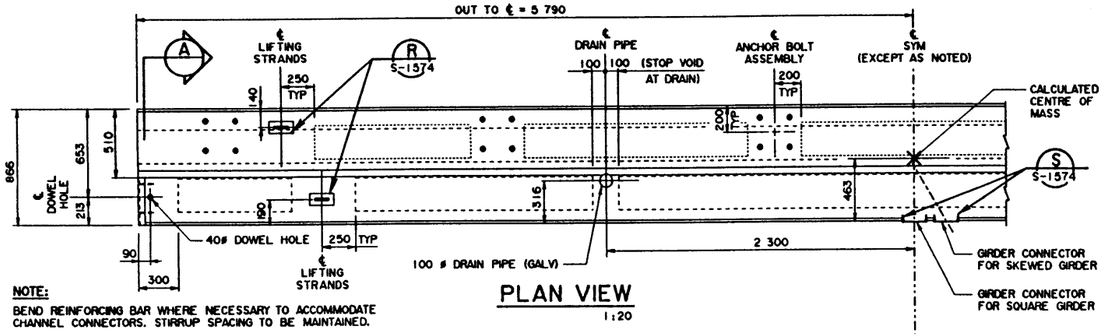
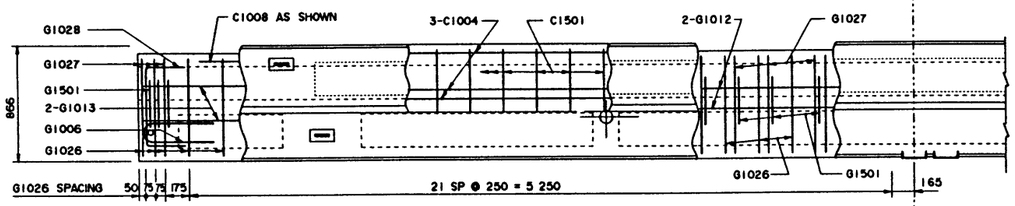
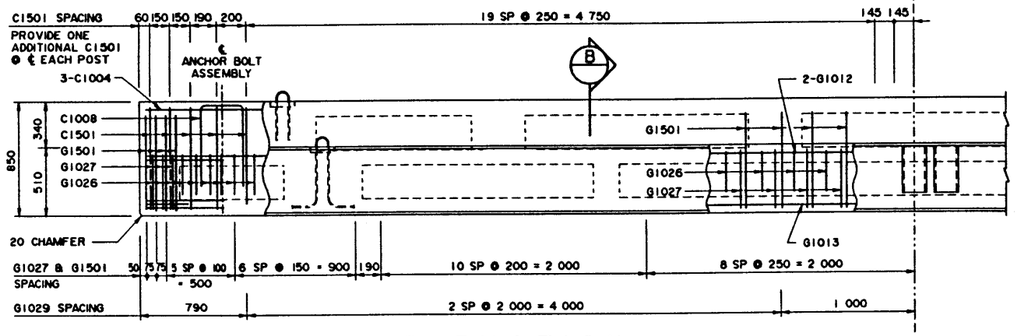


PLAN VIEW
1:20

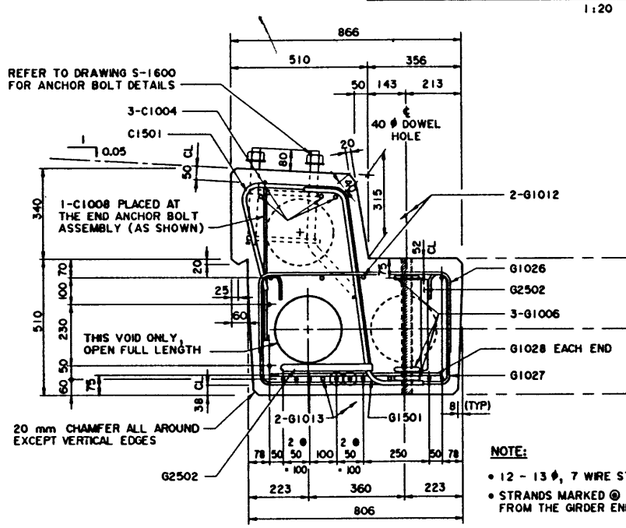
NOTE:
BEND REINFORCING BAR WHERE NECESSARY TO ACCOMMODATE CHANNEL CONNECTORS. STIRRUP SPACING TO BE MAINTAINED.



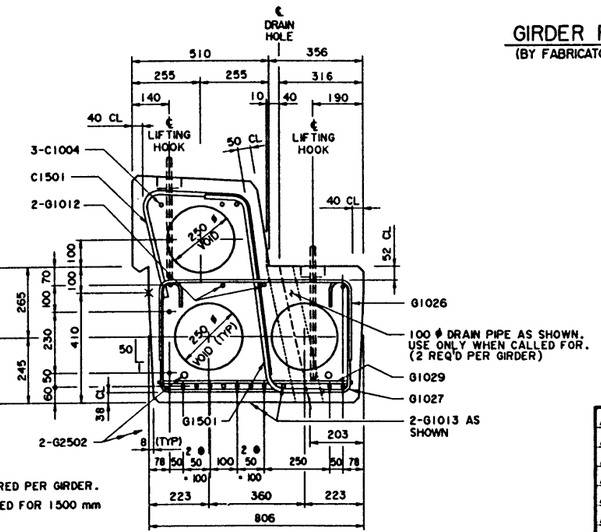
REINFORCEMENT PLAN
1:20



ELEVATION
1:20

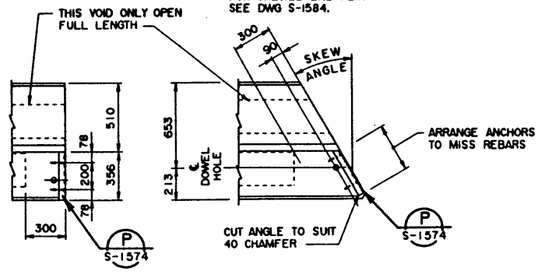


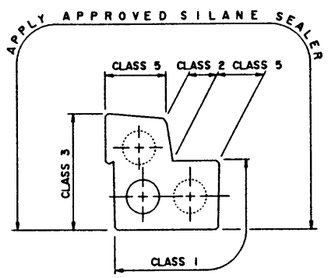
A SECTION
1:10

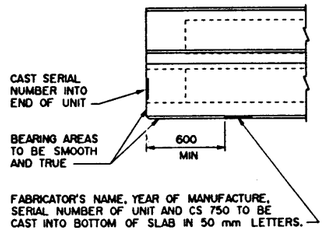


B SECTION
1:10

NOTE:
- 12 - 13 ø, 7 WIRE STRANDS REQUIRED PER GIRDER.
- STRANDS MARKED @ TO BE DEBONDED FOR 1500 mm FROM THE GIRDER END.







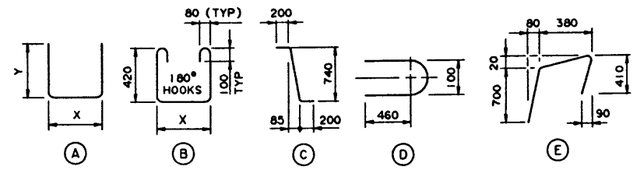
GIRDER FINISHES
(BY FABRICATOR) 1:20

BAR LIST: FOR SQUARE GIRDER

MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
C1004	10	3	STR			11 480	27
C1008	10	2	A	310	600	1 510	2
C1501	15	56	E			1 455	128
G1006	10	6	D			1 080	5
G1012	10	2	STR			11 480	18
G1013	10	2	STR			11 380	18
G1026	10	51	A	725	300	1 325	53
G1027	10	65	B	725		1 820	93
G1028	10	2	A	600	300	1 200	2
G1029	10	6	STR			700	3
G1501	15	65	C			1 140	116
G2502	25	2	A	11 430	350	12 130	95

TOTAL kg : 560

BAR TYPES
(ALL BAR DIMENSIONS ARE OUT TO OUT)



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/m³.
- 28 DAY CONCRETE STRENGTH — 35 MPa
- RELEASE STRENGTH ——— 28 MPa
- PRESTRESSING STEEL SHALL BE 13 ø, 7 WIRE LOW RELAXATION STRAND (fpu = 1860 MPa).
- REINFORCING STEEL SHALL BE GRADE 400W (YIELD STRENGTH OF GRADE 300 USED IN DESIGN TO ALLOW TACK WELDING OF SHEAR REINFORCEMENT).

FABRICATION

- ⚠1 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 • 109 kN/STRAND
- CURB SHALL BE CAST MONOLITHICALLY WITH GIRDER.
- ANCHOR BOLT ASSEMBLIES SHALL BE CAST IN GIRDER AT SPACINGS SHOWN ON DRAWING S-1576.
- 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-1576.

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 10.5 t.

(2)

REV	DATE	REVISIONS	BY
⚠1	95-07-10	SPECIFICATION NOTE	LEA
⚠2			
⚠3			
⚠4			
⚠5			
⚠6			

ORIGINAL DRAWING APPROVED BY
J. RAMOTAR
EXECUTIVE DIRECTOR
BRIDGE ENGINEERING
MAY 24, 1994

Alberta TRANSPORTATION AND UTILITIES
BRIDGE ENGINEERING BRANCH

PRESTRESSED CONCRETE 11.58 m TYPE SC-510 CURB GIRDER

DESIGNED	DRAWN	DATE	CHECKED	DATE	STREAM	LOCATION	HIGHWAY	FILE	SHEET	DRAWING
LEA	VMV	94-04-21	SBD	94-05-16					2 or 4	S-1575

FILE: BRVM #1575-94-RVI UPDATE JUL 14, 1995
TIME: 09:00 HR