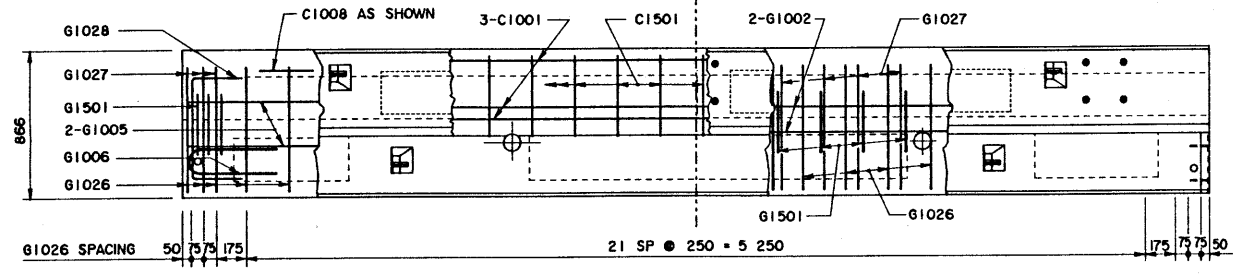


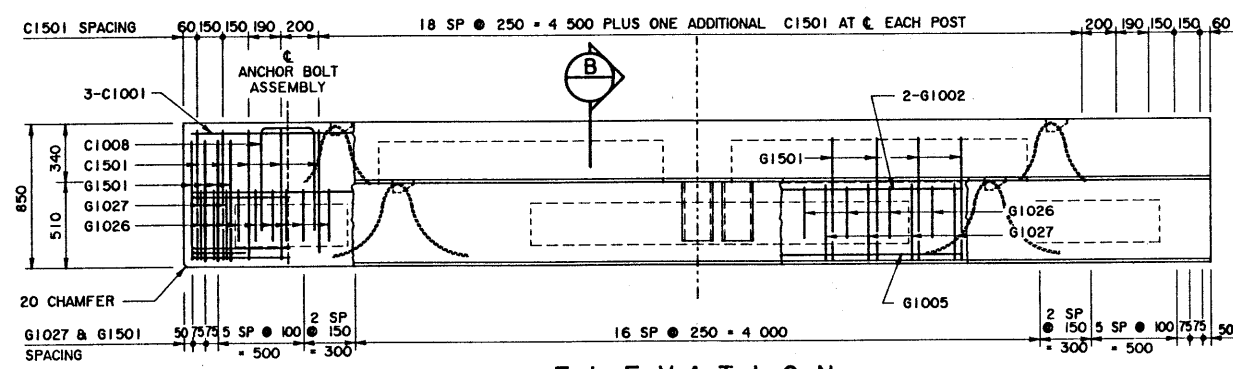
BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
C1001	10	3	STR			5 900	14
C1008	10	2	A	310	600	1 510	2
C1501	15	30	E			1 455	69
G1006	10	6	D			1 020	5
G1002	10	2	STR			5 900	9
G1005	10	2	STR			5 800	9
G1026	10	28	A	725	300	1 325	29
G1027	10	35	B	725		1 820	50
G1028	10	2	A	600	300	1 200	2
G1501	15	35	C			1 140	63
						TOTAL kg :	252

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

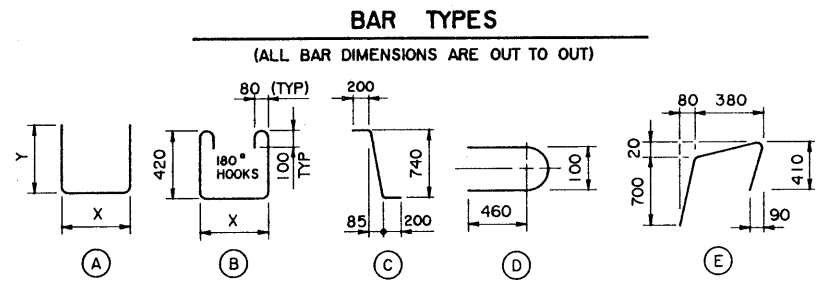
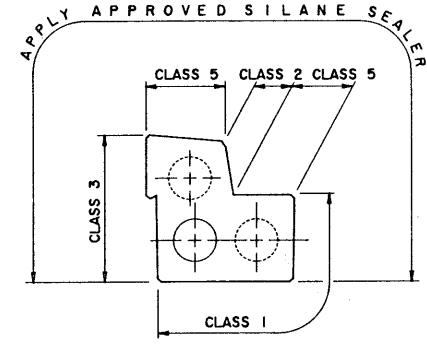
PLAN VIEW
1:20



REINFORCEMENT PLAN
1:20

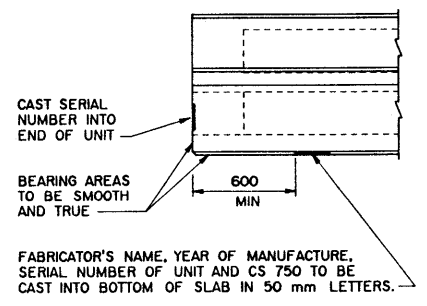


ELEVATION
1:20

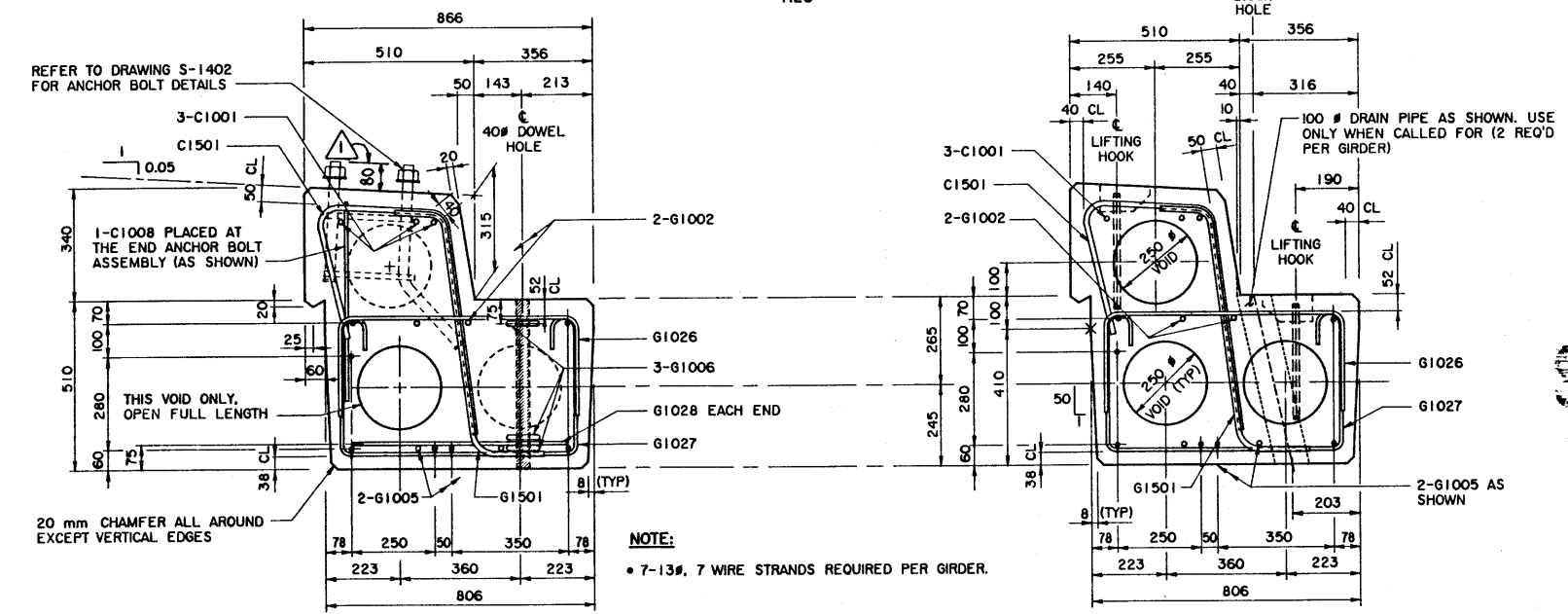


GENERAL NOTES

- 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-LIGHT WEIGHT CONCRETE SHALL BE 1920 kg/m³.
 - 28 DAY CONCRETE STRENGTH - 35 MPa
 - RELEASE STRENGTH - 28 MPa
 - PRESTRESSING STEEL SHALL BE 13# 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 = 113 kN/STRAND
 - CURB SHALL BE CAST MONOLITHICALLY WITH GIRDER.
 - ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1537.
 - 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 5.5 T
- WORK THESE DRAWINGS TOGETHER : S-1535, S-1536 AND S-1537.



GIRDER FINISHES
(BY FABRICATOR) 1:20



SECTION A
1:10

SECTION B
1:10

NOTE:
• 7-13#, 7 WIRE STRANDS REQUIRED PER GIRDER.

BY S-1536 rev. 2 94-04-05

SUPERSEDED

DESIGNED				DRAWN				DATE				CHECKED				DATE				STREAM				LOCATION				HIGHWAY				FILE				SHEET				DRAWING							
LEA				VMV				90-07-02				T.J.S.K.				90-08-23																								2 of 4				S-1536			

APPROVED

Mark Boyd
EXECUTIVE DIRECTOR
BRIDGE ENGINEERING

DATE: Aug 23, 1990

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

PRESTRESSED CONCRETE
6 m TYPE SC-510
CURB GIRDER

AT 1 U - RECORDS CENTRE