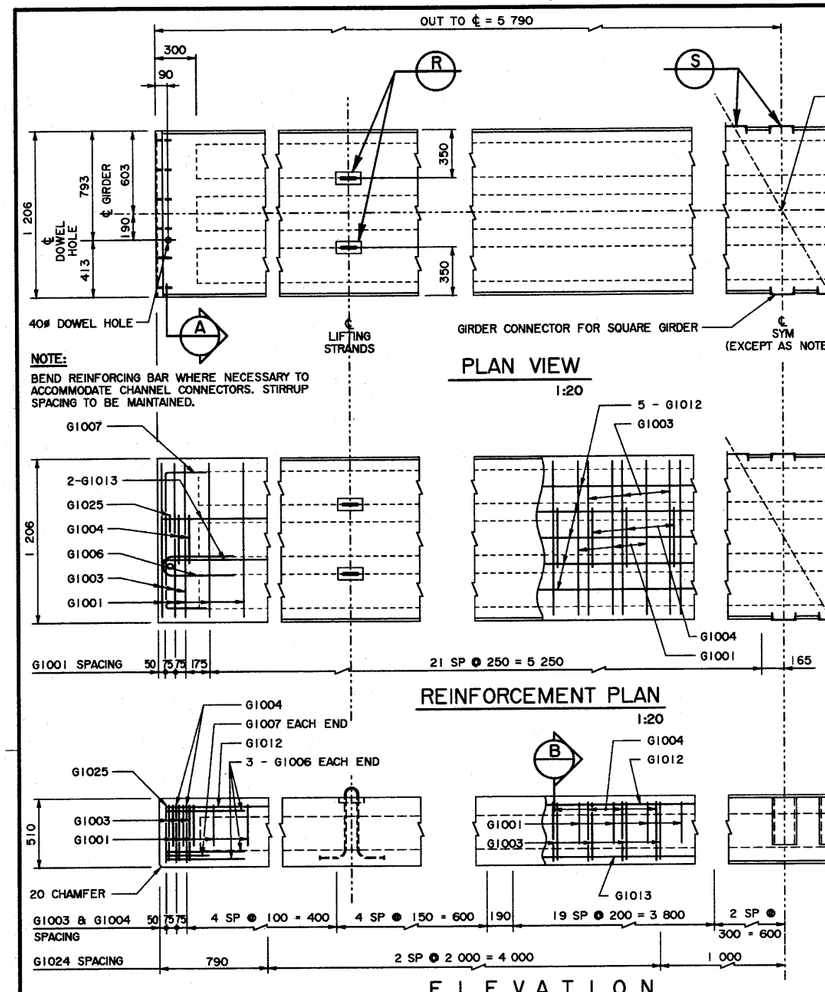
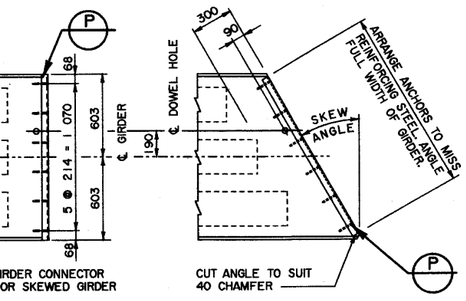
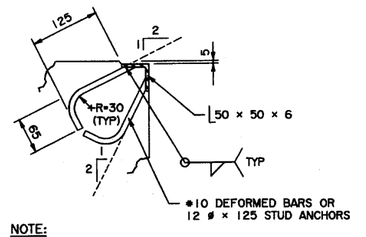


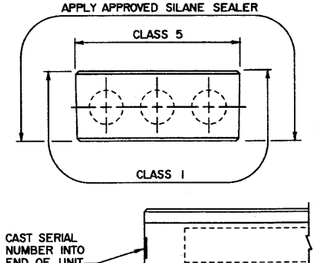
NOTE:
FOR SKEWED END REINFORCING BAR DETAILS SEE DWG S-1675-01





NOTE:
ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

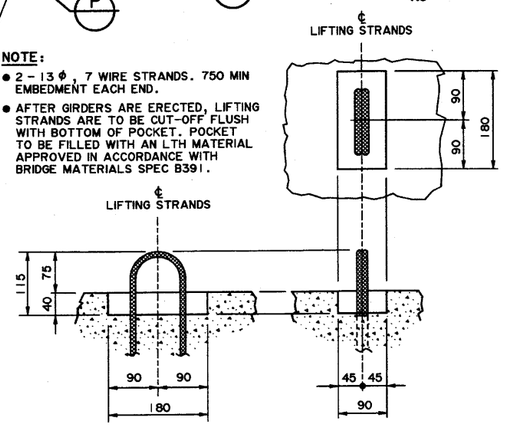
P BUFFER ANGLE
1:5



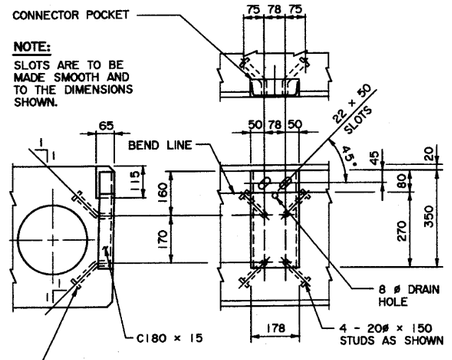
FABRICATOR'S NAME, YEAR OF MANUFACTURE, SERIAL NUMBER OF UNIT AND CS 750 TO BE CAST INTO BOTTOM OF SLAB IN 50 mm LETTERS.

GIRDER FINISHES
(BY FABRICATOR) 1:20

NOTE:
• 2 - 13 ø, 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

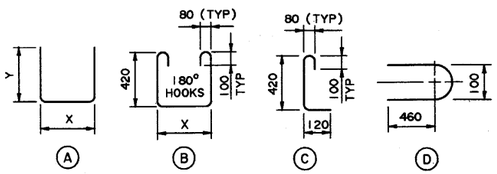
NOTE: ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

S GIRDER CONNECTORS
1:10

BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	51	A	1 125	300	1 725	69
G1003	10	65	B	1 125		2 220	113
G1004	10	63	B	420		1 520	75
G1006	10	6	D			1 080	5
G1007	10	2	A	1 000	300	1 600	3
G1012	10	5	STR			11 480	45
G1013	10	2	STR			11 380	18
G1024	10	6	STR			1 100	5
G1025	10	2	C			670	1
G2502	25	4	A	11 430	350	12 130	190

TOTAL kg : 524

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 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

• 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 = 104 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-1675-01

ERECTION

• ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
• CALCULATED MASS OF ONE GIRDER IS 10.94 t.
• WORK THESE DRAWINGS TOGETHER : S-1674-01 AND S-1675-01 (1)

REV	DATE	REVISIONS	BY
4			
3			
2			
1			
0			

DESIGNER RJK CHECKER CTC

RECOMMENDED DIRECTOR BRIDGE ENGINEERING

APPROVED EXECUTIVE DIRECTOR TECHNICAL STANDARDS BRANCH
DATE July 16/01

Alberta TRANSPORTATION

PRESTRESSED CONCRETE 11.58 m TYPE SC-510 INTERIOR GIRDER

F902031 E | DATE 2001-04-30 | SHEET 1 of 2 | DRAWING S-1674-01

S1674201.DGN PLOTTED 2001-04-30