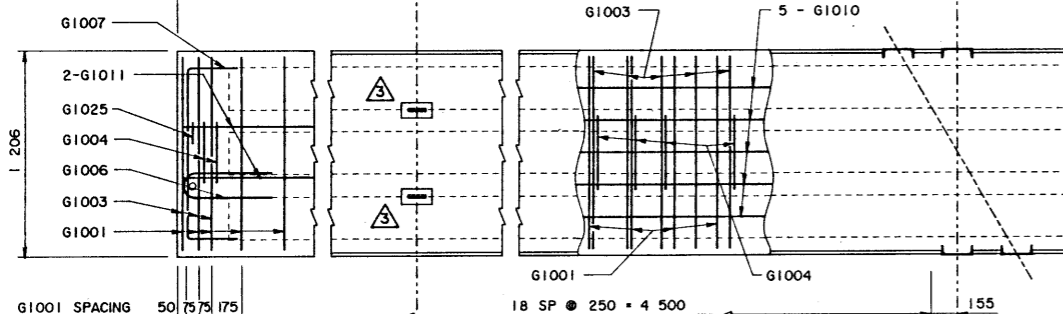
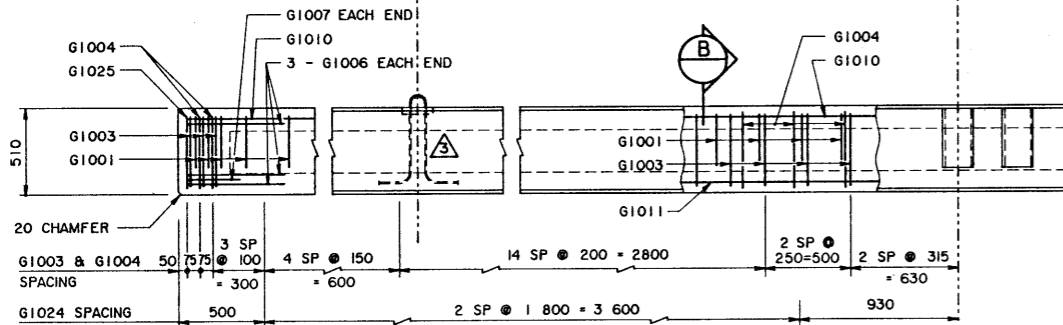


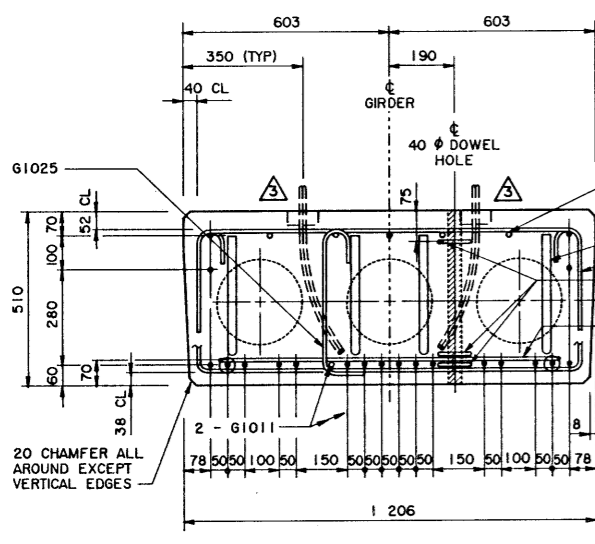
PLAN VIEW
1:20



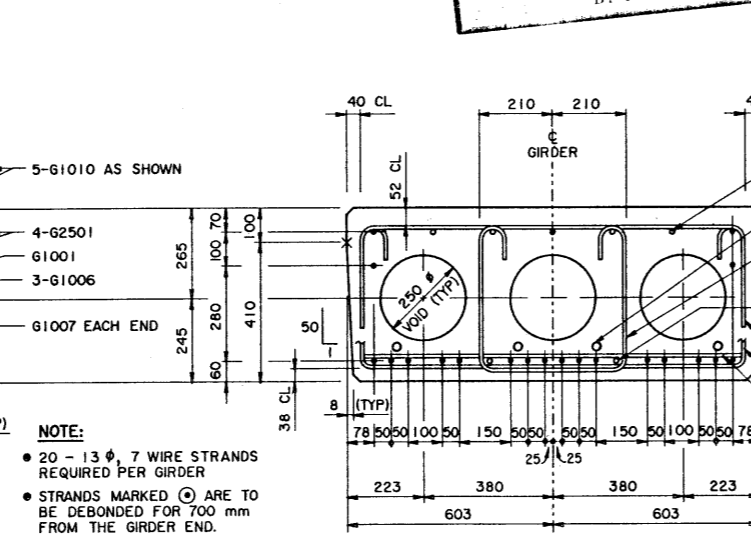
REINFORCEMENT PLAN
1:20



ELEVATION
1:20

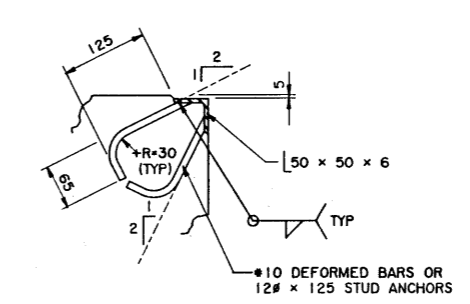
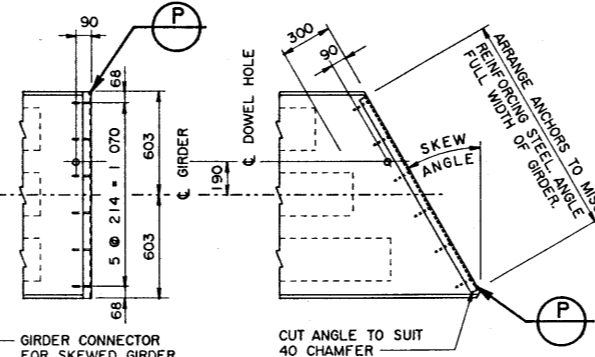


A SECTION
1:10



B SECTION
1:10

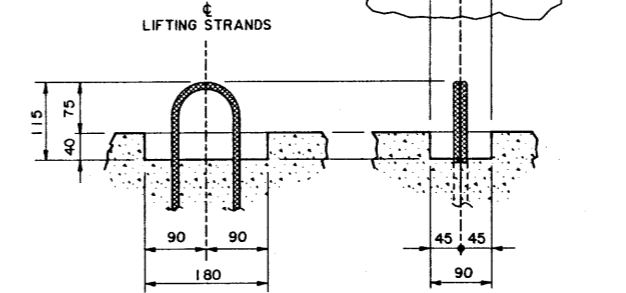
NOTE:
FOR SKEWED END REINFORCING BAR DETAILS SEE DWG S-1570



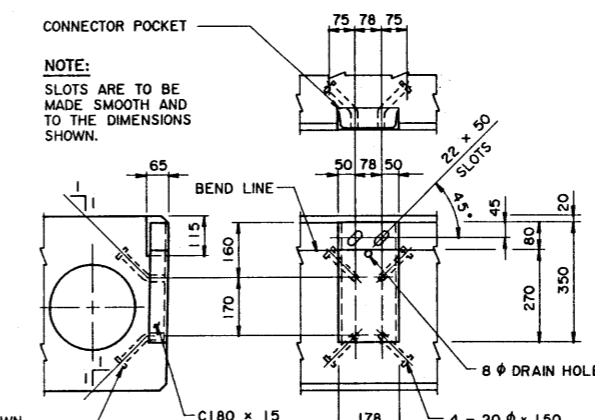
NOTE:
ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

P BUFFER ANGLE
1:5

NOTE:
• 2 - 13 φ, 7 WIRE STRANDS. 750 MIN EMBEDMENT EACH END.
• AFTER GIRDERS ARE ERECTED, LIFTING STRANDS ARE TO BE CUT-OFF FLUSH WITH BOTTOM OF POCKET. POCKET TO BE FILLED WITH AN LTH MATERIAL APPROVED IN ACCORDANCE WITH BRIDGE MATERIALS SPEC B391.



R LIFTING HOOK POCKET
1:5



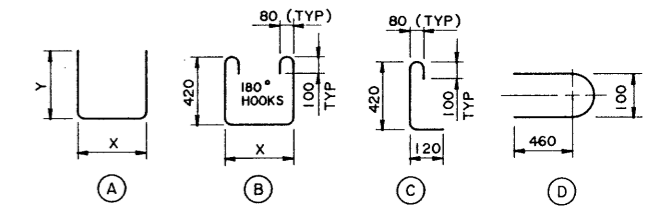
NOTE:
SLOTS ARE TO BE MADE SMOOTH AND TO THE DIMENSIONS SHOWN.
ALTERNATE SYSTEM OF ANCHORING CHANNEL, WHICH FACILITATES THE PLACING OF THE CIRCULAR VOID, WILL BE CONSIDERED BY THE DEPARTMENT.
NOTE: ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

S GIRDER CONNECTORS
1:10

BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	45	A	1 125	300	1 725	61
G1003	10	55	B	1 125		2 220	96
G1004	10	53	B	420		1 550	63
G1006	10	6	D			1 080	5
G1007	10	2	A	1 000	300	1 600	3
G1010	10	5	STR			9 960	39
G1011	10	2	STR			9 860	15
G1024	10	6	STR			1 100	5
G1025	10	2	C			670	1
G2501	25	4	A	9 910	350	10 610	167

TOTAL kg : 455

BAR TYPES
(ALL BAR DIMENSIONS ARE OUT TO OUT)



GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
- DESIGN**
- CAN/CSA-S6-88 SPECIFICATIONS EXCEPT AS MODIFIED BELOW:
 - ALLOWABLE TENSION AT MIDSPAN IS 40% OF MODULUS OF RUPTURE (SEVERE EXPOSURE CONDITIONS).
 - NO TENSION ALLOWED IN DECK SURFACE.
- **LOADING:**
 - LIVE LOAD - CAN/CSA-S6-88; CS-750 ONE WHEEL LINE PER GIRDER
 - DEAD LOAD - GIRDER = 0.93 t/m
 - WEARING SURFACE = 0.24 t/m

MATERIALS

- CONCRETE SHALL CONTAIN SILICA FUME AND BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND NATURAL SAND FINES. UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE SHALL BE 1920 kg/m³.
- 28 DAY CONCRETE STRENGTH - 35 MPa
- RELEASE STRENGTH - 28 MPa
- PRESTRESSING STEEL SHALL BE 13 φ, 7 WIRE LOW RELAXATION STRAND (f_{pu} = 1860 MPa).
- REINFORCING STEEL SHALL BE GRADE 400W (YIELD STRENGTH OF GRADE 300 USED IN DESIGN TO ALLOW TACK WELDING OF SHEAR REINFORCEMENT).

FABRICATION

- GIRDERS SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE BRIDGE MATERIALS SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS (SPEC B190).
- FORCE IN PRESTRESSING STEEL:
 - INITIAL TENSIONING LOAD = 129 kN/STRAND
 - DESIGN LOAD AFTER LOSSES = 106 kN/STRAND
- ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A123.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO FIT GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING IS TO BE MAINTAINED. FOR CONNECTOR AND LIFTING HOOK LOCATION SEE DWG S-1570.

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 9.54 t.

SUPERSEDED
BY REVISION

SUPERSEDED

REV	DATE	DESIGNED	DRAWN	DATE	CHECKED	DATE	BY	APPROVED
94-04-05		LEA	VMV	93-08-23	SDB	94-05-16	LEA	APPROVED
93-12-13		SDB						EXECUTIVE DIRECTOR BRIDGE ENGINEERING
93-08-27		LEA						DATE: 24/94

DESIGNED	DRAWN	DATE	CHECKED	DATE	BY	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
LEA	VMV	93-08-23	SDB	94-05-16						1 of 4	S-1568

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH
PRESTRESSED CONCRETE
10.06 m TYPE SC-510
INTERIOR GIRDER