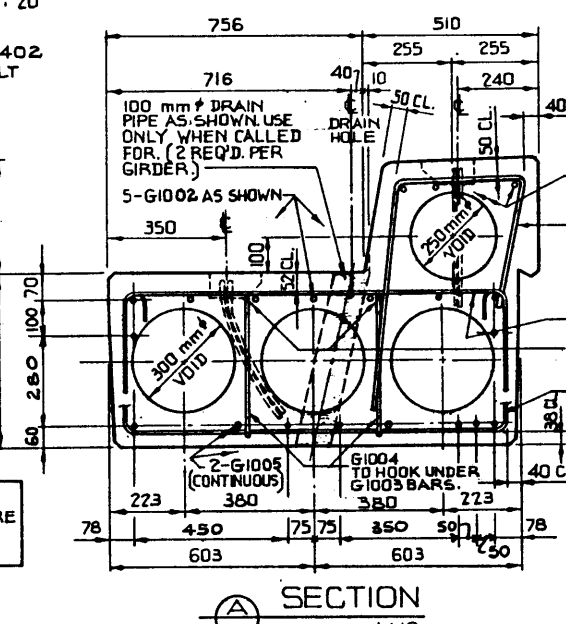
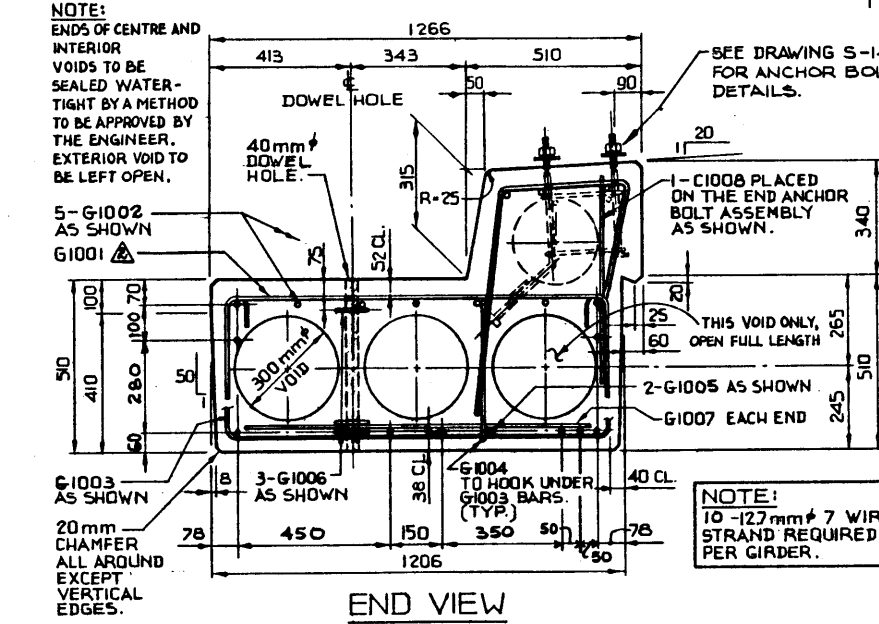
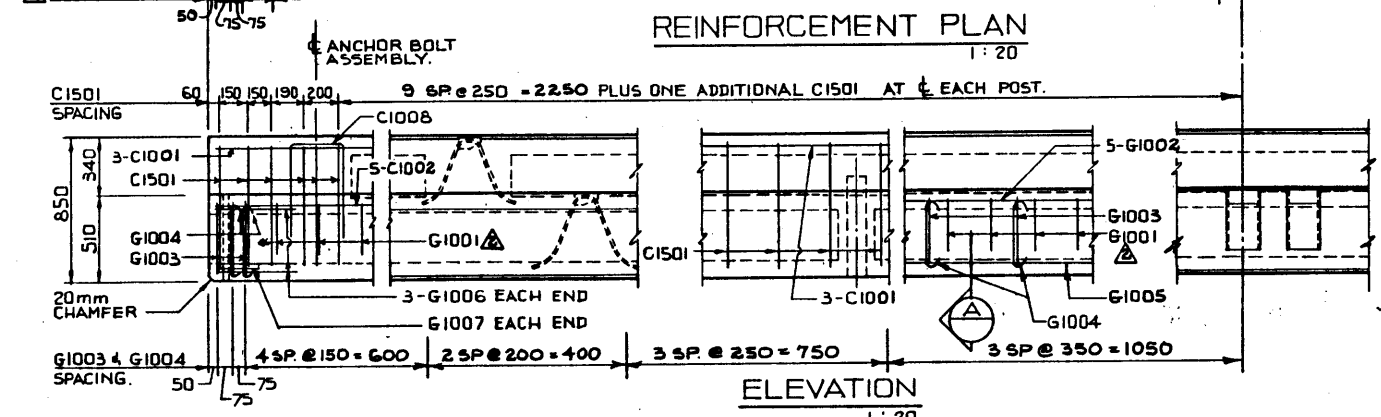
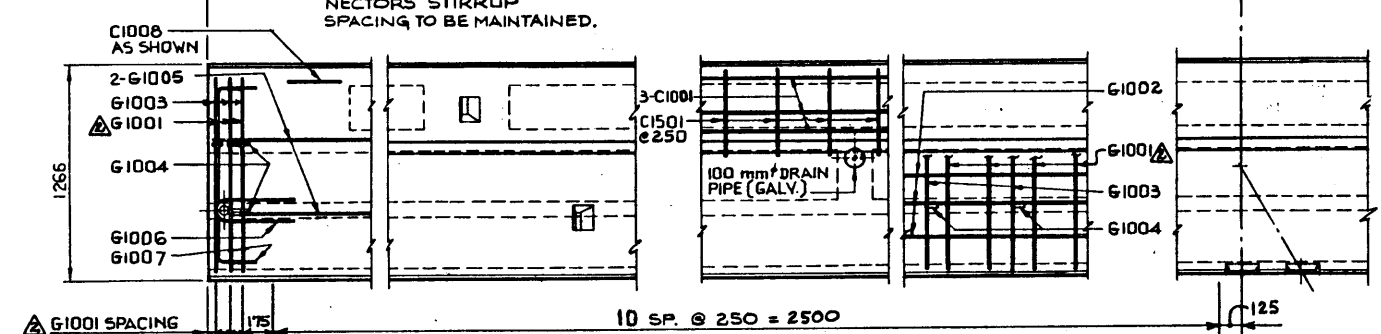
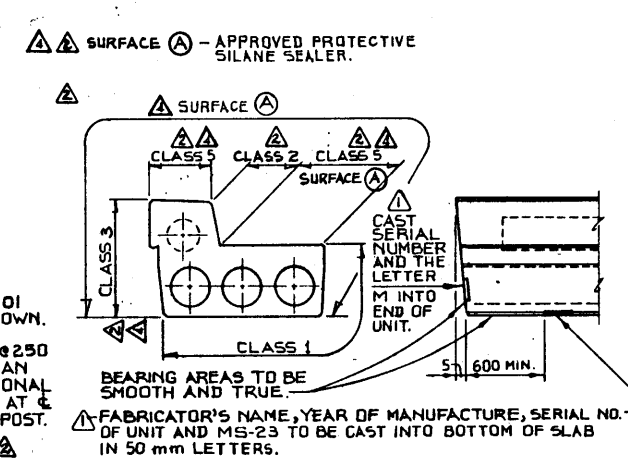


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO.	TYPE	X	Y	LENGTH	MASS
G1001	10	28	A	1125	300	1725	38
G1002	10	5	STR.			5900	23
G1003	10	29	B			2220	51
G1004	10	56	C			620	27
G1005	10	2	STR.			5800	9
G1006	10	6	D			1020	5
G1007	10	2	A	1000	300	1600	3
C1001	10	3	STR.			5900	14
C1501	15	30	E			1455	69
C1008	10	2	A	310	600	1510	2
TOTAL kg:							236
							241



SUPERSEDED

21-12-2024
30-05-2024
KEL



NO.	DATE	DESCRIPTION	BY
88-03-04		SUPERSEDED BY S-1302-00	DH Q
87-10-15		GIRDER FINISHES	T J S
85-10-23		GIRDER FINISHES BY FABRICATOR	JCY
79-03-20		4-G1001 ADDED & GIRDER FINISHES	R.G.Q.
78-07-20		GIRDER MARKINGS	R.G.Q.

DESIGNED: R.W.L. DRAWN BY: V.G.B. DATE: 78 02 15

GENERAL NOTES:

DESIGN:

- A.A.S.H.T.O. 1973 SPECIFICATIONS PLUS INTERIMS TO 1976 EXCEPT AS MODIFIED BELOW:
 - ALLOWABLE TENSION AT MIDSPAN IS 80% OF MODULUS OF RUPTURE.
 - NO TENSION ALLOWED IN DECK SURFACE.
 - WEB REINFORCEMENT - ACCORDING TO A.C.I. 318-71, BUT NOT LESS THAN A.A.S.H.T.O. MINIMUM.
 - CAPACITY REDUCTION FACTORS ACCORDING TO C.S.A. 56-1974
- LOADING:
 - LIVE LOAD - BRIDGE BRANCH MS-23 ONE WHEEL LINE PER GIRDER.
 - DEAD LOAD - GIRDER WEARING SURFACE & BRIDGERAIL = 0.1020 t/m

MATERIALS:

- CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWEIGHT COARSE AGGREGATE AND SAND FINES.
- 28 DAY CONCRETE STRENGTH - 35 MPa
- RELEASE STRENGTH - 28 MPa
- UNIT WEIGHT OF SEMI-LIGHT WEIGHT CONCRETE 1920 kg/m³
- PRESTRESSING STEEL SHALL BE 12.7mm ϕ 7 WIRE STRESS-RELIEVED STRAND ($f_b = 1860$ MPa). 12.7mm ϕ 7 WIRE LOW RELAX. STRAND ($f_b = 1860$ MPa.) MAY BE SUBSTITUTED FOR STRESS-RELIEVED STRAND ON A ONE FOR ONE BASIS AT THE SAME INITIAL STRESS. THE ENGINEER SHALL BE NOTIFIED IF THIS SUBSTITUTION IS MADE.

FABRICATION:

- GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE ALBERTA BRIDGE BRANCH SPECIFICATION FOR THE MANUFACTURE OF PRESTRESSED CONCRETE BRIDGE UNITS.
- FORCE IN PRESTRESSING STEEL:
 - INITIAL TENSIONING LOAD = 126.6 kN/STRAND
 - DESIGN LOAD AFTER LOSSES = 105.4 kN/STRAND
- CURB TO BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DWG. S-1303.
- ALL GALVANIZING SHALL CONFORM TO A.S.T.M. SPEC. A 153.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS, LIFTING HOOK AND ANCHOR BOLT ASSEMBLIES. STIRRUP SPACING IS TO BE MAINTAINED.

ERECTION:

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 236 kg.

SUPERSEDED

DIMENSIONS ARE GIVEN IN mm

Alberta TRANSPORTATION BRIDGE BRANCH METRIC

PRESTRESSED CONCRETE G m TYPE SM-510 CURB GIRDER

APPROVED: [Signature] CHIEF BRIDGE ENGINEER

DATE: MAR 23 78

DESIGNED: R.W.L. DRAWN BY: V.G.B. DATE: 78 02 15