

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	1.205	--	1.75	0.271	1.59	*	EL	**	0.616	1.2	*	EL	**	0.80	0.271	1.46	*	EL	**		
	HL-93(0pr)	N/A	--	1.562	--	1.35	0.271	2.06	*	EL	**	0.616	1.56	*	EL	**	N/A	--	--	--	--	--		
	HS-20(Inv)	36.000	2	1.434	51.614	1.75	0.271	1.97	*	EL	**	0.616	1.43	*	EL	**	0.80	0.271	1.81	*	EL	**		
	HS-20(0pr)	36.000	--	1.859	66.906	1.35	0.271	2.56	*	EL	**	0.616	1.86	*	EL	**	N/A	--	--	--	--	--		
LEGAL LOAD RATING	SV	SNSH	13,500	--	3,678	49,655	1.4	0.271	5.02	*	EL	**	0.616	4	*	EL	**	0.80	0.271	3.68	*	EL	**	
		SNGARBS2	20,000	--	2,905	58,101	1.4	0.271	3.97	*	EL	**	0.616	2.93	*	EL	**	0.80	0.271	2.91	*	EL	**	
		SNAGRIS2	22,000	--	2,748	60,456	1.4	0.271	3.83	*	EL	**	0.616	2.75	*	EL	**	0.80	0.271	2.81	*	EL	**	
		SNCOTTS3	27,250	--	1,835	49,998	1.4	0.271	2.5	*	EL	**	0.616	2.01	*	EL	**	0.80	0.271	1.83	*	EL	**	
		SNAGGRS4	34,925	--	1,595	55,714	1.4	0.271	2.18	*	EL	**	0.616	1.72	*	EL	**	0.80	0.271	1.60	*	EL	**	
		SNS5A	35,550	--	1,556	55,303	1.4	0.271	2.12	*	EL	**	0.616	1.77	*	EL	**	0.80	0.271	1.56	*	EL	**	
		SNS6A	39,950	--	1,455	58,112	1.4	0.271	1.99	*	EL	**	0.616	1.64	*	EL	**	0.80	0.271	1.45	*	EL	**	
	SNS7B	42,000	--	1,386	58,224	1.4	0.271	1.89	*	EL	**	0.616	1.65	*	EL	**	0.80	0.271	1.39	*	EL	**		
	TTST	TNAGRIT3	33,000	--	1,782	58,809	1.4	0.271	2.43	*	EL	**	0.616	1.94	*	EL	**	0.80	0.271	1.78	*	EL	**	
		TNT4A	33,075	--	1,798	59,458	1.4	0.271	2.45	*	EL	**	0.616	1.86	*	EL	**	0.80	0.271	1.80	*	EL	**	
		TNT6A	41,600	--	1,497	62,293	1.4	0.271	2.04	*	EL	**	0.616	1.8	*	EL	**	0.80	0.271	1.50	*	EL	**	
		TNT7A	42,000	--	1.52	63,842	1.4	0.271	2.08	*	EL	**	0.616	1.67	*	EL	**	0.80	0.271	1.52	*	EL	**	
		TNT7B	42,000	--	1.585	66,559	1.4	0.271	2.16	*	EL	**	0.616	1.59	*	EL	**	0.80	0.271	1.58	*	EL	**	
TNAGRIT4		43,000	--	1,504	64,667	1.4	0.271	2.05	*	EL	**	0.616	1.53	*	EL	**	0.80	0.271	1.50	*	EL	**		
TNAGT5A	45,000	--	1,405	63,217	1.4	0.271	1.92	*	EL	**	0.616	1.56	*	EL	**	0.80	0.271	1.40	*	EL	**			
TNAGT5B	45,000	3	1,376	61,936	1.4	0.271	1.88	*	EL	**	0.616	1.45	*	EL	**	0.80	0.271	1.38	*	EL	**			

LOAD FACTORS:

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

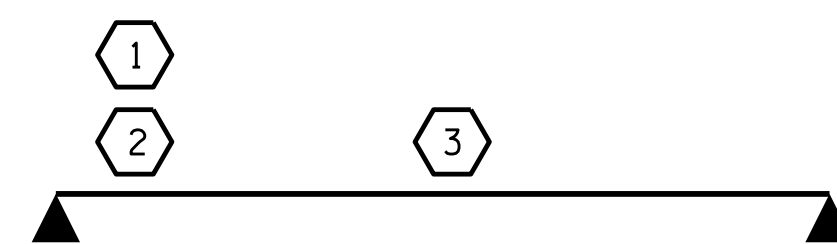
NOTES:

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:

- * BEARING-TO-BEARING GIRDER LENGTH VARIES BY SPAN. SEE PLAN OF SPANS FOR GIRDER LENGTHS.
- ** DISTANCE VARIES BY SPAN. THE POINT IS AT MIDSPAN FOR ALL SPANS.
- *** DISTANCE VARIES BY SPAN. THE POINT IS AT THE FIRST 10TH POINT FOR ALL SPANS.
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⊠ 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

FOR SPANS 'A' - 'P', SKEW RANGE 106°-36'-1" TO 97°-48'-47"
AND SPANS 'FF' - 'UU', SKEW RANGE 82°-11'-13" TO 76°-49'-52"

PROJECT NO. B-2500AB

DARE COUNTY

STATION: 3170+75.00 -L-

SHEET 1 OF 2



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD

LRFR SUMMARY FOR
CORED SLAB UNIT

(NON-INTERSTATE TRAFFIC)

ASSEMBLED BY : E. K. POPE, P.E. DATE : 6/15
CHECKED BY : B. L. GREEN, P.E. DATE : 6/15

DRAWN BY : CVC 6/10
CHECKED BY : DNS 6/10

REVISIONS						SHEET NO. S-9
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 44
2			4			