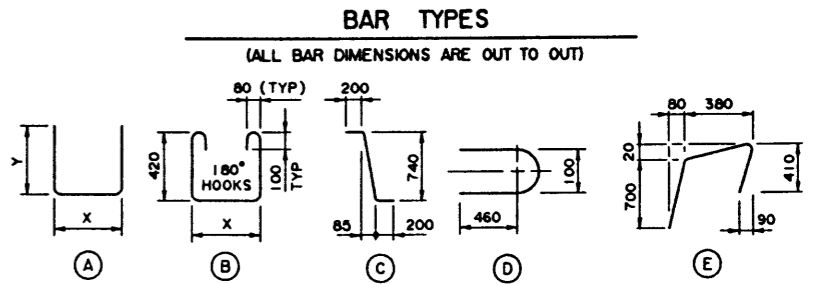
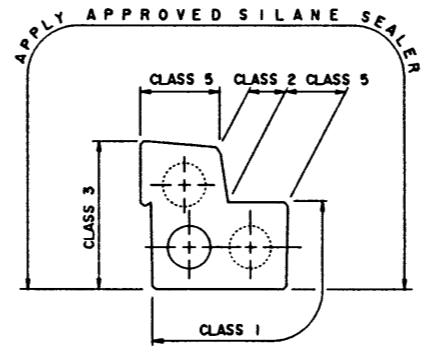
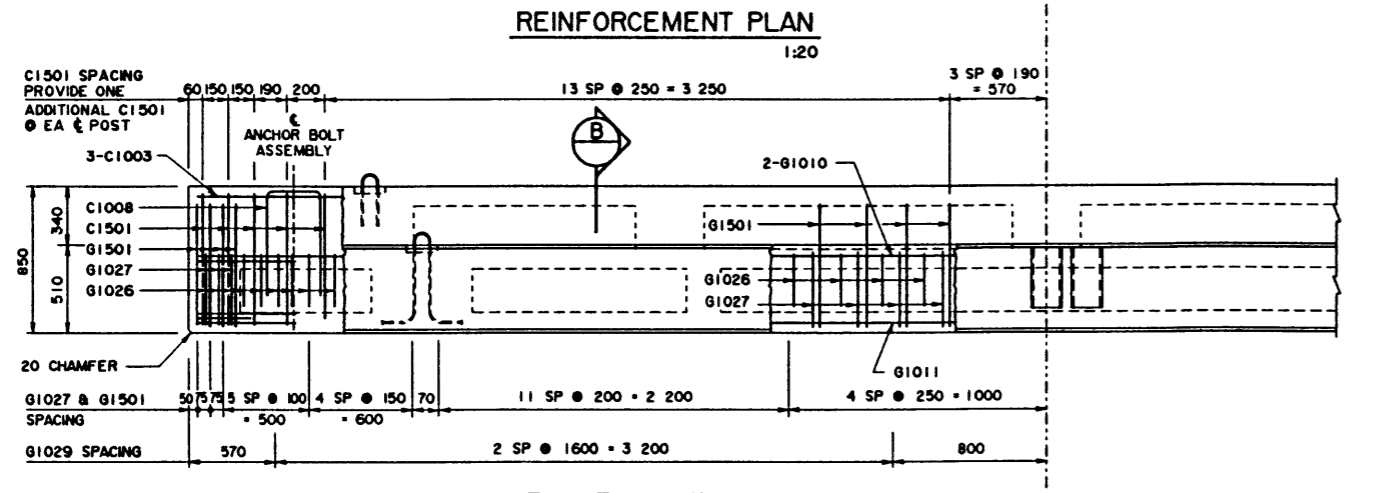
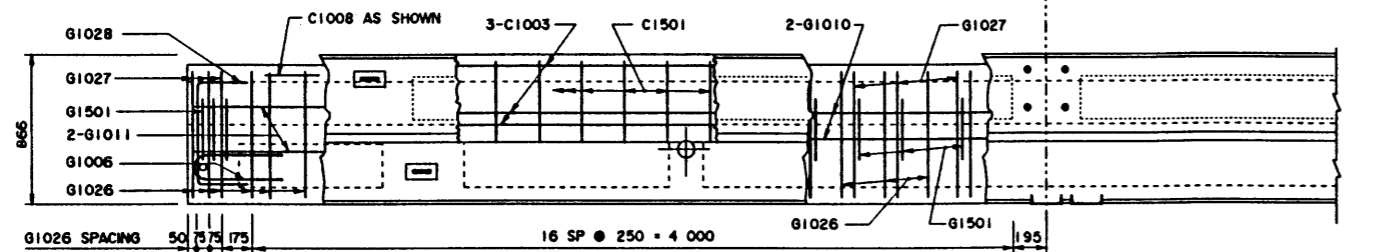


BAR LIST: FOR SQUARE GIRDER								
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS	
C1003	10	3	STR			9 050	21	
C1008	10	2	A	310	600	1 510	2	
C1501	15	46	E			1 455	105	
G1006	10	6	D			1 080	5	
G1010	10	2	STR			9 050	14	
G1011	10	2	STR			8 950	14	
G1026	10	41	A	725	300	1 325	43	
G1027	10	55	B	725	300	1 820	79	
G1028	10	2	A	600	300	1 200	2	
G1029	10	6	STR			700	3	
G1501	15	55	C			1 140	98	
G2501	25	2	A	9 000	350	9 700	76	
TOTAL kg :							462	



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

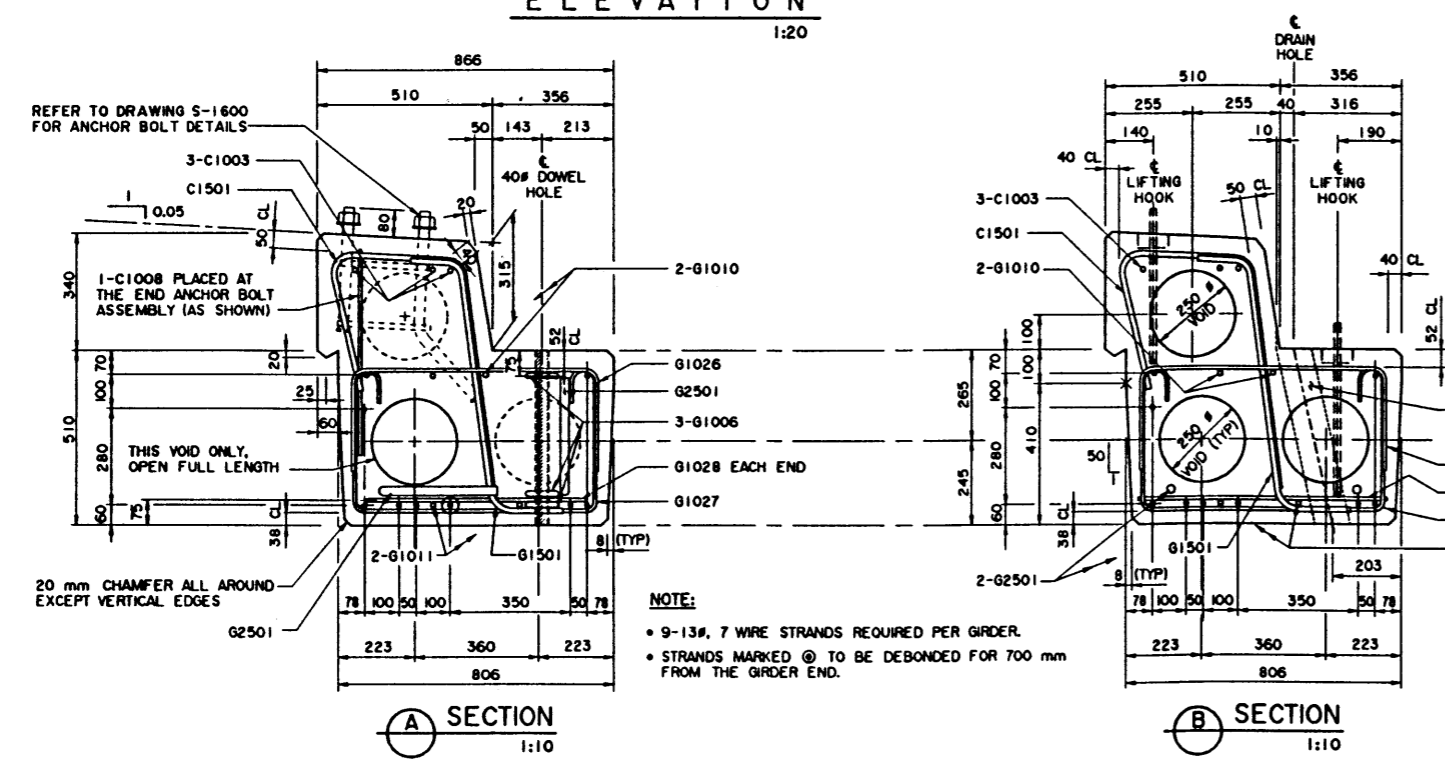
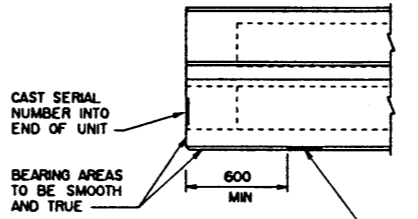
- CONCRETE SHALL CONTAIN SILICA FUME AND BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND NATURAL SAND FINES. UNIT WEIGHT OF SEMI-LIGHTWEIGHT CONCRETE SHALL BE 1920 kg/m<sup>3</sup>.
- 28 DAY CONCRETE STRENGTH - 35 MPa
- RELEASE STRENGTH - 28 MPa
- PRESTRESSING STEEL SHALL BE 13  $\phi$ , 7 WIRE LOW RELAXATION 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 SPECIFICATIONS FOR BRIDGE CONSTRUCTION SECTION 7 - PRECAST CONCRETE UNITS.
- FORCE IN PRESTRESSING STEEL:
  - INITIAL TENSIONING LOAD = 129 kN/STRAND
  - DESIGN LOAD AFTER LOSSES = 112 kN/STRAND
- CURB SHALL BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1567.
- 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-1567.

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 8.3 t.



DESIGNED		DRAWN		DATE		CHECKED		DATE		STREAM		LOCATION		HIGHWAY		FILE		SHEET		DRAWING	
LEA		VMV		93-12-23		SBD		94-05-16										2 of 4		S-1566	

ORIGINAL DRAWING APPROVED BY

J. RAMOTAR

EXECUTIVE DIRECTOR

BRIDGE ENGINEERING

MAY 24, 1994

**Alberta TRANSPORTATION AND UTILITIES**

BRIDGE ENGINEERING BRANCH

**PRESTRESSED CONCRETE**

**9.14 m TYPE SC-510**

**CURB GIRDER**