

## EMBEDDED PLATE "B-1" DETAILS FOR AASHTO TYPE III GIRDER (2 REQ'D PER GIRDER)

DEAD LOAD DEFLECTION TABLE FOR GIRDERS																						
SPAN A OR B																						
0.6" Ø LOW RELAXATION		GIRDERS 1 & 5																				
TWENTIETH POINTS		0	<b>.</b> 05	.10	<b>.</b> 15	<b>.</b> 20	<b>.</b> 25	<b>.</b> 30	<b>.</b> 35	.40	<b>.</b> 45	<b>.</b> 50	<b>.</b> 55	.60	<b>.</b> 65	.70	<b>.</b> 75	.80	<b>.</b> 85	.90	<b>.</b> 95	0
CAMBER (GIRDER ALONE IN PLACE)	<b>†</b>	0	0.027	0.053	0.077	0.100	0.120	0.137	0.150	0.160	0.166	0.168	0.166	0.160	0.150	0.137	0.120	0.100	0.077	0.053	0.027	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	<b>V</b>	0	0.019	0.038	0.055	0.071	0.086	0.098	0.107	0.114	0.119	0.120	0.119	0.114	0.107	0.098	0.086	0.071	0.055	0.038	0.019	0
FINAL CAMBER	<b>†</b>	0	1/16"	3/16"	1/4"	3/8"	7∕ <sub>16</sub> "	1/2"	1/2"	9/16"	%6"	9/16"	%6"	%6"	1/2"	1/2"	7∕ <sub>16</sub> "	3/8"	1/4"	3/16"	1/16"	0
0.6"Ø LOW RELAXATION		GIRDERS 2, 3, & 4																				
TWENTIETH POINTS		0	.05	.10	<b>.</b> 15	.20	<b>.</b> 25	.30	.35	.40	<b>.</b> 45	<b>.</b> 50	<b>.</b> 55	.60	<b>.</b> 65	.70	<b>.</b> 75	.80	<b>.</b> 85	.90	<b>.</b> 95	0
CAMBER (GIRDER ALONE IN PLACE)	<b>†</b>	0	0.027	0.053	0.077	0.100	0.120	0.137	0.150	0.160	0.166	0.168	0.166	0.160	0.150	0.137	0.120	0.100	0.077	0.053	0.027	0
* DEFLECTION DUE TO SUPERIMPOSED D.L.	<b>∀</b>	0	0.020	0.040	0.059	0.076	0.091	0.104	0.114	0.122	0.126	0.128	0.126	0.122	0.114	0.104	0.091	0.076	0.059	0.040	0.020	0
FINAL CAMBER	<b>†</b>	0	1/16"	1/8"	1/4"	5/16"	5/16"	3/8"	7/ <sub>16</sub> "	7∕ <sub>16</sub> "	1/2"	1/2"	1/2"	7∕ <sub>16</sub> "	7∕ <sub>16</sub> "	3/8"	5/16"	5/16"	1/4"	1/8"	1/16"	0

\* INCLUDES FUTURE WEARING SURFACE

DESIGN ENGINEER OF RECORD:

ASSEMBLED BY : P.K. NEWTON

CHECKED BY : M.K. BEARD

DRAWN BY: ELR 11/91 CHECKED BY: GRP 11/91

P. D. BRYANT

\_ DATE : <u>3/1/21</u>

DATE: 1/15/21

DATE: 2/8/21

MAA/TMG MAA/TMG MAA/THC

ALL VALUES ARE SHOWN IN FEET (DECIMAL FORM ), EXCEPT "FINAL CAMBER ", WHICH IS GIVEN IN INCHES (FRACTION FORM ).

PROJECT NO. BR-0017 DUPLIN STATION: 18+27.00 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STANDARD

PRESTRESSED CONCRETE GIRDER CONTINUOUS FOR LIVE LOAD DETAILS

P. Korey Newton

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

ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THROUGH 1020 OR APPROVED

APPLY EPOXY PROTECTIVE COATING TO END OF GIRDER SURFACES INDICATED IN

EMBEDDED PLATE "B-1" SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD

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 OR END WALLS, PRESTRESSING STRANDS MAY EXTEND A MAXIMUM OF 2"BEYOND THE GIRDER ENDS.

OTHERWISE, PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE GIRDER ENDS.

ANCHORS MAY BE NECESSARY IN THE PRESTRESSED CONCRETE GIRDER.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE GIRDER SHALL BE DONE WHEN CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 5700 PSI.

DEPENDING ON THE TYPE OF SYSTEM USED TO SUPPORT THE DECK SLAB FORMS, PRESET

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

IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL SHALL BE GRADE 60.

ELEVATION VIEW.

SPECIFICATIONS.

DEPTH OF 1/4".

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3/30/2021		SHEET NO					
CUMENT NOT CONSIDERED	NO.	BY:	DATE:	NO.	BY:	DATE:	S-11
FINAL UNLESS ALL	1			3			TOTAL SHEETS
SIGNATURES COMPLETED	2			4			28
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STD. NO. PCG9 (Sht. 2)