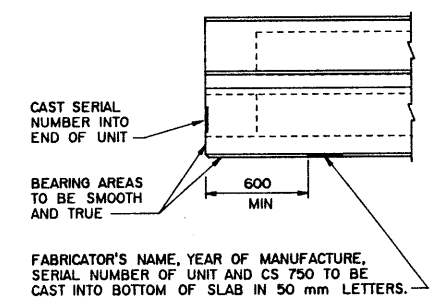
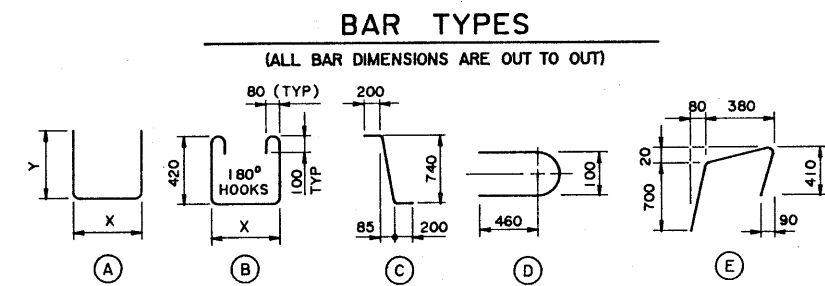
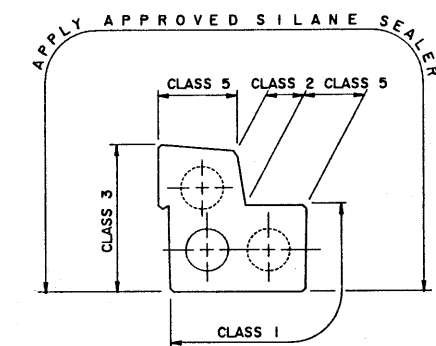
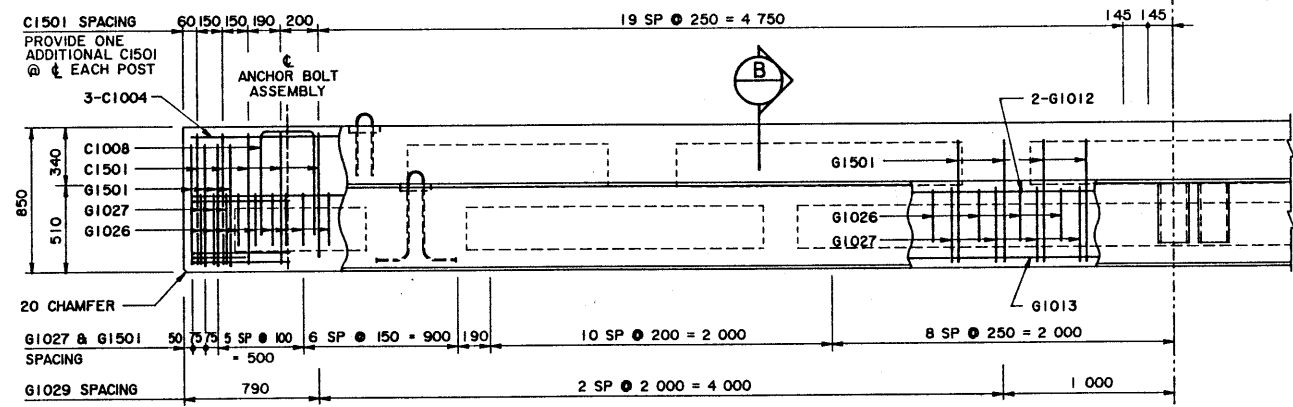
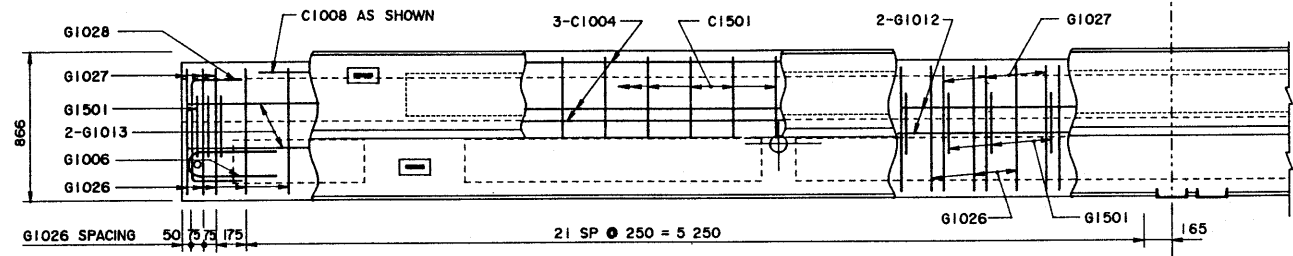
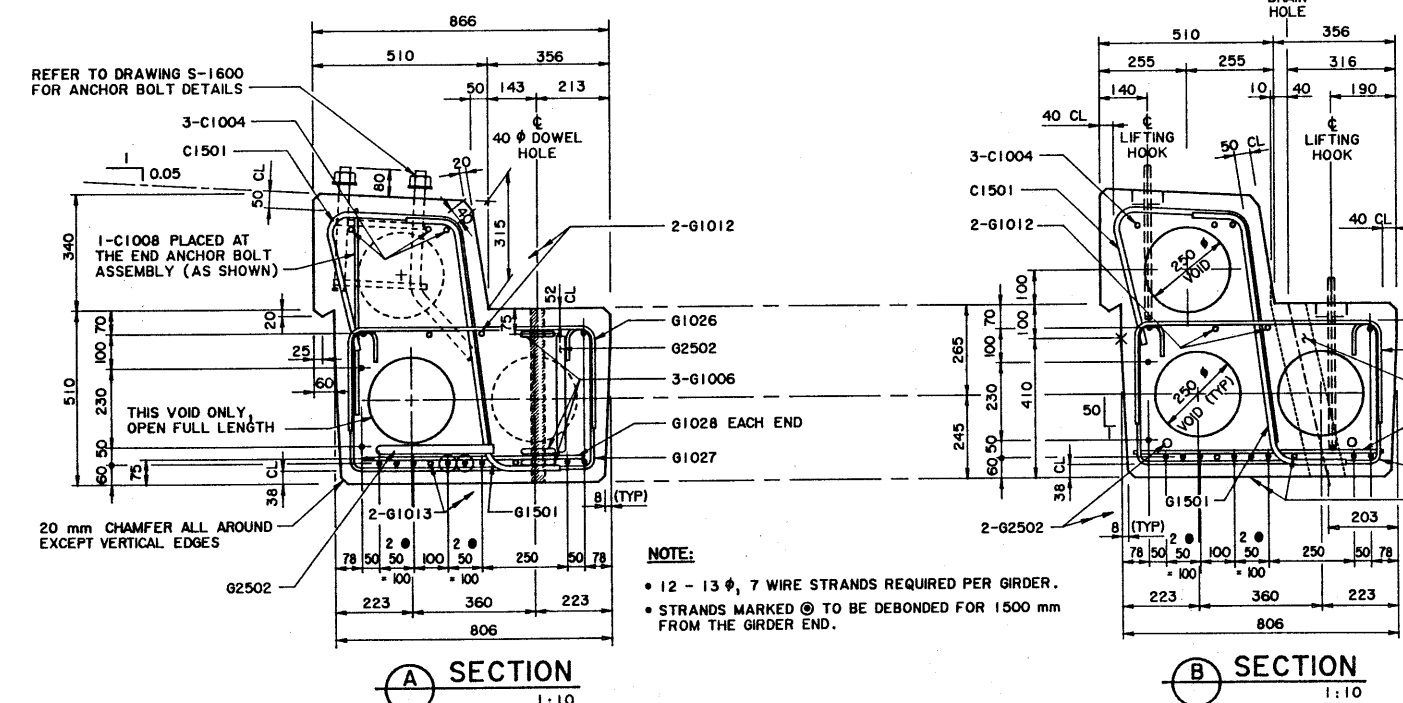


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
C1004	10	3	STR			11 480	27
C1008	10	2	A	310	600	1 510	2
C1501	15	56	E			1 455	128
G1006	10	6	D			1 080	5
G1012	10	2	STR			11 480	18
G1013	10	2	STR			11 380	18
G1026	10	51	A	725	300	1 325	53
G1027	10	65	B	725		1 820	93
G1028	10	2	A	600	300	1 200	2
G1029	10	6	STR			700	3
G1501	15	65	C			1 140	116
G2502	25	2	A	11 430	350	12 130	95
TOTAL kg :							560



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 ( $f_{pu} = 1860$  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 = 109 kN/STRAND
  - CURB SHALL BE CAST MONOLITHICALLY WITH GIRDER.
  - ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1576.
  - 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. FOR CONNECTOR AND LIFTING HOOK LOCATIONS SEE DWG S-1576.
- ERECTION
  - ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROPPED WALKERS.
  - CALCULATED MASS OF ONE GIRDER IS 10.5 t



**SUPERSEDED**  
BY REVISION

**SUPERSEDED**

DESIGNED L. O'Brien LEA		DRAWN VMV		DATE 94-04-21		CHECKED S. Smith SBD		DATE 94-05-16		APPROVED  EXECUTIVE DIRECTOR BRIDGE ENGINEERING		<b>Alberta</b> TRANSPORTATION AND UTILITIES BRIDGE ENGINEERING BRANCH  PRESTRESSED CONCRETE 11.58 m TYPE SC-510 CURB GIRDER	
REV	DATE	REVISIONS				BY	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
												2 of 4	S-1575

FILE: BBVNI s1575x94.dgn UPDATE: APR 27, 1994  
TIME: 0900 HR