

PRECAST LONGITUDINAL HALF-SECTION

SHOWING POST-TENSIONING CABLE PATHS

‡ MEASURED BEFORE POST-TENSIONING.

SEE "DUCT SPLICE DETAIL"

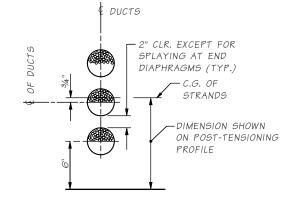
2'-0" CLOSURE

CLOSURE DETAIL

-2 G2 #5, G3 #5, 2 G7 #3 ~ 5 SPA. @ 4" = 1'-8"

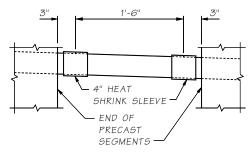
6 <u>G</u>4 #5

-1'-6" MIN. LAP SPLICE (TYP.)



TENDON IN SAG CURVE

STRAND LOCATION DETAIL



DUCT SPLICE DETAIL

POST-TENSIONING TABLE

SPAN		MIN. CONC. COMPRESSIVE STRENGTH (KSI)		OF	PRESTRESSING LOAD (KIPS)		TOTAL				TEMPORARY STRANDS	
	GIRDER				IACKING	AFTER	PRESTRESS	E1 (IN.)	E2 (IN.)	E3 (IN.)	NUMBER OF	JACKING
		GIRDER	CLOSURE	STRANDS	JACKING	SEATING	LOSS (KSI)				STRANDS	FORCE (KIPS)

POST-TENSIONING NOTES

- 1. THE MINIMUM COMPRESSIVE STRENGTH OF THE CAST-IN-PLACE CONCRETE AT THE CLOSURE AT THE TIME OF POST-TENSIONING SHALL BE AS SHOWN IN POST-TENSIONING
- THE MAXIMUM OUTSIDE DIAMETER OF THE DUCT SHALL BE ??? INCHES. THE AREA OF THE DUCT SHALL BE AT LEAST 2.5 TIMES THE NET AREA OF THE PRESTRESSING STEEL IN THE DUCT.
- 3. THE DESIGN IS BASED ON [½"Ø OR O.6"Ø] LOW RELAXATION STRANDS WITH AN ANCHOR SET OF 36", A CURVATURE FRICTION COEFFICIENT, μ = 0.20 AND A WOBBLE FRICTION COEFFICIENT, k = 0.0002/FT. THE ACTUAL ANCHOR SET AND JACKING FORCE USED BY THE CONTRACTOR SHALL BE SPECIFIED IN THE SHOP PLANS AND INCLUDED IN THE TRANSFER FORCE CALCULATIONS.
- 4. THE DESIGN IS BASED ON THE ESTIMATED PRESTRESS LOSS OF POST-TENSIONING STRANDS SHOWN IN THE POST-TENSIONING TABLE DUE TO STEEL RELAXATION, ELASTIC SHORTENING CREEP AND SHRINKAGE OF CONCRETE.

- 5. THE CONTRACTOR SHALL SUBMIT THE STRESSING SEQUENCE AND ELONGATION CALCULATIONS TO THE ENGINEER FOR APPROVAL. ALL LOSSES DUE TO TENDON VERTICAL AND HORIZONTAL CURVATURE MUST BE INCLUDED IN ELONGATION CALCULATIONS. THE STRESSING SEQUENCE SHALL MEET THE FOLLOWING CRITERIA:
 - A. THE PRESTRESSING FORCE SHALL BE DISTRIBUTED WITH AN APPROXIMATELY EQUAL AMOUNT IN EACH WEB AND SHALL BE PLACED SYMMETRICALLY ABOUT THE CENTERLINE OF THE BRIDGE.
 - B. NO MORE THAN ONE-HALF OF THE PRESTRESSING FORCE IN ANY WEB MAY BE STRESSED BEFORE AN EQUAL FORCE IS STRESSED IN THE ADJACENT WEBS. AT NO TIME DURING STRESSING OPERATION WILL MORE THAN 1/6 OF THE TOTAL PRESTRESSING FORCE IS APPLIED ECCENTRICALLY ABOUT THE CENTERLINE OF THE BRIDGE
- 6. ALL TENDONS SHALL BE STRESSED FROM ONE END.
- 7. TEMPORARY STRANDS SHALL BE POST-TENSIONED IN ACCORDANCE WITH SECTION 6-02.3(25)L OF THE STANDARD SPECIFICATIONS. TEMPORARY STRANDS MAY BE POST-TENSIONED ON THE SAME DAY THE PRETENSIONING IS RELEASED INTO THE GIRDER.

& GIRDER	
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	"0
	o" MIN.

POST-TENSIONING STRAND PATTERN AT & SPAN

Bridge Design Engr. M·\STANDARDS\Girders\PT Wide Flange\WF95PTG1 MAN REGION STATE FED. AID PROJ. NO. SHEET TOTAL NO. SHEETS Supervisor Designed By 10 WASH Checked Bv Detailed By JOB NUMBER Bridge Projects Engr. Prelim, Plan By Architect/Specialist DATE REVISION BY APP'D

BRIDGE AND STRUCTURES OFFICE



STANDARD
PRESTRESSED CONCRETE GIRDERS

WF95PTG SPLICED GIRDER
DETAILS 1 OF 5

5.9-A3-

Tue Mar 10 15:16:20 2015