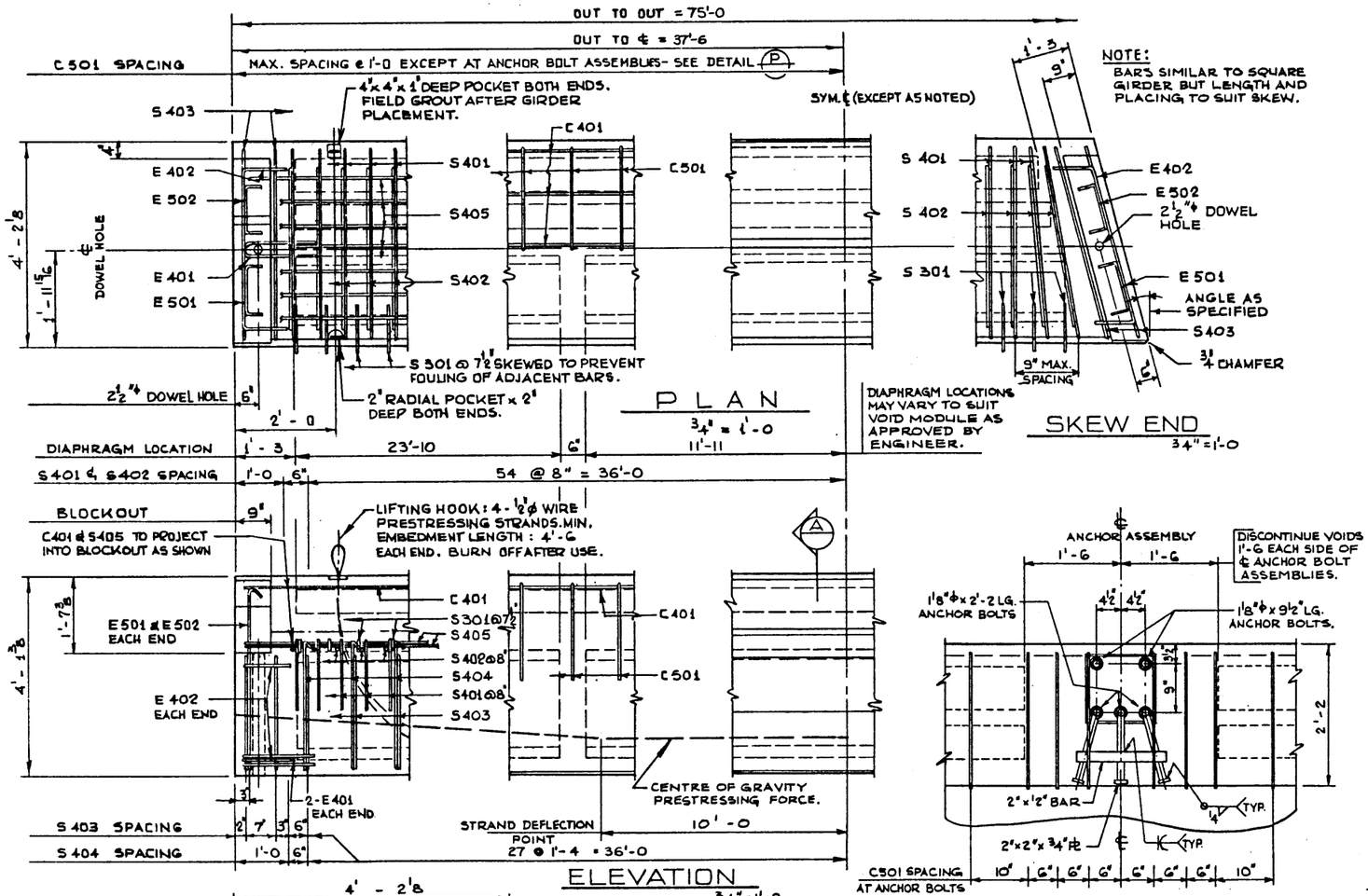
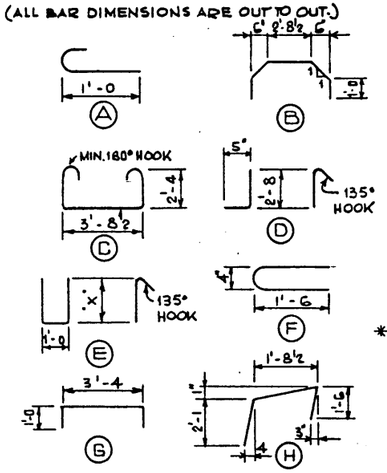


BAR TYPES N.T.S.

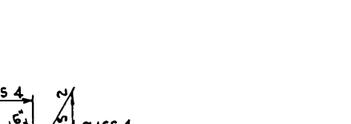
(ALL BAR DIMENSIONS ARE OUT TO OUT.)



BAR LIST: FOR UNSKEWED GIRDER

MARK	SIZE	NO.	TYPE	X	Y	LENGTH	WEIGHT
S 301	3	118	A			1' - 5	63
S 401	4	111	B			6' - 2	457
S 402	4	111	STR.			3' - 4	247
S 403	4	61	C			9' - 3	377
S 404	4	57	D			3' - 6	133
S 405	4	14	STR.			37' - 10	354
E 401	4	4	F			3' - 4	9
E 402	4	4	G			5' - 4	14
E 501	5	2	E	2'-8½		7' - 4	15
E 502	5	2	E	3'-8		9' - 3	19
C 401	4	6	STR.			37' - 10	152
* C 501	5	92	H			5' - 4	512

*ASSUMED 8 POSTS. TOTAL LBS.: 2,352



CAMBER DIAGRAM
N.T.S.

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. H5-25-44
  0.70 WHEEL LINE PER GIRDER
  DEAD LOAD - GIRDER = 1.05 KIPS/FT.
  WEARING SURFACE = 0.10 KIPS/FT.

MATERIALS:

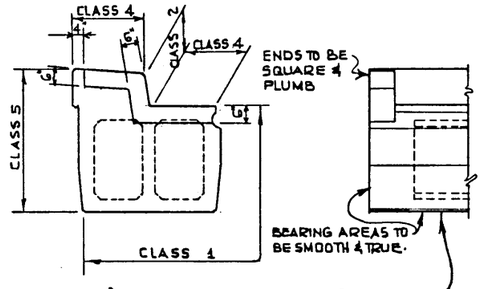
- CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND SAND FINES.
- CONCRETE IN CURB SHALL BE MADE OF STANDARD WEIGHT AGGREGATES.
- CONCRETE 28 DAY STRENGTH 5,000 PSI.
- RELEASE STRENGTH 4,000 PSI.
- UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE 120 LB./CU. FT.
- PRESTRESSING STEEL SHALL 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 = 22.16 K/STRAND
- CURB TO BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS AS REQUIRED.

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 72,200 LBS.



FABRICATOR'S NAME, YEAR OF MANUFACTURE, SERIAL NUMBER OF UNIT AND "HS - 25" TO BE CAST INTO BOTTOM OF SLAB IN 2" LETTERS.

GIRDER FINISHES

½" = 1'-0

0

NO.	DATE	DESCRIPTION	BY
1			
2			
3			
4			
5			

REVISIONS

APPROVED

CHIEF BRIDGE ENGINEER

DATE

Alberta HIGHWAYS AND TRANSPORT BRIDGE BRANCH

75 FT. TYPE RD-36 CURB 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.	P.SZ.	JAN.78						SHOWN		..... OF	S-1242