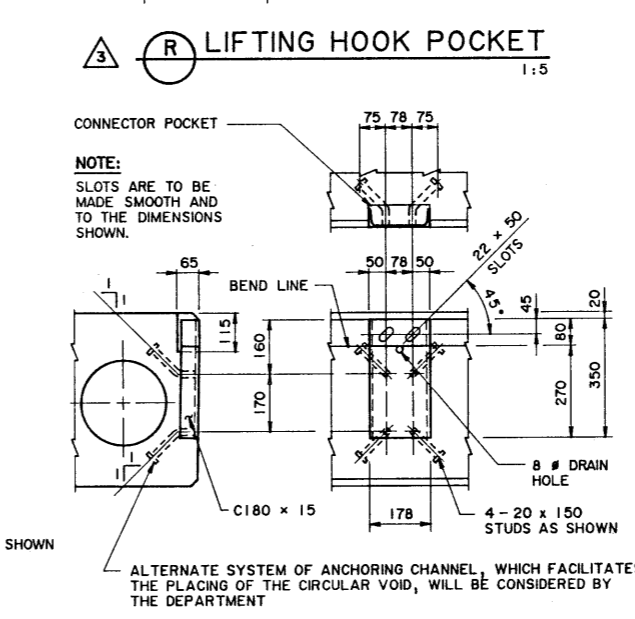
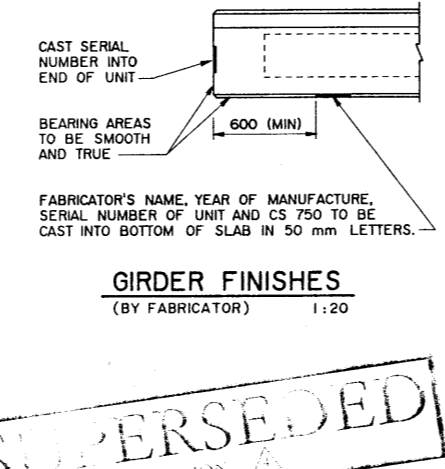
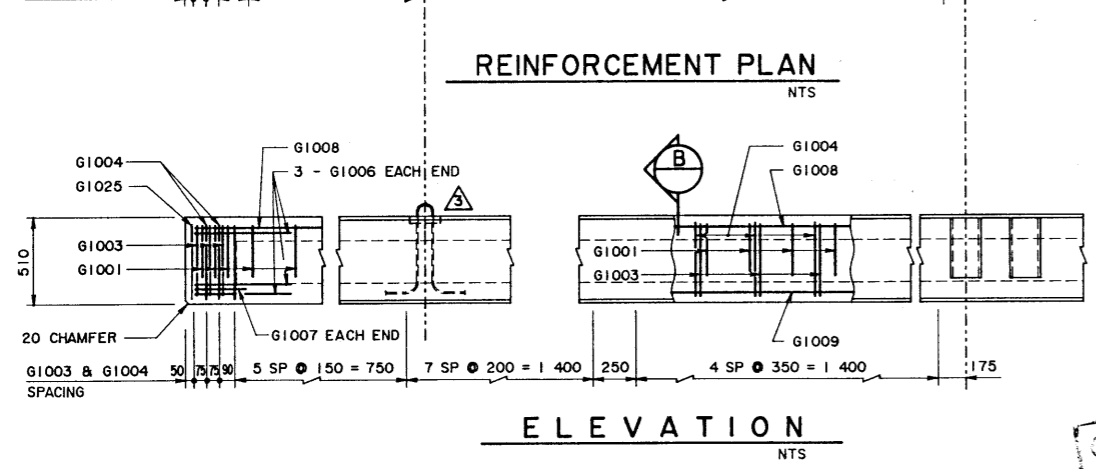
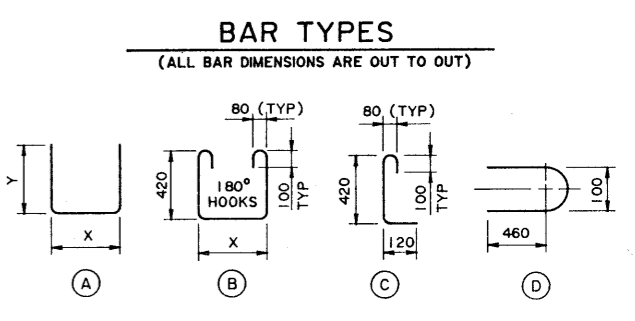
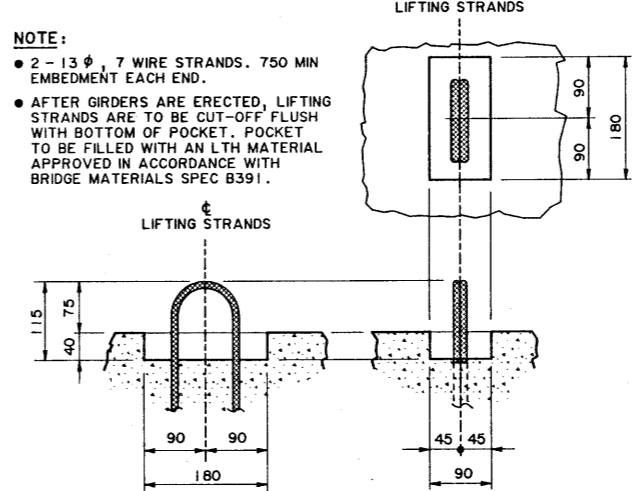
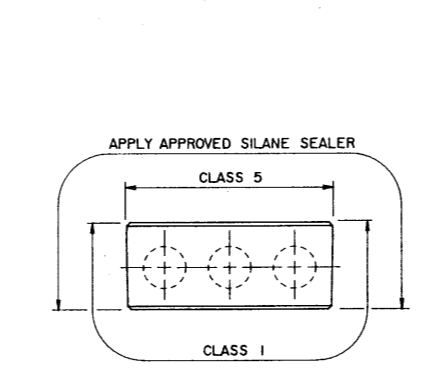
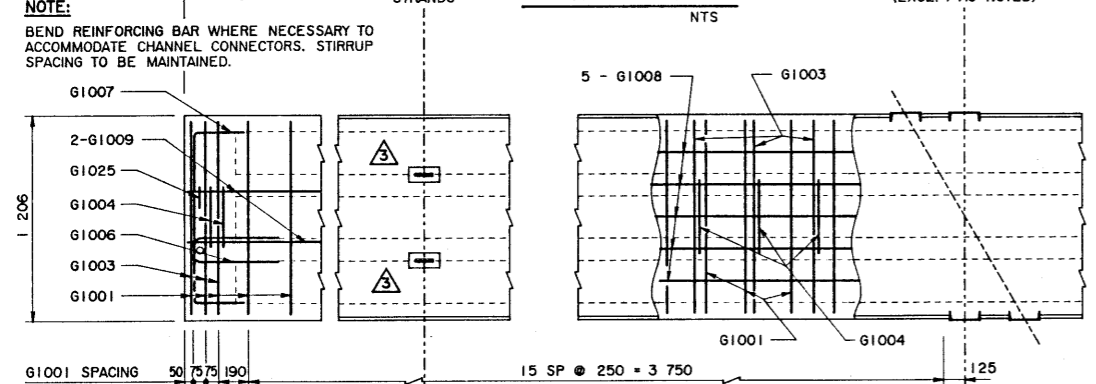
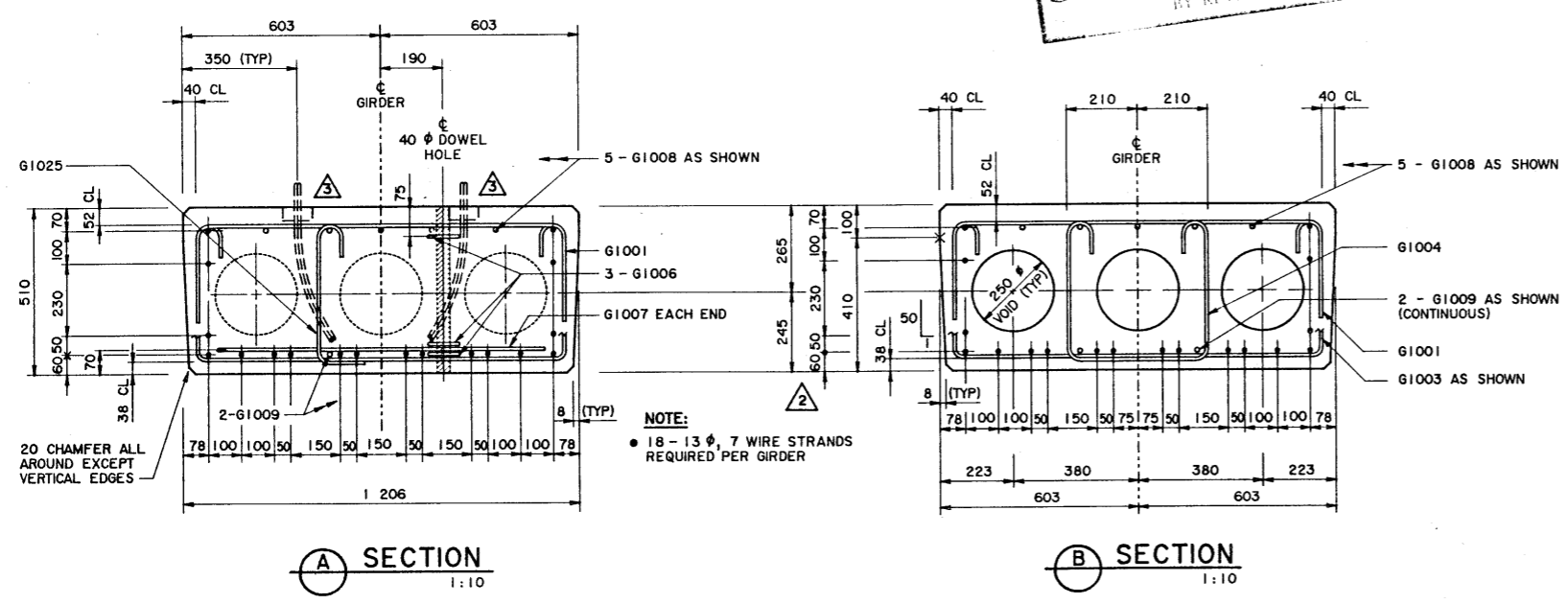


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	38	A	1 125	300	1 725	51
G1003	10	42	B	1 125		2 220	73
G1004	10	40	B	420		1 520	48
G1006	10	6	D			1 080	5
G1007	10	2	A	1 000	300	1 600	3
G1008	10	5	STR			8 430	33
G1009	10	2	STR			8 330	13
G1025	10	2	C			670	1
<b>TOTAL kg :</b>							227



**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 = 108 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 SHALL BE MAINTAINED FOR CONNECTOR AND LIFTING HOOK LOCATIONS SEE DWG S-1564.
- ERECTION**
- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF THE GIRDER IS 8.11 t.



**SUPERSEDED**  
BY REVISION

**SUPERSEDED**

REV	DATE	REVISIONS	BY
1	94-04-05	LIFTING HOOK POCKET	LEA
2	93-12-13	BAR LENGTH REVISED; SECTION B DIMENSIONS	SBD
3	93-08-27	CONNECTOR & LIFTING HOOK LOCATION NOTE	LEA

DESIGNED LEA	DRAWN VMV	DATE 93-08-19	CHECKED SBD	DATE 94-05-16
APPROVED <i>Albion</i> EXECUTIVE DIRECTOR BRIDGE ENGINEERING		DATE May 21/94		

<b>Albion TRANSPORTATION AND UTILITIES</b> BRIDGE ENGINEERING BRANCH				
<b>PRESTRESSED CONCRETE</b> 8.53 m TYPE SC-510 INTERIOR GIRDER				
DESIGNED	DRAWN	DATE	CHECKED	DATE
LEA	VMV	93-08-19	SBD	94-05-16
STREAM	LOCATION	HIGHWAY	FILE	SHEET
				1 OF 4
				DRAWING S-1562