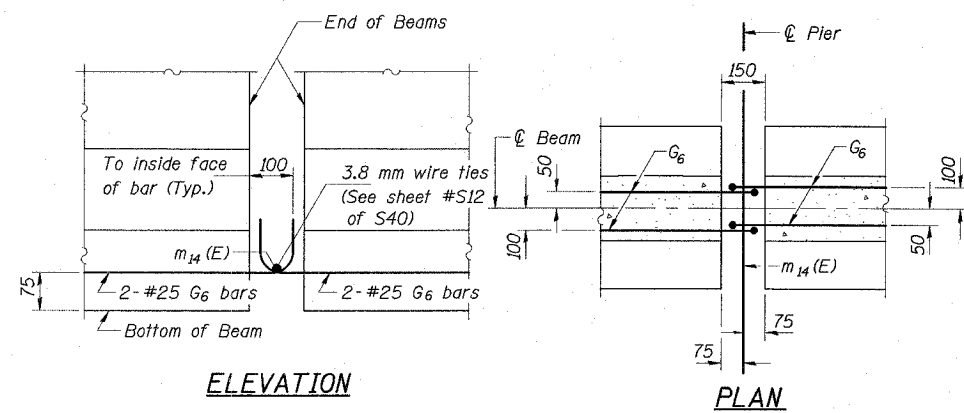
**BAR G5**

**BAR G4**

**BAR G2**

**BILL OF MATERIAL**

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 1219 mm	m	562.5



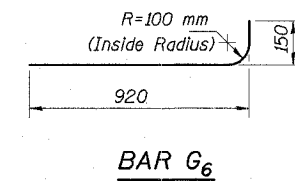
**ELEVATION**

**PLAN**

**DETAIL "A"**

**NOTES**

All inserts and threaded dowel rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per meter of "Furnishing and Erecting Precast Prestressed Concrete I-Beams, 1219 mm."  
 Inserts for 20 mm threaded dowel rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams.  
 Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand (Fu=1860 MPa).  
 The nominal diameter shall be 12.7 mm and the nominal cross-sectional area shall be 98.71 mm<sup>2</sup>.  
 Non-prestressing steel shall conform to AASHTO designation M 31M or M 322M Grade 400.  
 Lifting loops shall be 3-12.7 mm  $\phi$  strands (Fu=1860 MPa), as shown.  
 Required release strength, f'ci, shall be 35 MPa.  
 Reinforcement bars designated (E) shall be epoxy coated.  
 All dimensions are in millimeters (mm) except as noted.



**BAR G6**

**COLLINS ENGINEERS**  
 123 N. WACKER DR., SUITE 300  
 CHICAGO, ILL. 60606  
 (312) 704-9300  
 ILLINOIS PROFESSIONAL DESIGN FIRM  
 LICENSE NO. 184-000893

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 F.A.I. 90 (I-90)  
 AT NAGLE AVENUE  
 F.A.I. RTE. 2783 SEC 1314B  
 COOK COUNTY STATION 04+998.813  
 STRUCTURE NO. 016-0708  
**BEAM DETAILS-SPANS 2 & 3**  
 DRAWN BY KAC  
 CHECKED BY LDB/DGS  
 DATE: DEC. 2004