

LOAD FACTORS:

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

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 (γ_{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 (γ_{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	1.03	--	1.75	0.960	1.25	B	E	57.88	1.120	1.77	B	I	11.01	0.80	0.960	1.03	B	E	57.88	
		HL-93 (OPERATING)	N/A		1.63	--	1.35	0.960	1.63	B	E	57.88	1.120	2.32	B	I	11.01	N/A	--	--	--	--	--	
		HS-20 (INVENTORY)	36.000	②	1.49	53.64	1.75	0.960	1.81	B	E	57.88	1.120	2.48	B	I	11.01	0.80	0.960	1.49	B	E	57.88	
		HS-20 (OPERATING)	36.000		2.35	84.60	1.35	0.960	2.35	B	E	57.88	1.120	3.26	B	I	11.01	N/A	--	--	--	--	--	
LEGAL LOAD RATING	SINGLE VEHICLE (SV)	SH	12.500		3.91	48.88	1.40	0.960	5.94	B	E	57.88	1.120	8.65	B	I	11.01	0.80	0.960	3.91	B	E	57.88	
		S3C	21.500		2.28	49.02	1.40	0.960	3.47	B	E	57.88	1.120	5.01	B	I	11.01	0.80	0.960	2.28	B	E	57.88	
		S3A	22.750		2.16	49.14	1.40	0.960	3.28	B	E	57.88	1.120	4.75	B	I	11.01	0.80	0.960	2.16	B	E	57.88	
		S4A	26.750		1.88	50.29	1.40	0.960	2.86	B	E	57.88	1.120	4.10	B	I	11.01	0.80	0.960	1.88	B	E	57.88	
		S5A	30.500		1.66	50.63	1.40	0.960	2.52	B	E	57.88	1.120	3.68	B	I	11.01	0.80	0.960	1.66	B	E	57.88	
		S6A	34.500		1.49	51.41	1.40	0.960	2.27	B	E	57.88	1.120	3.28	B	I	11.01	0.80	0.960	1.49	B	E	57.88	
		S7B	38.500		1.35	51.98	1.40	0.960	2.06	B	E	57.88	1.120	3.02	B	I	11.01	0.80	0.960	1.35	B	E	57.88	
		S7A	40.000	③	1.33	53.20	1.40	0.960	2.02	B	E	57.88	1.120	3.05	B	I	11.01	0.80	0.960	1.33	B	E	57.88	
	TRUCK TRACTOR SEMI-TRAILER (TTST)	T4A	28.250		1.84	51.98	1.40	0.960	2.79	B	E	57.88	1.120	3.94	B	I	11.01	0.80	0.960	1.84	B	E	57.88	
		T5B	32.000		1.62	51.84	1.40	0.960	2.46	B	E	57.88	1.120	3.65	B	I	104.74	0.80	0.960	1.62	B	E	57.88	
		T6A	36.000		1.47	52.92	1.40	0.960	2.23	B	E	57.88	1.120	3.31	B	I	11.01	0.80	0.960	1.47	B	E	57.88	
		T7A	40.000		1.35	54.00	1.40	0.960	2.05	B	E	57.88	1.120	3.04	B	I	11.01	0.80	0.960	1.35	B	E	57.88	
	T7B	40.000		1.41	56.40	1.40	0.960	2.15	B	E	57.88	1.120	2.90	B	I	11.01	0.80	0.960	1.41	B	E	57.88		

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)

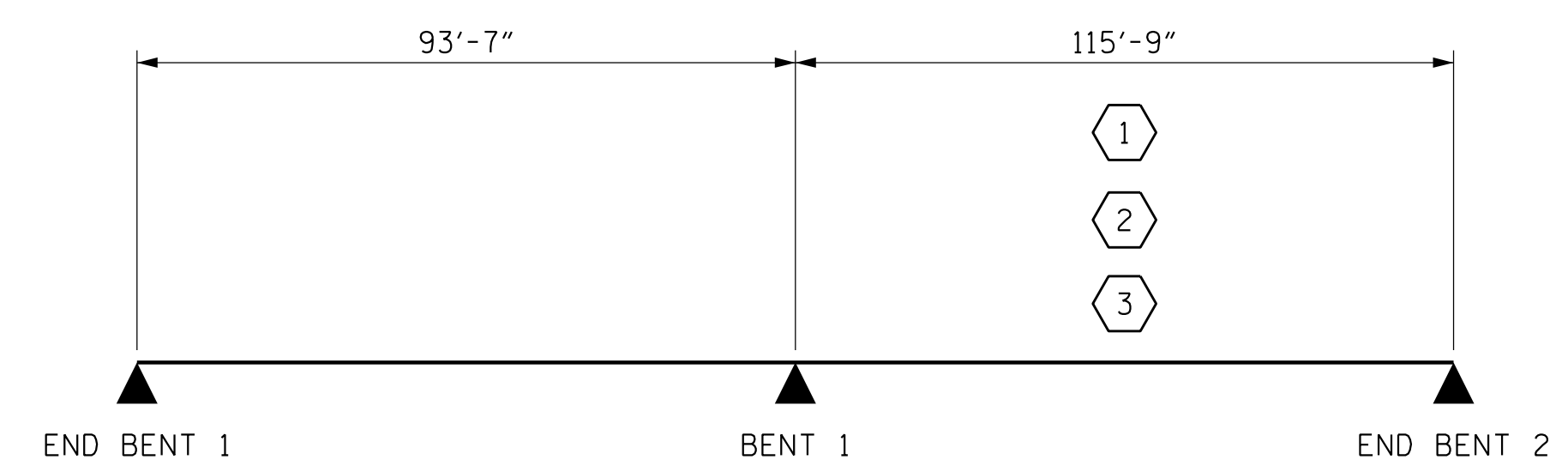
② DESIGN LOAD RATING (HS-20)

③ LEGAL LOAD RATING **

** SEE CHART FOR VEHICLE TYPE

GIRDER LOCATION

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



LRFR SUMMARY

PROJECT NO. I-5987B
ROBESON COUNTY
 STATION: 617+12.20 -L- POT

SHEET 5 OF 5

ASSEMBLED BY : J. A. PANDOLI	DATE : 12/21
CHECKED BY : M. D. METZGER	DATE : 12/21
DRAWN BY : MAA 1/08	REV. 11/12/08RR MAA/GM
CHECKED BY : GM/DI 2/08	REV. 10/1/11 MAA/GM
	REV. 12/17 MAA/THC

PLANS PREPARED BY:

NV5

NV5 ENGINEERS & CONSULTANTS, INC.
 3300 REGENCY PARKWAY, SUITE 100
 CARY, NC 27518
 P: 919.851.1912 www.NV5.com
 NC License # F-1333

**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

THIS STANDARD DRAWING REVIEWED & ADOPTED FOR USE AT THE REFERENCED LOCATION BY THE UNDERSIGNED:

L. Kevin Austin
 L. KEVIN AUSTIN
 ENGINEER
 4/22/2022

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

STANDARD
 LRFR SUMMARY FOR
 PRESTRESSED
 CONCRETE GIRDERS
 (INTERSTATE TRAFFIC)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S6-5
1			3			TOTAL SHEETS
2			4			53

STD. NO. LRFR2