

LOAD FACTORS:

DESIGN LOAD RATING FACTORS	LIMIT STATE	γ_{DC}	γ_{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	1.00	--	1.75	0.27	1.16	B	EL	37.002	0.495	1.79	B	EL	7.401	0.80	0.27	1.00	B	EL	37.002		
	HL-93(0pr)	N/A	--	1.50	--	1.35	0.27	1.50	B	EL	37.002	0.495	2.33	B	EL	7.401	N/A	--	--	--	--	--		
	HS-20(Inv)	36.000	②	1.32	47.401	1.75	0.27	1.52	B	EL	37.002	0.495	2.26	B	EL	7.401	0.80	0.27	1.32	B	EL	37.002		
	HS-20(0pr)	36.000	--	1.97	70.977	1.35	0.27	1.97	B	EL	37.002	0.495	2.93	B	EL	7.401	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SV	SNSH	13,500	--	2.98	40.258	1.40	0.27	4.31	B	EL	37.002	0.495	6.75	B	EL	7.401	0.80	0.27	2.98	B	EL	37.002	
		SNGARBS2	20,000	--	2.22	44.361	1.40	0.27	3.2	B	EL	37.002	0.495	4.80	B	EL	7.401	0.80	0.27	2.22	B	EL	37.002	
		SNAGRIS2	22,000	--	2.10	46.172	1.40	0.27	3.03	B	EL	37.002	0.495	4.45	B	EL	7.401	0.80	0.27	2.10	B	EL	37.002	
		SNCOTTS3	27,250	--	1.48	40.435	1.40	0.27	2.14	B	EL	37.002	0.495	3.37	B	EL	7.401	0.80	0.27	1.48	B	EL	37.002	
		SNAGGRS4	34,925	--	1.24	43.251	1.40	0.27	1.79	B	EL	37.002	0.495	2.79	B	EL	7.401	0.80	0.27	1.24	B	EL	37.002	
		SNS5A	35,550	--	1.21	43.056	1.40	0.27	1.75	B	EL	37.002	0.495	2.83	B	EL	7.401	0.80	0.27	1.21	B	EL	37.002	
		SNS6A	39,950	--	1.11	44.366	1.40	0.27	1.6	B	EL	37.002	0.495	2.58	B	EL	7.401	0.80	0.27	1.11	B	EL	37.002	
	TTST	SNS7B	42,000	--	1.06	44.417	1.40	0.27	1.53	B	EL	37.002	0.495	2.53	B	EL	7.401	0.80	0.27	1.06	B	EL	37.002	
		TNAGRIT3	33,000	--	1.35	44.683	1.40	0.27	1.96	B	EL	37.002	0.495	3.07	B	EL	7.401	0.80	0.27	1.35	B	EL	37.002	
		TNT4A	33,075	--	1.36	44.976	1.40	0.27	1.96	B	EL	37.002	0.495	2.99	B	EL	7.401	0.80	0.27	1.36	B	EL	37.002	
		TNT6A	41,600	--	1.11	46.224	1.40	0.27	1.6	B	EL	37.002	0.495	2.69	B	EL	7.401	0.80	0.27	1.11	B	EL	37.002	
		TNT7A	42,000	--	1.12	46.887	1.40	0.27	1.61	B	EL	37.002	0.495	2.64	B	EL	7.401	0.80	0.27	1.12	B	EL	37.002	
		TNT7B	42,000	--	1.15	48.469	1.40	0.27	1.67	B	EL	37.002	0.495	2.47	B	EL	7.401	0.80	0.27	1.15	B	EL	37.002	
		TNAGRIT4	43,000	--	1.10	47.234	1.40	0.27	1.59	B	EL	37.002	0.495	2.39	B	EL	7.401	0.80	0.27	1.10	B	EL	37.002	
TNAGT5A	45,000	--	1.04	46.621	1.40	0.27	1.5	B	EL	37.002	0.495	2.38	B	EL	7.401	0.80	0.27	1.04	B	EL	37.002			
TNAGT5B	45,000	③	1.02	46.070	1.40	0.27	1.48	B	EL	37.002	0.495	2.28	B	EL	7.401	0.80	0.27	1.02	B	EL	37.002			

NOTES:

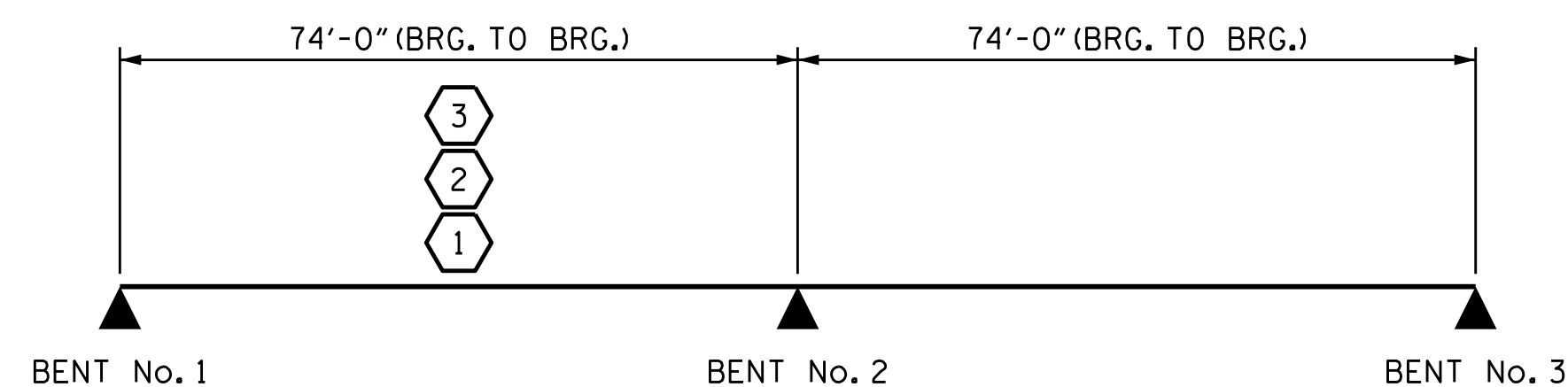
MINIMUM RATING FACTORS ARE BASED ON THE STRENGTH I AND SERVICE III LIMIT STATES.

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

COMMENTS:

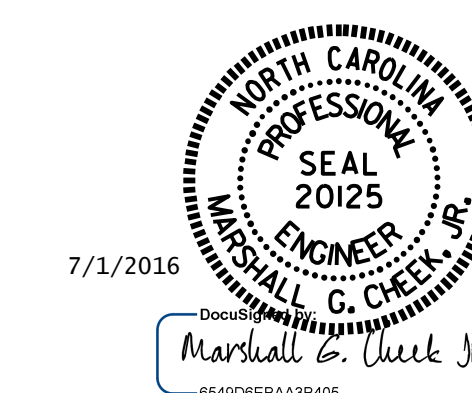
- 1.
- 2.
- 3.
- 4.

③	CONTROLLING LOAD RATING
①	DESIGN LOAD RATING (HL-93)
②	DESIGN LOAD RATING (HS-20)
③	LEGAL LOAD RATING **
** SEE CHART FOR VEHICLE TYPE	
GIRDER LOCATION	
I - INTERIOR GIRDER EL - EXTERIOR LEFT GIRDER ER - EXTERIOR RIGHT GIRDER	



LRFR SUMMARY
SPAN B & C

PROJECT NO. B-5125
MACON COUNTY
 STATION: 13+25.89 -L-



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

LRFR SUMMARY FOR
 PRESTRESSED
 CONCRETE GIRDERS
 SPAN B & C

ASSEMBLED BY : W.J. HARRIS	DATE : 5/10/16
CHECKED BY : M.G. CHEEK	DATE : 5/10/16
DRAWN BY : MAA	REV. 11/2/08RR MAA/GM
CHECKED BY : GM/DI 2/08	REV. 10/1/11 MAA/GM

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO. S-5
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 43
2			4			