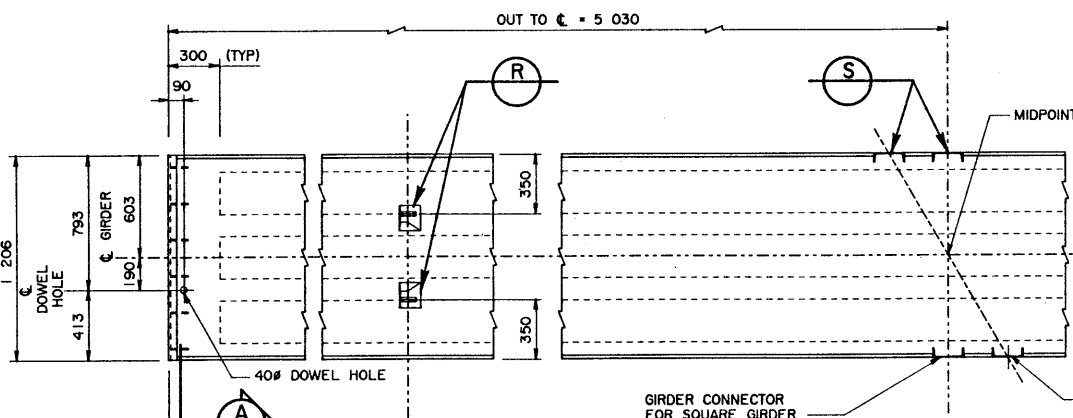
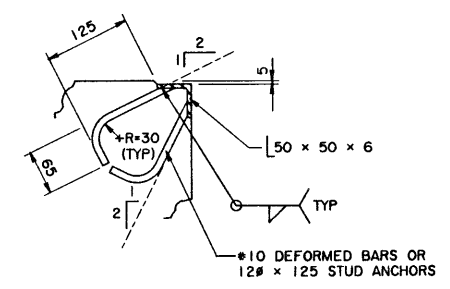


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	45	A	1 125	300	1 725	61
G1003	10	55	B	1 225		2 220	96
G1004	10	53	C	420		1 520	63
G1006	10	6	D			1 020	5
G1007	10	2	A	1 000	300	1 600	3
G1010	10	5	STR			9 960	39
G1011	10	2	STR			9 860	15
G1024	10	6	STR			1 100	5
G1025	10	2	C			670	1
G2501	25	4	A	9 910	350	10 610	167

TOTAL kg : 455



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

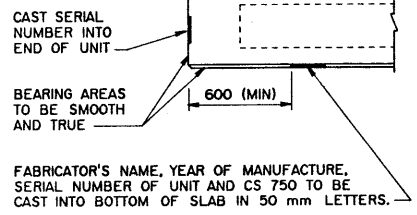
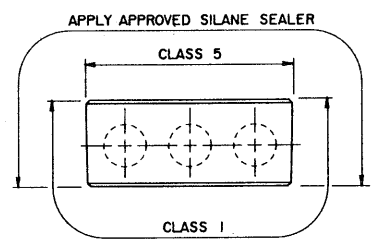
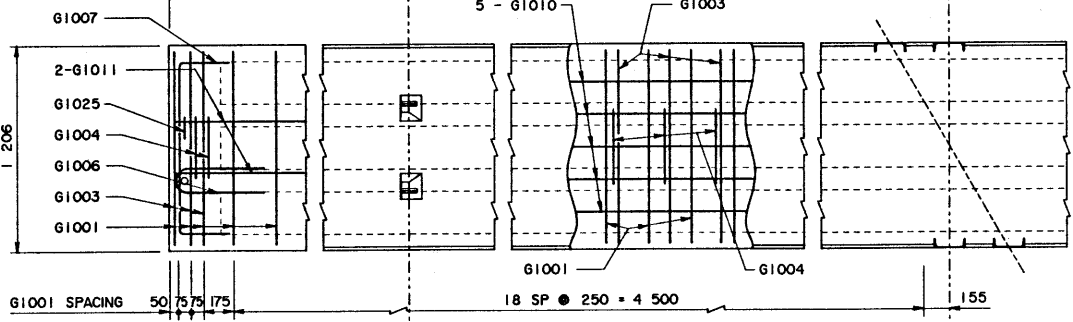


NOTE:  
ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

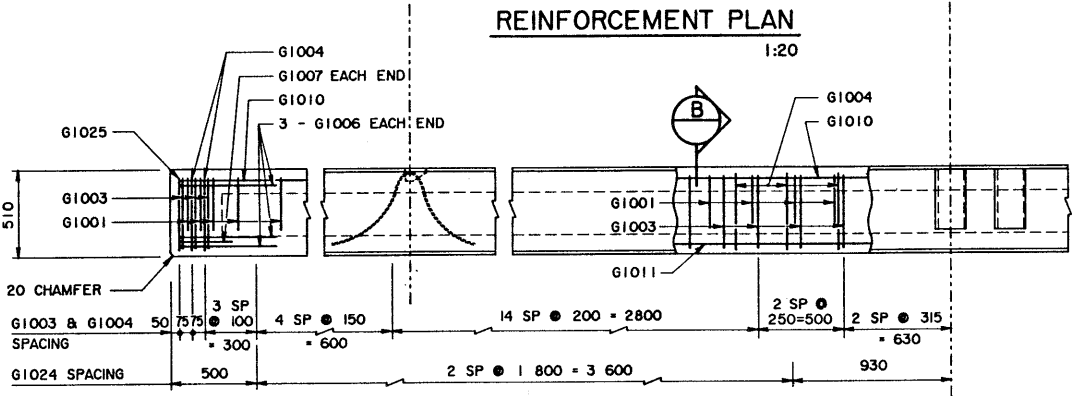
(P) BUFFER ANGLE  
1:5

NOTE:  
BEND REINFORCING BAR WHERE NECESSARY TO ACCOMMODATE CHANNEL CONNECTORS. STIRRUP SPACING TO BE MAINTAINED.

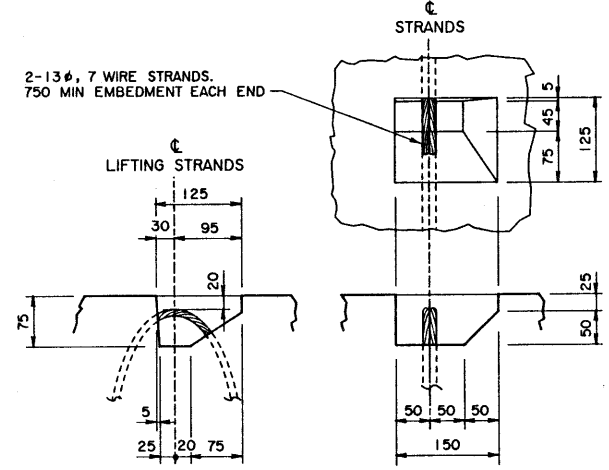
PLAN VIEW  
1:20



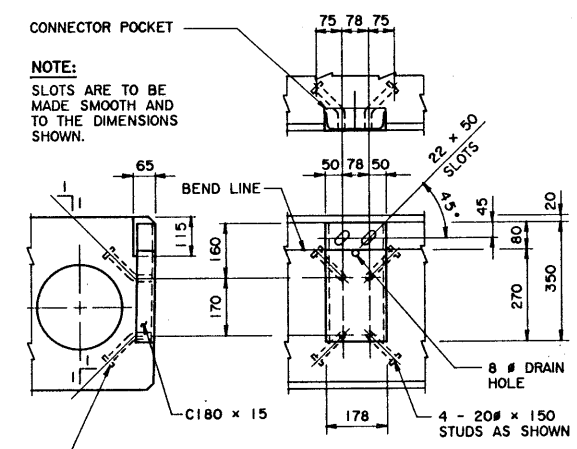
GIRDER FINISHES  
(BY FABRICATOR)  
1:20



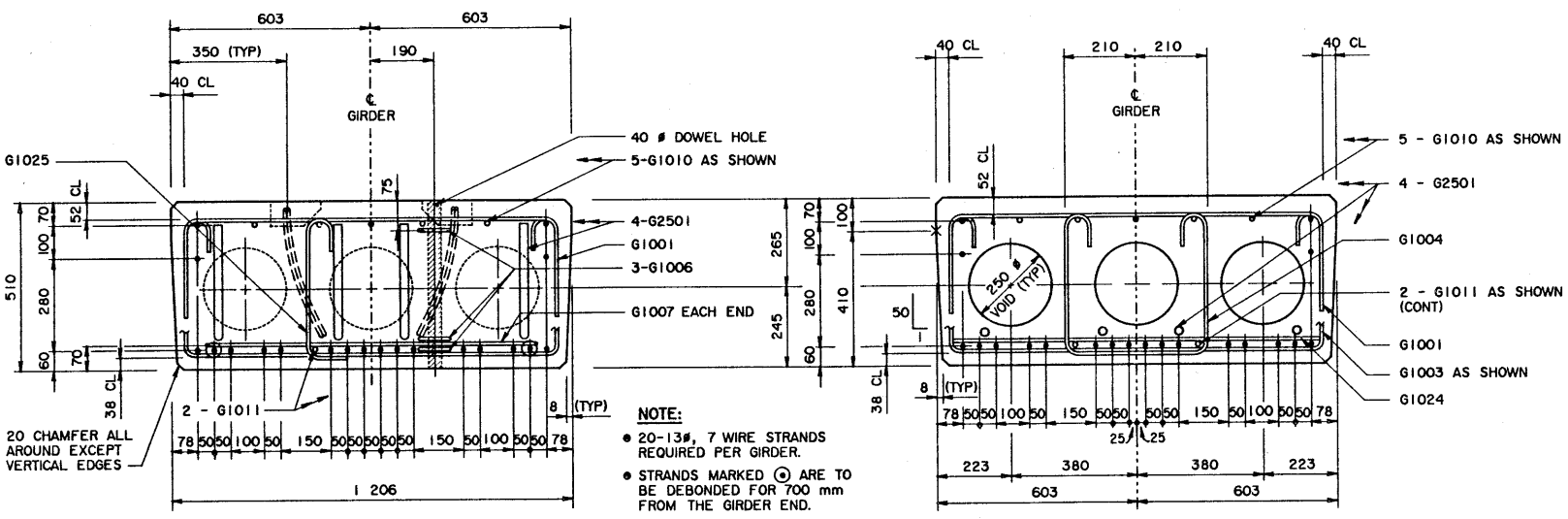
ELEVATION  
1:20



(R) LIFTING HOOK POCKET  
1:5



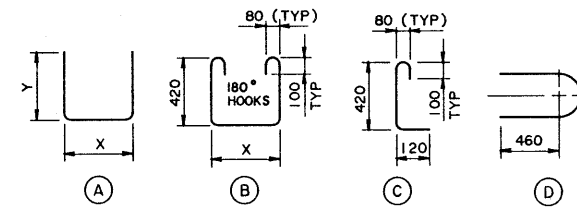
(S) GIRDER CONNECTORS  
1:10



(A) SECTION  
1:10

(B) SECTION  
1:10

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/m<sup>3</sup>.
- 28 DAY CONCRETE STRENGTH - 35 MPa
- RELEASE STRENGTH - 28 MPa
- PRESTRESSING STEEL SHALL BE 13# 7 WIRE LOW RELAXATION STRAND (f<sub>pu</sub> = 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 CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING 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**

APPROVED		Albarta TRANSPORTATION AND UTILITIES BRIDGE ENGINEERING BRANCH	
EXECUTIVE DIRECTOR BRIDGE ENGINEERING		PRESTRESSED CONCRETE 10.06 m TYPE SC-510 INTERIOR GIRDER	
DESIGNED	DRAWN	DATE	CHECKED
LEA	VMV	93-08-23	
REV	DATE	REVISIONS	BY
1		93-08-27	LEA
DATE		PRELIM	
STREAM	LOCATION	HIGHWAY	FILE
SHEET	DRAWING		
1 of 4	S-1568		