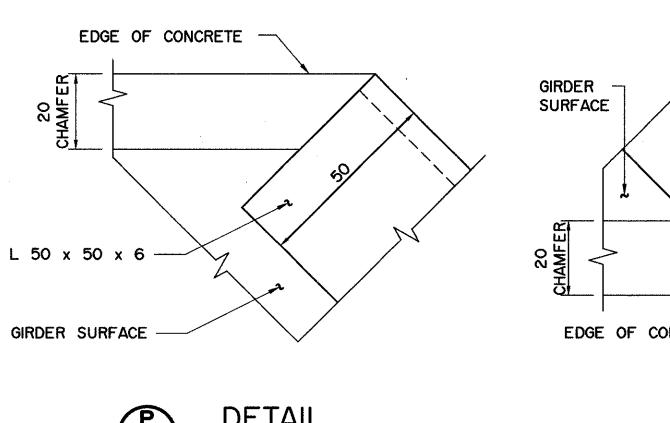
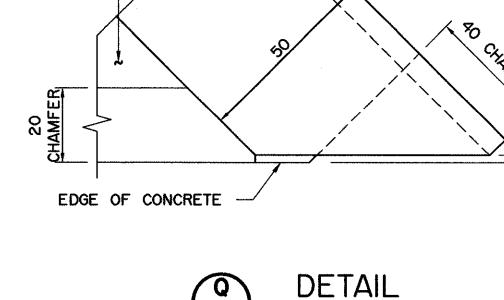
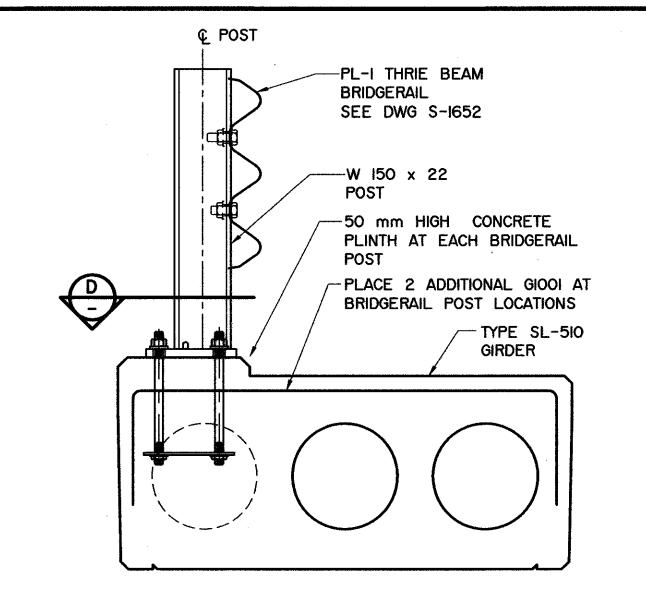


GIRDER SKEWED END PLAN DETAIL



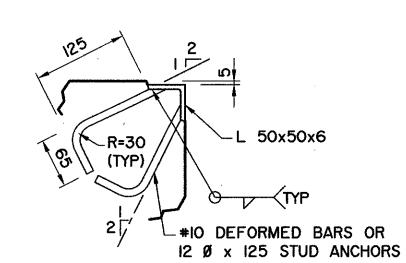


-L 50 x 50 x 6



TYPICAL EXTERIOR GIRDER

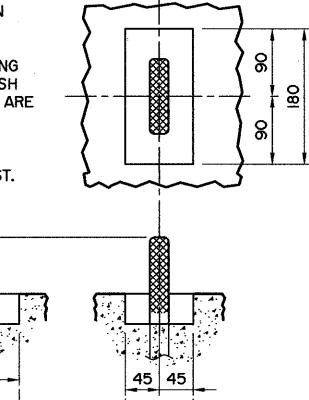
**©** POST



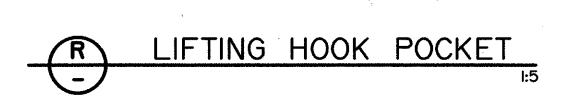
ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

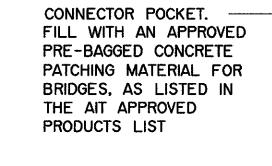


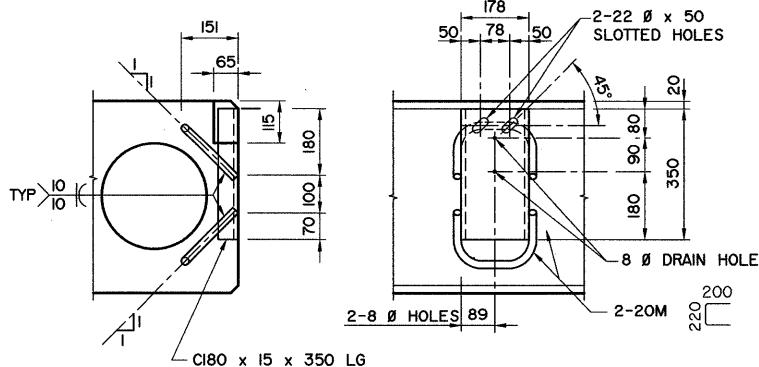
- 2-15 Ø , 7 WIRE STRANDS. 1000 MIN EMBEDMENT EACH END.
- AFTER GIRDERS ARE ERECTED, LIFTING STRANDS ARE TO BE CUT OFF FLUSH WITH BOTTOM OF POCKET. POCKETS ARE TO BE FILLED WITH AN APPROVED PRE-BAGGED CONCRETE PATCHING MATERIAL FOR BRIDGES, AS LISTED IN THE AIT APPROVED PRODUCTS LIST.



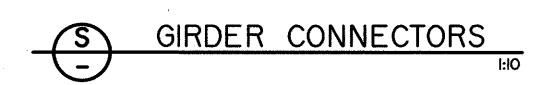
LIFTING STRANDS

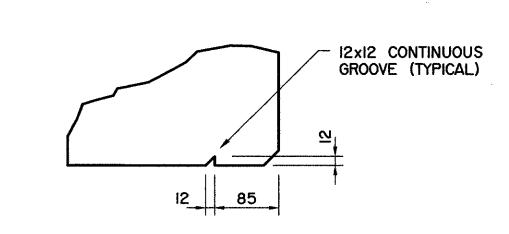




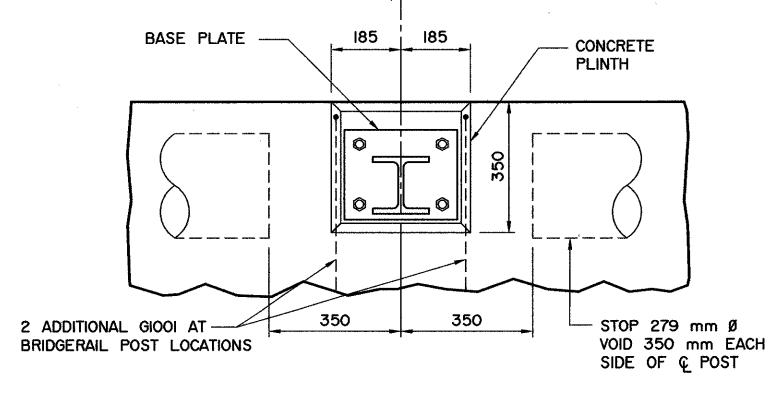


NOTE: ASSEMBLY TO BE HOT DIP GALVANIZED AFTER FABRICATION.

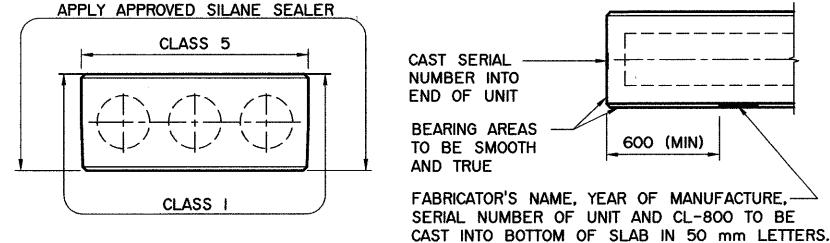








AT POSTS



CAST SERIAL NUMBER INTO END OF UNIT BEARING AREAS 600 (MIN) TO BE SMOOTH AND TRUE FABRICATOR'S NAME, YEAR OF MANUFACTURE, SERIAL NUMBER OF UNIT AND CL-800 TO BE

GIRDER FINISHES (BY FABRICATOR)

# GENERAL NOTES

• ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.

# **DESIGN**

- CAN/CSA-S6-06 SPECIFICATIONS EXCEPT AS MODIFIED BELOW:
- ALLOWABLE TENSION IN BOTTOM FIBRE AT MIDSPAN = 2.0 MPg EXCEPT WHERE NOTED ON GIRDER SPECIFIC DRAWINGS.
- NO TENSION ALLOWED IN DECK SURFACE.

### LOADING:

LIVE LOAD - CAN/CSA-S6-06: CL-800 - ONE WHEEL LINE PER GIRDER

DEAD LOAD - GIRDER

- ALLOWANCE FOR FUTURE WEARING SURFACE (90 mm ACP AND

WATERPROOFING) = 0.26 t/m

= 1.16 t/m

### **MATERIALS**

- CONCRETE SHALL BE STANDARD WEIGHT, CONTAINING 10% SILICA FUME AND NOT LESS THAN 5% AIR ENTRAINMENT.
- 28 DAY CONCRETE STRENGTH
- 50 MPa FOR ALL SPANS EXCEPT THE 14.0 m SPAN - 70 MPa FOR THE 14.0 m SPAN
- CONCRETE RELEASE STRENGTH:
- 35 MPa FOR ALL SPANS EXCEPT THE 14.0 m SPAN - 40 MPa FOR THE 14.0 m SPAN
- PRESTRESSING STEEL SHALL BE 15 Ø, 7 WIRE LOW RELAXATION STRAND (fpu = 1860 MPa).
- REINFORCING STEEL SHALL BE GRADE 400W. TACK WELDING OF REINFORCING SHALL NOT BE ALLOWED.

## **FABRICATION**

- GIRDERS SHALL CONFORM TO THE CURRENT REQUIREMENTS OF THE SPECIFICATIONS FOR BRIDGE CONSTRUCTION SECTION 7 - PRECAST CONCRETE UNITS.
- ALL GALVANIZING SHALL CONFORM TO CSA SPECIFICATION GI64.
- BEND OR SHIFT REINFORCING WHERE REQUIRED TO CLEAR GIRDER CONNECTORS AND LIFTING HOOK ASSEMBLIES. STIRRUP SPACING IS TO BE MAINTAINED.
- ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 20 mm CHAMFER OR FILLET UNLESS NOTED OTHERWISE.

# **ERECTION**

- LIFTING FORCE SHALL BE VERTICAL AT ALL TIMES.
- GIRDERS SHALL BE MAINTAINED LEVEL AT ALL TIMES.
- ANY FREE SPACE BETWEEN CONNECTORS SHALL BE FILLED WITH DROP-IN WASHERS.

SUPERSEDED BY S-1749-07 REVISION 1, 2008-04-18

CHECKER DESIGNER RECOMMENDED PERMIT TO PRACTICE pm for EXECUTIVE DIRECTOR BPTEC - DNW Engineering Ltd. Date August 1,2007 PERMÍT NUMBER: POI32 Suite 200, 4220-98 St Ph: (780) 436-5376 The Association of Professional Engineers Geologists and Geophysicists of Alberta Edmonton, AB T6E 6A1 Fax: (780) 435-4843 DATE \_ DATE \_\_\_ REV **REVISIONS** DATE

INFRASTRUCTURE AND TRANSPORTATION

PRESTRESSED CONCRETE TYPE SL-510 GIRDER STANDARD DETAILS

AI BAR CODE

2007-06-07 3 of 3 S-1749-07