

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 (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			
						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 (++)	DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN	GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (++)		DISTRIBUTION FACTORS (DF)	RATING FACTOR	SPAN		GIRDER LOCATION	DISTANCE FROM LEFT END OF SPAN (++)	
DESIGN LOAD RATING	HL-93 (INVENTORY)	N/A	①	1.12	--	1.75	0.63	1.39	B	EL	55.6	0.99	1.22	B	EL	89.4	0.80	0.63	1.12	B	EL	55.6		
	HL-93 (OPERATING)	N/A		1.80	--	1.35	0.63	1.80	B	EL	55.6	1.07	1.85	B	I	89.4	N/A	--	--	--	--	--		
	HS-20 (INVENTORY)	36.000	②	1.61	57.96	1.75	0.63	2.00	B	EL	55.6	1.07	1.93	B	I	89.4	0.80	0.63	1.61	B	EL	55.6		
	HS-20 (OPERATING)	36.000		2.55	91.80	1.35	0.63	2.59	B	EL	55.6	1.07	2.55	B	I	89.4	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SINGLE VEHICLE (SV)	SNSH	13.500		3.89	52.52	1.40	0.63	6.03	B	EL	55.6	1.04	5.97	A & C	I	89.4	0.80	0.63	3.89	B	EL	55.6	
		SNGARBS2	20.000		2.79	55.80	1.40	0.63	4.33	B	EL	55.6	1.04	4.45	A & C	I	89.4	0.80	0.63	2.79	B	EL	55.6	
		SNAGRIS2	22.000		2.60	57.20	1.40	0.63	4.03	B	EL	55.6	1.04	4.22	A & C	I	89.4	0.80	0.63	2.60	B	EL	55.6	
		SNCOTTS3	27.250		1.93	52.59	1.40	0.63	3.00	B	EL	55.6	1.04	2.95	A & C	I	89.4	0.80	0.63	1.93	B	EL	55.6	
		SNAGGRS4	34.925		1.57	54.83	1.40	0.63	2.44	B	EL	55.6	1.07	2.42	B	I	89.4	0.80	0.63	1.57	B	EL	55.6	
		SNS5A	35.550		1.54	54.75	1.40	0.63	2.39	B	EL	55.6	1.07	2.38	B	I	89.4	0.80	0.63	1.54	B	EL	55.6	
		SNS6A	39.950		1.39	55.53	1.40	0.63	2.17	B	EL	55.6	1.07	2.19	B	I	89.4	0.80	0.63	1.39	B	EL	55.6	
		SNS7B	42.000		1.33	55.86	1.40	0.63	2.06	B	EL	55.6	1.07	2.11	B	I	89.4	0.80	0.63	1.33	B	EL	55.6	
	TRUCK TRACTOR SEMI-TRAILER (TTST)	TNAGRIT3	33.000		1.70	56.10	1.40	0.63	2.63	B	EL	55.6	1.07	2.61	B	I	89.4	0.80	0.63	1.70	B	EL	55.6	
		TNT4A	33.075		1.70	56.23	1.40	0.63	2.64	B	EL	55.6	1.07	2.50	B	I	89.4	0.80	0.63	1.70	B	EL	55.6	
		TNT6A	41.600		1.37	56.99	1.40	0.63	2.13	B	EL	55.6	1.07	2.18	B	I	89.4	0.80	0.63	1.37	B	EL	55.6	
		TNT7A	42.000		1.37	57.54	1.40	0.63	2.13	B	EL	55.6	1.07	2.14	B	I	89.4	0.80	0.63	1.37	B	EL	55.6	
		TNT7B	42.000		1.40	58.80	1.40	0.63	2.17	B	EL	55.6	1.07	2.04	B	I	89.4	0.80	0.63	1.40	B	EL	55.6	
		TNAGRIT4	43.000		1.35	58.05	1.40	0.63	2.09	B	EL	55.6	1.07	1.95	B	I	89.4	0.80	0.63	1.35	B	EL	55.6	
		TNACT5A	45.000		1.28	57.60	1.40	0.63	1.98	B	EL	55.6	1.07	1.91	B	I	89.4	0.80	0.63	1.28	B	EL	55.6	
TNACT5B	45.000	③	1.27	57.15	1.40	0.63	1.97	B	EL	55.6	1.07	1.98	B	I	89.4	0.80	0.63	1.27	B	EL	55.6			

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.

③ CONTROLLING LOAD RATING

① DESIGN LOAD RATING (HL-93)

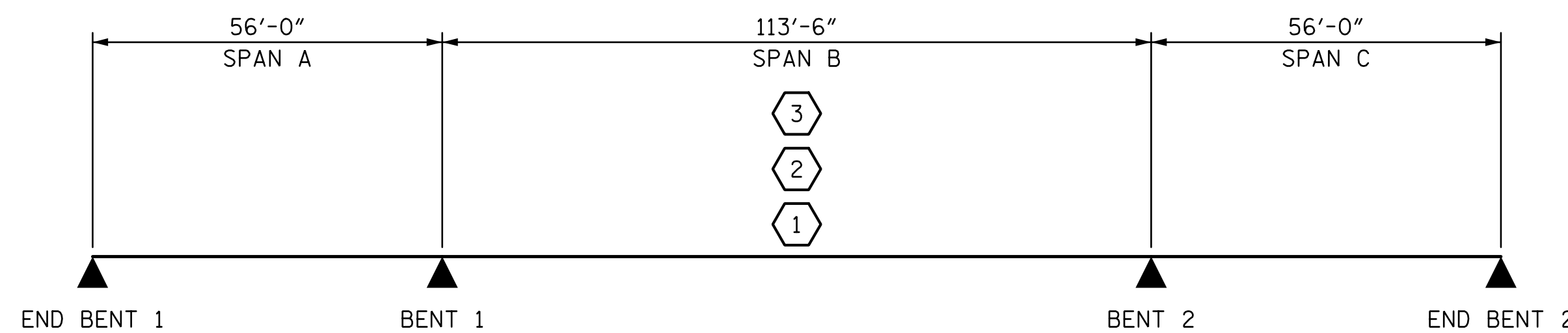
② DESIGN LOAD RATING (HS-20)

③ LEGAL LOAD RATING **

** SEE CHART FOR VEHICLE TYPE

GIRDER LOCATION

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

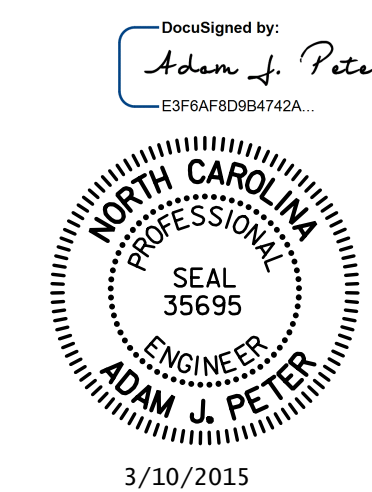


LRFR SUMMARY

PROJECT NO. R-2514D

JONES & CRAVEN COUNTY

STATION: 526+71.12 -L-
= 16+08.07 -Y6-



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

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

DRAWN BY: CLG DATE: 5-14
CHECKED BY: AJP DATE: 5-14
DESIGN ENGINEER OF RECORD: T. TOWNSEND DATE: 6-14

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Charlotte, NC 28202
NC License Number F-0991

REVISIONS				SHEET NO.		
NO.	BY:	DATE:	NO.	BY:	DATE:	S11-4
1			3			TOTAL SHEETS
2			4			38