

Structure No.: 7777-777 Route: US ### Cycle No.: 1
Name: US ### over Road Insp. Date: 06/12/2012

LOAD RATING SUMMARY SHEET (LRSS)

(Form NJ-BI-101 Created 1/25/2011)

Project Information:

Group: STXX Agreement No.: 2011BI999Z Contract ID: 01-00001 Agree/Mod No.: 00

Rating Information:

Method: LRFR: Yes LFR: Yes ASR: No Other (Specify): _____

Rating Date: 9/5/2012 Computer Software Used: LARS Bridge V8i Version: 5.00.06.09

Load Testing: No Cycle when Rating Performed: 1 Design Load: HL93

Structure Information:

Plans Available? Yes Contract Designation: I-999-99(99)99

Overlay? No Considered in Rating? N/A Type/Thickness: N/A

Section Losses? No Considered in Rating? N/A Item 59: 9

For LRFR Use Only:

Dynamic Load Allowance: 1 Condition Factor: 1 System Factor: 1

ADTT (one direction): 300 Resistance Factor: LARS Calculated FCM: No

Load Rating Engineer (LRE):

Name: John A. Smith Firm: ABC Consultants Initial: JAS

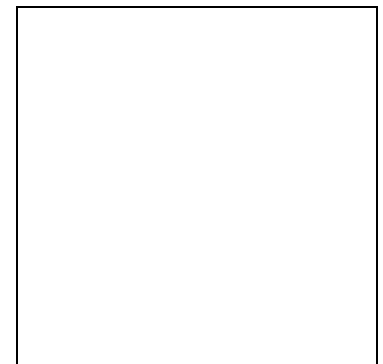
Load Rating Reviewer (LRR) certification as per the NBIS Title 23 CFR Section 650.309(c):

Name: Jane B. Brown N.J. P.E. No.: 24GE00000001

Firm: ABC Consultants

I certify that this rating is an accurate representation of the subject structure, considering all deterioration and/or changes to loading conditions, to the extent determinable by research and visual inspection and testing performed. I am charged with the overall responsibility for bridge capacity evaluation for the above mentioned structure.

Sign Date



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LOAD RATING SUMMARY SHEET (LRSS) (cont.)

Rating Comments:

The Load Factor and LRFR ratings, computed in accordance with the FHWA directive dated November 1993, AASHTO Manual for Bridge Evaluation, 2011, as modified by the NJDOT Highway Bridge Load Rating Manual and Section 43 of the NJDOT Design Manual, Bridges and Structures, are as follows:

			<u>Allowable Stresses (Psi)</u>							
<u>Material</u>			<u>Compressive Strength f_c</u>		<u>Tensile Strength</u>		<u>Yield</u>	<u>Inventory</u>	<u>Operating</u>	
Concrete			4,000		---		---	1,200	1,650	
Reinforcing Steel			---		---		60,000	24,000	36,000	
Structural Steel			---		---		50,000	27,500	37,500	

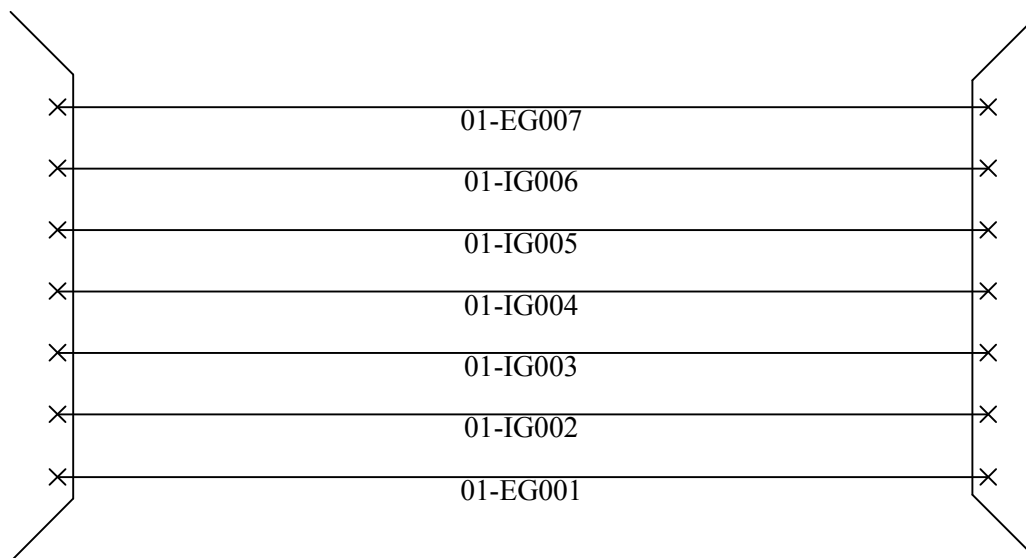
			<u>Rating (Tons) / Rating Factor</u>							
			<u>LFR</u>				<u>LRFR</u>			
<u>Member</u>	<u>Truck Type (Tons)</u>		<u>As-Built</u>		<u>As-Insp.</u>		<u>As-Built</u>		<u>As-Insp.</u>	
			<u>Inv.</u>	<u>Op.</u>	<u>Inv.</u>	<u>Op.</u>	<u>Inv.</u>	<u>Op.</u>¹	<u>Inv.</u>	<u>Op.</u>¹
Interior Girder ² 01-IG002 Cond. Rating = 9	H15	(15T)	---	---	---	---	---	---	---	---
	HL-93	(NL)	---	---	---	---	1.72	2.24	1.72	2.24
	HS-20	(36T)	62	104	62	104	2.74	3.57	2.74	3.57
	3	(25T)	65	109	65	109	---	3.87	---	3.87
	3S2	(40T)	72	120	72	120	---	2.67	---	2.67
	3-3	(40T)	76	126	76	126	---	2.81	---	2.81
	SU4	(27T)	64	107	64	107	---	3.52	---	3.52
	SU5	(31T)	65	109	65	109	---	3.12	---	3.12
	SU6	(35T)	65	109	65	109	---	2.78	---	2.78
	SU7	(39T)	66	110	66	110	---	2.52	---	2.52

¹ Operating level rating of design load or legal load rating

² Controlling Rating
(NL) = Notional Load

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LARS Member Identification Sketch:



☐ Simply-Supported

Structure No.: 7777-777 Route: US ### Cycle No.: 1
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CALCULATIONS - LARS MEMBER SUMMARY (TABULAR) REPORT:

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v5.00.06.09 PAGE 1

BRIDGE / MEMBER DATA

SUMMARY REPORT

Bridge ID: 7777777_20120905cy01_01of01
 Bridge Name US ### over Road
 Path Name T:\ 7777777_20120905cy01\
 File Name 7777777_20120905cy01_01of01.BMD

Comments:

Member Descr: 01-EG001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
G01	HL93	150	M	362	M	318	M	530	M	6.02	M	7.80	M		
G01	HS20	150	M	362	M	318	M	530	M	9.59	M	12.43	M		
G01	3	156	M	377	M	331	M	552	M	13.50	M	17.50	M	13.56	S
G01	3S2	173	M	418	M	367	M	611	M	9.34	M	12.11	M	9.38	S
G01	3-3	182	M	439	M	385	M	642	M	9.81	M	12.72	M	9.85	S
G01	SU4	154	M	371	M	326	M	543	M	12.30	M	15.95	M	12.35	S
G01	SU5	156	M	377	M	331	M	552	M	10.89	M	14.11	M	10.93	S
G01	SU6	156	M	378	M	332	M	553	M	9.73	M	12.61	M	9.77	S
G01	SU7	158	M	381	M	334	M	557	M	8.79	M	11.40	M	8.83	S

Member Descr: 01-IG002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
G02	HL93	14	M	63	M	62	M	104	M	1.72	S	2.24	S		
G02	HS20	14	M	63	M	62	M	104	M	2.74	S	3.57	S		
G02	3	15	M	66	M	65	M	109	M	3.87	S	5.02	S	3.87	S
G02	3S2	16	M	73	M	72	M	120	M	2.67	S	3.48	S	2.67	S
G02	3-3	17	M	77	M	76	M	126	M	2.81	S	3.65	S	2.81	S
G02	SU4	14	M	65	M	64	M	107	M	3.52	S	4.58	S	3.52	S
G02	SU5	15	M	66	M	65	M	109	M	3.12	S	4.05	S	3.12	S
G02	SU6	15	M	66	M	65	M	109	M	2.78	S	3.62	S	2.78	S
G02	SU7	15	M	67	M	66	M	110	M	2.52	S	3.27	S	2.52	S

Member Descr: 01-IG003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
G03	HL93	14	M	63	M	62	M	104	M	1.72	S	2.24	S		
G03	HS20	14	M	63	M	62	M	104	M	2.74	S	3.57	S		
G03	3	15	M	66	M	65	M	109	M	3.87	S	5.02	S	3.87	S
G03	3S2	16	M	73	M	72	M	120	M	2.67	S	3.48	S	2.67	S
G03	3-3	17	M	77	M	76	M	126	M	2.81	S	3.65	S	2.81	S
G03	SU4	14	M	65	M	64	M	107	M	3.52	S	4.58	S	3.52	S

Structure No.:	7777-777	Route:	US ###	Cycle No.:	1
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G03	SU5	15	M	66	M	65	M	109	M	3.12	S	4.05	S	3.12	S
G03	SU6	15	M	66	M	65	M	109	M	2.78	S	3.62	S	2.78	S
G03	SU7	15	M	67	M	66	M	110	M	2.52	S	3.27	S	2.52	S

Member Descr: 01-IG004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
G04	HL93	14	M	63	M	62	M	104	M	1.72	S	2.24	S		
G04	HS20	14	M	63	M	62	M	104	M	2.74	S	3.57	S		
G04	3	15	M	66	M	65	M	109	M	3.87	S	5.02	S	3.87	S
G04	3S2	16	M	73	M	72	M	120	M	2.67	S	3.48	S	2.67	S
G04	3-3	17	M	77	M	76	M	126	M	2.81	S	3.65	S	2.81	S
G04	SU4	14	M	65	M	64	M	107	M	3.52	S	4.58	S	3.52	S
G04	SU5	15	M	66	M	65	M	109	M	3.12	S	4.05	S	3.12	S
G04	SU6	15	M	66	M	65	M	109	M	2.78	S	3.62	S	2.78	S
G04	SU7	15	M	67	M	66	M	110	M	2.52	S	3.27	S	2.52	S

Member Descr: 01-IG005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
G05	HL93	14	M	63	M	62	M	104	M	1.72	S	2.24	S		
G05	HS20	14	M	63	M	62	M	104	M	2.74	S	3.57	S		
G05	3	15	M	66	M	65	M	109	M	3.87	S	5.02	S	3.87	S
G05	3S2	16	M	73	M	72	M	120	M	2.67	S	3.48	S	2.67	S
G05	3-3	17	M	77	M	76	M	126	M	2.81	S	3.65	S	2.81	S
G05	SU4	14	M	65	M	64	M	107	M	3.52	S	4.58	S	3.52	S
G05	SU5	15	M	66	M	65	M	109	M	3.12	S	4.05	S	3.12	S
G05	SU6	15	M	66	M	65	M	109	M	2.78	S	3.62	S	2.78	S
G05	SU7	15	M	67	M	66	M	110	M	2.52	S	3.27	S	2.52	S

Member Descr: 01-IG006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
G06	HL93	14	M	63	M	62	M	104	M	1.72	S	2.24	S		
G06	HS20	14	M	63	M	62	M	104	M	2.74	S	3.57	S		
G06	3	15	M	66	M	65	M	109	M	3.87	S	5.02	S	3.87	S
G06	3S2	16	M	73	M	72	M	120	M	2.67	S	3.48	S	2.67	S
G06	3-3	17	M	77	M	76	M	126	M	2.81	S	3.65	S	2.81	S
G06	SU4	14	M	65	M	64	M	107	M	3.52	S	4.58	S	3.52	S
G06	SU5	15	M	66	M	65	M	109	M	3.12	S	4.05	S	3.12	S
G06	SU6	15	M	66	M	65	M	109	M	2.78	S	3.62	S	2.78	S
G06	SU7	15	M	67	M	66	M	110	M	2.52	S	3.27	S	2.52	S

Member Descr: 01-EG007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
G07	HL93	150	M	362	M	318	M	530	M	6.02	M	7.80	M		

Structure No.:	<u>7777-777</u>	Route:	<u>US ###</u>	Cycle No.:	<u>1</u>
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G07	HS20	150	M	362	M	318	M	530	M	9.59 M	12.43 M	
G07	3	156	M	377	M	331	M	552	M	13.50 M	17.50 M	13.56 S
G07	3S2	173	M	418	M	367	M	611	M	9.34 M	12.11 M	9.38 S
G07	3-3	182	M	439	M	385	M	642	M	9.81 M	12.72 M	9.85 S
G07	SU4	154	M	371	M	326	M	543	M	12.30 M	15.95 M	12.35 S
G07	SU5	156	M	377	M	331	M	552	M	10.89 M	14.11 M	10.93 S
G07	SU6	156	M	378	M	332	M	553	M	9.73 M	12.61 M	9.77 S
G07	SU7	158	M	381	M	334	M	557	M	8.79 M	11.40 M	8.83 S