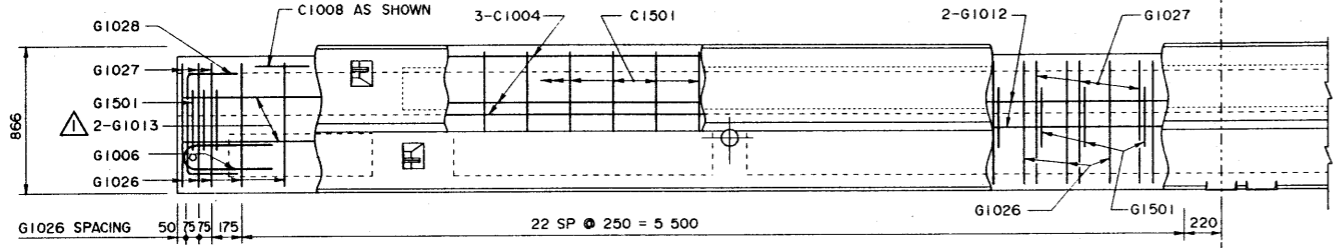
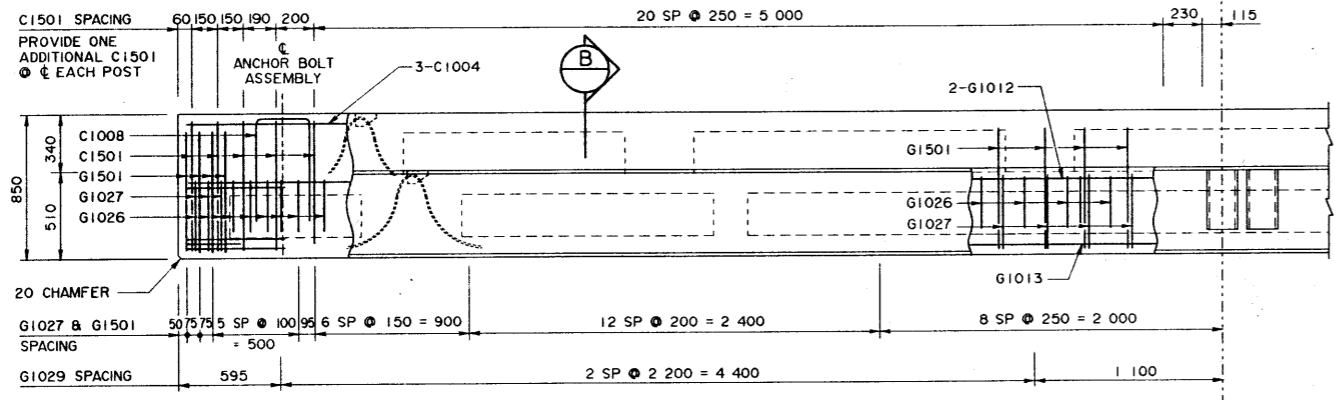


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
C1004	10	3	STR			12 090	28
C1008	10	2	A	310	600	1 510	2
C1501	15	58	E			1 455	132
G1006	10	6	D			1 080	5
G1012	10	2	STR			12 090	19
G1013	10	2	STR			11 990	19
G1026	10	53	A	725	300	1 325	55
G1027	10	69	B	725		1 820	99
G1028	10	2	A	600	300	1 200	2
G1029	10	6	STR			700	3
G1501	15	69	C			1 140	123
G2502	25	2	A	12 040	350	12 740	100

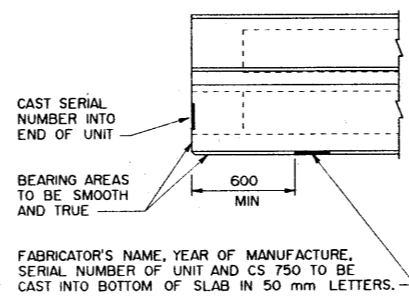
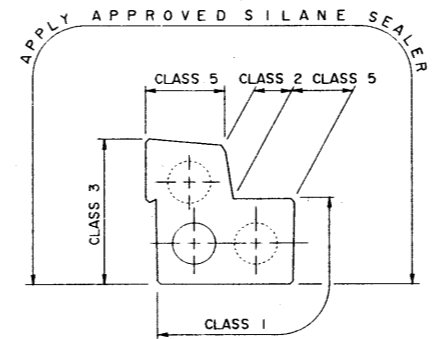
TOTAL kg : 587



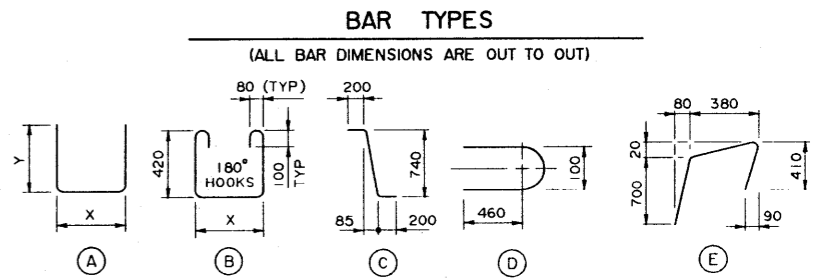
REINFORCEMENT PLAN
1:20



ELEVATION
1:20



GIRDER FINISHES
(BY FABRICATOR) 1:20



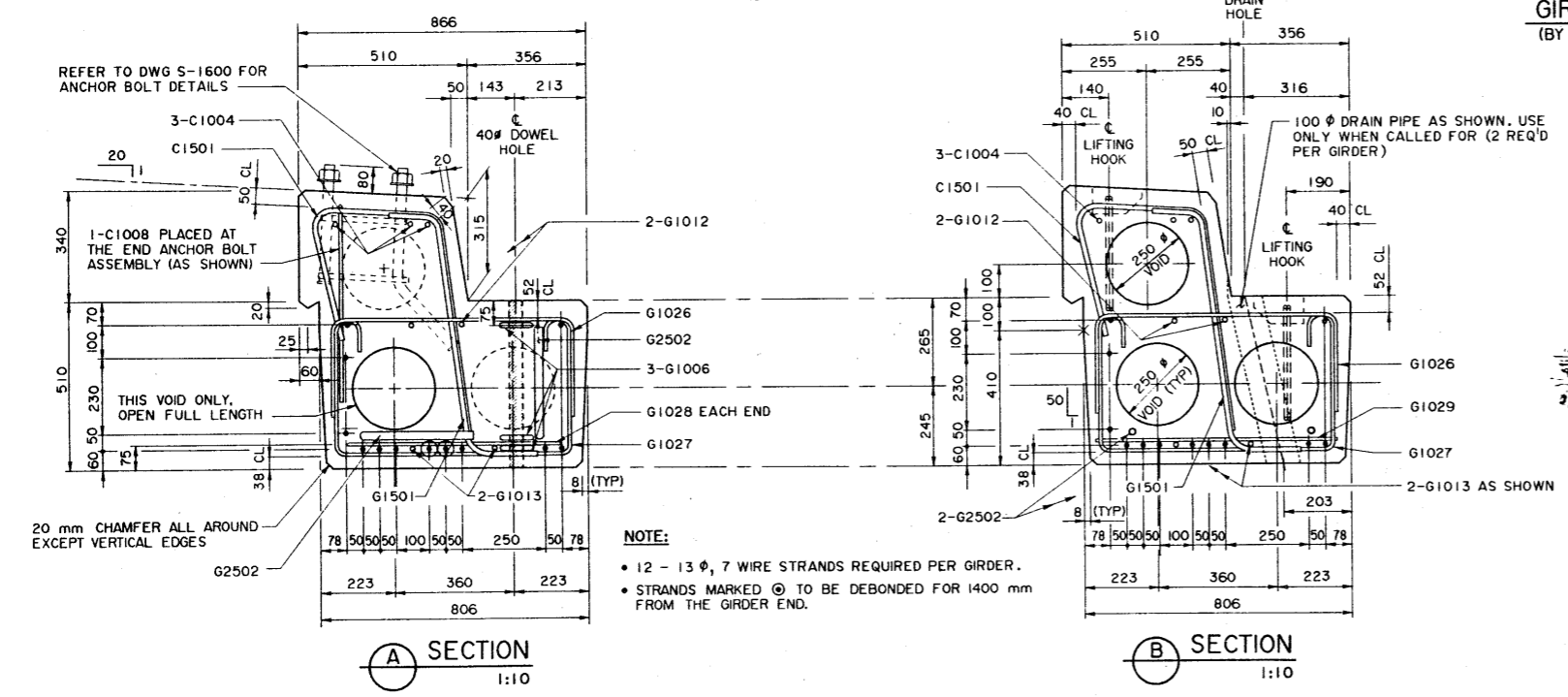
GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.
- DESIGN**
 - CAN/CSA-S6-88 SPECIFICATIONS EXCEPT AS MODIFIED BELOW:
 - ALLOWED 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/m³.
 - 28 DAY CONCRETE STRENGTH - 40 MPa
 - RELEASE STRENGTH - 28 MPa
 - PRESTRESSING STEEL SHALL BE 13 φ, 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-1579.
 - 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 CONNECTIONS AND LIFTING HOOK LOCATIONS SEE DWG S-1579.

- ERECTION**
 - ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
 - CALCULATED MASS OF ONE GIRDER IS 11.0 t.



SECTION A
1:10

SECTION B
1:10

SUPERSEDED

APPROVED		EXECUTIVE DIRECTOR BRIDGE ENGINEERING		DATE: PRELIM	
DESIGNED: LEA		DRAWN: VMV		DATE: 93-09-17	
CHECKED: SBD		DATE:		STREAM:	
LOCATION:		HIGHWAY:		FILE:	
SHEET: 2 of 4		DRAWING: S-1578			

AT & U - RECORDS CENTRE
7281183