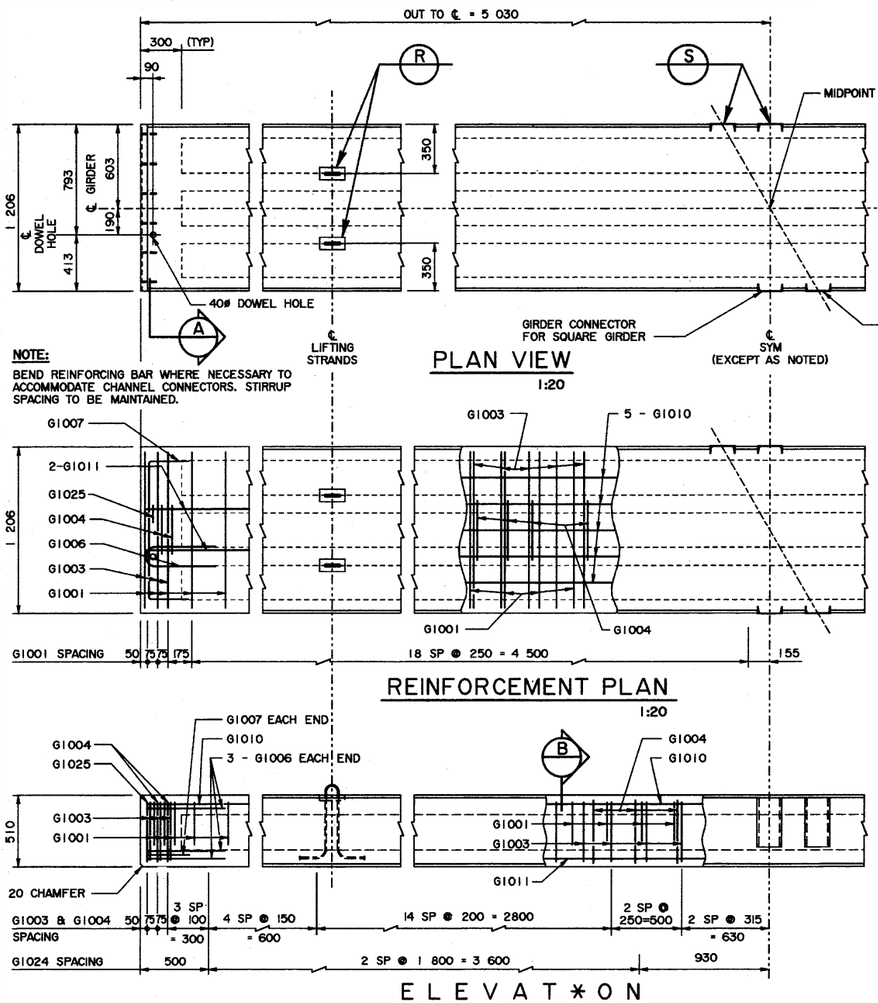
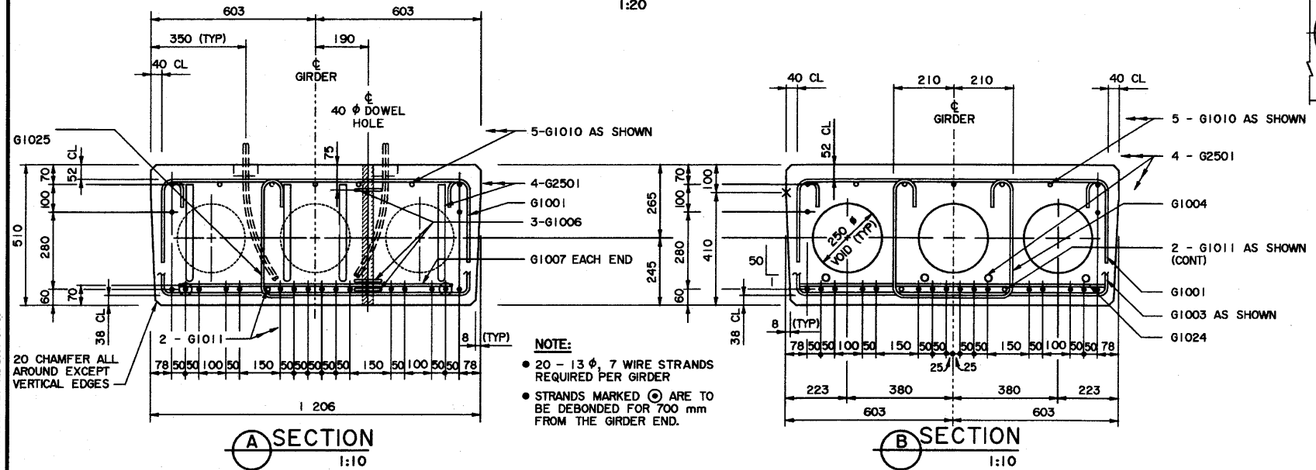


PLAN VIEW
1:20

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

REINFORCEMENT PLAN
1:20

ELEVATION
1:20

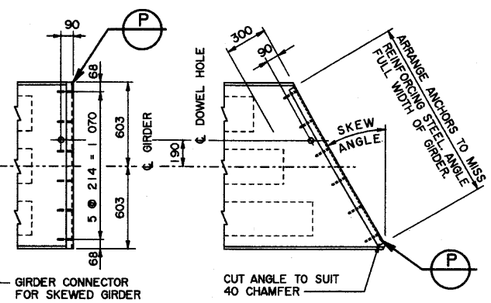


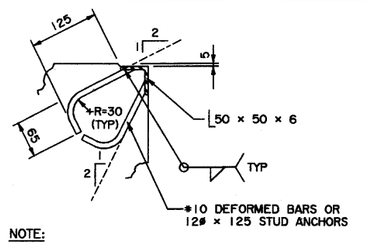
A SECTION
1:10

NOTE:
- 20 - 13 ϕ, 7 WIRE STRANDS REQUIRED PER GIRDER
- STRANDS MARKED ⊙ ARE TO BE DEBONDED FOR 700 mm FROM THE GIRDER END.

B SECTION
1:10

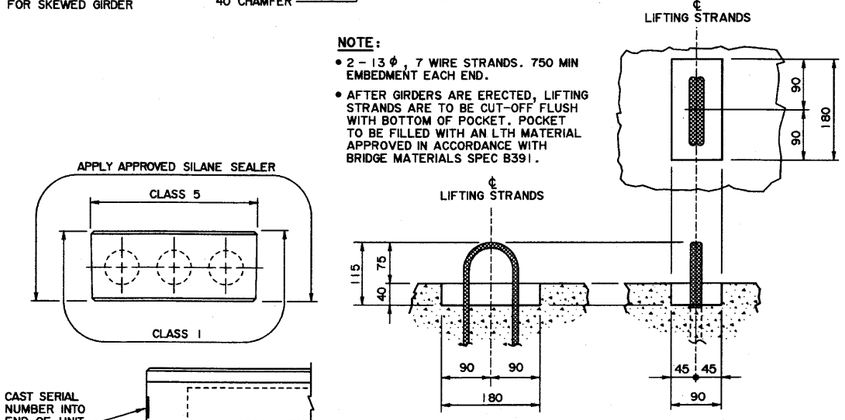
NOTE:
FOR SKEWED END REINFORCING BAR DETAILS SEE DWG S-1671-01





NOTE:
ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

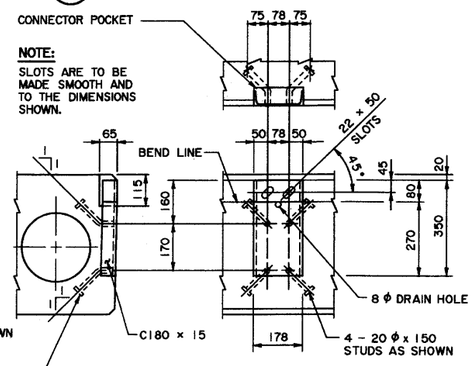
P BUFFER ANGLE
1:5



GIRDER FINISHES
(BY FABRICATOR) 1:20

NOTE:
- 2 - 13 ϕ, 7 WIRE STRANDS. 750 MIN EMBEDMENT EACH END.
- AFTER GIRDERS ARE ERECTED, LIFTING STRANDS ARE TO BE CUT-OFF FLUSH WITH BOTTOM OF POCKET. POCKET TO BE FILLED WITH AN LTH MATERIAL APPROVED IN ACCORDANCE WITH BRIDGE MATERIALS SPEC B391.

R LIFTING HOOK POCKET
1:5



ALTERNATE SYSTEM OF ANCHORING CHANNEL, WHICH FACILITATES THE PLACING OF THE CIRCULAR VOID, WILL BE CONSIDERED BY THE DEPARTMENT

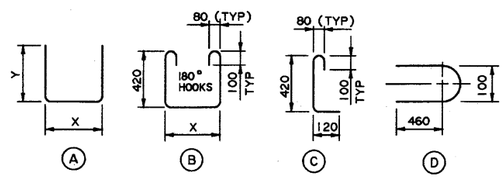
NOTE: ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

S GIRDER CONNECTORS
1:10

BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	45	A	1 125	300	1 725	61
G1003	10	55	B	1 125		2 220	96
G1004	10	53	B	420		1 550	63
G1006	10	6	D			1 080	5
G1007	10	2	A	1 000	300	1 600	3
G1010	10	5	STR			9 960	39
G1011	10	2	STR			9 860	15
G1024	10	6	STR			1 100	5
G1025	10	2	C			670	1
G2501	25	4	A	9 910	350	10 610	167

TOTAL kg : 455

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 ONE WHEEL LINE PER GIRDER

  DEAD LOAD - GIRDER = 0.93 t/m
  - WEARING SURFACE = 0.24 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 ϕ, 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

- 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 = 106 kN/STRAND
- ALL GALVANIZING SHALL CONFORM TO ASTM SPEC A123.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING IS TO BE MAINTAINED. FOR CONNECTOR AND LIFTING HOOK LOCATIONS SEE DWG S-1671-01

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 9.54 t.

• WORK THESE DRAWINGS TOGETHER : S-1670-01 AND S-1671-01 (1)

REV	DATE	REVISIONS	BY
6			
4			
3			
2			
1			

DESIGNER RY CHECKER CTC

RECOMMENDED DIRECTOR BRIDGE ENGINEERING

APPROVED EXECUTIVE DIRECTOR TECHNICAL STANDARDS BRANCH

DATE July 10/01

Alberta TRANSPORTATION

PRESTRESSED CONCRETE 10.06 m TYPE SC-510 INTERIOR GIRDER

F5020227

DATE	SHEET	DRAWING
2001-04-30	1 OF 2	S-1670-01

S1670001.DGN PLOTTED 2001-04-30