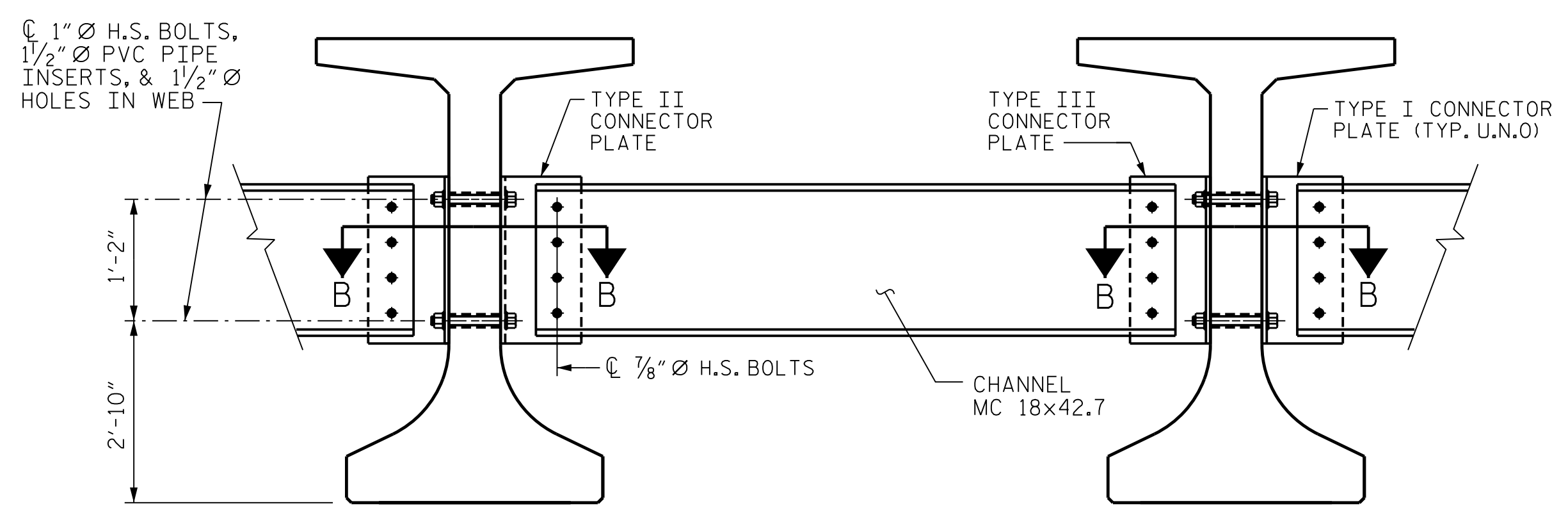
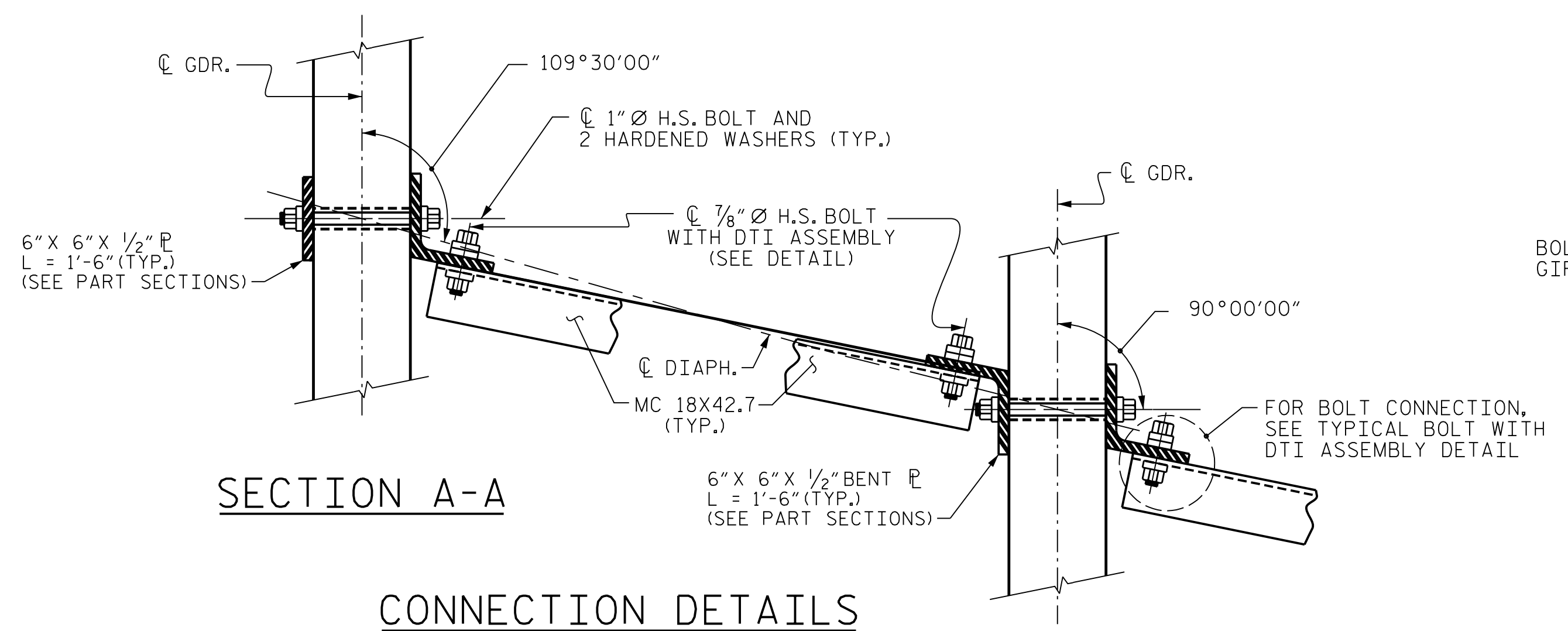


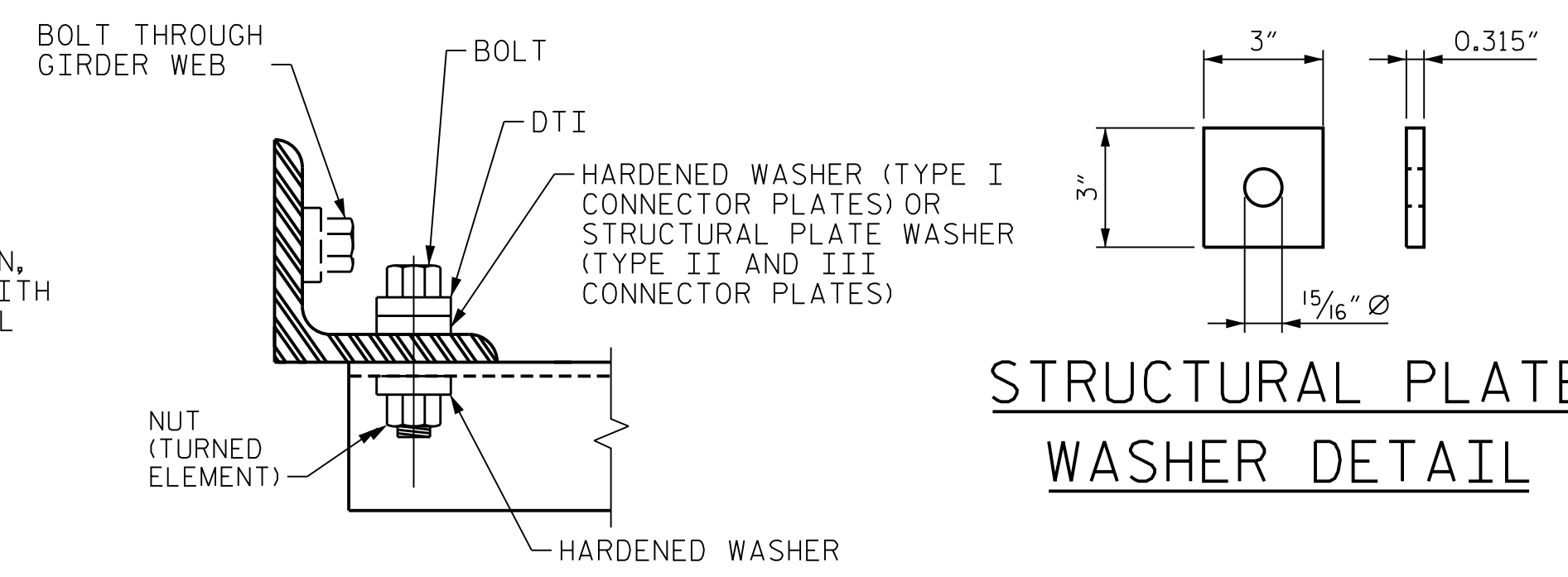
EXTERIOR GIRDERS INTERIOR GIRDERS
PART SECTION AT INTERMEDIATE DIAPHRAGM
(DETAIL TYPICAL EXCEPT AT CLOSURE POURS)



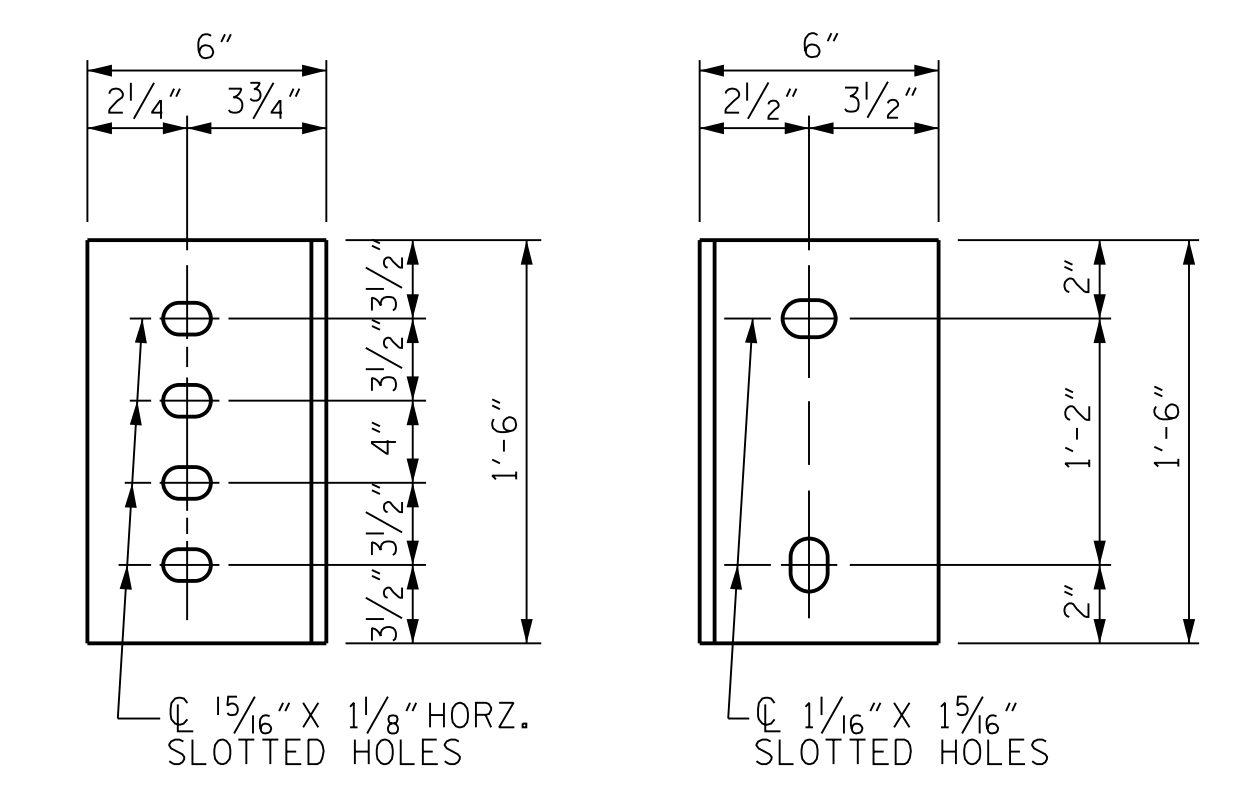
GIRDER 6 OR 12 GIRDER 7 OR 13
PART SECTION AT INTERMEDIATE DIAPHRAGM
IN CLOSURE POUR BAY



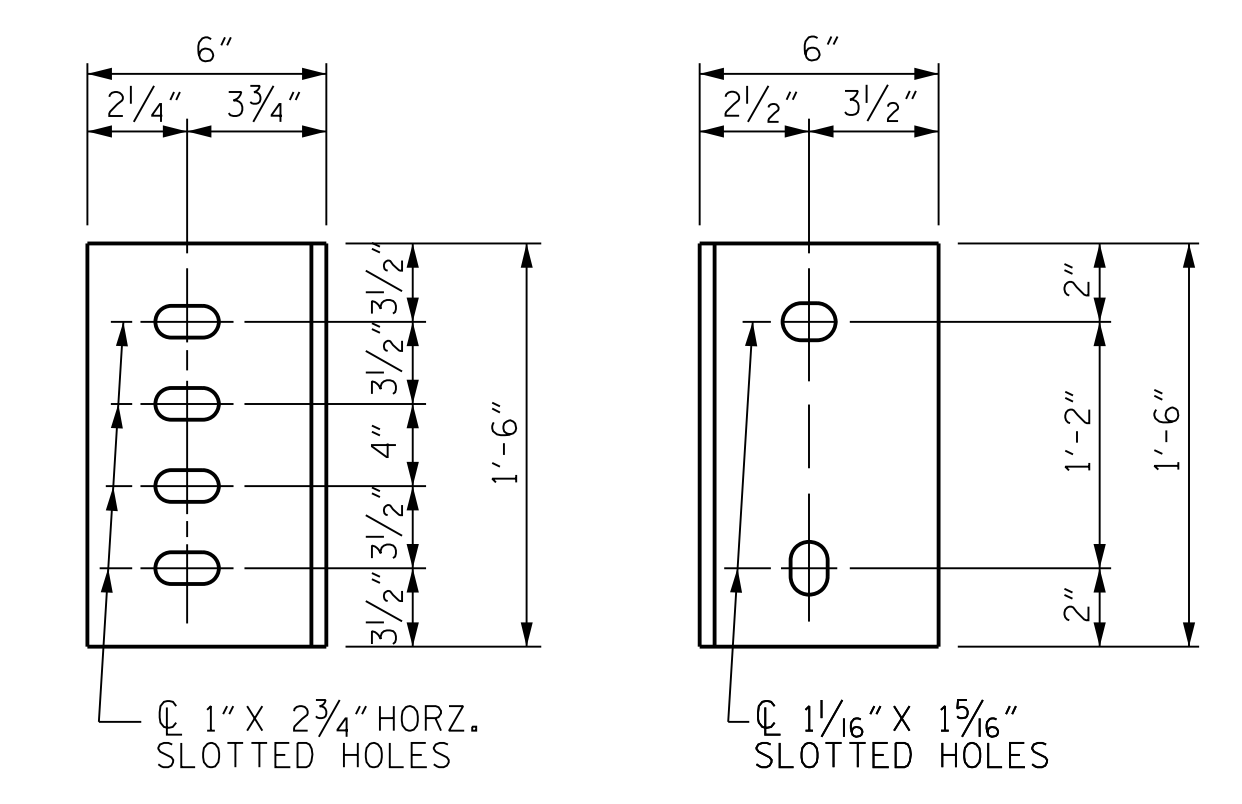
SECTION A-A CONNECTION DETAILS SECTION B-B



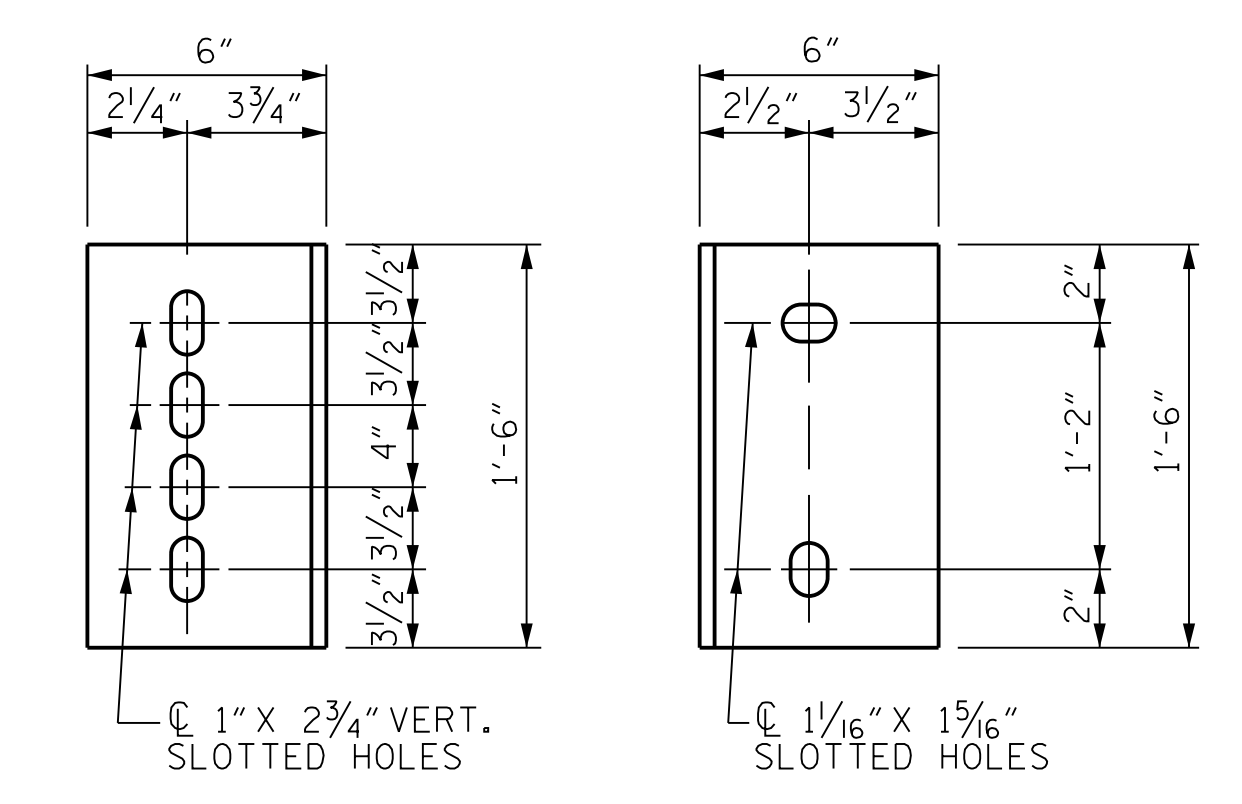
BOLT WITH DTI ASSEMBLY DETAIL



DIAPHRAGM FACE WEB FACE
TYPE I CONNECTOR PLATE DETAILS



DIAPHRAGM FACE WEB FACE
TYPE II CONNECTOR PLATE DETAILS



DIAPHRAGM FACE WEB FACE
TYPE III CONNECTOR PLATE DETAILS

STRUCTURAL STEEL NOTES

ALL INTERMEDIATE DIAPHRAGM STEEL AND CONNECTOR PLATES SHALL BE AASHTO M270 GRADE 50 OR APPROVED EQUAL.

TENSION ON THE ASTM A325 BOLTS THROUGH THE CHANNEL MEMBER SHALL BE CALIBRATED USING DIRECT TENSION INDICATOR WASHERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TENSION ON THE ASTM A449 BOLTS THROUGH THE GIRDER WEB SHALL BE SNUG TIGHTENED FOLLOWED BY AN ADDITIONAL 1/4 TURN.

THE PLATES, BENT PLATES, CHANNELS, AND ANGLES SHALL BE GALVANIZED OR METALLIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. FOR THERMAL SPRAYED COATINGS (METALLIZATION), SEE SPECIAL PROVISIONS.

FOR METALLIZATION, APPLY A THERMAL SPRAYED COATING WITH A SEAL COAT TO ALL STEEL DIAPHRAGM SURFACES IN ACCORDANCE WITH THE DEPARTMENTS THERMAL SPRAYED COATINGS (METALLIZATION) PROGRAM, THERMAL SPRAYED COATINGS SPECIAL PROVISION AND SECTION 442 OF THE STANDARD SPECIFICATIONS.

GALVANIZE THE HIGH STRENGTH BOLTS, NUTS, WASHERS AND DIRECT TENSION INDICATORS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

USE AN ASTM F436 HARDENED WASHER WITH STANDARD AND SLOTTED HOLES UNDER EACH BOLT HEAD AND NUT.

FOR BOLTS THROUGH THE GIRDER WEB, PROVIDE SUFFICIENT LENGTH OF THREADS ON ALL BOLTS TO ACCOMMODATE WASHERS AND THE THICKNESS OF CONNECTING MEMBER PLUS AT LEAST 1/4" PROJECTION BEYOND THE NUT.

INTERMEDIATE DIAPHRAGM ASSEMBLY SHALL COMPLY WITH SECTION 1072 OF THE STANDARD SPECIFICATIONS.

SUBMIT TWO SETS OF WORKING DRAWINGS FOR THE INTERMEDIATE DIAPHRAGM ASSEMBLY FOR REVIEW, COMMENTS AND ACCEPTANCE. AFTER REVIEW, COMMENTS, AND ACCEPTANCE, SUBMIT SEVEN SETS FOR DISTRIBUTION.

IN THE EXTERIOR BAYS, PLACE TEMPORARY STRUTS BETWEEN PRESTRESSED GIRDERS ADJACENT TO THE STEEL DIAPHRAGMS. STRUTS SHALL REMAIN IN PLACE 3 DAYS AFTER CONCRETE IS PLACED.

THE COST OF THE STEEL DIAPHRAGMS AND ASSEMBLIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE GIRDERS.

THE INTERMEDIATE STEEL DIAPHRAGMS IN THE CLOSURE BAYS SHALL BE INSTALLED AFTER THE TWO ADJACENT DECK SECTIONS ARE PLACED, AND BEFORE THE CLOSURE POUR IS PLACED.

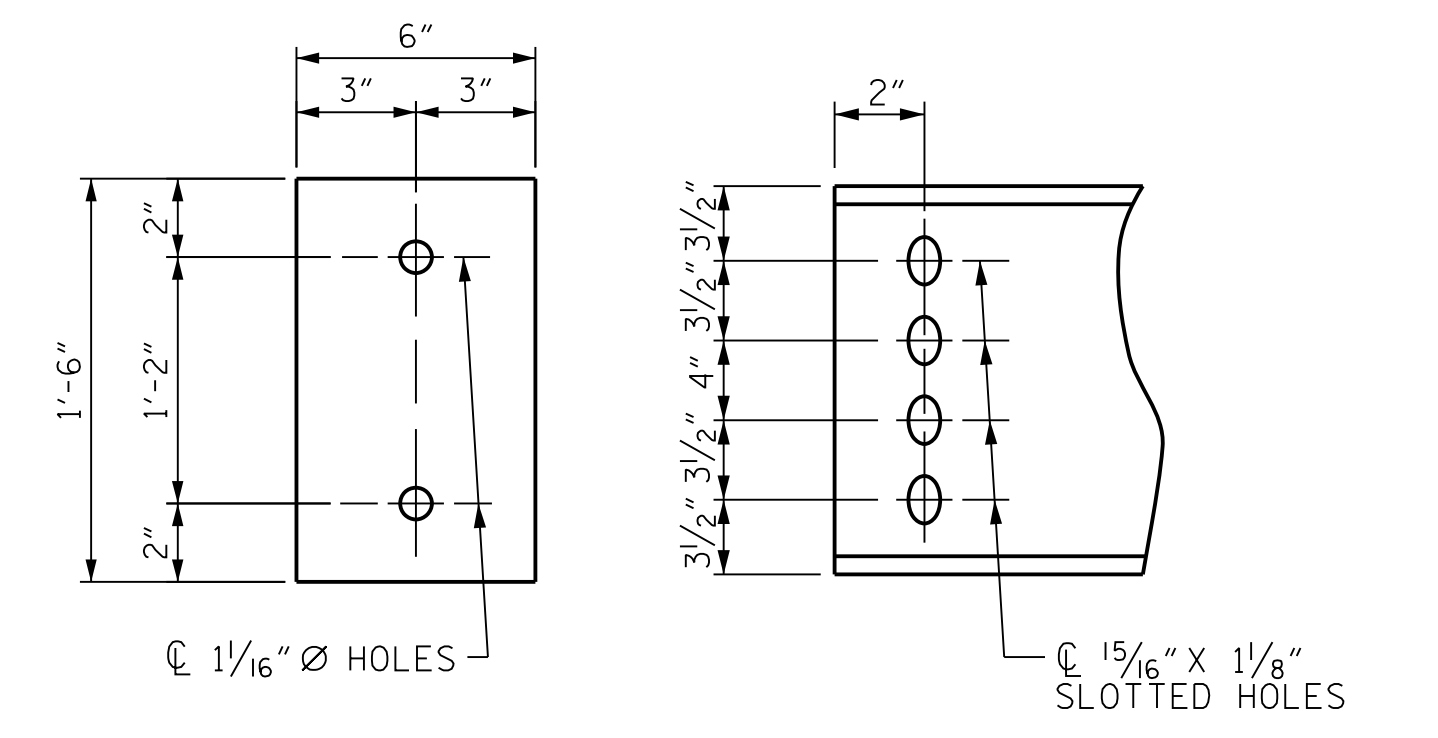


PLATE DETAIL CHANNEL END

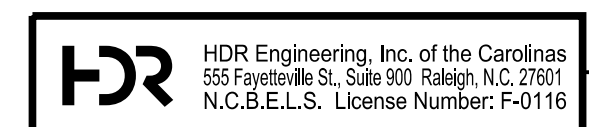
PROJECT NO. U-2579AB
FORSYTH COUNTY
STATION: 47+28.33 -Y15REV-



10/18/2021

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
INTERMEDIATE STEEL
DIAPHRAGMS

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS	
1	--	--	3	--	--	61	
2	--	--	4	--	--	61	



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PLOT DRIVER: NCDOT.pdf_color_eng-50dpi
 USER: PPETERSO DATE: 10/14/2021
 FILE: ...SUPERSTRUCTURE.INT
 PENTABLE: NCDOT STRUCTURES DEFAULT PEN.tbl
 TIME: 3:48:02 PM