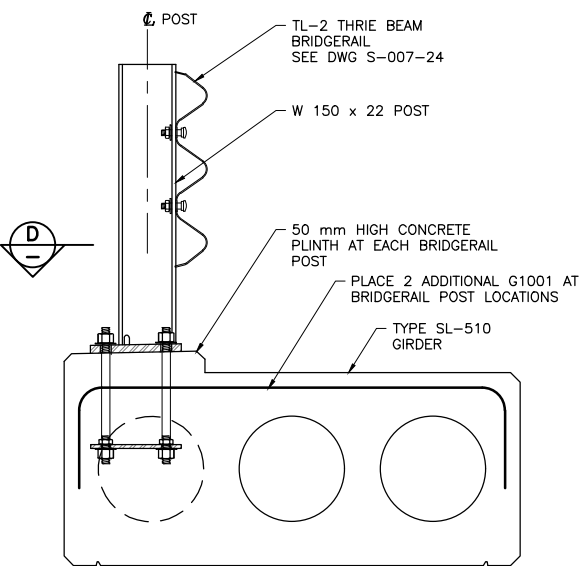
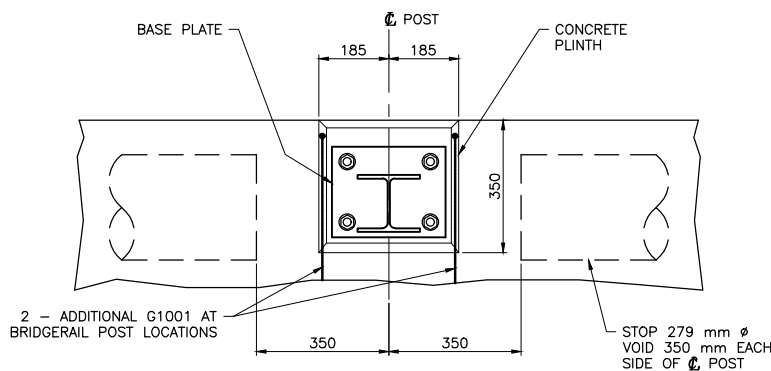


NOTE: 40 VERTICAL CHAMFER ON ACUTE CORNERS OF GIRDERS WITH A SKEW OF 30° OR GREATER

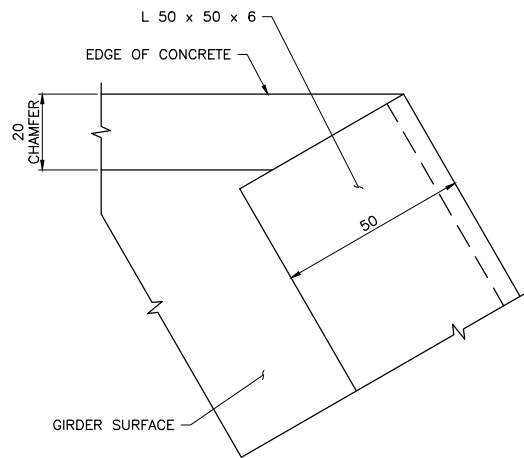
GIRDER SKEWED END PLAN DETAIL
1:15



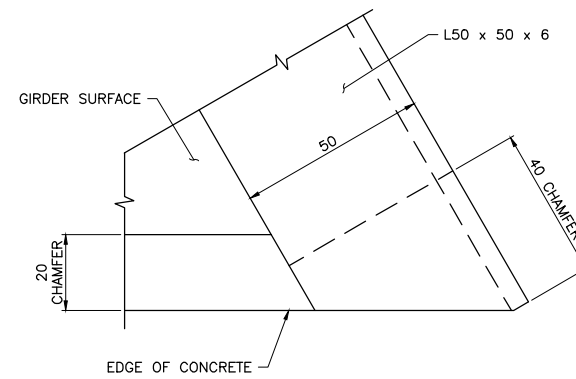
TYPICAL EXTERIOR GIRDER
1:10



(D) SECTION (AT POSTS)
1:10



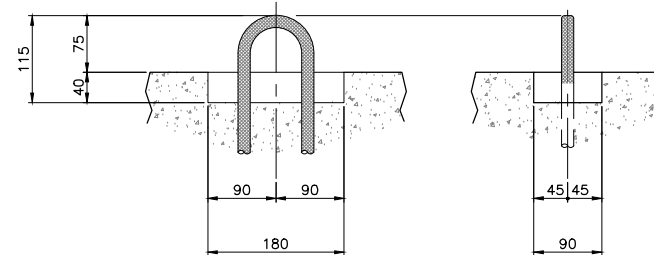
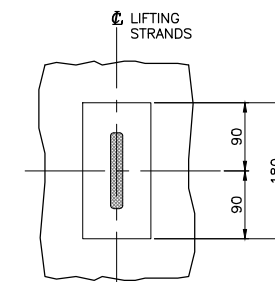
(P) DETAIL
1:1



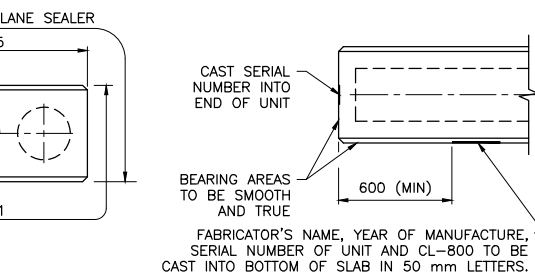
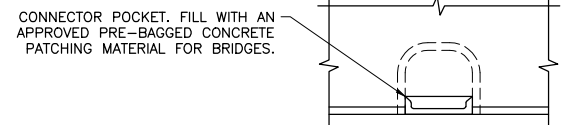
(Q) DETAIL
1:1

NOTE:

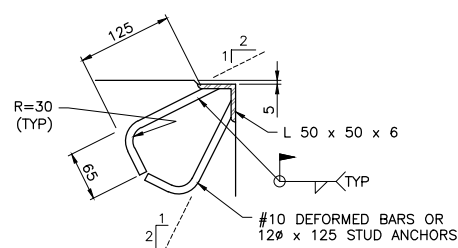
- 2 - 15 ϕ , 7 WIRE STRANDS. 1 000 MIN EMBEDMENT EACH END.
- AFTER GIRDERS ARE ERECTED, LIFTING STRANDS ARE TO BE CUT OFF FLUSH WITH BOTTOM OF POCKET. POCKETS ARE TO BE FILLED WITH AN APPROVED PRE-BAGGED CONCRETE PATCHING MATERIAL FOR BRIDGES.



(R) LIFTING HOOK POCKET
1:5

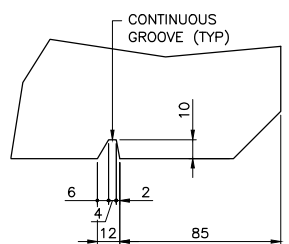


GIRDER FINISHES (BY FABRICATOR)
1:20

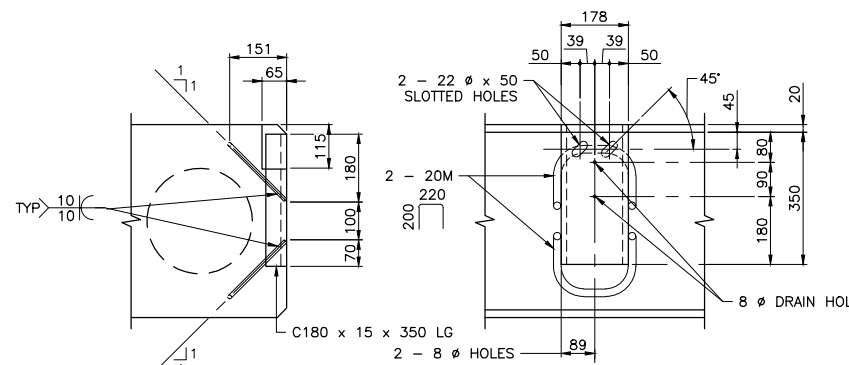


NOTE: ASSEMBLY TO BE HOT-DIP GALVANIZED AFTER FABRICATION.

(C) SECTION - BUFFER ANGLE
1:5



(T) DRIP GROOVE DETAIL
1:2



NOTE: ASSEMBLY TO BE HOT-DIP GALVANIZED AFTER FABRICATION.

(S) GIRDER CONNECTIONS
1:10

GENERAL NOTES

- ALL DRAWING REFERENCES ARE TO CURRENT DRAWINGS.

DESIGN

- DESIGN SPECIFICATION: CSA-S6-19
- LOADING:
 - LIVE LOAD - CSA-S6-19: CL-800
 - ONE WHEEL LINE PER GIRDER
 - GIRDER = 1.16 t/m
 - DEAD LOAD - ALLOWANCE FOR FUTURE WEARING SURFACE (90 mm ACP AND WATERPROOFING) = 0.26 t/m

MATERIALS

- CONCRETE SHALL CONFORM TO REQUIREMENTS OF THE SPECIFICATIONS FOR BRIDGE CONSTRUCTION, SECTION 7 - PRECAST CONCRETE UNITS.
- 28 DAY CONCRETE STRENGTH:
 - 50 MPa FOR ALL SPANS EXCEPT THE 14.0 m SPAN.
 - 70 MPa FOR THE 14.0 m SPAN ONLY.
- CONCRETE RELEASE STRENGTH:
 - 35 MPa FOR ALL SPANS EXCEPT THE 14.0 m SPAN.
 - 40 MPa FOR THE 14.0 m SPAN ONLY.
- PRESTRESSING STEEL SHALL BE 15 ϕ , 7 WIRE LOW RELAXATION STRAND (fpu = 1 860 MPa).
- REINFORCING STEEL SHALL BE GRADE 400W. TACK WELDING OF REINFORCING SHALL NOT BE ALLOWED.
- PRE-BAGGED CONCRETE PATCHING MATERIAL FOR BRIDGES SHALL BE SELECTED FROM EITHER THE ALBERTA TRANSPORTATION AND ECONOMIC CORRIDORS PRODUCTS LIST OR FROM THE BC MINISTRY OF TRANSPORTATION AND TRANSIT RECOGNIZED PRODUCTS LIST.

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 G164.
- 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.

		Consultant Logo	

Rev	Date	Description	Init

REVISIONS

Government of Northwest Territories

STANDARD DRAWING
PRESTRESSED CONCRETE TYPE SL-510 GIRDER
STANDARD DETAILS

DESIGNED	K. HABEL	DATE	OCTOBER 25, 2024
CHECKED	K. WILLIS	DATE	OCTOBER 25, 2024
DRAWN	T. CHIU	DATE	OCTOBER 25, 2024
SCALE	AS SHOWN		
PROJECT No.		PREPARED UNDER THE DIRECTION OF	
		K. HABEL ENGINEER OF RECORD	
		DATE OCTOBER 25, 2024	
		DRAWING No.	
		S-107-24	