

8'-11'' 4" THREAD THREAD 4" P 1/2" X 5" Ø WASHER AND HEX NUT (EACH END)

## 11/4" Ø TIE ROD ASSEMBLY

(<u>6</u> COMPLETE ASSEMBLIES REQUIRED)

TWO EMBEDDED PLATES "B-1" ARE REQUIRED FOR EACH GIRDER.

UPSTATION \_ UPSTATION \_ © 3″Ø CORED OR FORMED HOLE · € 3″Ø CORED OR FORMED HOLE € 3″Ø CORED OR FORMED HOLE - PRESTRESSED ----CONCRETE GIRDER DIM. "A" DIM. "B" DIM. "D" DIM. "E" DIM. "F" <u>ELEVATION</u> <u>ELEVATION</u>

## TIE ROD PLACEMENT DETAILS

TIE ROD PLACEMENT TABLE													
SPAN "A"							SPAN "B"						
	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"	DIM."F"		DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"	DIM."F"
GIRDER A1	25′-2′′	29'-91/2''	1′-10′′		Washington Andrews	* Strafferendelserverstaten	GIRDER B1	29'-91/4''	34'-43/4''	1′-10′′	Material continues	***************	
GIRDER A2			1′-10′′	25′-2′′	4'-71/2"	25′-2′′	GIRDER B2	***************************************		1′-10′′	29'-91/4''	4'-71/2''	29'-91/4''
GIRDER A3	udo de la constanta de la cons		1'-10''	25′-2′′	4'-71/2''	25′-2′′	GIRDER B3			1′-10′′	29'-91/4''	4'-71/2''	29'-91/4''
GIRDER A4	29'-91/2''	25′-2′′	1'-10''				GIRDER B4	34'-43/4''	29'-91/4''	1′-10′′			

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW-RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TIE ROD ASSEMBLY SHALL BE AASHTO M270 GRADE 36 STRUCTURAL STEEL.

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES. INDICATED IN ELEVATION VIEW. FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. BEVEL EDGES OF PLATE 'B-1" TO GIVE CLOSE FIT BUT NOT TIGHT FIT TO STEEL CASTING FORM.

ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED EQUAL, AND SHALL MEET THE TYPE "B" REQUIREMENTS OF SUBSECTION 7.3 OF THE ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

AT ENDS OF GIRDERS TO BE EMBEDDED IN CONCRETE DIAPHRAGMS, PRESTRESSING STRANDS MAY EXTEND A MAXIMUM OF 2"BEYOND THE GIRDER ENDS. OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

FOR GIRDERS IN SPAN "A" AND SPAN "C", THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI.

FOR GIRDERS IN SPAN "B", THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4800 PSI.

DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS. PRESET ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

RAKED TO A DEPTH OF 1/4". FOR VERTICAL CRACKS IN PRESTRESSED CONCRETE GIRDERS PRIOR TO

THE TOP SURFACE OF THE GIRDER, EXCLUDING THE OUTSIDE 4", SHALL BE

DETENSIONING, SEE SPECIAL PROVISIONS.

ALL REINFORCING STEEL SHALL BE GRADE 60.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

PROJECT NO. B-3885ORANGE COUNTY STATION: 17+75.00 -L-

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS

**REVISIONS** SHEET NO. S-13 NO. BY: DATE: DATE: TOTAL SHEETS

DRAWN BY: P.C. BREWER DATE: 7/22/03 CHECKED BY: S.B. WILLIAMS DATE: 7/31/03