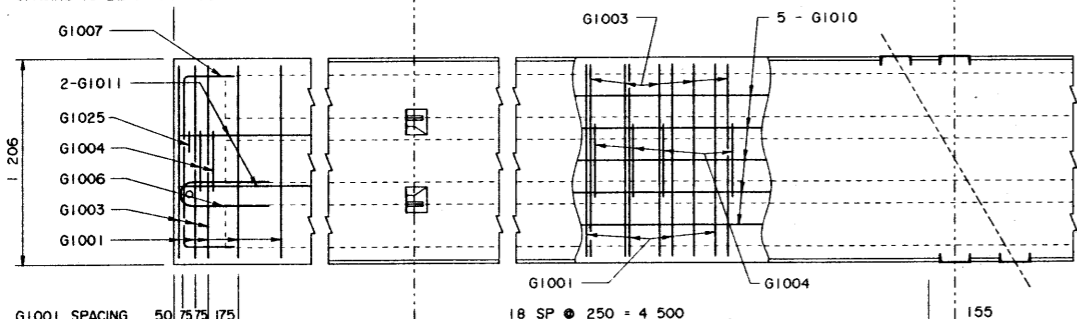
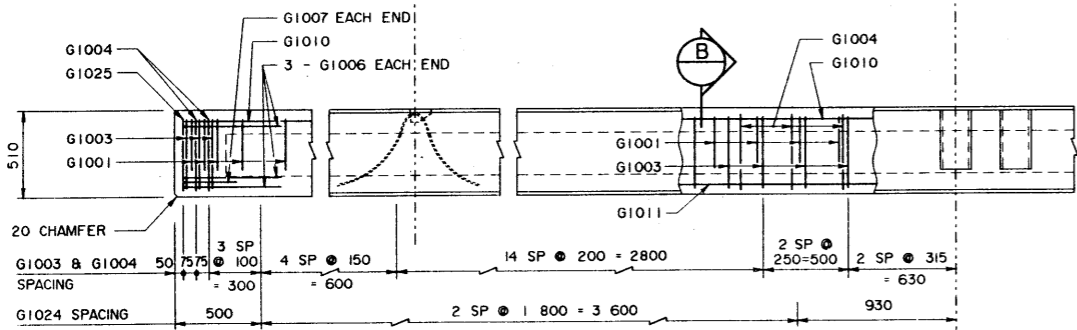


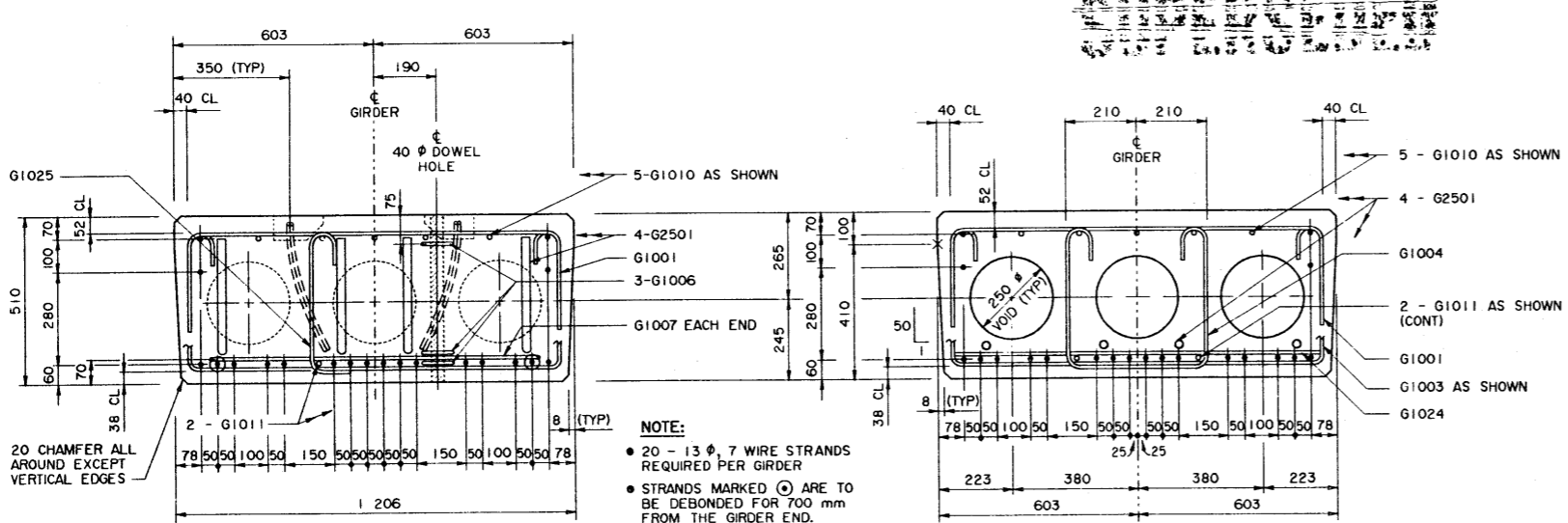
PLAN VIEW
1:20



REINFORCEMENT PLAN
1:20



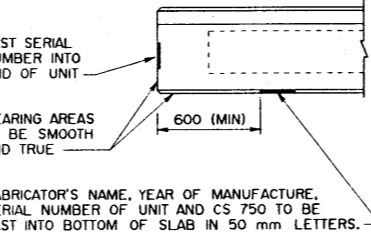
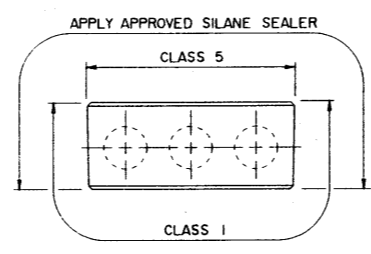
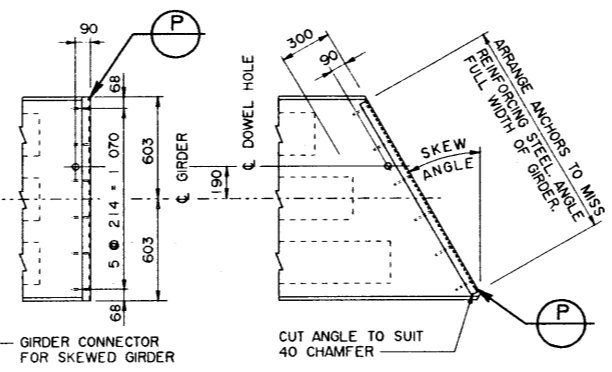
ELEVATION
1:20



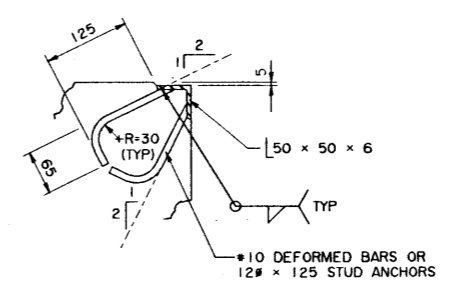
SECTION A
1:10

SECTION B
1:10

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

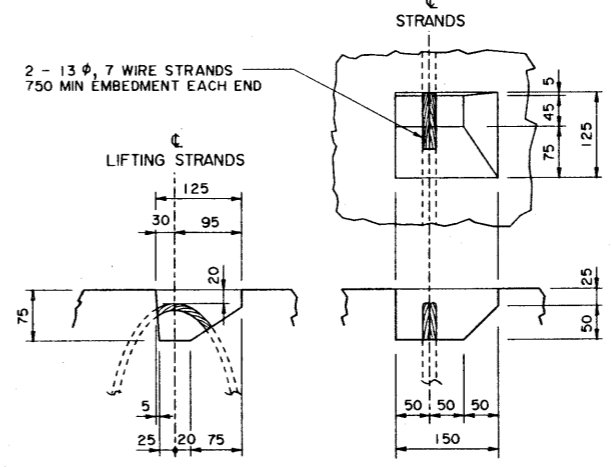


GIRDER FINISHES
(BY FABRICATOR) 1:20

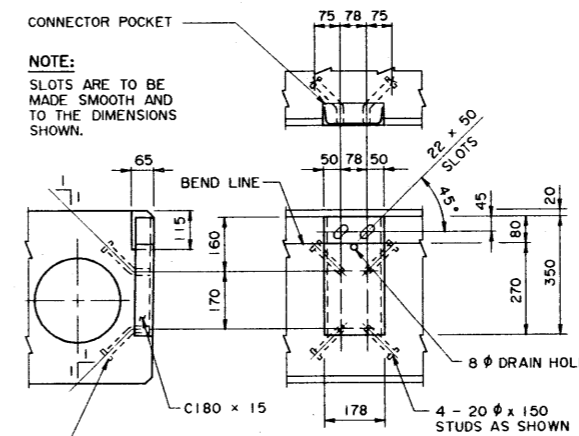


NOTE:
ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

BUFFER ANGLE
1:5



LIFTING HOOK POCKET
1:5



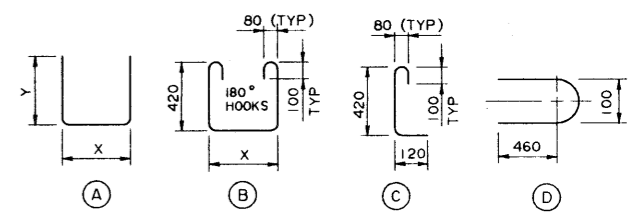
NOTE:
SLOTS ARE TO BE MADE SMOOTH AND TO THE DIMENSIONS SHOWN.

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 A123.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP BRACING IS TO BE MAINTAINED. FOR CONNECTOR AND LIFTING HOOK LOCATIONS 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

DESIGNED		DRAWN		DATE		CHECKED		DATE		STREAM		LOCATION		HIGHWAY		FILE		SHEET		DRAWING	
LEA		VMV		93-08-23		SBD												1 of 4		S-1568	

APPROVED
EXECUTIVE DIRECTOR
BRIDGE ENGINEERING
DATE: PRELIM

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

PRESTRESSED CONCRETE
10.06 m TYPE SC-510
INTERIOR GIRDER