

LOAD FACTORS:

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

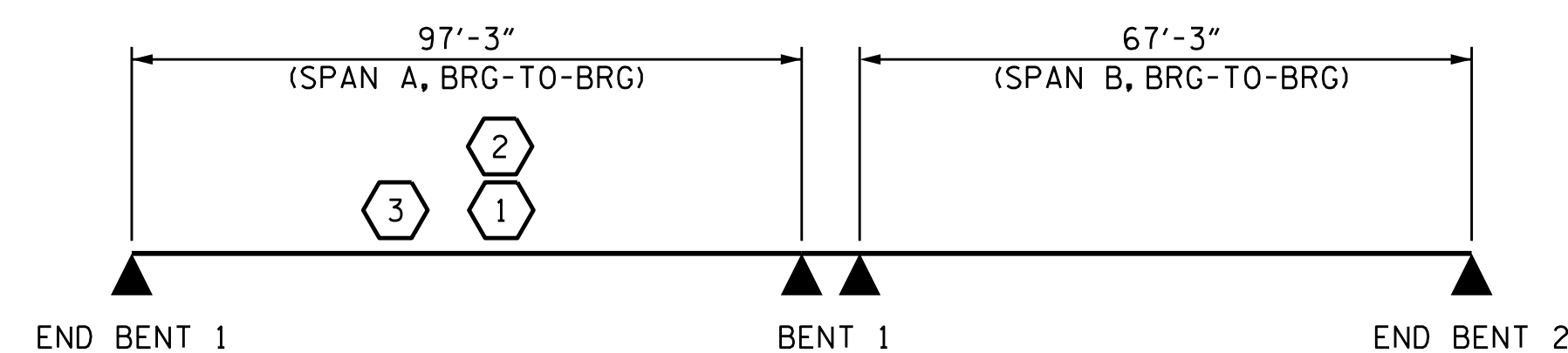
LOAD AND RESISTANCE FACTOR RATING (LRFR) SUMMARY FOR PRESTRESSED CONCRETE GIRDERS

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								
						LIVE-LOAD FACTORS ( $\gamma_{LL}$ )	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)	LIVE-LOAD FACTORS ( $\gamma_{LL}$ )	DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN		GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	
DESIGN LOAD RATING	HL-93 (INVENTORY)	N/A	①	1.177	0.000	1.75	0.746	1.466	A	I	48.63	0.918	1.509	A	I	29.18	0.80	0.746	1.177	A	I	48.63		
	HL-93 (OPERATING)	N/A		1.177	0.000	1.35	0.746	1.901	A	I	48.63	0.918	1.957	A	I	29.18	N/A	0.746	1.177	A	I	48.63		
	HS-20 (INVENTORY)	36.000	②	1.632	58.767	1.75	0.746	2.034	A	I	48.63	0.918	1.884	A	I	29.18	0.80	0.746	1.632	A	I	48.63		
	HS-20 (OPERATING)	36.000		1.632	58.767	1.35	0.746	2.637	A	I	48.63	0.918	2.442	A	I	29.18	N/A	0.746	1.632	A	I	48.63		
LEGAL LOAD RATING	SINGLE VEHICLE (SV)	SNSH	13.500		3.863	52.147	1.40	0.746	6.017	A	I	48.63	0.918	5.633	A	I	29.18	0.80	0.746	3.863	A	I	48.63	
		SNGARBS2	20.000		2.801	56.020	1.40	0.746	4.363	A	I	48.63	0.918	3.996	A	I	29.18	0.80	0.746	2.801	A	I	48.63	
		SNAGRIS2	22.000		2.621	57.669	1.40	0.746	4.083	A	I	48.63	0.918	3.706	A	I	29.18	0.80	0.746	2.621	A	I	48.63	
		SNCOTTS3	27.250		1.920	52.318	1.40	0.746	2.991	A	I	48.63	0.918	2.811	A	I	29.18	0.80	0.746	1.920	A	I	48.63	
		SNAGGRS4	34.925		1.575	54.992	1.40	0.746	2.453	A	I	48.63	0.918	2.327	A	I	29.18	0.80	0.746	1.575	A	I	48.63	
		SNS5A	35.550		1.542	54.809	1.40	0.746	2.402	A	I	48.63	0.918	2.353	A	I	29.18	0.80	0.746	1.542	A	I	48.63	
		SNS6A	39.950		1.402	56.025	1.40	0.746	2.185	A	I	48.63	0.918	2.145	A	I	29.18	0.80	0.746	1.402	A	I	48.63	
		SNS7B	42.000		1.335	56.072	1.40	0.746	2.08	A	I	48.63	0.918	2.104	A	I	29.18	0.80	0.746	1.335	A	I	48.63	
	TRUCK TRACTOR SEMI-TRAILER (TTST)	TNAGRIT3	33.000		1.707	56.316	1.40	0.746	2.658	A	I	48.63	0.918	2.554	A	I	29.18	0.80	0.746	1.707	A	I	48.63	
		TNT4A	33.075		1.711	56.584	1.40	0.746	2.665	A	I	48.63	0.918	2.492	A	I	29.18	0.80	0.746	1.711	A	I	48.63	
		TNT6A	41.600		1.387	57.716	1.40	0.746	2.161	A	I	48.63	0.918	2.235	A	I	29.18	0.80	0.746	1.387	A	I	48.63	
		TNT7A	42.000		1.388	58.309	1.40	0.746	2.163	A	I	48.63	0.918	2.191	A	I	29.18	0.80	0.746	1.388	A	I	48.63	
		TNT7B	42.000		1.422	59.708	1.40	0.746	2.215	A	I	48.63	0.918	2.056	A	I	29.18	0.80	0.746	1.422	A	I	48.63	
		TNAGRIT4	43.000		1.363	58.619	1.40	0.746	2.124	A	I	48.63	0.918	1.992	A	I	29.18	0.80	0.746	1.363	A	I	48.63	
		TNAGT5A	45.000		1.290	58.072	1.40	0.746	2.010	A	I	48.63	0.918	1.976	A	I	29.18	0.80	0.746	1.290	A	I	48.63	
TNAGT5B	45.000	③	1.279	57.577	1.40	0.746	1.993	A	I	48.63	0.918	1.895	A	I	29.18	0.80	0.746	1.279	A	I	48.63			

NOTES:

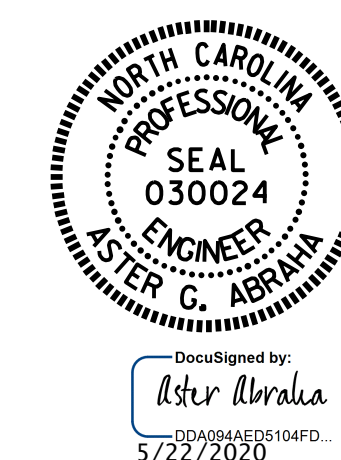
MINIMUM RATING FACTORS ARE BASED ON THE STRENGTH I AND SERVICE III LIMIT STATES.  
ALLOWABLE STRESSES FOR SERVICE III LIMIT STATE ARE AS REQUIRED FOR DESIGN.

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



LRFR SUMMARY

PROJECT NO. B-4931  
EDGEcombe COUNTY  
STATION: 16+99.00 -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			30

ASSEMBLED BY : A. Y. GODFREY DATE : 04/2020  
CHECKED BY : A. ABRAHA DATE : 04/2020  
DRAWN BY : MAA 1/08 REV. 11/2/08RR MAA/GM  
CHECKED BY : GM/DI 2/08 REV. 10/1/11 MAA/GM  
REV. 12/17 MAA/THC

DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL  
SIGNATURES COMPLETED