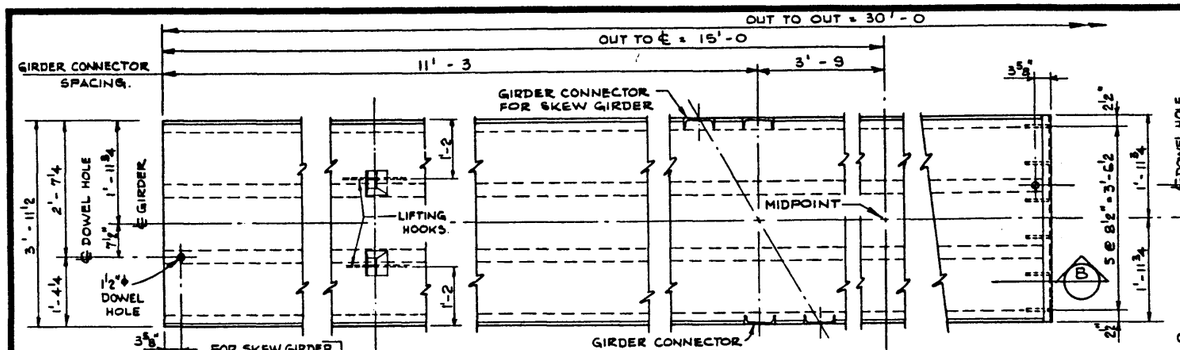
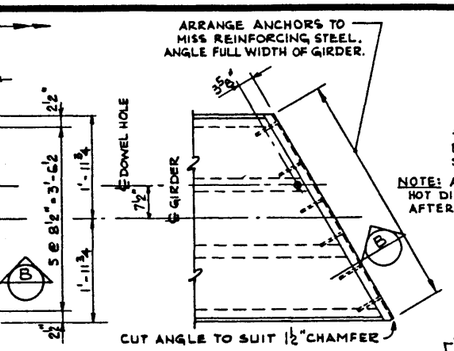


PLAN VIEW

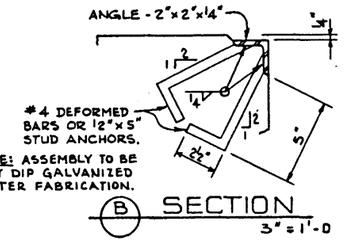
¾" = 1'-0



PROTECTION ANGLES

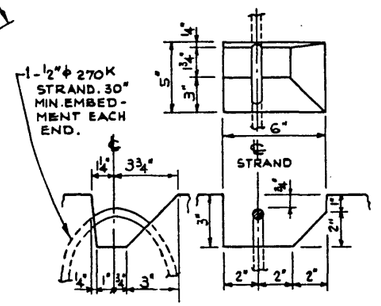
TO BE SUPPLIED BOTH ENDS OF ALL GIRDERS.

¾" = 1'-0



SECTION

3" = 1'-0



LIFTING HOOK POCKET

4 - REQ'D

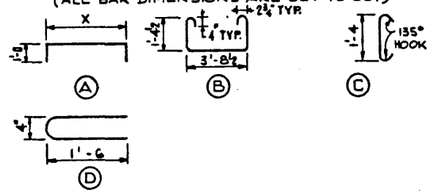
N.T.S

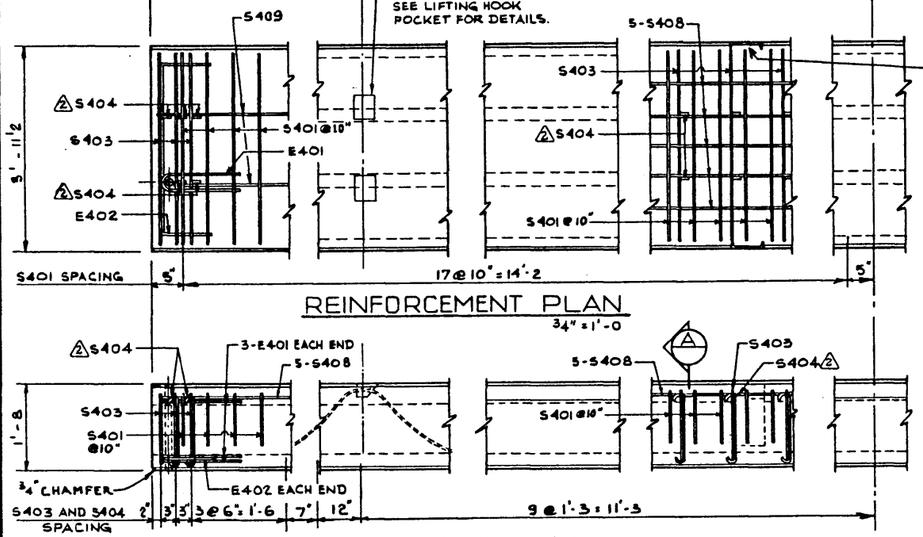
BAR LIST: FOR UNSKEWED GIRDER							
MARK	SIZE	NO.	TYPE	X	Y	LENGTH	WEIGHT
S 401	4	36	A	3'-8½		5'-9	138
S 408	4	5	STR.			29'-8	99
S 403	4	33	B			7'-4	162
S 404	4	64	C			2'-1	89
S 409	4	2	STR.			29'-4	39
E 401	4	6	D			3'-4	13
E 402	4	2	A	3'-4		5'-4	7

TOTAL LBS: 547

BAR TYPES N.T.S.

(ALL BAR DIMENSIONS ARE OUT TO OUT)



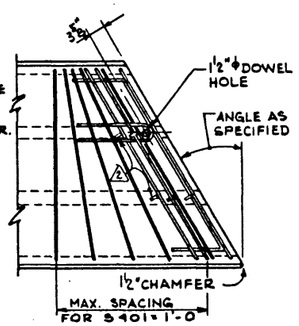


REINFORCEMENT PLAN

¾" = 1'-0

ELEVATION

¾" = 1'-0

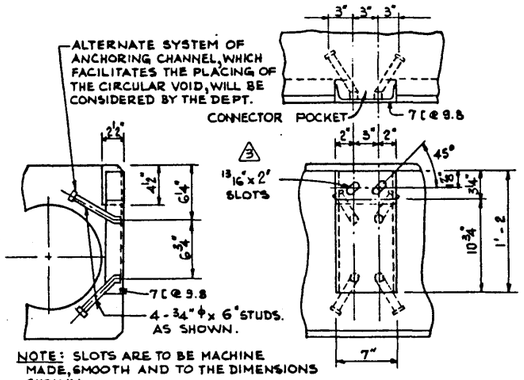


SKEW END

¾" = 1'-0

NOTE:

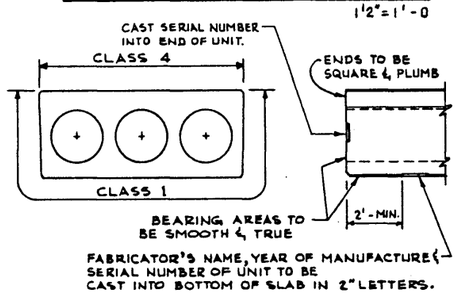
BARS SIMILAR TO SQUARE GIRDER BUT LENGTH AND PLACING TO SUIT SKEW. MAINTAIN STIRRUP SPACING (S 403 & S 404) AT ℄ OF UNIT. STIRRUP SPACING AT ANY LOCATION ACROSS UNIT NOT TO EXCEED 125% OF ℄ SPACING. EXTRA PARTIAL STIRRUPS TO BE USED WHERE REQUIRED TO MAINTAIN MAXIMUM SPACING.



NOTE: SLOTS ARE TO BE MACHINE MADE, SMOOTH AND TO THE DIMENSIONS SHOWN.

GIRDER CONNECTORS

1½" = 1'-0



GIRDER FINISHES

¾" = 1'-0

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. HS-25-44 ONE WHEEL LINE PER GIRDER
  DEAD LOAD - GIRDER = 0.524 KIPS/FT.
  WEARING SURFACE = 0.100 KIPS/FT.

MATERIALS:

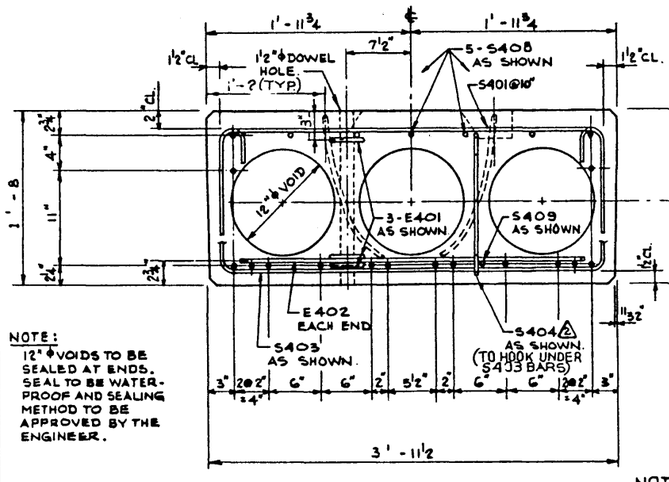
- CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND SAND FINES.
- CONCRETE 28 DAY STRENGTH 5,000 PSI.
- RELEASE STRENGTH 4,000 PSI.
- UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE 120 LB./CU. FT.
- PRESTRESSING STEEL SHALL BE 1/2" DIAMETER - 7 WIRE 270 K STRAND

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 = 21.58 K/STRAND
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOKS. STIRRUP SPACING TO BE MAINTAINED.

ERECTION:

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH WASHERS.
- CALCULATED WEIGHT OF ONE GIRDER IS 15,720 LBS.

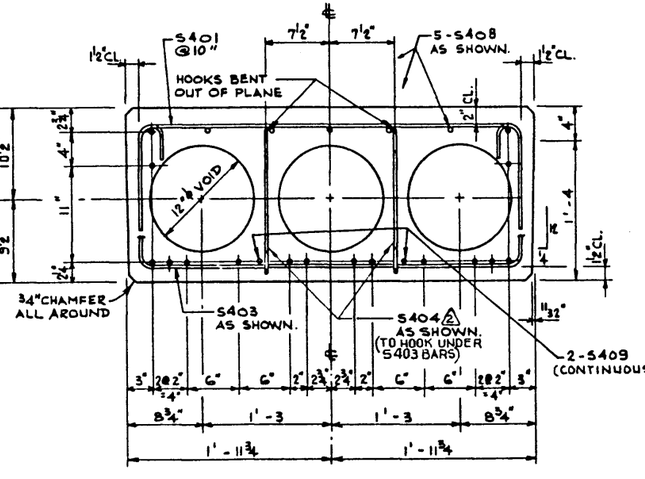


NOTE:
12"ϕ VOIDS TO BE SEALED AT ENDS. SEAL TO BE WATER-PROOF AND SEALING METHOD TO BE APPROVED BY THE ENGINEER.

END VIEW

1½" = 1'-0

NOTE:
16 - ½"ϕ 7 WIRE STRAND, REQUIRED PER GIRDER.



A SECTION

1½" = 1'-0

NO.	DATE	DESCRIPTION	BY
⚠	77 09 02	1½"ϕ SLOTS CHANGED TO 2"IG	R.W.K.
⚠	22 JAN. 76	BAR S404 REPRESENTATION CORRECTED	R.G.Q.
⚠	DEC. 2. 74	REDRAWN FROM S-1205-74. REV. POST SPACING, LIFTING HOOKS CONNECTORS & CENTRE STIRRUP.	R.G.Q.

REVISIONS

APPROVED

CHIEF BRIDGE ENGINEER

DATE Dec 2, 1974

Alberta HIGHWAYS AND TRANSPORT BRIDGE BRANCH

30 FT. TYPE VS-20 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.	M.M.F.	NOV. 74						SHOWN		..... OF	S-1205-74A

3

M.P. 210