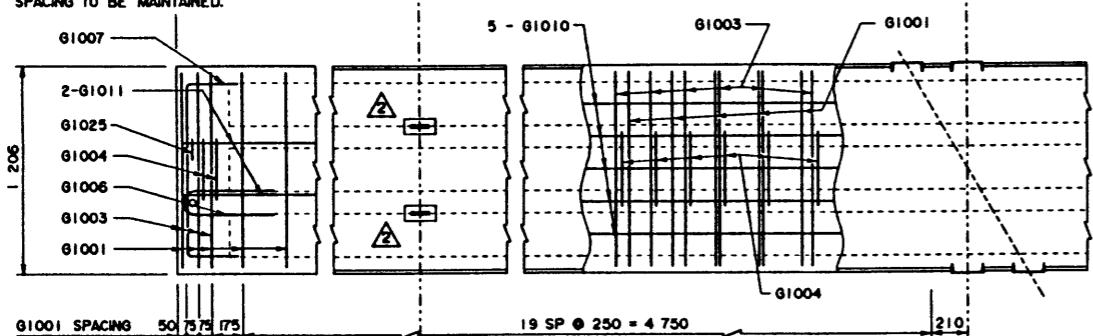
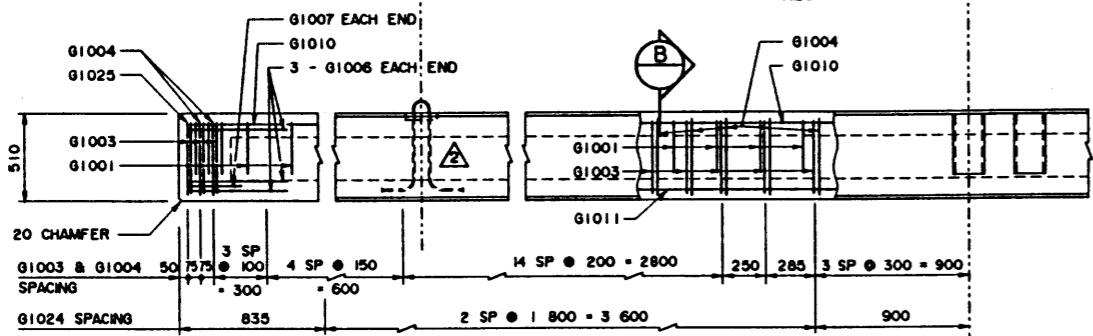


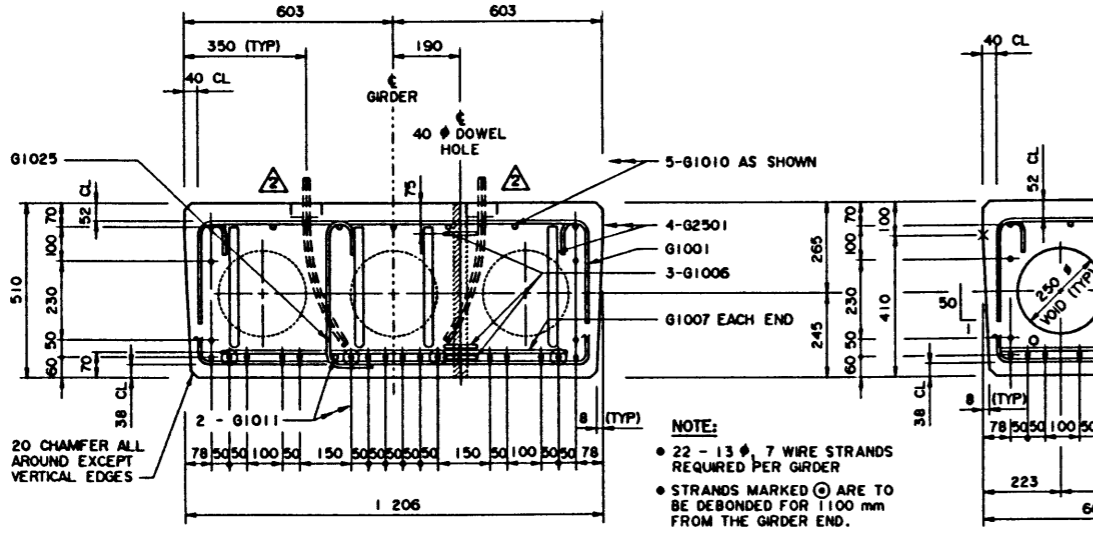
PLAN VIEW
1:20



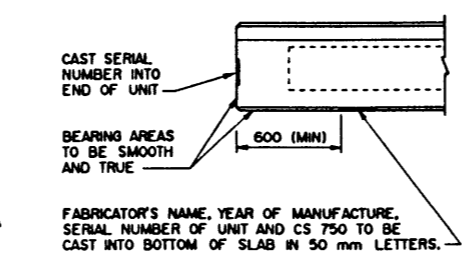
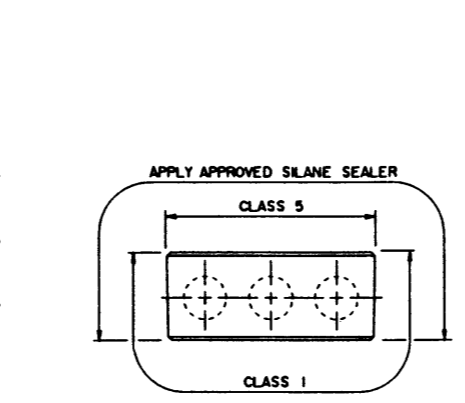
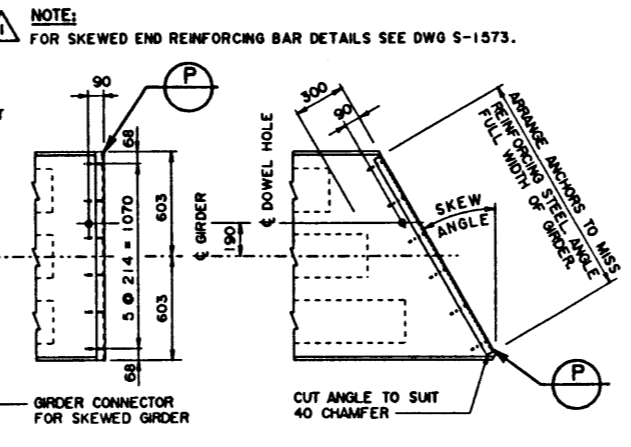
REINFORCEMENT PLAN
1:20



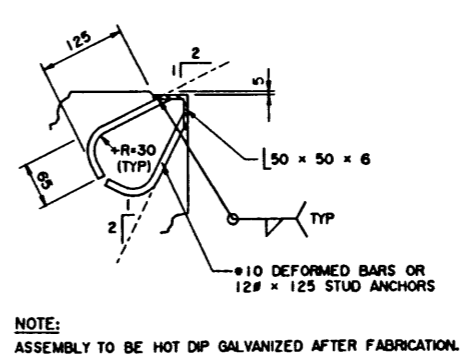
ELEVATION
1:20



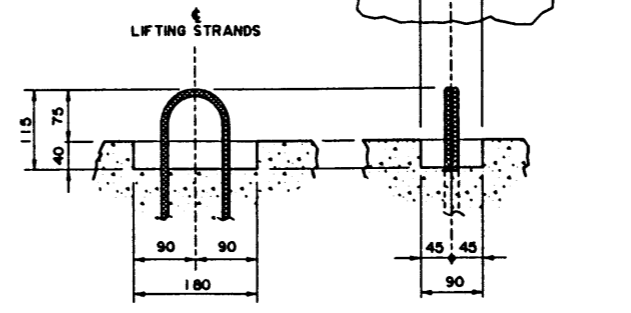
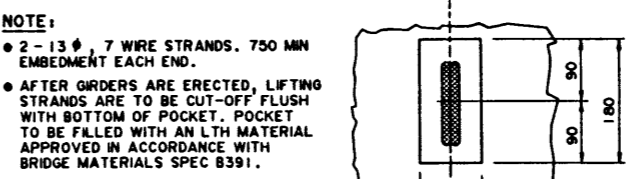
SECTION A
1:10



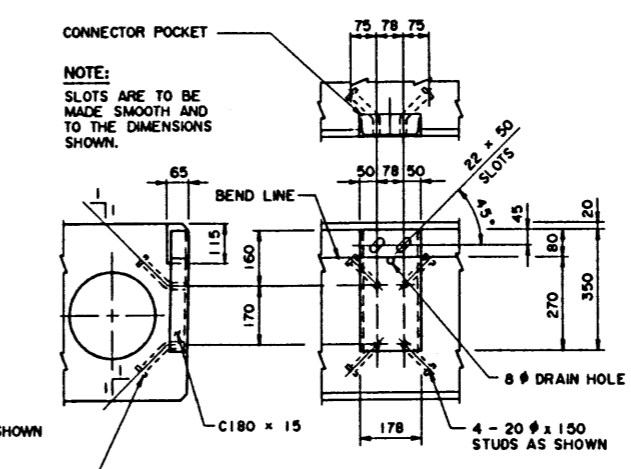
GIRDER FINISHES
(BY FABRICATOR)
1:20



BUFFER ANGLE
1:5

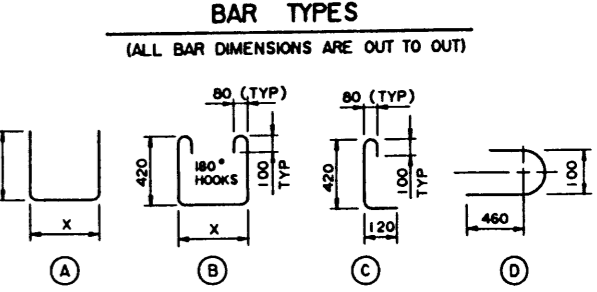


LIFTING HOOK POCKET
1:5



GIRDER CONNECTORS
1:10

BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	47	A	1 125	300	1 725	64
G1003	10	57	B	1 125		2 220	99
G1004	10	55	B	420		1 630	70
G1006	10	6	D			1 080	5
G1007	10	2	A	1 000	300	1 600	3
G1010	10	5	STR			10 570	41
G1011	10	2	STR			10 470	16
G1024	10	6	STR			1 100	5
G1025	10	2	C			670	1
G2501	25	4	A	10 520	350	11 220	176
TOTAL kg :							476



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 #, 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 SPECIFICATIONS FOR BRIDGE CONSTRUCTION SECTION 7 - PRECAST CONCRETE UNITS.
- FORCE IN PRESTRESSING STEEL:
 - INITIAL TENSIONING LOAD = 129 kN/STRAND
 - DESIGN LOAD AFTER LOSSES = 103 kN/STRAND
- ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A123.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING IS TO BE MAINTAINED. FOR CONNECTOR AND LIFTING HOOK LOCATIONS SEE DWG S-1573.

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 10.101.

REV	DATE	REVISIONS	BY
DESIGNED	DRAWN	D1TE	CHECKED
LEA	VMV	93-09-17	SBD
DATE	DATE	DATE	DATE
94-05-16	94-05-16	94-05-16	94-05-16

ORIGINAL DRAWING APPROVED BY
J. RAMOTAR
EXECUTIVE DIRECTOR
BRIDGE ENGINEERING
MAY 24, 1994

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

DESIGNED	DRAWN	D1TE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
LEA	VMV	93-09-17	SBD	94-05-16					1 of 4	S-1571

FILE: BRIDGE/S1571/102 UPDATE MAY 14, 1994