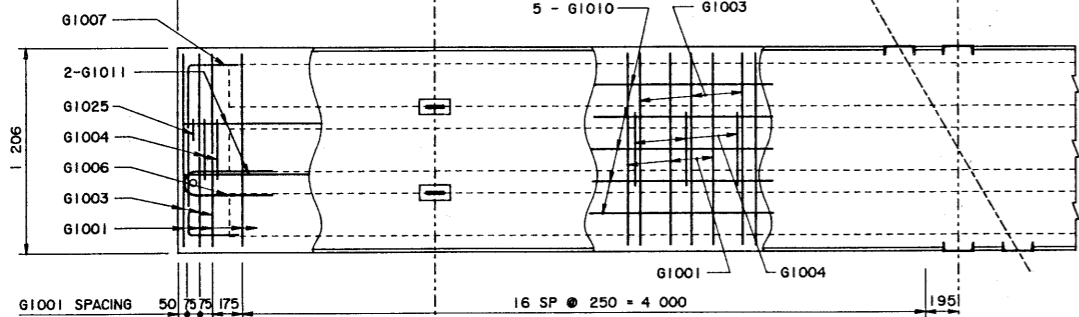
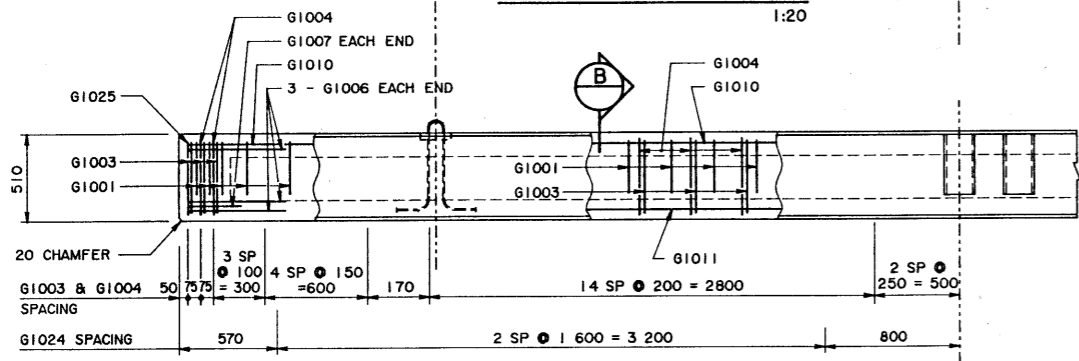


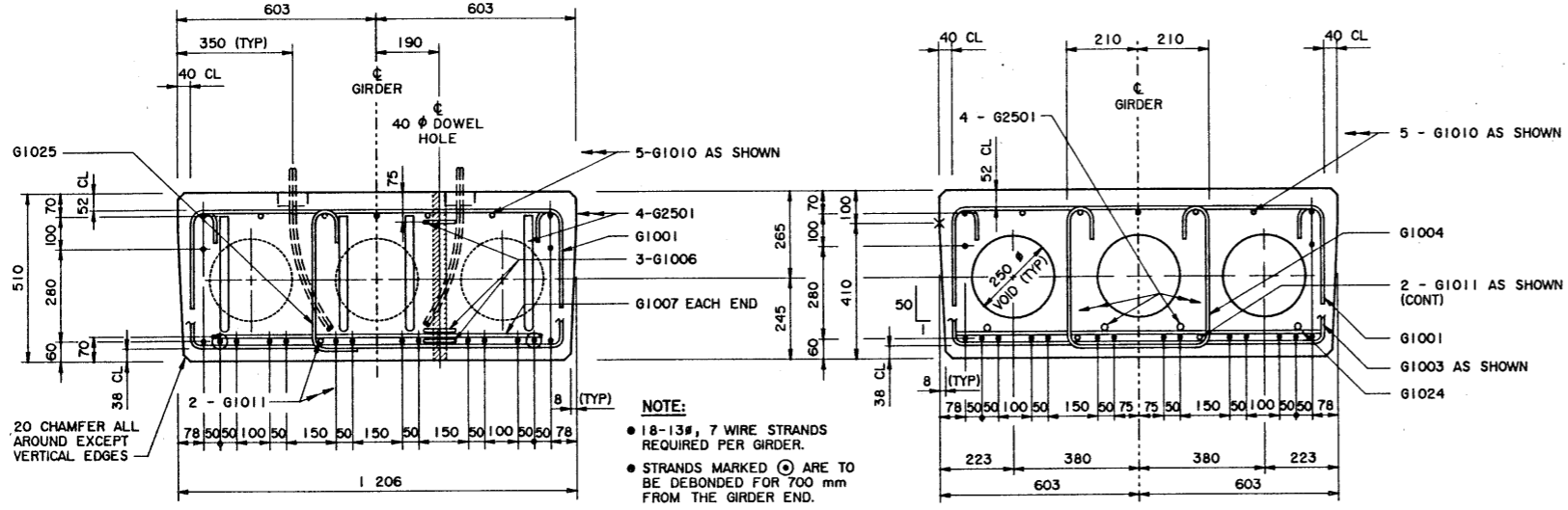
PLAN VIEW
1:20



REINFORCEMENT PLAN
1:20



ELEVATION
1:20

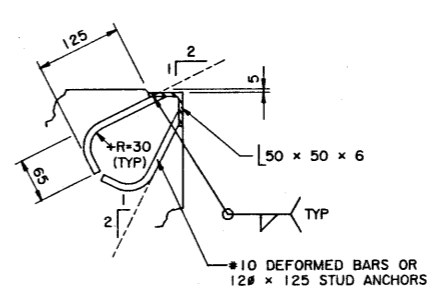
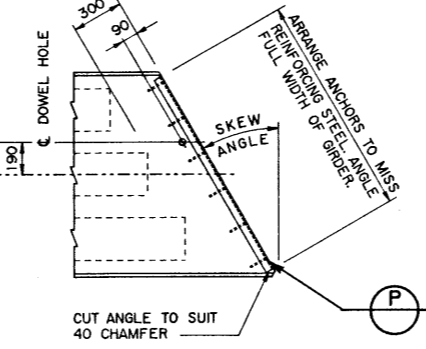


SECTION A
1:10

SECTION B
1:10

NOTE:
• 18-13# 7 WIRE STRANDS REQUIRED PER GIRDER.
• STRANDS MARKED (C) ARE TO BE DEBONDED FOR 700 mm FROM THE GIRDER END.

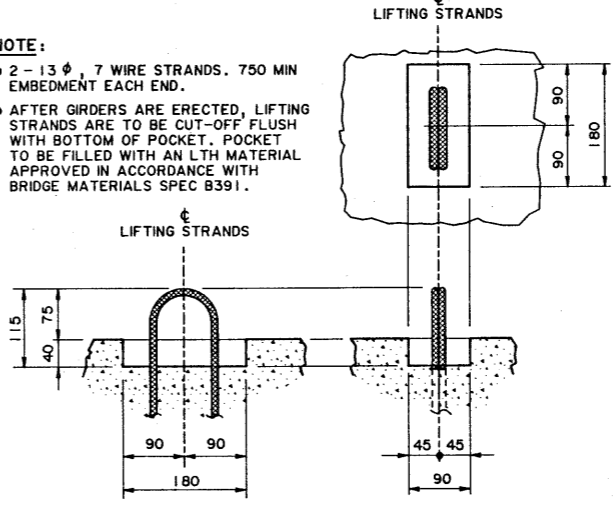
NOTE:
FOR SKEWED END REINFORCING BAR DETAILS SEE DWG S-1567.



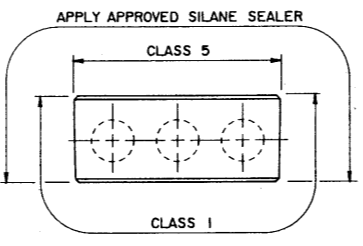
NOTE:
ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

BUFFER ANGLE
1:5

NOTE:
• 2-13# 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.



LIFTING HOOK POCKET
1:5



APPLY APPROVED SILANE SEALER
CLASS 5
CLASS 1

CAST SERIAL NUMBER INTO END OF UNIT

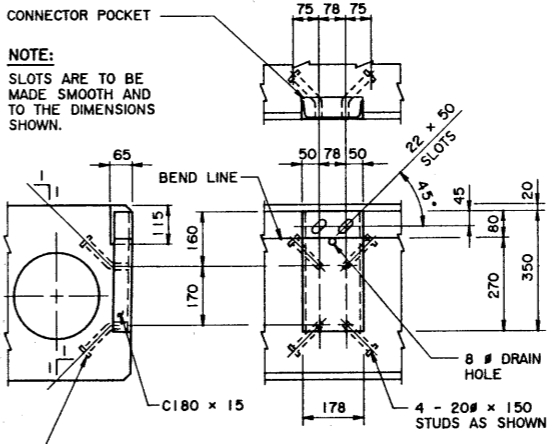
BEARING AREAS TO BE SMOOTH AND TRUE

600 (MIN)

FABRICATOR'S NAME, YEAR OF MANUFACTURE, SERIAL NUMBER OF UNIT AND CS 750 TO BE CAST INTO BOTTOM OF SLAB IN 50 mm LETTERS.

GIRDER FINISHES
(BY FABRICATOR)
1:20

SUPERSEDED
BY REVISION



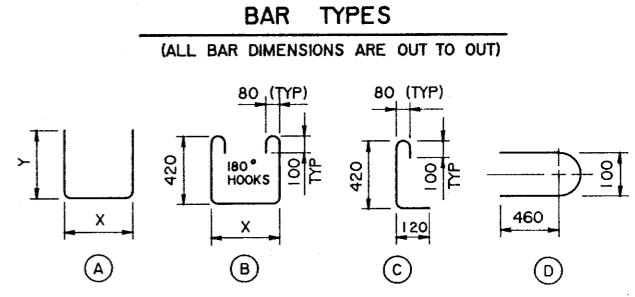
NOTE:
SLOTS ARE TO BE MADE SMOOTH AND TO THE DIMENSIONS SHOWN.

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.

GIRDER CONNECTORS
1:10

BAR LIST: FOR SQUARE GIRDER								
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS	
G1001	10	41	A	1 125	300	1 725	56	
G1003	10	53	B	1 125		2 220	92	
G1004	10	51	B	420		1 520	61	
G1006	10	6	D			1 080	5	
G1007	10	2	A	1 000	300	1 600	3	
G1010	10	5	STR			9 050	36	
G1011	10	2	STR			8 950	14	
G1024	10	6	STR			1 100	5	
G1025	10	2	C			670	1	
G2501	25	4	A	9 000	350	9 700	152	
TOTAL							kg	425



GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
- 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# 7 WIRE LOW RELAXATION STRAND (fpu = 1 860 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 A153
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING TO BE MAINTAINED. FOR CONNECTOR AND LIFTING HOOK LOCATIONS SEE DWG S-1567.

ERECTOR

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 8.70 t.

SUPERSEDED

APPROVED		Alberta TRANSPORTATION AND UTILITIES BRIDGE ENGINEERING BRANCH	
EXECUTIVE DIRECTOR BRIDGE ENGINEERING		PRESTRESSED CONCRETE 9.14 m TYPE SC-510 INTERIOR GIRDER	
DESIGNED LEA	DRAWN VMV	DATE 94-03-15	CHECKED SBD
DATE 94-05-16	BY	STREAM	LOCATION
REV	DATE	REVISIONS	BY
FILE		HIGHWAY	FILE
SHEET		DRAWING	
1 of 4		S-1565	