

LOAD FACTORS:

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

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:

DISTANCE FROM LEFT END OF SPAN IS MEASURED FROM  $\phi$  BEARING.

**#** CONTROLLING LOAD RATING

**1** DESIGN LOAD RATING (HL-93)

**2** DESIGN LOAD RATING (HS-20)

**3** LEGAL LOAD RATING \*\*

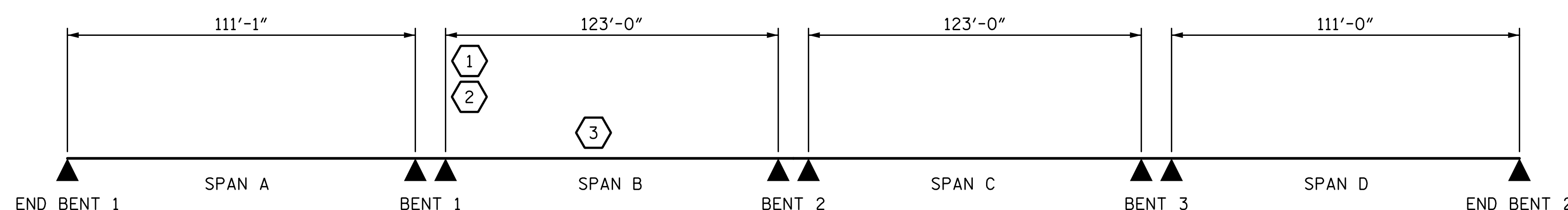
\*\* SEE CHART FOR VEHICLE TYPE

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GIRDER LOCATION

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

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			
						LIVE-LOAD FACTORS (%LL)	MOMENT					SHEAR					LIVE-LOAD FACTORS (%LL)	MOMENT						
							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)		DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN		GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (ft)	
DESIGN LOAD RATING	HL-93 (INVENTORY)	N/A	1	1.05	--	1.75	0.843	1.37	B	EL	61.5	0.914	1.05	B	I	12.3	0.80	0.843	1.20	B	EL	61.5		
	HL-93 (OPERATING)	N/A		1.55	--	1.35	0.843	1.78	B	EL	61.5	0.914	1.55	B	I	12.3	N/A	--	--	--	--	--		
	HS-20 (INVENTORY)	36.000	2	1.73	62.3	1.75	0.843	2.02	B	EL	61.5	0.914	1.73	B	I	12.3	0.80	0.843	1.76	B	EL	61.5		
	HS-20 (OPERATING)	36.000		2.37	85.3	1.35	0.843	2.62	B	EL	61.5	0.914	2.37	B	I	12.3	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SINGLE VEHICLE (SV)	SNSH		3.42	46.2	1.40	0.843	6.14	B	EL	61.5	0.914	5.99	B	I	12.3	0.80	0.843	3.42	B	EL	61.5		
		SNGARBS2	20.000		2.44	48.8	1.40	0.843	4.38	B	EL	61.5	0.914	4.11	B	I	12.3	0.80	0.843	2.44	B	EL	61.5	
		SNAGRIS2	22.000		2.27	49.9	1.40	0.843	4.07	B	EL	61.5	0.914	3.76	B	I	12.3	0.80	0.843	2.27	B	EL	61.5	
		SNCOTTS3	27.250		1.70	46.3	1.40	0.843	3.05	B	EL	61.5	0.914	2.88	B	I	12.3	0.80	0.843	1.70	B	EL	61.5	
		SNAGGRS4	34.925		1.38	48.2	1.40	0.843	2.47	B	EL	61.5	0.914	2.29	B	I	12.3	0.80	0.843	1.38	B	EL	61.5	
		SNS5A	35.550		1.35	48.0	1.40	0.843	2.43	B	EL	61.5	0.914	2.29	B	I	12.3	0.80	0.843	1.35	B	EL	61.5	
		SNS6A	39.950		1.22	48.7	1.40	0.843	2.19	B	EL	61.5	0.914	2.03	B	I	12.3	0.80	0.843	1.22	B	EL	61.5	
	SNS7B	42.000		1.16	48.7	1.40	0.843	2.09	B	EL	61.5	0.914	1.97	B	I	12.3	0.80	0.843	1.16	B	EL	61.5		
	TRUCK TRACTOR SEMI-TRAILER (TTS1)	TNAGRIT3	33.000		1.48	48.8	1.40	0.843	2.67	B	EL	61.5	0.914	2.49	B	I	12.3	0.80	0.843	1.48	B	EL	61.5	
		TNT4A	33.075		1.49	49.3	1.40	0.843	2.67	B	EL	61.5	0.914	2.45	B	I	12.3	0.80	0.843	1.49	B	EL	61.5	
		TNT6A	41.600		1.20	49.9	1.40	0.843	2.16	B	EL	61.5	0.914	2.05	B	I	12.3	0.80	0.843	1.20	B	EL	61.5	
		TNT7A	42.000		1.20	50.4	1.40	0.843	2.15	B	EL	61.5	0.914	2.01	B	I	12.3	0.80	0.843	1.20	B	EL	61.5	
		TNT7B	42.000		1.22	51.2	1.40	0.843	2.19	B	EL	61.5	0.914	1.93	B	I	12.3	0.80	0.843	1.22	B	EL	61.5	
		TNAGRIT4	43.000		1.17	50.3	1.40	0.843	2.11	B	EL	61.5	0.914	1.86	B	I	12.3	0.80	0.843	1.17	B	EL	61.5	
TNAGT5A		45.000	3	1.11	50.0	1.40	0.843	2.00	B	EL	61.5	0.914	1.80	B	I	12.3	0.80	0.843	1.11	B	EL	61.5		
TNAGT5B	45.000	3	1.11	50.0	1.40	0.843	1.99	B	EL	61.5	0.914	1.74	B	I	12.3	0.80	0.843	1.11	B	EL	61.5			



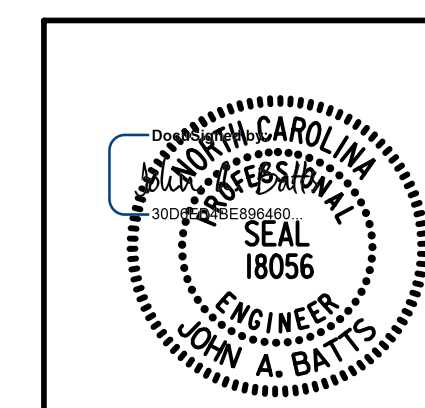
LRFR SUMMARY

PROJECT NO. Y-4810K  
CABARRUS COUNTY  
 STATION: 31+94.08 -L-

SHEET 6 OF 6

MILE POST 350.73

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 GENERAL DRAWING  
 LRFR SUMMARY  
 FOR PRESTRESSED  
 CONCRETE GIRDER  
 (NON-INTERSTATE TRAFFIC)



LICENSURE NO. C-4434

8/25/2022 11:22 AM

DRAWN BY: S.D. COOPER DATE: 2-19  
 CHECKED BY: J. A. BATTS DATE: 2-19  
 DESIGN ENGINEER OF RECORD: J. A. BATTS DATE: 2-19

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-7
1			3			TOTAL SHEETS
2			4			53