

LOAD FACTORS:

DESIGN LOAD RATING FACTORS	LIMIT STATE	$\gamma_{DC}$	$\gamma_{DW}$
	STRENGTH I	1.25	1.50
	SERVICE III	1.00	1.00

LOAD AND RESISTANCE FACTOR RATING (LRFD) SUMMARY FOR PRESTRESSED CONCRETE GIRDERS

LEVEL	VEHICLE	WEIGHT (W) (TONS)	CONTROLLING LOAD RATING #	MINIMUM RATING FACTORS (RF)	TONS = W X RF	STRENGTH I LIMIT STATE										SERVICE III LIMIT STATE					COMMENT NUMBER			
						MOMENT					SHEAR					MOMENT								
						LIVELOAD FACTORS	DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN	GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN	GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	LIVELOAD FACTORS	DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN		GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	
DESIGN LOAD RATING	HL-93(Inv)	N/A	1	1.07	--	1.75	0.79	1.19	A	I	33.625	0.88	1.19	A	I	47.075	0.80	0.88	1.07	A	I	33.625		
	HL-93(0pr)	N/A	--	1.54	--	1.35	0.79	1.54	A	I	33.625	0.88	1.55	A	I	47.075	N/A	--	--	--	--	--		
	HS-20(Inv)	36.000	2	1.38	49.612	1.75	0.79	1.53	A	I	33.625	0.88	1.43	A	I	47.075	0.80	0.79	1.38	A	I	33.625		
	HS-20(0pr)	36.000	--	1.85	66.609	1.35	0.79	1.99	A	I	33.625	0.88	1.85	A	I	47.075	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SV	SNSH	13.500	--	3.06	41.323	1.40	0.79	4.26	A	I	33.625	0.88	4.04	A	I	47.075	0.80	0.79	3.06	A	I	33.625	
		SNGARBS2	20.000	--	2.30	46.044	1.40	0.79	3.20	A	I	33.625	0.88	2.93	A	I	20.175	0.80	0.79	2.30	A	I	33.625	
		SNAGRIS2	22.000	--	2.19	48.163	1.40	0.79	3.04	A	I	33.625	0.88	2.75	A	I	47.075	0.80	0.79	2.19	A	I	33.625	
		SNCOTTS3	27.250	--	1.52	41.524	1.40	0.79	2.12	A	I	33.625	0.88	2.02	A	I	20.175	0.80	0.79	1.52	A	I	33.625	
		SNAGGRS4	34.925	--	1.28	44.756	1.40	0.79	1.78	A	I	33.625	0.88	1.72	A	I	47.075	0.80	0.79	1.28	A	I	33.625	
		SNS5A	35.550	--	1.25	44.531	1.40	0.79	1.74	A	I	33.625	0.88	1.77	A	I	47.075	0.80	0.79	1.25	A	I	33.625	
		SNS6A	39.950	--	1.15	46.050	1.40	0.79	1.60	A	I	33.625	0.88	1.63	A	I	47.075	0.80	0.79	1.15	A	I	33.625	
	SNS7B	42.000	--	1.10	46.109	1.40	0.79	1.53	A	I	33.625	0.88	1.63	A	I	47.075	0.80	0.79	1.10	A	I	33.625		
	TTST	TNAGRIT3	33.000	--	1.41	46.419	1.40	0.79	1.96	A	I	33.625	0.88	1.93	A	I	47.075	0.80	0.79	1.41	A	I	33.625	
		TNT4A	33.075	--	1.41	46.761	1.40	0.79	1.97	A	I	33.625	0.88	1.86	A	I	47.075	0.80	0.79	1.41	A	I	33.625	
		TNT6A	41.600	--	1.16	48.224	1.40	0.79	1.61	A	I	33.625	0.88	1.79	A	I	20.175	0.80	0.79	1.16	A	I	33.625	
		TNT7A	42.000	--	1.17	49.004	1.40	0.79	1.62	A	I	33.625	0.88	1.72	A	I	47.075	0.80	0.79	1.17	A	I	33.625	
		TNT7B	42.000	--	1.21	50.879	1.40	0.79	1.68	A	I	33.625	0.88	1.57	A	I	47.075	0.80	0.79	1.21	A	I	33.625	
		TNAGRIT4	43.000	--	1.15	49.415	1.40	0.79	1.60	A	I	33.625	0.88	1.52	A	I	47.075	0.80	0.79	1.15	A	I	33.625	
TNAGT5A		45.000	--	1.08	48.691	1.40	0.79	1.50	A	I	33.625	0.88	1.54	A	I	47.075	0.80	0.79	1.08	A	I	33.625		
TNAGT5B	45.000	3	1.07	48.043	1.40	0.79	1.48	A	I	33.625	0.88	1.44	A	I	47.075	0.80	0.79	1.07	A	I	33.625			

NOTES:

MINIMUM RATING FACTORS ARE BASED ON THE STRENGTH I AND SERVICE III LIMIT STATES.

ALLOWABLE STRESSES FOR SERVICE III LIMIT STATE ARE AS REQUIRED FOR DESIGN.

# CONTROLLING LOAD RATING

1 DESIGN LOAD RATING (HL-93)

2 DESIGN LOAD RATING (HS-20)

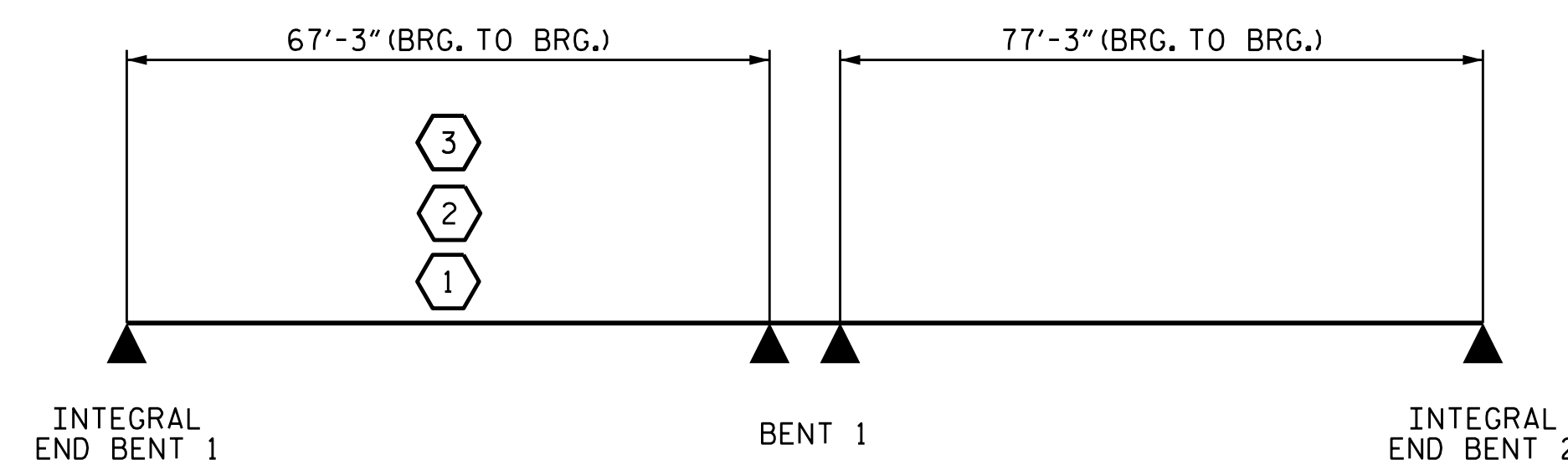
3 LEGAL LOAD RATING \*\*

\*\* SEE CHART FOR VEHICLE TYPE

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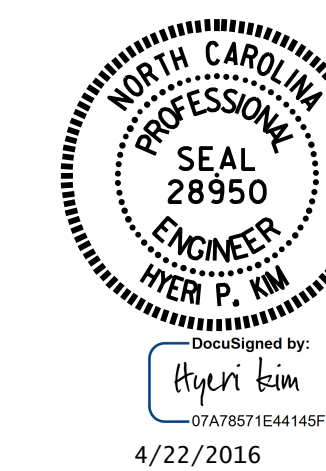
GIRDER LOCATION

I - INTERIOR GIRDER  
EL - EXTERIOR LEFT GIRDER  
ER - EXTERIOR RIGHT GIRDER



LRFR SUMMARY

PROJECT NO. B-4766  
IREDELL COUNTY  
 STATION: 16+28.00 -L-



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

STANDARD  
 LRFR SUMMARY FOR  
 PRESTRESSED  
 CONCRETE GIRDERS  
 (NON-INTERSTATE TRAFFIC)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-4
1			3			TOTAL SHEETS
2			4			26

ASSEMBLED BY : H. P. KIM DATE : 8/5/2015  
 CHECKED BY : H. A. LOCKLEAR DATE : 8/5/2015  
 DRAWN BY : MAA 1/08 REV. 11/2/08RR MAA/GM DESIGN ENGINEER OF RECORD:  
 CHECKED BY : GM/DI 2/08 REV. 10/1/11 MAA/GM H. P. KIM DATE : 1/26/16

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED