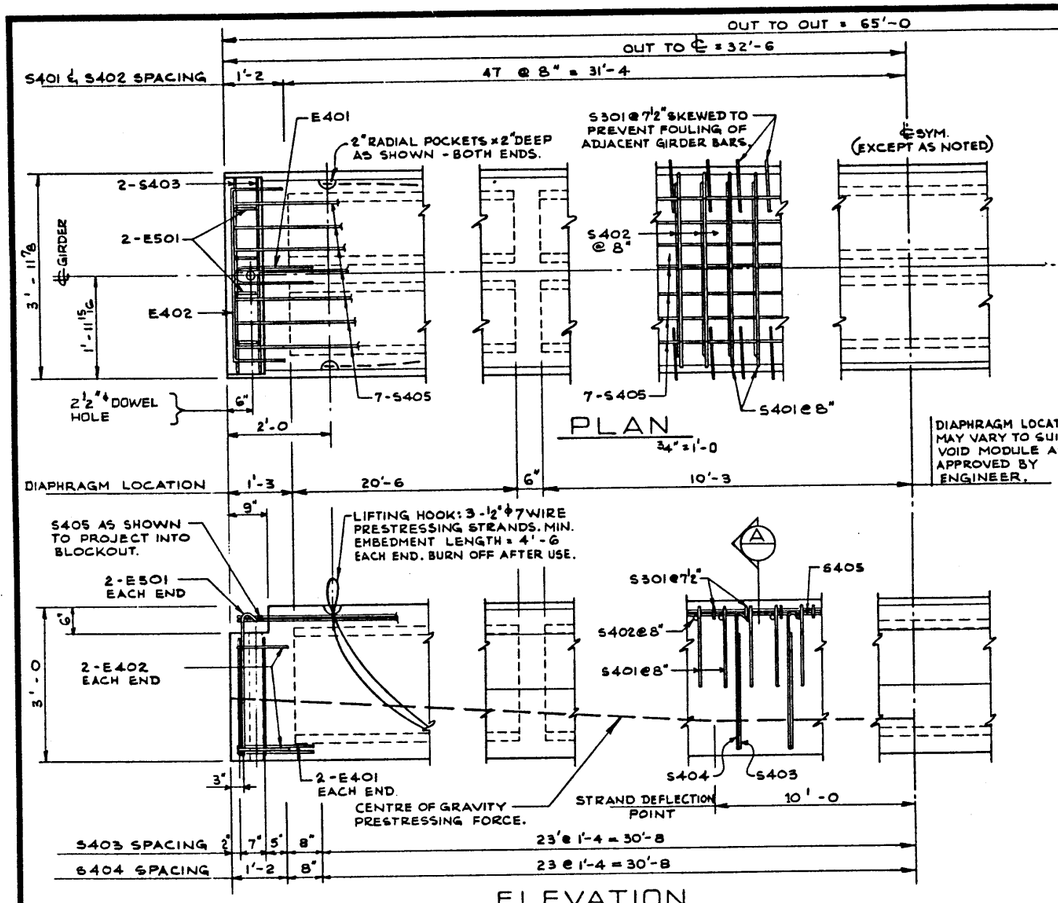
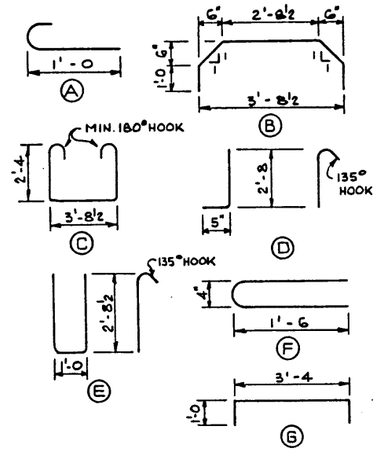


BAR TYPES N.T.S.

(ALL BAR DIMENSIONS ARE OUT TO OUT)



BAR LIST: FOR UNSKEWED GIRDER

MARK	SIZE	NO.	TYPE	X	Y	LENGTH	WEIGHT
S 301	3	204	A			1'-5	109
S 401	4	95	B			6'-2	391
S 402	4	95	STR.			3'-4	212
S 403	4	53	C			9'-3	327
S 404	4	49	D			3'-6	115
S 405	4	14	STR.			32'-10	307
E 501	5	4	E			7'-4	31
E 401	4	4	F			3'-4	9
E 402	4	4	G			5'-4	14

TOTAL LBS: 1,515

GENERAL NOTES

DESIGN:

- A.A.S.H.O. 1973 SPECIFICATION EXCEPT AS MODIFIED BELOW.
  - ALLOWABLE TENSION AT ℄ 80% MODULUS OF RUPTURE.
  - NO TENSION IN DECK SURFACE.
  - WEB REINFORCEMENT - ACCORDING TO A.C.I. 318-71 BUT NOT LESS THAN A.A.S.H.O. MINIMUM.
- LOADING LIVE LOAD - A.A.S.H.O. 15-25-44 0.70 WHEEL LINE PER GIRDER
  DEAD LOAD - GIRDER = 0.73 KIPS/FT.
  WEARING SURFACE = 0.10 KIPS/FT.

MATERIALS:

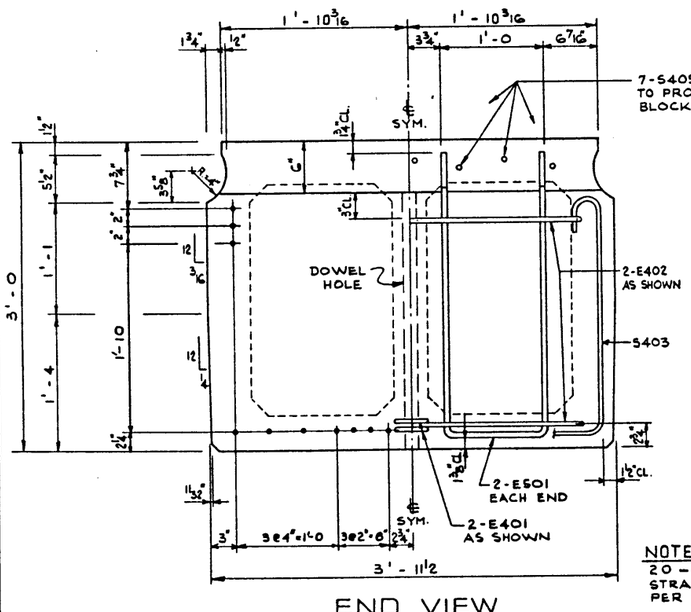
- CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND SAND FINES.
- CONCRETE 28 DAY STRENGTH 5000 PSI.
- RELEASE STRENGTH 4000 PSI.
- UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE 120 LB./CU. FT.
- PRESTRESSING STEEL SHALL BE 1/2" DIAMETER - 7 WIRE 270 K STRAND

FABRICATION:

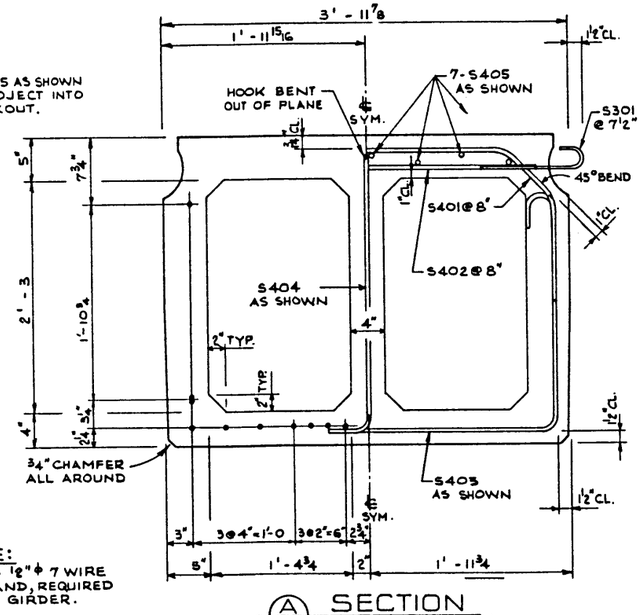
- GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE ALBERTA BRIDGE BRANCH SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS.
- FORCE IN PRESTRESSING STEEL:
  INITIAL TENSIONING LOAD = 28.73 K/STRAND
  DESIGN LOAD AFTER LOSSES = 21.25 K/STRAND

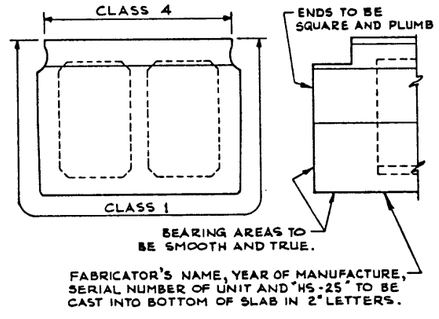
ERECTION:

- LIFTING FORCE AT EACH HOOK SHALL NOT EXCEED 35° FROM THE VERTICAL. GIRDER SURFACE MUST BE LEVEL AT ALL TIMES.
- CALCULATED WEIGHT OF ONE GIRDER IS 47,330 LBS.



NOTE:
20 - 1½" ϕ 7 WIRE STRAND, REQUIRED PER GIRDER.





GIRDER FINISHES
¾" = 1'-0

(1)

NO.	DATE	DESCRIPTION	BY

REVISIONS

APPROVED

CHIEF BRIDGE ENGINEER

DATE

Alberta — HIGHWAYS AND TRANSPORT, BRIDGE BRANCH

65 FT. TYPE RD-36 INTERIOR GIRDER SEMI-LIGHTWT. CONCRETE

DESIGNED	DRAWN BY	DATE	CHECKED BY	DATE	STREAM	LOCATION	HWY. NO.	SCALE	FILE NO.	SHEET	DWG. NO.
R.G.Q. D.K.D.	V.G.B.	MAY 76						SHOWN		..... OF	S-1237

M.P. 216 — UPDATED DEC. 12/75 R.G.Q.