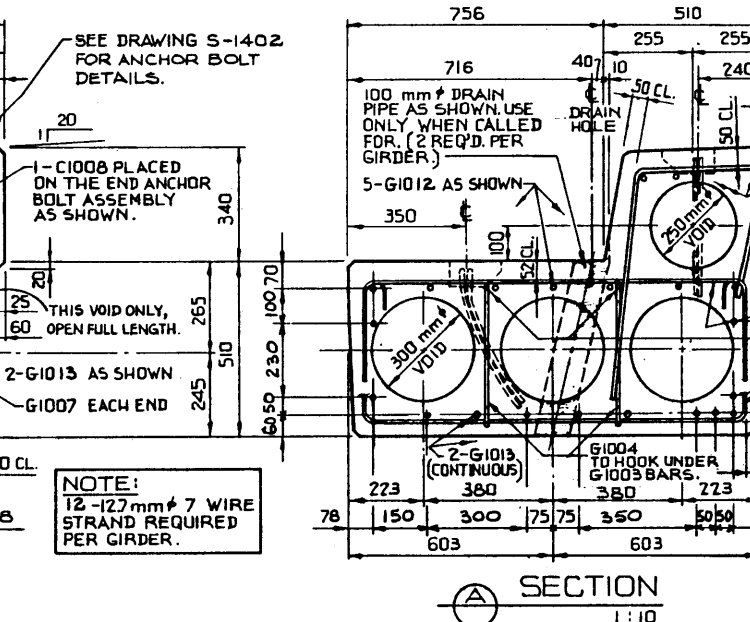
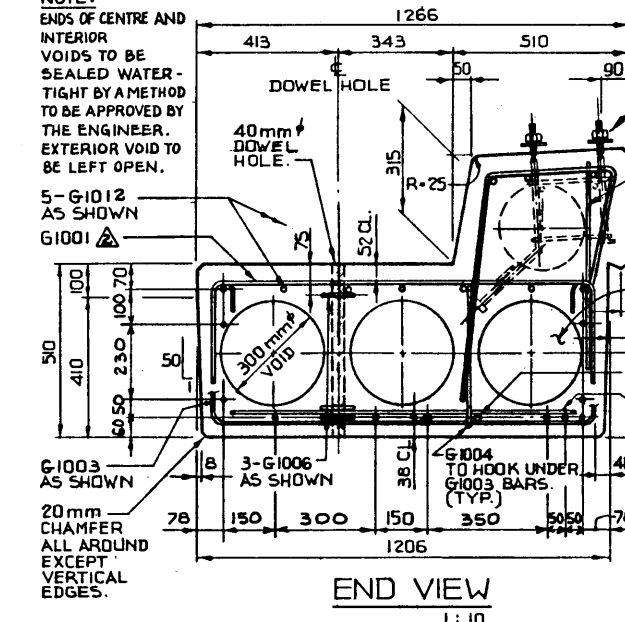
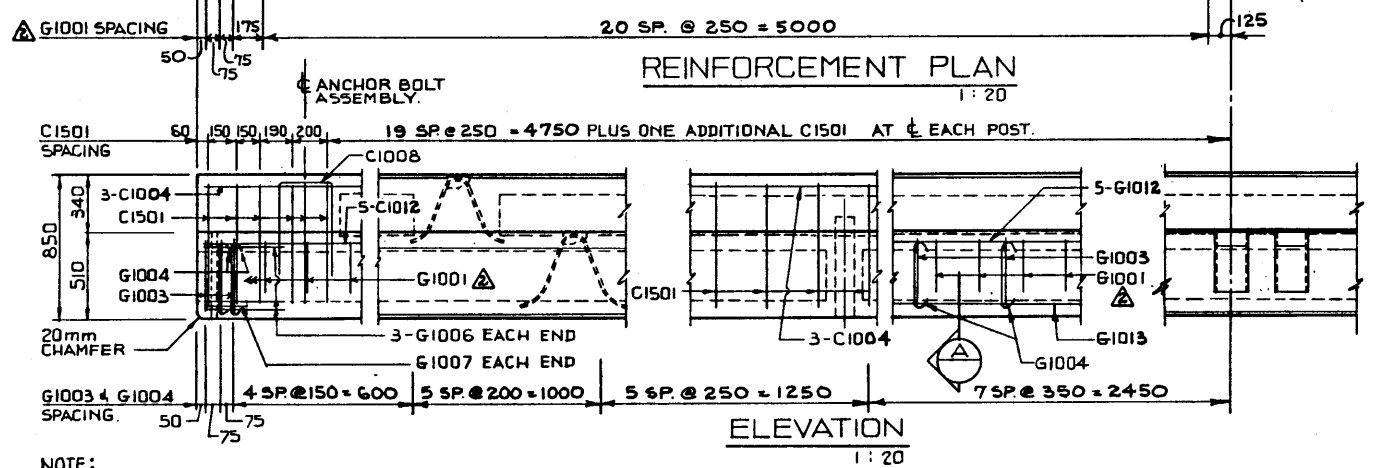
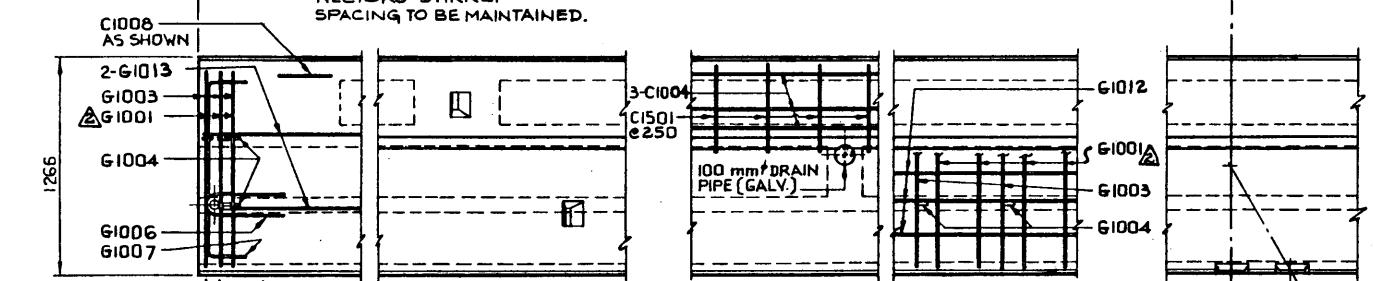
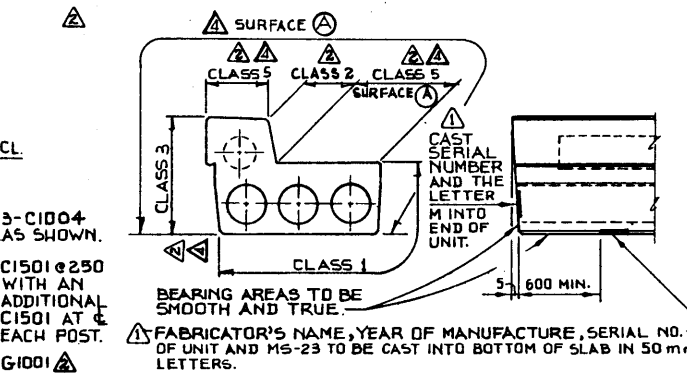


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO.	TYPE	X	Y	LENGTH	MASS
G1001	10	48	A	1125	300	1 725	65
G1012	10	5	STR.			10 900	43
G1003	10	47	B			2 220	82
G1004	10	92	C			620	45
G1013	10	2	STR.			10 800	17
G1006	10	6	D			1 020	5
G1007	10	2	A	1000	300	1 600	3
TOTAL kg: 402							407



▲▲ SURFACE (A) - APPROVED PROTECTIVE SILANE SEALER.



GIRDER FINISHES (BY FABRICATOR) 1:25

WORK THIS DWG. IN CONJUNCTION WITH DWG. NO. S-1310 & S-1312

NO.	DATE	DESCRIPTION	BY
88-03-04		SUPERSEDED BY S-1311-98	D.H.Q.
87-10-15		GIRDER FINISHES	T.J.S.
85-10-23		GIRDER FINISHES-BY FABRICATOR	J.C.Y.
79-03-20		4-G1001 ADDED & GIRDER FINISHES	R.G.Q.
78-07-20		GIRDER MARKINGS	R.G.Q.

APPROVED: *[Signature]* CHIEF BRIDGE ENGINEER

DATE: M.A.R. 23/78

DESIGNED	DRAWN BY	DATE	CHECKED BY	DATE	STREAM	LOCATION	HWY. NO.	SCALE	FILE NO.	SHEET	DWG. NO.
R.W.L.	V.G.B.	78 02 15									S-1311

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 = 1.020 t/m WEARING SURFACE & BRIDGERAIL = 0.110 t/m

MATERIALS:

- CONCRETE IN GIRDER SHALL BE MADE OF LIGHTWGT 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 12.7 mm ϕ 7 WIRE STRESS-RELIEVED STRAND ($f_p = 1860$ MPa). 12.7 mm ϕ 7 WIRE LOW RELAX. STRAND ($f_p = 1860$ 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 = 128.6 kN/STRAND
 - DESIGN LOAD AFTER LOSSES = 105.0 kN/STRAND
- CURB TO BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DWG. S-1312.
- 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 1.020 t/m

DIMENSIONS ARE GIVEN IN mm

Alberta TRANSPORTATION BRIDGE BRANCH METRIC

PRESTRESSED CONCRETE 11 m TYPE SM-510 CURB GIRDER

APPROVED: *[Signature]* CHIEF BRIDGE ENGINEER

DATE: M.A.R. 23/78

DESIGNED	DRAWN BY	DATE	CHECKED BY	DATE	STREAM	LOCATION	HWY. NO.	SCALE	FILE NO.	SHEET	DWG. NO.
R.W.L.	V.G.B.	78 02 15									S-1311

SUPERSEDED