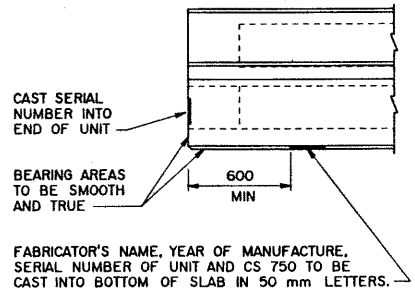
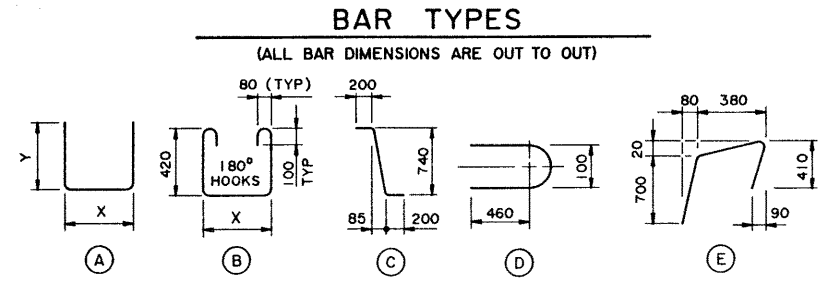
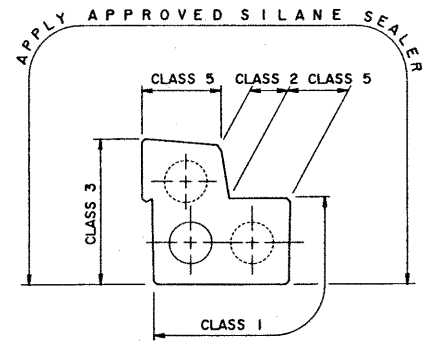
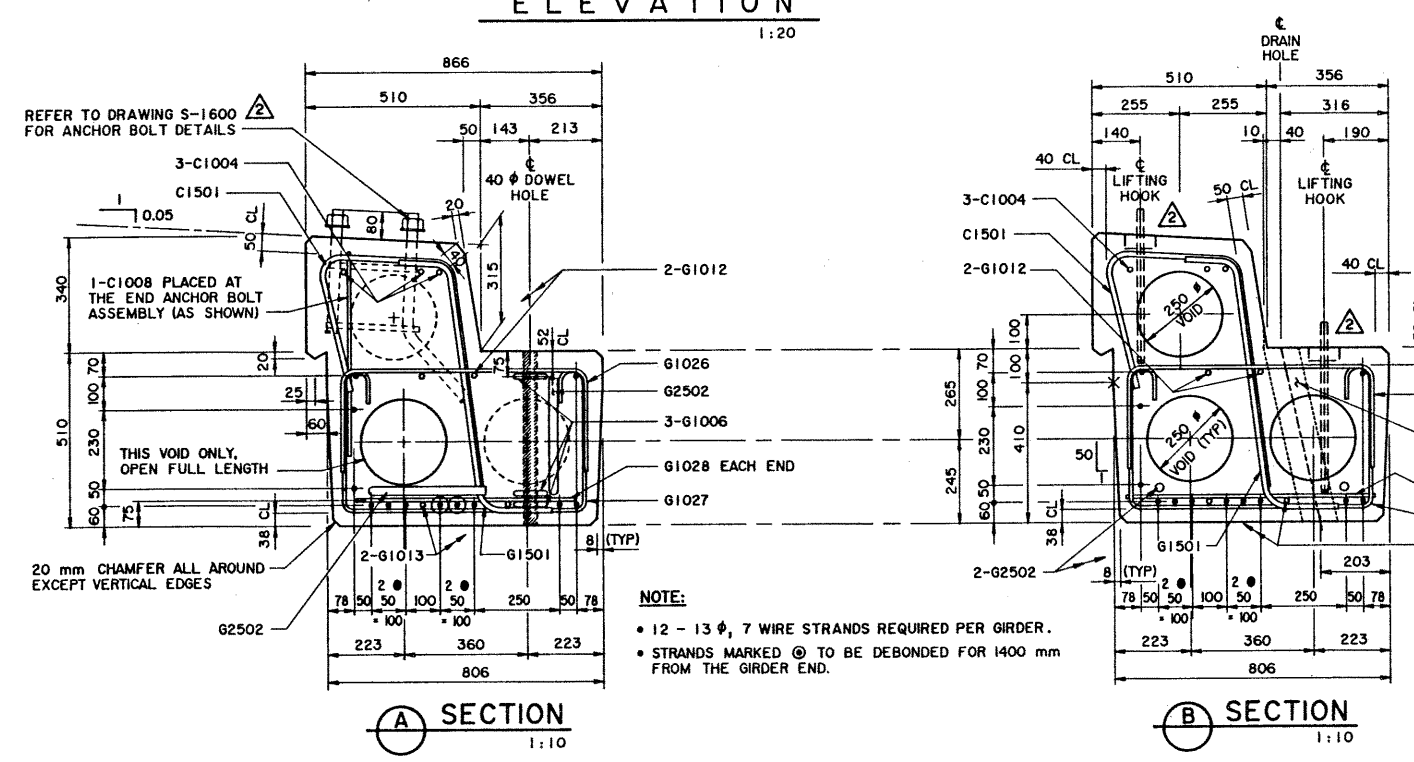
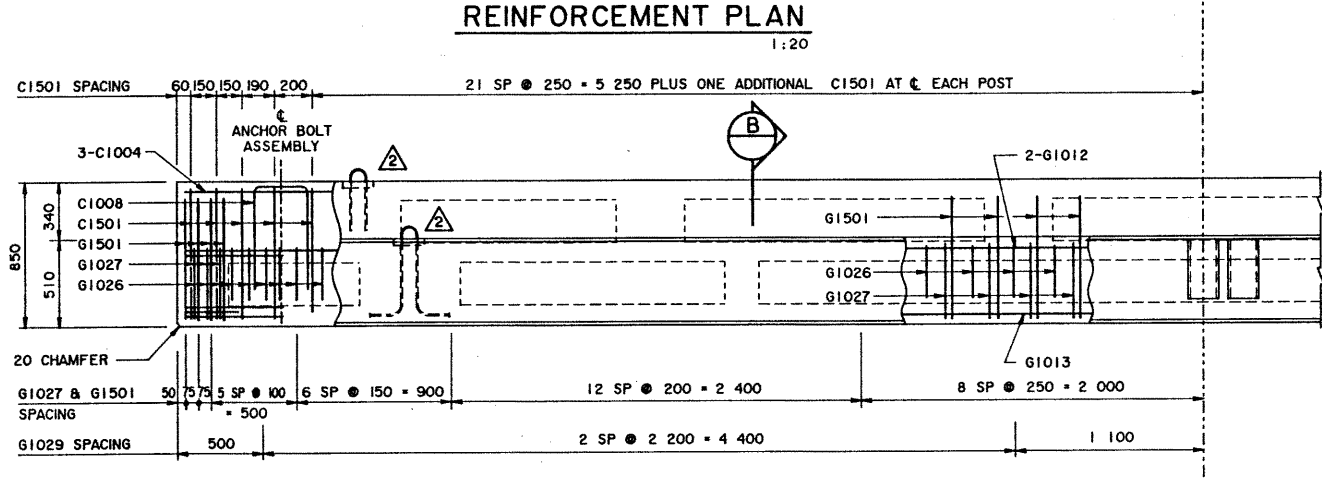
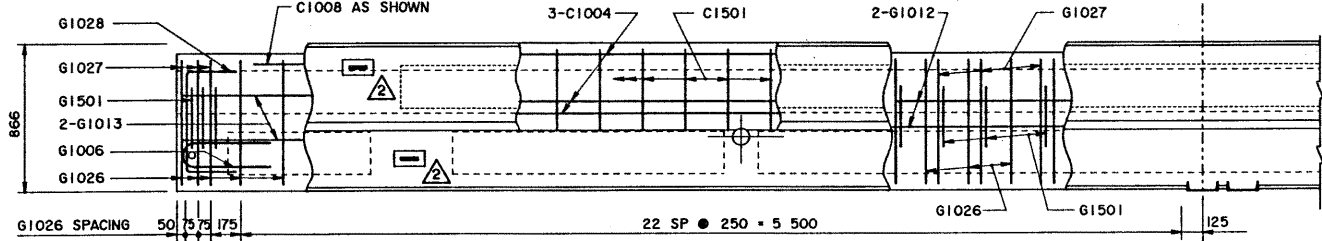


BAR LIST: FOR SQUARE GIRDER										
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS			
C1004	10	3	STR			11 900	28			
C1008	10	2	A	310	600	1 510	2			
C1501	15	57	E			1 455	130			
G1006	10	6	D			1 020	5			
G1012	10	2	STR			11 900	19			
G1013	10	2	STR			11 800	19			
G1026	10	52	A	725	300	1 325	54			
G1027	10	67	B	725		1 820	96			
G1028	10	2	A	600	300	1 200	2			
G1029	10	6	STR			700	3			
G1501	15	67	C			1 140	120			
G2502	25	2	A	11 850	350	12 550	99			

TOTAL kg : 577



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 0.8 WHEEL LINES PER GIRDER
  - DEAD LOAD - GIRDER = 0.86 t/m
  - WEARING SURFACE = 0.09 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  $\phi$ , 7 WIRE LOW RELAXATION STRAND (fpu = 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 = 109 kN/STRAND
  - CURB SHALL BE CAST MONOLITHICALLY WITH GIRDER.
  - ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1546.
  - ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A123 OR A153 AS APPLICABLE.
  - BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING SHALL BE MAINTAINED.
- ERECTION
  - ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
  - CALCULATED MASS OF ONE GIRDER IS 1.18 t.
- WORK THESE DRAWINGS TOGETHER : S-1544, S-1545, S-1546.

**SUPERSEDED**  
BY REVISION 3 75-07-11

**SUPERSEDED**

ORIGINAL DRAWING APPROVED BY N. BOYD EXECUTIVE DIRECTOR BRIDGE ENGINEERING AUG 23, 1990				<b>Albarta</b> TRANSPORTATION AND UTILITIES BRIDGE ENGINEERING BRANCH <b>PRESTRESSED CONCRETE</b> 12 m TYPE SC-510 CURB GIRDER						
DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
LEA	VMV	90-07-02	TJS	90-08-23					2 of 4	S-1545