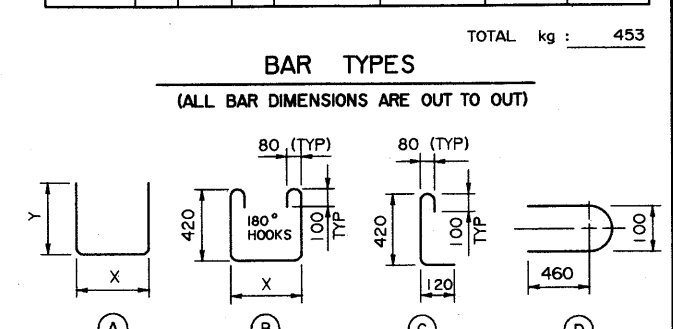


BAR LIST: FOR SQUARE GIRDER							
MARK	SIZE	NO	TYPE	X	Y	LENGTH	MASS
G1001	10	44	A	125	300	1725	60
G1003	10	55	B	125		2220	96
G1004	10	53	B	420		1520	63
G1006	10	6	D			1020	5
G1007	10	2	A	1000	300	1600	3
G1010	10	5	STR			9900	39
G1011	10	2	STR			9800	15
G1024	10	6	STR			1100	5
G1025	10	2	C			670	1
G2501	25	4	A	9850	350	10550	166

TOTAL kg : 453



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# 7 WIRE LOW RELAXATION STRAND (f_{pu} = 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.

ERECTION

- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.
- CALCULATED MASS OF ONE GIRDER IS 9.48 t.

WORK THESE DRAWINGS TOGETHER : S-1660-01 AND S-1661-01

S1660-01.DWG PLOTTED 2001-04-12

RECOMMENDED DIRECTOR BRIDGE ENGINEERING

Alberta TRANSPORTATION

PRESTRESSED CONCRETE
10 m TYPE SC-510
INTERIOR GIRDER

DATE: 2001-04-12 SHEET: 1 of 2 DRAWING: S-1660-01

REV	DATE	REVISIONS	BY

DESIGNER: [Signature] CHECKER: [Signature] DATE: July 10/01