



BRIDGE RE-EVALUATION SURVEY REPORT

STATE STRUCTURE NO. 02M4216
COUNTY STRUCTURE NO. M4216
PATRIOTS WAY OVER RAMAPO RIVER
Oakland Borough
BERGEN COUNTY

CYCLE No. 02

JUNE 17, 2020

NOTE: This Bridge Re-Evaluation Report
shall be filed immediately after the
1st Cycle Inspection Report.

Prepared By:



TABLE OF CONTENTS

	<u>PAGE NUMBER</u>
STRUCTURAL DATA	02-1
CONCLUSIONS/RECOMMENDATIONS	02-2
STRUCTURE INVENTORY AND APPRAISAL	02-3
ELEMENTS	02-12
LOAD RATING SUMMARY	02-13
SKETCHES	02-59
PICTURES	02-63
FIELD NOTES	02-74
PRIORITY REPAIRS	02-96
NJDOT FCM CHECKLIST	02-99

N.J.D.O.T.
STRUCTURAL EVALUATION AND BRIDGE MANAGEMENT
BRIDGE RE-EVALUATION SURVEY REPORT

CYCLE NO. 02

STRUCTURAL DATA:

Bridge No.: 02M4216	Year Built: 1996	Widened/Rehab: 0000
County Structure No.: M4216	Length: 262 ft	Width: 36.7 ft
Route No.: 00000	Date of this Evaluation: 06/17/2020	
Mile Point: 0000.000	By: M08 - MP Engineering P.C.	
Municipality: 0242 - Oakland Borough	Date of Previous Evaluation: 06/18/2018	
County: 003 - BERGEN COUNTY	By: M08 - MP Engineering P.C.	
Name: PATRIOTS WAY OVER RAMAPO RIVER	FCM/ PH Inspection	Dates
	FCM By:	
Structure Type: Three span steel truss, rolled steel stringers and floorbeams	P/H By:	
	Date of Underwater/Fathometric Inspection:	
	By:	
	Date of Special Testing:	
	Date of Elec./Mech. Inspection (Level: II):	
Special Equipment Used:	Scour Critical: No	

WORK DONE: New bituminous concrete has been resurfaced over span 1.
New steel plate section has been installed in eastbound lane at span 2.
New asphalt patches have been applied over existing asphalt patches in span 3.
New "CAUTION" sign is written at southwest approach sidewalk.
New plywood has been constructed on top of the sidewalk.
New 2 girders have been inserted adjacent to existing stringers in span1 & 3.

OVERALL PHYSICAL CONDITION: The structure is in satisfactory condition due to the condition of the superstructure.

OVERALL CONDITION (ITEM 67): 6 - Equal to present minimum criteria

Inspection Team Leader: Deepkumar Patel
Certifying Engineer: Mahendra Patel, P.E.
N.J. P.E. Number: 24GE04426200

Initials: _____

I certify that this report is an accurate description of the subject structure, to the extent determinable by visual inspection and testing performed.

Signature: _____

Date: _____

CONCLUSIONS AND RECOMMENDATIONS:

The overall condition of the structure is satisfactory due to condition of the superstructure.

The deck is in satisfactory condition due to presence of fine to medium cracking throughout the deck surface in span 2, deteriorated asphalt & minor cracking along header in span 1 & span 3 deck joint and moderately corroded SIP panels at underside of deck for all spans. See Photo(s) 7, 9, 10, 11

The approach roadway is in satisfactory condition due to presence of one wide longitudinal cracking along center line of both approach roadways along with several medium longitudinal and transverse cracks throughout both the approach ways. See Photo(s) 3, 4

The superstructure is in satisfactory condition as the floor beams exhibit moderate corrosion with pack rust majorly at both west and east ends, along with the bottom flange in all spans and cross bracings exhibit moderate rusting throughout. See Photo(s) 13, 15

Since the previous inspection, the deck has been upgraded from fair to satisfactory condition due to newly resurfaced bituminous concrete over span 1. See Photo(s) 16

The superstructure has been upgraded from poor to satisfactory condition due to newly inserted 2 girders adjacent to existing stringer in span 1 and span 3. See Photo(s) 20, 21

Due to its non-redundant construction (welded truss), this bridge is fracture critical.

The bridge is not posted for a restricted load limit. Based on field observations and the load ratings computed by LARS in Cycle 01, the operating ratings are higher than the legal loads; therefore load posting is not warranted.

Stone riprap countermeasures are placed along both abutments and wingwalls. The current cycle inspection revealed no evidence of scour or exposed footings. Therefore the structure is not considered scour critical and an in-depth scour evaluation is not required. Therefore, SI&A Item 113 is remains coded 8.

Based on Memorandum dated May 15, 2018, Structurally Deficient (SD₂₀₁₈ or SD or poor) definition, this bridge is not Structurally Deficient or Functionally Obsolete bridge.

We recommend that the following priority repair(s) be made to retard further deterioration, preserve the structural integrity of the bridge, improve safety and extend its useful life:

Priority Repair 2

Location and defect: Sidewalk panel at southwest approach sidewalk exhibits erosion below causing undermining and settlement up to 2 inch. Similar settlement up to 2 inch is observed at northwest sidewalk. See Photo(s) 8

Proposed work: Back fill and compact area below sidewalk panel and rebuild/feather the approach sidewalk panels to eliminate settlement for a smooth transition between sidewalk panels.

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

1 - STRUCTURAL DATA

IDENTIFICATION

8 Structure No.: 02M4216 M82 County Bridge No.: M4216 M83 Municipal Bridge No.:
(AB) Name: PATRIOTS WAY OVER RAMAPO RIVER
1 State Code: 2 Highway Agency District: DISTRICT 01 (NORTH)
(1A) State Code 34 - New Jersey 4 Place Code: 53850 - Oakland
(1B) Region Code 2 - Region 2 - New York/New Jersey
3 County Code: 003 - BERGEN COUNTY (A) Town: 0242 - Oakland Borough
5A Inventory Route (On/Under): 1: Route carried "on" the structure 9 Location: 1 mi. west of us 202
5B Inventory Route Signing Prefix: 5 - CITY STREET
5C Level of Service: 0 - None 11 Mile Point: 0000.000
5D Inventory Route Number: 00000 (AA) Inventory Route: 9102 - County/Municipality in Bergen County
5E Directional Suffix: 0 - NOT APPLICABLE (FV) Inventory Route Milepoint:
6 Features RAMAPO RIVER (AC) Non-Inventory Feature: WW: Roadway and/or railroad over waterway
Intersected:
7 Facility PATRIOTS WAY
Carried by
Structure:
16 Latitude: 410253.34 (AD) Adm. Juris. Non- 1: State
17 Longitude: 741343.68 Inv Feature:
(AE) Alternate Agency:
M84 Latitude (Degrees): 41.04815 (AF) Alternate Structure Number:
M85 Longitude (Degrees): -74.22880 98 Border Bridge Code:
(98AA) State Code:
(98AB) Region Code:
(98B) % Resp.:
99 Border Bridge Structure Number:

M142 GPS Location: Southwest Corner

CLASSIFICATION

21 Maintenance Responsibility: 04 - City or Municipal Highway Agency 26 Func. Class. of Inv. Route: 19 - Urban - Local
M94 Maint. Resp.: Oakland Borough 37 Historical Significance: 5 - Not eligible
22 Owner: 04 - City or Municipal Highway Agency M91 On/Off System: 0
M93 Owner: Oakland Borough M96 Comments
M95 Ownership Resolved: E: Established Ownership:
101 Parallel Structure Designation: N - No parallel structure (BB) Orphan Bridge:
103 Temporary Struct. Designation: (BP) Bridge Demolition:
104 Highway System of Inv. Route: 0 - Structure/Route is NOT on NHS (CP) Federal Report: _ - Highway carrying NBIS bridges included in reports to FHWA
112 NBIS Bridge Length: Yes (CR) Off-Route Bridge: N
Agency Admin. Area: (FX) Federal Error Cannot be Corrected:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

STRUCTURE TYPE AND MATERIAL

43A Main Span Material: 3 - Steel

43B Main Span Design: 10 - Truss - Thru

44A Approach Span Material:

44B Approach Span Design:

45 Number of Main Spans: 003

46 Number of Approach Spans:

(AJ) Type of Slope Protection:

(AK) Type of Abutment: 52: Semi-stub on Concrete Piles

(AL) Type of Pier: 54: One or more Individual Column on Concrete

(AT) Special Material 1:

(AT) Special Material 2:

(AU) Additional Structure Type 1:

(AU) Additional Structure Type 2:

Fracture Critical Details: D - Steel Trusses

M143 Structure Type Primary:

M144 Structure Type Secondary:

*M97 Struct. Mat.
Type Desc:*

107 Deck Structure Type: 6 - Corrugated Steel

108A Wearing Surface: 6 - Bituminous

108B Membrane: 0 - None

108C Deck Protection: 0 - None

(AV) Widened Structure Type:

1st Widened Material:

1st Widened Design:

2nd Widened Material:

2nd Widened Design:

AGE AND SERVICE

27 Year Built: 1996

28A Lanes On Structure: 02

28B Lanes Under Structure: 00

106 Year Reconstructed: 0000

42A Type of Service On: 5 - Highway-pedestrian

42B Type of Service Under: 5 - Waterway

GEOMETRIC DATA

32 Approach Roadway Width (w/ shoulders): 028 ft

33 Bridge Median: 0 - No median

34 Skew: 11 deg

35 Structure Flared:

M98 Str. is Standalone or Connected:

M99 Length of Portion Included: ft

M101 Total Structure Opening: ft²

*M145 Design Vertical Inside
Opening:* ft

*M146 Available Vertical Inside -
South or West End:* ft

*M147 Available Vertical Inside -
North or East End:* ft

48 Length of Maximum Span: 130 ft

49 Structure Length: 262 ft

M141 Effective CoMBIS Width: ft

50A Left Curb/Sidewalk Width: 05.0 ft

50B Right Curb/Sidewalk Width: 00.0 ft

51 Bridge Roadway Width, Curb-to-Curb: 28 ft

52 Deck Width, Out-to-Out: 36.7 ft

(AM) Depth of Fill over Structure: 00.0 ft

Total length: 262 ft

Deck Area: 9615.4 ft²

NAVIGATION DATA

38 Navigation Control: 0 - No navigation control on waterway (bridge permit not required)

39 Navigation Vertical Clearance: 000 ft

40 Navigation Horizontal Clearance: 0000 ft

111 Pier/Abutment Protection: _ - Not Applicable

116 Min. Nav. Vertical Clearance under Lift Bridge: ft

(AP) Fender System:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

UTILITIES AND APPURTENANCES

(HA) Bridge Noise Barrier:

Type of Material 1:

Type of Material 2:

Barrier Height 1: ft

Barrier Height 2: ft

(AO) Utilities:

Utilities 1: F: Fiber Optic

Utilities 2: G: Gas Main

Utilities 3: W: Water Main

Utilities 4:

Sign Structures:

(GS) Overhead Sign Structure:

(GT) Cantilever Sign Structure:

(GU) Fascia Mounted Sign Structure:

RAILROAD

(BC) USRA Code:

(BE) Rail Milepost:

(BD1) Rail On:

(BD2) Rail Under:

TEMPORARY STRUCTURES

(GV) Bridge:

(GW) Shoring:

(GZ) Cond. Desc.:

(GY) Measures:

(GX) Repairs:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

2 - LOAD RATING AND POSTING

Load Rating Review Recommended: ☐

41 Posting Status: A - Open

31 Design Load: 9 - HS 25 or greater

(CG1) Posted Load Type:

(CG2) Posted Load Limit: tons

(AI) Speed Limit Posting: mph

Load Rating Engineer: Fremal Patel

70 Posting: 5 - Equal to or above legal loads

Rating Date 01/01/2019

(BK) Overstress %:

(CH1) Load Rating/Posting Combo:

(CH2) Load Rating/Posting Combo: tons

(AN) Plans Available: Yes, plans are readily available.

65 Inventory Rating Method: 1 - Load Factor (LF)

63 Operating Rating Method: 1 - Load Factor (LF)

66 Inventory Rating: 37.0 tons

64 Operating Rating: 62.0 tons

RATING (TONS)				RATING FACTOR			
Type	Inventory		Operating	Type	Inventory		Operating
HL93:	()	37	() 62	HL93:	(CW)	0.67	(CX) 0.87
H15/H20:	(BQ)	20	(CA) 34	H15/H20:	(BQ2)	1.14	(CA2) 1.47
HS20:	(BR)	37	(CB) 62	HS20:	(BR2)	0.85	(CB2) 1.11
3:	(BS)	32	(CC) 54	3:			(CC2) 1.38
NJ3S2:	(BT)	52	(CD) 87	NJ3S2:			(CD2) 1.38
3-3:	(BU)	52	(CE) 86	3-3:			(CE2)
Military:	(BV)		(CF)	Military:	(BV2)		(CF2)
SU4:	(BW)	31	(CS) 52	SU4:			(CS2) 1.22
SU5:	(BX)	36	(CT) 60	SU5:			(CT2) 1.22
SU6:	(BY)	40	(CU) 67	SU6:			(CU2) 1.22
SU7:	(BZ)	45	(CV) 75	SU7:			(CV2) 1.22

ALTERNATE LOAD RATINGS

Alt. Design Load:

Alt. Rating Date

Alt. Inventory Rating: tons

Alt. Operating Rating: tons

Type	Inventory	Operating	Posting	Inventory	Operating
HL93:	()	()			
H15:	()	()	Truck 1:		
HS20:	()	()	Truck 2:		
3:	()	()	Truck 3:		
NJ3S2:	()	()			
3-3:	()	()			
Military:	()	()			

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

3A - INSPECTION INFORMATION

APPRAISAL ITEMS

Structurally Deficient/Functionally Obsolete: ND Sufficiency Rating: 92.0
 67 Structural Evaluation: 6 - Equal to present minimum criteria 70 Bridge Posting: 5 - Equal to or above legal loads
 68 Deck Geometry: 6 - Equal to present minimum criteria 71 Waterway Adequacy: 8 - Bridge Above Approaches
 69 Underclearances, Vertical & Horizontal: N - Not applicable 72 Approach Roadway Alignment: 6 - Equal to present minimum criteria

EXISTING BRIDGE CONDITION

58 Deck: 6 - Satisfactory Condition (minor deterioration) (BA) Approach Roadway Condition: 6: Satisfactory Condition - more significant defects such as large spalls, severe settlements (1" to 2") or major collision damage to guide rails. Moderate amounts of slope embankment erosion.
 59 Superstructure: 6 - Satisfactory Condition (minor deterioration)
 60 Substructure: 7 - Good Condition (some minor problems) 61 Channel/Channel Protection: 7 - Bank protection needs minor repairs
 62 Culvert: N - Not Applicable 113 Scour Critical Bridge: 8 - Stable for scour conditions
 63 Operating Rating Method: 1 - Load Factor (LF) 64 Operating Rating: 62.0 tons
 65 Inventory Rating Method: 1 - Load Factor (LF) 66 Inventory Rating: 37.0 tons

CONDITION REMARKS

Deck Distress/Unrepaired Spalls:	ft ²	
<u>(BF) Deck:</u>	<u>(BG) Superstructure:</u>	<u>(BH) Substructure:</u>
1. A: Medium to wide cracks	1. A: Mod/severe rusting	1.
2	2. 4: Rusted bearings	2
3	3	3
4.	4.	4.
5.	5.	5.
<u>(BI) Channel:</u>	<u>(BJ) Culvert:</u>	
1.	1.	
2	2	

HIGHWAY SAFETY/FENCING

36A Bridge Rail: 0 - Does not meet acceptable standards/safety (AG) Type of Bridge Rail: 13: All Wood Railing
 36B Transition: 0 - Does not meet acceptable standards/safety (AH) Height of Bridge Rail: 2.00 ft
 36C Approach Rail: 0 - Does not meet acceptable standards/safety (AQ) Chain Link Fence Height: ft
 36D End Treatments: 0 - Does not meet acceptable standards/safety (FN) Fencing Warranted: NO - Conditions DO NOT warrant chain link
 (FO) Pedestrian Traffic Fencing Status: N: Not applicable or fencing is not
 (FP) Fencing Improvement Cost: \$

SCOUR EVALUATION

*113 Scour Critical Bridge: 8 - Stable for scour conditions (FA) FHWA Scour Category: 05: Unknown Foundations
 (FB) Date of Stage 1 Scour Eval.: (FF) Date of Stage 2 Scour Eval.:
 (FC) Stage 1 Scour Eval. Consultant: (FG) Stage 2 Scour Eval. Consultant: _ - Not Applicable
 (FH) Scour Critical Elements:
 (FD) Stage 1 Scour Eval. Prioritization Category:
 (FE) Stage 1 Scour Eval. Sufficiency Rating:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SCOUR COUNTERMEASURES

(FJ) Scour Countermeasures Cost: \$

(FL) Scour Monitoring Required/Type:

(FK) Scour Countermeasures Installed/Type:

1. A: Rock Riprap
- 2.
- 3.

(FI) Recommended Scour Countermeasures:

PROPOSED IMPROVEMENTS

75A Type of Work:

75B Work To Be Done By:

76 Length of Structure Improvement: ft

(BO) Owner's Maintenance Cost: \$

94 Bridge Improvement Cost: \$

95 Roadway Improvement Cost: \$

96 Total Project Cost: \$

97 Year of Improvement Cost Estimate:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

3B - INSPECTION INFORMATION

INSPECTION DATES

Inspection Report Author: Patel, Deepkumar	93A FC Inspection Date: 06/17/2020
Primary Type of Inspection: Regular Inspection	92A FC Inspection Frequency (in months): 24
Previous Cycle Inspection Date: 06/18/2018	Next FC Inspection Date: 06/17/2022
90 Inspection Date: 06/17/2020	93B UW Inspection Date:
91 Inspection Frequency (in months): 24	92B UW Inspection Frequency (in months):
Next Inspection Date: 06/17/2022	Next UW Inspection Date:
Pontis Element Inspection Date: 06/17/2020	UW Inspected By:
Pontis Element Frequency (in months): 24	93C SI Date:
Next Pontis Element Inspection Due: 06/17/2022	92C SI Frequency (in months):
(AW) Date of Mechanical/Electrical inspection:	Next SI Date:
(AW1) Mechanical Insp. Type:	(AR) Special Equipment:
(AW2) Electrical Insp. Type:	(AR) Special Equipment:
(AW3) Traffic Safety Insp. Type:	(AR) Special Equipment:
(AW4) Mechanical Insp. Date:	Special Inspection By:
(AW5) Electrical Insp. Date:	(AS) Special Testing Type:
(AW6) Traffic Safety Insp. Date:	
(AW7) Movable Bridge Type:	
(AX) Date of Deck Condition Survey:	(AS) Special Testing Type:
M132 Confined Space Entry:	
M105 Description of Inspection Type:	(AS) Special Testing Type:
	(AY) Date of Special Testing:

PAINT CONDITIONS AND DATE

(GD) Fascia Beam: 03: 16 - 33% Rust	(GA) Is Painting Required? Yes: Parts of the structure require painting
(GE) Fascia Bottom Flange: 03: 16 - 33% Rust	(GB) Environment: 01: Rural or Industrial, Mild Exposure
(GF) Interior Beam: 02: 33 - 50% Rust	(GC) Date of Current Paint Inspection: 06/17/2020
(GH) Interior Bottom Flange: 03: 16 - 33% Rust	(GR) Date of Last Painting:
(GI) Beam Ends: 02: 33 - 50% Rust	(GP) Remarks 1:
(GJ) Connections: 03: 16 - 33% Rust	
(GK) Bracings: 04: 10 - 16% Rust	
(GL) Bearings: 03: 16 - 33% Rust	
(GM) Substructure:	(GQ) Remarks 2:
(GN) Above Deck Superstructure: 10: 0-0.03% Rust	
(GO) Railings/Fence:	

(AZ) FATIGUE DETAIL

Location 1:	Location 3:
Location 2:	

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

IN-DEPTH FRACTURE CRITICAL/PIN-HANGER

(FY) Special FCM Insp. Required: ☐ (FS) FCM's Inspected:
(FZ) Special P/H Insp. Required: ☐ (FT) Combo In-Depth Fracture Critical/Pin-Hanger Inspection:
(FQ) Latest In-Depth FC/ Pin-Hanger Inspection Date:
(FQ1) Special FCM Insp. Date:
(FQ2) Special P/H Insp. Date:
(FR1) Special FCM Insp. Consultant:
(FR2) Special P/H Insp. Consultant:

CYCLE DATA

(P1) Group Number: 02F8 (BM) Federal Job Number:
(P2) Work Spec Number: 02F8_01 (BN) State Job Number:
(CI) Cycle Number: 02 (P3) NTP Date:
(CJ) Inspection Type: R: Regular Inspection Funding Category: None
(CM) Current Consultant: M08 - MP Engineering P.C. (P4) State Project Manager: Harjit S. Bal
(CO) Previous Consultant: M08 - MP Engineering P.C. (P5) State Assistant PM: Bhavesh Patel
M87 Contract State Agreement No.: 2018BI163C County Project Manager: John Araneo
Agreement Modification Number: 02 M130 Project Name:
Contract ID: 18-50807
Contract Date: 05/22/2018

STRUCTURE STATUS

Bridge Status: 3 - Active
Bridge Lifecycle Phase: 1 - Service
Data Last Updated: 06/17/2020

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

4A - ROADWAY DATA

ROADWAY IDENTIFICATION

Roadway Name: PATRIOTS WAY

Bridge ID/Structure Number: 02M4216

5A Position of Route (On/Under): 1: Route carried "on" the structure

Roadway SRI:

5B Route Signing Prefix: 5 - CITY STREET

NBI Roadway?: Yes

5C Level of Service: 0 - None

5D Route Number: 00000

5E Directional Suffix: 0 - NOT APPLICABLE

HIGHWAY NETWORKS AND SERVICE CLASSIFICATION

11 Milepoint: 0000.000

100 STRAHNET Highway Designation: 0 - Not a STRAHNET route

12 Base Highway Network: Inventory Route is not on the Base Network

102 Traffic Direction: 2 - 2-way traffic

13A LRS inventory Route:

104 NHS System: 0 - Structure/Route is NOT on NHS

13B Subroute Number:

105 Federal Lands Highways:

13R Ramp Code:

0 - Not Applicable

20 Toll Facility: 3 - On free road. The structure is toll-free and carries a toll-free highway.

110 Designated Truck Highway Network: Inventory route not on network

26 Functional Classification: 19 - Urban - Local

School Bus: ☐

Transit Route: ☐

Emergency Route: ☐

TRAFFIC DATA

28 Number of Lanes: ON 02 UNDER 00

ADT Class: ADT Class 4

Number of Medians: 0

29 ADT Total: 153

Roadway Speed Limit: 25 mph

30 Year of ADT: 2020

19 Bypass/Detour Length: 01 miles

114 Future ADT: 186

Detour Speed: 25 mph

115 Year of Future ADT: 2040

(FM) Incidents Reported:

109 Truck ADTT (%): 01

Accident Count: Rate:

(FW) Estimated ADT:

VERTICAL AND HORIZONTAL CLEARANCES

10 Vertical Clearance: 99.99 ft 32 Approach Roadway Width: 028 ft

53 Minimum Vertical Clearance over Bridge: 99.99 ft 47 Inventory Route, Total Horizontal Clearance: 28 ft

54A Minimum Vertical Underclearance Ref.: N - Feature not a highway or railroad 51 Bridge Roadway Width, Curb-to-Curb: 28 ft

54B Minimum Vertical Underclearance: 00.00 ft 55A Minimum Lateral Underclearance Ref: N - Feature not a highway or railroad

(DJ) Minimum Vertical Underclearance (including shoulders): 00.00 ft 55B Minimum Lateral Underclearance on Right: 00.0 ft

56 Minimum Lateral Underclearance on Left: 00.0 ft

Inspector: Rajesh Patel, P.E

Inspection Date: 06/17/2020



Structure Number: 02M4216

Facility Carried: PATRIOTS WAY

NBIS Bridges Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
30 - Steel Deck Corrugated/Orthotropic/Etc.	3 - Mod.	9615	sq. ft.	5769	3846	0	0
1000 - Corrosion		3846		0	3846	0	0
113 - Steel Stringer	3 - Mod.	2882	ft.	2068	720	72	22
1000 - Corrosion		814		0	720	72	22
515 - Steel Protective Coating		8590	sq. ft.	7965	0	575	50
3440 - Effectiveness (Steel Protective Coatings)		625		0	0	575	50
120 - Steel Truss	3 - Mod.	524	ft.	524	0	0	0
515 - Steel Protective Coating		10625	sq. ft.	10625	0	0	0
152 - Steel Floor Beam	3 - Mod.	458	ft.	358	100	0	0
1000 - Corrosion		100		0	100	0	0
515 - Steel Protective Coating		3815	sq. ft.	2815	1000	0	0
3440 - Effectiveness (Steel Protective Coatings)		1000		0	1000	0	0
162 - Steel Gusset Plate	3 - Mod.	54	each	54	0	0	0
515 - Steel Protective Coating		1296	sq. ft.	1296	0	0	0
210 - Reinforced Concrete Pier Wall	3 - Mod.	62	ft.	52	10	0	0
1120 - Efflorescence/Rust Staining		10		0	10	0	0
215 - Reinforced Concrete Abutment	3 - Mod.	77	ft.	77	0	0	0
234 - Reinforced Concrete Pier Cap	3 - Mod.	70	ft.	70	0	0	0
300 - Strip Seal Expansion Joint	3 - Mod.	140	ft.	140	0	0	0
313 - Fixed Bearing	3 - Mod.	16	each	0	16	0	0
1000 - Corrosion		16		0	16	0	0
332 - Timber Bridge Railing	3 - Mod.	524	ft.	314	200	0	10
1140 - Decay/Section Loss		10		0	0	0	10
1150 - Check/Shake		200		0	200	0	0
803 - Timber Curbs/Sidewalks	3 - Mod.	262	ft.	262	0	0	0
833 - Rocker Bearings - Expansion/Moveable	3 - Mod.	40	each	20	20	0	0
1000 - Corrosion		20		0	20	0	0
842 - Reinforced Concrete Wingwall	3 - Mod.	79	ft.	69	10	0	0
1130 - Cracking (RC and Other)		10		0	10	0	0

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

LOAD RATING SUMMARY SHEET (LRSS)

(Form NJ-BI-101 Created 1/14/2010)

Project Information:

Group: 02F8 Agreement No.: 2018BI163C Contract ID: 18-50807 Agree/Mod No.: 01

Rating Information:

Method: LRFR: Yes LFR: Yes ASR: No Engineering Judgment: No

Other (Specify): N/A

Rating Date: 01/01/2019 Computer Software Used: LARS Bridge Version: 10.06.00.18

Load Testing: No Cycle Rating Performed: 01 Design Load: HS-25

Structure Information:

Plans Available? Yes Contract Designation: Unknown

Overlay? No Considered in Rating? No Type/Thickness: Monolithic Concrete

Section Losses? No Considered in Rating? Item 59/62: 4

For LRFR Use Only:

Surface Roughness Factor: 33% Condition Factor: 1.00 System Factor: 0.85

ADTT (one direction): 1 Resistance Factor: LARS FCM: No
Calculated

Load Rating Engineer (LRE):

Name: Fremal Patel Firm: MP Engineers, P.C. Initial:

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

Name: Mahendra Patel, P.E. N.J.P.E. No.: 24GE04426200

Firm: MP Engineers, P.C.

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

LOAD RATING SUMMARY SHEET (LRSS)

(Form NJ-BI-101 Created 1/14/2010)

Rating Comments:

Legal loads, SHV load rating and Emergency Vehicle (EV-2) and (EV-3) load rating are taken from Cycle 01.

LRFR live load distribution factors for stringers & floorbeams are calculated by LARS. LFR live load distribution factor for truss is calculated by LARS. The Live Load Ratings were computed using LARS Bridge Software.

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

<u>Material</u>	<u>Compressive Strength f_c</u>	<u>Allowable Stresses (Psi)</u>			
		<u>Tensile Strength</u>	<u>Yield</u>	<u>Inventory</u>	<u>Operating</u>
Concrete (Deck)	3,000			1,200	1,650
Reinforced Steel			60,000	24,000	36,000
Structural Steel			50,000	27,500	37,500

<u>Rating (Tons) / Rating Factor</u>										
<u>Member</u>	<u>Load Factor</u>				<u>LRFR</u>					
	<u>Truck Type</u>		<u>As-Built</u>		<u>As-Insp.</u>		<u>As-Built</u>		<u>As-Insp.</u>	
	(Tons)		<u>Inv.</u>	<u>Op.</u>	<u>Inv.</u>	<u>Op.</u>	<u>Inv.</u>	<u>Op.</u>	<u>Inv.</u>	<u>Op.</u>
Member:	HL93	NL	54	90	54	90	0.88	1.14	0.88	1.14
Truss	H15/H20	(15T)	33	55	33	55	1.55	2.01	1.55	2.01
02-T001	HS-20	(36T)	54	90	54	90	1.05	1.37	1.05	1.37
L8L10	3	(25T)	54	90	54	90	---	2.05	---	2.05
	NJ3S2	(40T)	60	100	60	100	---	1.42	---	1.42
	3-3	(40T)	64	106	64	106	---	1.51	---	1.51
Condition Rating 4	SU4	(27T)	53	89	53	89	---	1.87	---	1.87
Sect. Loss Location:	SU5	(31T)	54	90	54	90	---	1.65	---	1.65
Sect. Loss Extent:	SU6	(35T)	54	90	54	90	---	1.48	---	1.48
	SU7	(39T)	55	91	55	91	---	1.34	---	1.34
	EV2	(28.75T)	53	88	53	88	---	1.74	---	1.74
	EV3	(43T)	54	91	54	91	---	1.20	---	1.20

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

LOAD RATING SUMMARY SHEET (LRSS)

(Form NJ-BI-101 Created 1/14/2010)

Member:	HL93	NL	34	56	34	56	0.80	1.03	0.80	1.03
Floor Beams	H15/H20	(15T)	30	51	30	51	1.65	2.13	1.65	2.13
03-IB003	HS-20	(36T)	52	87	52	87	1.17	1.51	1.17	1.51
	3	(25T)	42	70	42	70	---	1.83	---	1.83
	NJ3S2	(40T)	61	102	61	102	---	1.66	---	1.66
	3-3	(40T)	82	137	82	137	---	2.23	---	2.23
Condition Rating 4	SU4	(27T)	37	62	37	62	---	1.50	---	1.50
Sect. Loss Location:	SU5	(31T)	39	66	39	66	---	1.38	---	1.38
Sect. Loss Extent:	SU6	(35T)	40	67	40	67	---	1.26	---	1.26
	SU7	(39T)	43	72	43	72	---	1.22	---	1.22
	EV2	(28.75T)	70	118	70	118	---	2.22	---	2.22
	EV3	(43T)	66	110	66	110	---	1.39	---	1.39
Member:	HL93	NL	37	62	37	62	0.67	0.87	0.67	0.87
Stringers	H15/H20	(15T)	20	34	20	34	1.14	1.47	1.14	1.47
05-ES013	HS-20	(36T)	37	62	37	62	0.85	1.11	0.85	1.11
	3	(25T)	32	54	32	54	---	1.38	---	1.38
	NJ3S2	(40T)	52	87	52	87	---	1.38	---	1.38
	3-3	(40T)	63	106	63	106	---	1.67	---	1.67
Condition Rating 4	SU4	(27T)	31	52	31	52	---	1.22	---	1.22
Sect. Loss Location:	SU5	(31T)	36	60	36	60	---	1.22	---	1.22
Sect. Loss Extent:	SU6	(35T)	40	67	40	67	---	1.22	---	1.22
	SU7	(39T)	45	75	45	75	---	1.22	---	1.22
	EV2	(28.75T)	33	56	33	56	---	1.04	---	1.04
	EV3	(43T)	36	61	36	61	---	0.75	---	0.75
Member:	HL93	NL	---	---	---	---	---	---	---	---
Gusset Plate	H15/H20	(15T)	49	81	49	81	---	---	---	---
02-L2	HS-20	(36T)	44	73	44	73	---	---	---	---
	3	(25T)	44	73	44	73	---	---	---	---
	NJ3S2	(40T)	49	82	49	82	---	---	---	---
	3-3	(40T)	52	86	52	86	---	---	---	---

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

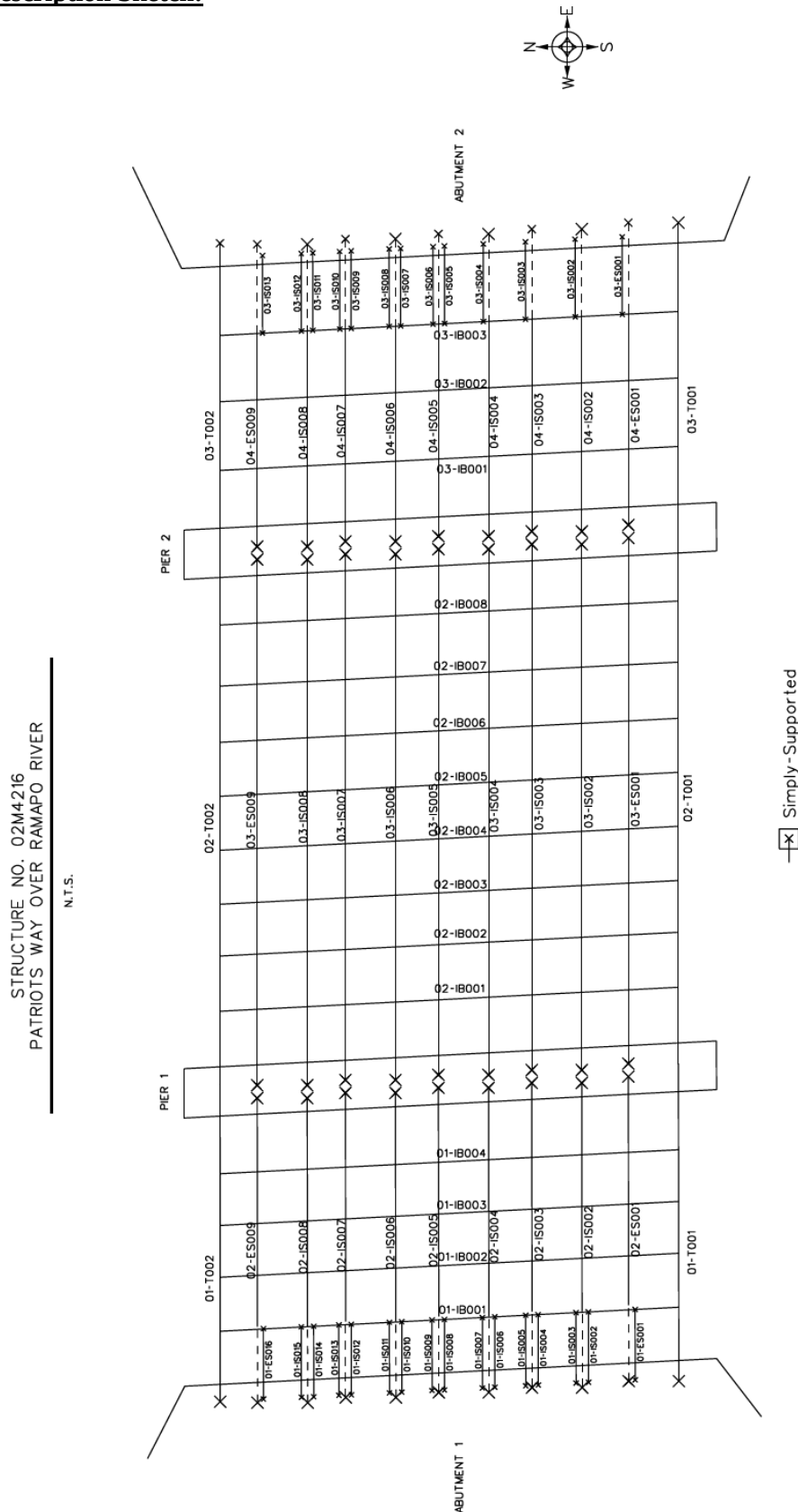
LOAD RATING SUMMARY SHEET (LRSS)

(Form NJ-BI-101 Created 1/14/2010)

Condition Rating 4	SU4	(27T)	43	73	43	73	---	---	---	---
Sect. Loss Location:	SU5	(31T)	44	73	44	73	---	---	---	---
Sect. Loss Extent:	SU6	(35T)	45	76	45	76	---	---	---	---
	SU7	(39T)	46	77	46	77	---	---	---	---
	EV2	(28.75T)	43	72	43	72	---	---	---	---
	EV3	(43T)	60	95	60	95	---	---	---	---

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

LARS Member Description Sketch:



Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

CALCULATIONS – LARS MEMBER SUMMARY (TABULAR) REPORT:

Gusset Plates: (Span 1)

Project	1026									
Consultant	MP Engineers & Architects					Structure Name				
Agreement	2018B163C					Patriots Way over Ramapo River				
Group	02F8					Route				
Total Plates	5					9002				
	Agreement Date					Structure No.				
	Modification/Addendum Code					02M4216				
	Modification/Addendum Date					Rated By				
						MS				
						Date				
						2/19/2019				
						Reviewed By				
						LS				
						Date				
						2/19/2019				

Plate No.	Plate Type	Location	SUMMARY - Plate Rating (Tons)																			
			(Note: Rating in BOLD indicates controlling rating)																			
			Type HS-20 (36T)				Type 3 (25T)				Type 3S2 (40T)				Type 3-3 (40T)				H15 (15T)			
			Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor	
			Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.
1	Bolted	L2	63	93	35	87	60	89	34	84	79	117	44	110	90	134	50	125	86	129	48	120
2	Bolted	L4	75	109	52	123	75	110	49	116	96	141	65	159	111	163	75	183	126	185	76	173
3	Bolted	U1	79	115	44	108	76	111	42	104	100	145	56	137	114	166	64	156	109	159	61	149
4	Bolted	U3	79	116	44	109	76	110	42	104	98	143	55	135	118	172	67	164	126	183	70	172
5	Bolted	U5	79	116	45	109	76	110	42	104	98	143	55	135	120	175	67	164	126	183	71	173

			Type SU4 (27T)				Type SU5 (31T)				Type SU6 (35T)				Type SU7 (39T)				EV2 (28.75T)			
			Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor	
			Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.
1	Bolted	L2	59	116	33	108	61	90	34	85	62	93	35	87	65	97	36	91	59	87	33	82
2	Bolted	L4	73	166	48	155	74	109	50	118	76	111	52	122	77	113	53	130	71	105	48	113
3	Bolted	U1	69	143	42	135	77	112	43	105	73	105	44	108	82	120	46	113	74	108	41	102
4	Bolted	U3	73	165	41	155	75	110	42	103	77	112	43	105	79	115	44	108	74	109	42	102
5	Bolted	U5	73	165	41	155	75	110	42	103	77	112	43	106	79	115	44	108	74	109	42	102

			Type EV3 (43T)			
			Working Stress		Load Factor	
			Inv.	Opr.	Inv.	Opr.
1	Bolted	L2	60	89	33	84
2	Bolted	L4	76	111	49	116
3	Bolted	U1	76	110	42	104
4	Bolted	U3	76	111	42	104
5	Bolted	U5	76	111	43	104

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Gusset Plates: (Span 2)

Project	1026									
Consultant	MP Engineers & Architects					Structure Name Patriots Way over Ramapo River				
Agreement	2018B1163C		Agreement Date			Structure No. 02M4216		Route 9002		
Group	02F8		Modification/Addendum Code			Rated By MS		Date 2/19/2019		
Total Plates	9		Modification/Addendum Date			Reviewed By LS		Date 2/19/2019		

Plate No.	Plate Type	Location	SUMMARY - Plate Rating (Tons)																			
			(Note: Rating in BOLD indicates controlling rating)																			
			Type HS-20 (36T)				Type 3 (25T)				Type 3S2 (40T)				Type 3-3 (40T)				H15 (15T)			
			Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor	
Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.			
1	Bolted	L2	44	73	24	68	44	73	24	67	49	82	27	75	52	86	28	80	49	81	27	75
2	Bolted	L4	119	176	77	190	118	174	76	136	130	192	84	206	138	204	90	221	142	211	92	162
3	Bolted	L6	132	189	75	178	130	184	73	136	148	216	85	203	156	229	92	220	161	236	95	162
4	Bolted	L8	95	143	56	142	95	143	56	136	106	159	63	159	112	169	67	168	116	175	69	162
5	Bolted	U1	60	95	33	88	60	95	33	88	67	106	37	99	71	112	39	104	67	106	37	98
6	Bolted	U3	87	129	83	198	85	127	81	138	98	144	93	221	104	154	99	236	104	154	100	163
7	Bolted	U5	107	153	60	144	104	149	59	138	122	175	69	165	132	189	74	178	135	194	76	163
8	Bolted	U7	114	160	64	151	110	155	62	137	134	189	76	179	149	209	84	198	153	215	86	163
9	Bolted	U9	112	166	62	155	109	161	61	137	123	183	69	171	132	197	74	184	134	199	75	163

			Type SU4 (27T)				Type SU5 (31T)				Type SU6 (35T)				Type SU7 (39T)				EV2 (28.75T)			
			Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor	
			Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.
1	Bolted	L2	43	73	24	68	44	73	24	68	45	76	25	70	46	77	25	71	43	72	24	67
2	Bolted	L4	116	190	75	146	118	175	76	177	119	176	77	189	119	177	77	190	117	173	75	162
3	Bolted	L6	128	213	72	146	130	185	73	175	134	193	76	182	135	198	79	188	128	181	72	163
4	Bolted	L8	94	157	56	146	95	143	57	143	96	145	57	145	97	146	58	145	93	140	55	140
5	Bolted	U1	59	95	33	88	60	95	33	89	62	98	34	91	64	101	35	93	59	94	33	87
6	Bolted	U3	85	138	80	147	86	127	82	180	89	132	85	202	92	135	87	207	84	125	80	165
7	Bolted	U5	103	175	58	147	105	150	59	142	109	157	61	147	113	162	63	152	103	147	58	139
8	Bolted	U7	109	194	61	147	111	157	63	148	117	164	66	155	121	170	68	161	108	153	61	144
9	Bolted	U9	107	179	59	147	108	161	60	151	110	163	61	153	111	165	62	155	108	161	60	151

			Type EV3 (43T)			
			Working Stress		Load Factor	
			Inv.	Opr.	Inv.	Opr.
1	Bolted	L2	60	95	33	88
2	Bolted	L4	85	126	81	193
3	Bolted	L6	104	149	58	140
4	Bolted	L8	110	155	62	146
5	Bolted	U1	109	162	61	151
6	Bolted	U3	44	73	24	67
7	Bolted	U5	118	175	76	186
8	Bolted	U7	129	184	73	173
9	Bolted	U9	95	144	57	143

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Gusset Plates: (Span 3)

Project	1026			
Consultant	MP Engineers & Architects		Structure Name	Patriots Way over Ramapo River
Agreement	2018B1163C	Agreement Date	Structure No.	02M4216
Group	02F8	Modification/Addendum Code	Rated By	MS
Total Plates	4	Modification/Addendum Date	Reviewed By	LS
			Date	2/19/2019

Plate No.	Plate Type	Location	SUMMARY - Plate Rating (Tons)																			
			(Note: Rating in BOLD indicates controlling rating)																			
			Type HS-20 (36T)				Type 3 (25T)				Type 3S2 (40T)				Type 3-3 (40T)				H15 (15T)			
			Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor	
			Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.
1	Bolted	L2	76	109	42	103	72	104	40	98	99	144	56	135	118	170	66	160	106	154	60	145
2	Bolted	L4	108	154	61	146	106	151	60	143	149	212	84	200	169	241	96	228	189	270	107	175
3	Bolted	U1	76	110	43	103	72	104	40	98	100	144	56	135	118	170	66	160	107	154	60	145
4	Bolted	U3	80	117	45	110	75	109	42	102	108	156	60	146	127	185	71	173	128	186	72	175

			Type SU4 (27T)				Type SU5 (31T)				Type SU6 (35T)				Type SU7 (39T)				EV2 (28.75T)			
			Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor		Working Stress		Load Factor	
			Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.	Inv.	Opr.
1	Bolted	L2	70	138	39	130	73	105	41	99	74	107	42	101	77	112	43	105	70	101	39	95
2	Bolted	L4	103	243	58	158	108	154	61	146	111	158	63	149	113	161	64	152	102	146	58	138
3	Bolted	U1	70	139	39	130	73	106	41	99	74	107	42	101	78	112	44	106	70	101	39	95
4	Bolted	U3	71	167	40	157	75	108	42	102	76	110	42	103	78	113	44	106	75	109	42	102

			Type EV3 (43T)			
			Working Stress		Load Factor	
			Inv.	Opr.	Inv.	Opr.
1	Bolted	L2	72	103	40	97
2	Bolted	L4	109	155	62	147
3	Bolted	U1	72	104	40	98
4	Bolted	U3	75	109	42	102

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

CALCULATIONS – LARS MEMBER SUMMARY (TABULAR) REPORT:

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v10.06.00.18 PAGE 1

BRIDGE / MEMBER DATA

SUMMARY REPORT

Bridge ID: 02M4216_20190101cy01_LR_SHV_05of08
 Bridge Name 02M4216
 Path Name O:\
 File Name 1026_02F8_67

(Truss)

Comments:

1SEE LARS MIS SKETCH FOR DETAILS

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
3	L 8L10 HL93	53		87		54		90		0.88		1.14			
	H15	32		53		33		55		1.55		2.01			
	HS20	53		87		54		90		1.05		1.37			
	3	53		87		54		90		1.52		1.97		2.05	
	3S2	59		97		60		100		1.06		1.37		1.42	
	3-3	63		103		64		106		1.12		1.46		1.51	
	SU4	52		86		53		89		1.39		1.80		1.87	
	SU5	53		87		54		90		1.23		1.59		1.65	
	SU6	53		87		54		90		1.10		1.42		1.48	
	SU7	54		88		55		91		0.99		1.29		1.34	

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

CALCULATIONS – LARS MEMBER SUMMARY (TABULAR) REPORT:

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v10.06.00.18 PAGE 1

BRIDGE / MEMBER DATA

SUMMARY REPORT

Bridge ID: 02M4216_20190101cy01_LR_SHV_03of08
 Bridge Name: 02M4216
 Path Name: O:\1026_02F8_67 Bergen County NJDOT\Load Rating\65_02M4216\
 File Name: 02M4216_20190101cy01_LR_SHV_03of08.BMD

(Floorbeams)

Comments:

1SEE LARS MIS SKETCH FOR DETAILS

Member Descr: 01-IB001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B01	HL93	42	M	59	M	34	S	58	S	0.81	M	1.06	M		
B01	H15	37	M	53	M	31	S	52	S	1.68	M	2.18	M		
B01	HS20	67	M	96	M	56	S	93	S	1.26	M	1.63	M		
B01	3	51	M	73	M	43	S	71	S	1.38	M	1.79	M	1.86	M
B01	3S2	76	M	108	M	63	S	105	S	1.28	M	1.65	M	1.72	M
B01	3-3	100	M	142	M	83	S	139	S	1.68	M	2.18	M	2.26	M
B01	SU4	46	M	66	M	38	S	64	S	1.16	M	1.50	M	1.56	M
B01	SU5	48	M	69	M	40	S	67	S	1.06	M	1.37	M	1.42	M
B01	SU6	50	M	71	M	41	S	69	S	0.97	M	1.26	M	1.30	M
B01	SU7	54	M	77	M	45	S	75	S	0.94	M	1.23	M	1.27	M

Member Descr: 01-IB002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B02	HL93	43	M	60	M	35	S	59	S	0.84	M	1.09	M		
B02	H15	38	M	54	M	31	S	53	S	1.73	M	2.24	M		
B02	HS20	69	M	98	M	57	S	95	S	1.29	M	1.68	M		
B02	3	53	M	74	M	43	S	73	S	1.42	M	1.85	M	1.92	M
B02	3S2	78	M	110	M	64	S	107	S	1.31	M	1.70	M	1.76	M
B02	3-3	103	M	145	M	85	S	142	S	1.73	M	2.24	M	2.33	M
B02	SU4	48	M	67	M	39	S	66	S	1.19	M	1.54	M	1.60	M
B02	SU5	50	M	70	M	41	S	69	S	1.09	M	1.41	M	1.46	M
B02	SU6	51	M	72	M	42	S	71	S	1.00	M	1.29	M	1.34	M
B02	SU7	56	M	79	M	46	S	77	S	0.97	M	1.26	M	1.31	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 01-IB003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B03	HL93	43	M	60	M	35	S	59	S	0.84	M	1.09	M		
B03	H15	38	M	54	M	31	S	53	S	1.73	M	2.24	M		
B03	HS20	69	M	98	M	57	S	95	S	1.29	M	1.68	M		
B03	3	53	M	74	M	43	S	73	S	1.42	M	1.85	M	1.92	M
B03	3S2	78	M	110	M	64	S	107	S	1.31	M	1.70	M	1.76	M
B03	3-3	103	M	145	M	85	S	142	S	1.73	M	2.24	M	2.33	M
B03	SU4	48	M	67	M	39	S	66	S	1.19	M	1.54	M	1.60	M
B03	SU5	50	M	70	M	41	S	69	S	1.09	M	1.41	M	1.46	M
B03	SU6	51	M	72	M	42	S	71	S	1.00	M	1.29	M	1.34	M
B03	SU7	56	M	79	M	46	S	77	S	0.97	M	1.26	M	1.31	M

Member Descr: 01-IB004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B04	HL93	43	M	60	M	35	S	59	S	0.84	M	1.09	M		
B04	H15	38	M	54	M	31	S	53	S	1.73	M	2.24	M		
B04	HS20	69	M	98	M	57	S	95	S	1.29	M	1.68	M		
B04	3	53	M	74	M	43	S	73	S	1.42	M	1.85	M	1.92	M
B04	3S2	78	M	110	M	64	S	107	S	1.31	M	1.70	M	1.76	M
B04	3-3	103	M	145	M	85	S	142	S	1.73	M	2.24	M	2.33	M
B04	SU4	48	M	67	M	39	S	66	S	1.19	M	1.54	M	1.60	M
B04	SU5	50	M	70	M	41	S	69	S	1.09	M	1.41	M	1.46	M
B04	SU6	51	M	72	M	42	S	71	S	1.00	M	1.29	M	1.34	M
B04	SU7	56	M	79	M	46	S	77	S	0.97	M	1.26	M	1.31	M

Member Descr: 02-IB001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B05	HL93	42	M	60	M	35	S	58	S	0.83	M	1.07	M		
B05	H15	38	M	54	M	31	S	52	S	1.71	M	2.22	M		
B05	HS20	67	M	95	M	56	S	93	S	1.26	M	1.63	M		
B05	3	52	M	74	M	43	S	72	S	1.41	M	1.83	M	1.90	M
B05	3S2	77	M	108	M	63	S	106	S	1.29	M	1.67	M	1.74	M
B05	3-3	102	M	144	M	84	S	141	S	1.72	M	2.22	M	2.31	M
B05	SU4	47	M	66	M	39	S	65	S	1.17	M	1.52	M	1.58	M
B05	SU5	49	M	70	M	41	S	68	S	1.07	M	1.39	M	1.44	M
B05	SU6	51	M	71	M	42	S	70	S	0.98	M	1.27	M	1.32	M
B05	SU7	55	M	77	M	45	S	76	S	0.95	M	1.24	M	1.28	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 02-IB002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B06	HL93	42	M	60	M	35	S	58	S	0.83	M	1.07	M		
B06	H15	38	M	54	M	31	S	52	S	1.71	M	2.22	M		
B06	HS20	67	M	95	M	56	S	93	S	1.26	M	1.63	M		
B06	3	52	M	74	M	43	S	72	S	1.41	M	1.83	M	1.90	M
B06	3S2	77	M	108	M	63	S	106	S	1.29	M	1.67	M	1.74	M
B06	3-3	102	M	144	M	84	S	141	S	1.72	M	2.22	M	2.31	M
B06	SU4	47	M	66	M	39	S	65	S	1.17	M	1.52	M	1.58	M
B06	SU5	49	M	70	M	41	S	68	S	1.07	M	1.39	M	1.44	M
B06	SU6	51	M	71	M	42	S	70	S	0.98	M	1.27	M	1.32	M
B06	SU7	55	M	77	M	45	S	76	S	0.95	M	1.24	M	1.28	M

Member Descr: 02-IB003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B07	HL93	42	M	60	M	35	S	58	S	0.83	M	1.07	M		
B07	H15	38	M	54	M	31	S	52	S	1.71	M	2.22	M		
B07	HS20	67	M	95	M	56	S	93	S	1.26	M	1.63	M		
B07	3	52	M	74	M	43	S	72	S	1.41	M	1.83	M	1.90	M
B07	3S2	77	M	108	M	63	S	106	S	1.29	M	1.67	M	1.74	M
B07	3-3	102	M	144	M	84	S	141	S	1.72	M	2.22	M	2.31	M
B07	SU4	47	M	66	M	39	S	65	S	1.17	M	1.52	M	1.58	M
B07	SU5	49	M	70	M	41	S	68	S	1.07	M	1.39	M	1.44	M
B07	SU6	51	M	71	M	42	S	70	S	0.98	M	1.27	M	1.32	M
B07	SU7	55	M	77	M	45	S	76	S	0.95	M	1.24	M	1.28	M

Member Descr: 02-IB004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B08	HL93	42	M	60	M	35	S	58	S	0.83	M	1.07	M		
B08	H15	38	M	54	M	31	S	52	S	1.71	M	2.22	M		
B08	HS20	67	M	95	M	56	S	93	S	1.26	M	1.63	M		
B08	3	52	M	74	M	43	S	72	S	1.41	M	1.83	M	1.90	M
B08	3S2	77	M	108	M	63	S	106	S	1.29	M	1.67	M	1.74	M
B08	3-3	102	M	144	M	84	S	141	S	1.72	M	2.22	M	2.31	M
B08	SU4	47	M	66	M	39	S	65	S	1.17	M	1.52	M	1.58	M
B08	SU5	49	M	70	M	41	S	68	S	1.07	M	1.39	M	1.44	M
B08	SU6	51	M	71	M	42	S	70	S	0.98	M	1.27	M	1.32	M
B08	SU7	55	M	77	M	45	S	76	S	0.95	M	1.24	M	1.28	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 02-IB005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B09	HL93	42	M	60	M	35	S	58	S	0.83	M	1.07	M		
B09	H15	38	M	54	M	31	S	52	S	1.71	M	2.22	M		
B09	HS20	67	M	95	M	56	S	93	S	1.26	M	1.63	M		
B09	3	52	M	74	M	43	S	72	S	1.41	M	1.83	M	1.90	M
B09	3S2	77	M	108	M	63	S	106	S	1.29	M	1.67	M	1.74	M
B09	3-3	102	M	144	M	84	S	141	S	1.72	M	2.22	M	2.31	M
B09	SU4	47	M	66	M	39	S	65	S	1.17	M	1.52	M	1.58	M
B09	SU5	49	M	70	M	41	S	68	S	1.07	M	1.39	M	1.44	M
B09	SU6	51	M	71	M	42	S	70	S	0.98	M	1.27	M	1.32	M
B09	SU7	55	M	77	M	45	S	76	S	0.95	M	1.24	M	1.28	M

Member Descr: 02-IB006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B10	HL93	42	M	60	M	35	S	58	S	0.83	M	1.07	M		
B10	H15	38	M	54	M	31	S	52	S	1.71	M	2.22	M		
B10	HS20	67	M	95	M	56	S	93	S	1.26	M	1.63	M		
B10	3	52	M	74	M	43	S	72	S	1.41	M	1.83	M	1.90	M
B10	3S2	77	M	108	M	63	S	106	S	1.29	M	1.67	M	1.74	M
B10	3-3	102	M	144	M	84	S	141	S	1.72	M	2.22	M	2.31	M
B10	SU4	47	M	66	M	39	S	65	S	1.17	M	1.52	M	1.58	M
B10	SU5	49	M	70	M	41	S	68	S	1.07	M	1.39	M	1.44	M
B10	SU6	51	M	71	M	42	S	70	S	0.98	M	1.27	M	1.32	M
B10	SU7	55	M	77	M	45	S	76	S	0.95	M	1.24	M	1.28	M

Member Descr: 02-IB007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B11	HL93	42	M	60	M	35	S	58	S	0.83	M	1.07	M		
B11	H15	38	M	54	M	31	S	52	S	1.71	M	2.22	M		
B11	HS20	67	M	95	M	56	S	93	S	1.26	M	1.63	M		
B11	3	52	M	74	M	43	S	72	S	1.41	M	1.83	M	1.90	M
B11	3S2	77	M	108	M	63	S	106	S	1.29	M	1.67	M	1.74	M
B11	3-3	102	M	144	M	84	S	141	S	1.72	M	2.22	M	2.31	M
B11	SU4	47	M	66	M	39	S	65	S	1.17	M	1.52	M	1.58	M
B11	SU5	49	M	70	M	41	S	68	S	1.07	M	1.39	M	1.44	M
B11	SU6	51	M	71	M	42	S	70	S	0.98	M	1.27	M	1.32	M
B11	SU7	55	M	77	M	45	S	76	S	0.95	M	1.24	M	1.28	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 02-IB008

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
B12	HL93	42	M	60	M	35	S	58	S	0.83	M	1.07	M		
B12	H15	38	M	54	M	31	S	52	S	1.71	M	2.22	M		
B12	HS20	67	M	95	M	56	S	93	S	1.26	M	1.63	M		
B12	3	52	M	74	M	43	S	72	S	1.41	M	1.83	M	1.90	M
B12	3S2	77	M	108	M	63	S	106	S	1.29	M	1.67	M	1.74	M
B12	3-3	102	M	144	M	84	S	141	S	1.72	M	2.22	M	2.31	M
B12	SU4	47	M	66	M	39	S	65	S	1.17	M	1.52	M	1.58	M
B12	SU5	49	M	70	M	41	S	68	S	1.07	M	1.39	M	1.44	M
B12	SU6	51	M	71	M	42	S	70	S	0.98	M	1.27	M	1.32	M
B12	SU7	55	M	77	M	45	S	76	S	0.95	M	1.24	M	1.28	M

Member Descr: 03-IB001

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
B13	HL93	41	M	59	M	34	S	57	S	0.81	M	1.06	M		
B13	H15	37	M	53	M	31	S	52	S	1.69	M	2.19	M		
B13	HS20	64	M	91	M	53	S	88	S	1.20	M	1.55	M		
B13	3	52	M	73	M	43	S	71	S	1.40	M	1.81	M	1.88	M
B13	3S2	75	M	106	M	62	S	104	S	1.26	M	1.64	M	1.70	M
B13	3-3	101	M	143	M	83	S	139	S	1.70	M	2.20	M	2.28	M
B13	SU4	46	M	65	M	38	S	63	S	1.14	M	1.48	M	1.54	M
B13	SU5	48	M	69	M	40	S	67	S	1.05	M	1.37	M	1.42	M
B13	SU6	50	M	70	M	41	S	68	S	0.96	M	1.25	M	1.30	M
B13	SU7	53	M	76	M	44	S	74	S	0.93	M	1.21	M	1.25	M

Member Descr: 03-IB002

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
B14	HL93	41	M	59	M	34	S	57	S	0.81	M	1.06	M		
B14	H15	37	M	53	M	31	S	52	S	1.69	M	2.19	M		
B14	HS20	64	M	91	M	53	S	88	S	1.20	M	1.55	M		
B14	3	52	M	73	M	43	S	71	S	1.40	M	1.81	M	1.88	M
B14	3S2	75	M	106	M	62	S	104	S	1.26	M	1.64	M	1.70	M
B14	3-3	101	M	143	M	83	S	139	S	1.70	M	2.20	M	2.28	M
B14	SU4	46	M	65	M	38	S	63	S	1.14	M	1.48	M	1.54	M
B14	SU5	48	M	69	M	40	S	67	S	1.05	M	1.37	M	1.42	M
B14	SU6	50	M	70	M	41	S	68	S	0.96	M	1.25	M	1.30	M
B14	SU7	53	M	76	M	44	S	74	S	0.93	M	1.21	M	1.25	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 03-IB003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LFD		LRF		LRF		LRF		LRF	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B15	HL93	40	M	58	M	34	S	56	S	0.80	M	1.03	M		
B15	H15	36	M	52	M	30	S	51	S	1.65	M	2.13	M		
B15	HS20	62	M	89	M	52	S	87	S	1.17	M	1.51	M		
B15	3	50	M	72	M	42	S	70	S	1.36	M	1.76	M	1.83	M
B15	3S2	73	M	104	M	61	S	102	S	1.23	M	1.60	M	1.66	M
B15	3-3	99	M	140	M	82	S	137	S	1.65	M	2.14	M	2.23	M
B15	SU4	45	M	64	M	37	S	62	S	1.11	M	1.45	M	1.50	M
B15	SU5	47	M	67	M	39	S	66	S	1.03	M	1.33	M	1.38	M
B15	SU6	48	M	69	M	40	S	67	S	0.94	M	1.22	M	1.26	M
B15	SU7	52	M	74	M	43	S	72	S	0.91	M	1.18	M	1.22	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

CALCULATIONS – LARS MEMBER SUMMARY (TABULAR) REPORT:

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v10.06.00.18 PAGE 1

BRIDGE / MEMBER DATA

SUMMARY REPORT

Bridge ID: 02M4216_20190101cy01_LR_SHV_01of08
 Bridge Name: 02M4216
 Path Name: O:\1026_02F8_67 Bergen County NJDOT\Load Rating\65_02M4216\
 File Name: 02M4216_20190101cy01_LR_SHV_01of08.BMD

(Stringers)

Comments:

1SEE LARS MIS SKETCH FOR DETAILS

Member Descr: 01-ES001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor				
		ASD		LFD		LRFD		LRF		LRF		LRF		
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL
S01	HL93	118	M	163	M	95	S	159	S	1.75	M	2.27	M	
S01	H15	65	M	90	M	53	S	88	S	2.89	M	3.75	M	
S01	HS20	118	M	163	M	95	S	159	S	2.17	M	2.81	M	
S01	3	106	M	146	M	85	S	142	S	2.80	M	3.63	M	3.57 S
S01	3S2	170	M	233	M	137	S	228	S	2.80	M	3.63	M	3.57 S
S01	3-3	206	M	284	M	166	S	277	S	3.40	M	4.41	M	4.33 S
S01	SU4	103	M	141	M	83	S	138	S	2.52	M	3.26	M	3.20 S
S01	SU5	118	M	162	M	95	S	159	S	2.52	M	3.26	M	3.20 S
S01	SU6	132	M	182	M	107	S	178	S	2.52	M	3.26	M	3.20 S
S01	SU7	147	M	203	M	119	S	198	S	2.52	M	3.26	M	3.20 S

Member Descr: 01-IS002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor				
		ASD		LFD		LRFD		LRF		LRF		LRF		
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL
S02	HL93	133	M	182	M	107	S	178	S	1.92	M	2.48	M	
S02	H15	74	M	101	M	59	S	99	S	3.17	M	4.10	M	
S02	HS20	133	M	182	M	107	S	178	S	2.37	M	3.08	M	
S02	3	119	M	163	M	96	S	160	S	3.07	M	3.97	M	3.89 S
S02	3S2	191	M	261	M	153	S	256	S	3.07	M	3.97	M	3.89 S
S02	3-3	231	M	318	M	186	S	310	S	3.72	M	4.83	M	4.73 S
S02	SU4	115	M	158	M	93	S	155	S	2.75	M	3.57	M	3.50 S
S02	SU5	132	M	182	M	106	S	178	S	2.75	M	3.57	M	3.50 S
S02	SU6	149	M	204	M	119	S	199	S	2.75	M	3.57	M	3.50 S
S02	SU7	166	M	227	M	133	S	222	S	2.75	M	3.57	M	3.50 S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 01-IS003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S03	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S03	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S03	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S03	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S03	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S03	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S03	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S03	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S03	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S03	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-IS004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S04	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S04	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S04	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S04	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S04	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S04	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S04	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S04	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S04	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S04	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-IS005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S05	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S05	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S05	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S05	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S05	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S05	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S05	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S05	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S05	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S05	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 01-IS006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S06	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S06	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S06	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S06	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S06	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S06	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S06	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S06	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S06	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S06	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-IS007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S07	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S07	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S07	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S07	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S07	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S07	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S07	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S07	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S07	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S07	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S08	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S08	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S08	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S08	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S08	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S08	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S08	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S08	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S08	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S08	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 01-IS009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LGL	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S09	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S09	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S09	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S09	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S09	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S09	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S09	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S09	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S09	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S09	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-IS010

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LGL	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S10	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S10	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S10	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S10	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S10	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S10	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S10	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S10	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S10	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S10	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-IS011

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LGL	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S11	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S11	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S11	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S11	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S11	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S11	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S11	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S11	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S11	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S11	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 01-IS012

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S12	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S12	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S12	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S12	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S12	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S12	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S12	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S12	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S12	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S12	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-IS013

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S13	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S13	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S13	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S13	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S13	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S13	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S13	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S13	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S13	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S13	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-IS014

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S14	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S14	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S14	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S14	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S14	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S14	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S14	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S14	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S14	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S14	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 01-IS015

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S15	HL93	206	M	283	M	166	S	276	S	3.03	M	3.92	M		
S15	H15	114	M	157	M	92	S	153	S	5.00	M	6.48	M		
S15	HS20	206	M	283	M	166	S	276	S	3.75	M	4.86	M		
S15	3	185	M	254	M	149	S	248	S	4.84	M	6.28	M	6.15	S
S15	3S2	296	M	406	M	238	S	397	S	4.84	M	6.28	M	6.15	S
S15	3-3	359	M	493	M	289	S	482	S	5.88	M	7.62	M	7.47	S
S15	SU4	179	M	246	M	144	S	240	S	4.35	M	5.64	M	5.53	S
S15	SU5	206	M	283	M	165	S	276	S	4.35	M	5.64	M	5.53	S
S15	SU6	231	M	317	M	186	S	310	S	4.35	M	5.64	M	5.53	S
S15	SU7	257	M	353	M	207	S	345	S	4.35	M	5.64	M	5.53	S

Member Descr: 01-ES016

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S16	HL93	49	M	68	M	40	S	66	S	0.44	M	0.57	M		
S16	H15	27	M	38	M	22	S	37	S	0.73	M	0.95	M		
S16	HS20	49	M	68	M	40	S	66	S	0.55	M	0.71	M		
S16	3	44	M	61	M	36	S	60	S	0.71	M	0.92	M	0.90	S
S16	3S2	71	M	98	M	57	S	96	S	0.71	M	0.92	M	0.90	S
S16	3-3	86	M	119	M	70	S	116	S	0.86	M	1.12	M	1.10	S
S16	SU4	43	M	59	M	34	S	58	S	0.64	M	0.82	M	0.81	S
S16	SU5	49	M	68	M	40	S	66	S	0.64	M	0.82	M	0.81	S
S16	SU6	55	M	76	M	44	S	74	S	0.64	M	0.82	M	0.81	S
S16	SU7	62	M	85	M	50	S	83	S	0.64	M	0.82	M	0.81	S

Member Descr: 02-ES001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S01	HL93	72	M	100	M	58	S	97	S	1.11	M	1.43	M		
S01	H15	40	M	55	M	32	S	54	S	1.79	M	2.32	M		
S01	HS20	72	M	100	M	58	S	97	S	1.34	M	1.74	M		
S01	3	67	M	92	M	53	S	89	S	1.78	M	2.30	M	2.26	S
S01	3S2	101	M	139	M	82	S	136	S	1.69	M	2.19	M	2.15	S
S01	3-3	130	M	178	M	104	S	174	S	2.16	M	2.80	M	2.74	S
S01	SU4	66	M	91	M	53	S	89	S	1.63	M	2.11	M	2.07	S
S01	SU5	76	M	104	M	61	S	102	S	1.63	M	2.11	M	2.07	S
S01	SU6	84	M	116	M	68	S	113	S	1.62	M	2.10	M	2.06	S
S01	SU7	97	V	134	V	79	V	131	V	1.69	M	2.19	M	2.15	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 02-IS002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S02	HL93	99	M	136	M	79	S	133	S	1.49	M	1.93	M		
S02	H15	55	M	75	M	44	S	73	S	2.40	M	3.11	M		
S02	HS20	99	M	136	M	79	S	133	S	1.80	M	2.34	M		
S02	3	91	M	125	M	73	S	122	S	2.38	M	3.09	M	3.03	S
S02	3S2	138	M	190	M	111	S	186	S	2.27	M	2.94	M	2.88	S
S02	3-3	177	M	243	M	142	S	237	S	2.89	M	3.75	M	3.68	S
S02	SU4	90	M	124	M	72	S	121	S	2.19	M	2.84	M	2.78	S
S02	SU5	103	M	142	M	83	S	139	S	2.19	M	2.84	M	2.78	S
S02	SU6	115	M	158	M	92	S	154	S	2.17	M	2.81	M	2.76	S
S02	SU7	133	V	182	V	107	V	179	V	2.27	M	2.94	M	2.88	S

Member Descr: 02-IS003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S03	HL93	99	M	136	M	79	S	133	S	1.49	M	1.93	M		
S03	H15	55	M	75	M	44	S	73	S	2.40	M	3.11	M		
S03	HS20	99	M	136	M	79	S	133	S	1.80	M	2.34	M		
S03	3	91	M	125	M	73	S	122	S	2.38	M	3.09	M	3.03	S
S03	3S2	138	M	190	M	111	S	186	S	2.27	M	2.94	M	2.88	S
S03	3-3	177	M	243	M	142	S	237	S	2.89	M	3.75	M	3.68	S
S03	SU4	90	M	124	M	72	S	121	S	2.19	M	2.84	M	2.78	S
S03	SU5	103	M	142	M	83	S	139	S	2.19	M	2.84	M	2.78	S
S03	SU6	115	M	158	M	92	S	154	S	2.17	M	2.81	M	2.76	S
S03	SU7	133	V	182	V	107	V	179	V	2.27	M	2.94	M	2.88	S

Member Descr: 02-IS004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S04	HL93	99	M	136	M	79	S	133	S	1.49	M	1.93	M		
S04	H15	55	M	75	M	44	S	73	S	2.40	M	3.11	M		
S04	HS20	99	M	136	M	79	S	133	S	1.80	M	2.34	M		
S04	3	91	M	125	M	73	S	122	S	2.38	M	3.09	M	3.03	S
S04	3S2	138	M	190	M	111	S	186	S	2.27	M	2.94	M	2.88	S
S04	3-3	177	M	243	M	142	S	237	S	2.89	M	3.75	M	3.68	S
S04	SU4	90	M	124	M	72	S	121	S	2.19	M	2.84	M	2.78	S
S04	SU5	103	M	142	M	83	S	139	S	2.19	M	2.84	M	2.78	S
S04	SU6	115	M	158	M	92	S	154	S	2.17	M	2.81	M	2.76	S
S04	SU7	133	V	182	V	107	V	179	V	2.27	M	2.94	M	2.88	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 02-IS005

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
S05	HL93	99	M	136	M	79	S	133	S	1.49	M	1.93	M		
S05	H15	55	M	75	M	44	S	73	S	2.40	M	3.11	M		
S05	HS20	99	M	136	M	79	S	133	S	1.80	M	2.34	M		
S05	3	91	M	125	M	73	S	122	S	2.38	M	3.09	M	3.03	S
S05	3S2	138	M	190	M	111	S	186	S	2.27	M	2.94	M	2.88	S
S05	3-3	177	M	243	M	142	S	237	S	2.89	M	3.75	M	3.68	S
S05	SU4	90	M	124	M	72	S	121	S	2.19	M	2.84	M	2.78	S
S05	SU5	103	M	142	M	83	S	139	S	2.19	M	2.84	M	2.78	S
S05	SU6	115	M	158	M	92	S	154	S	2.17	M	2.81	M	2.76	S
S05	SU7	133	V	182	V	107	V	179	V	2.27	M	2.94	M	2.88	S

Member Descr: 02-IS006

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
S06	HL93	99	M	136	M	79	S	133	S	1.49	M	1.93	M		
S06	H15	55	M	75	M	44	S	73	S	2.40	M	3.11	M		
S06	HS20	99	M	136	M	79	S	133	S	1.80	M	2.34	M		
S06	3	91	M	125	M	73	S	122	S	2.38	M	3.09	M	3.03	S
S06	3S2	138	M	190	M	111	S	186	S	2.27	M	2.94	M	2.88	S
S06	3-3	177	M	243	M	142	S	237	S	2.89	M	3.75	M	3.68	S
S06	SU4	90	M	124	M	72	S	121	S	2.19	M	2.84	M	2.78	S
S06	SU5	103	M	142	M	83	S	139	S	2.19	M	2.84	M	2.78	S
S06	SU6	115	M	158	M	92	S	154	S	2.17	M	2.81	M	2.76	S
S06	SU7	133	V	182	V	107	V	179	V	2.27	M	2.94	M	2.88	S

Member Descr: 02-IS007

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
S07	HL93	99	M	136	M	79	S	133	S	1.49	M	1.93	M		
S07	H15	55	M	75	M	44	S	73	S	2.40	M	3.11	M		
S07	HS20	99	M	136	M	79	S	133	S	1.80	M	2.34	M		
S07	3	91	M	125	M	73	S	122	S	2.38	M	3.09	M	3.03	S
S07	3S2	138	M	190	M	111	S	186	S	2.27	M	2.94	M	2.88	S
S07	3-3	177	M	243	M	142	S	237	S	2.89	M	3.75	M	3.68	S
S07	SU4	90	M	124	M	72	S	121	S	2.19	M	2.84	M	2.78	S
S07	SU5	103	M	142	M	83	S	139	S	2.19	M	2.84	M	2.78	S
S07	SU6	115	M	158	M	92	S	154	S	2.17	M	2.81	M	2.76	S
S07	SU7	133	V	182	V	107	V	179	V	2.27	M	2.94	M	2.88	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 02-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S08	HL93	99	M	136	M	79	S	133	S	1.49	M	1.93	M		
S08	H15	55	M	75	M	44	S	73	S	2.40	M	3.11	M		
S08	HS20	99	M	136	M	79	S	133	S	1.80	M	2.34	M		
S08	3	91	M	125	M	73	S	122	S	2.38	M	3.09	M	3.03	S
S08	3S2	138	M	190	M	111	S	186	S	2.27	M	2.94	M	2.88	S
S08	3-3	177	M	243	M	142	S	237	S	2.89	M	3.75	M	3.68	S
S08	SU4	90	M	124	M	72	S	121	S	2.19	M	2.84	M	2.78	S
S08	SU5	103	M	142	M	83	S	139	S	2.19	M	2.84	M	2.78	S
S08	SU6	115	M	158	M	92	S	154	S	2.17	M	2.81	M	2.76	S
S08	SU7	133	V	182	V	107	V	179	V	2.27	M	2.94	M	2.88	S

Member Descr: 02-ES009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S09	HL93	72	M	100	M	58	S	97	S	1.11	M	1.43	M		
S09	H15	40	M	55	M	32	S	54	S	1.79	M	2.32	M		
S09	HS20	72	M	100	M	58	S	97	S	1.34	M	1.74	M		
S09	3	67	M	92	M	53	S	89	S	1.78	M	2.30	M	2.26	S
S09	3S2	101	M	139	M	82	S	136	S	1.69	M	2.19	M	2.15	S
S09	3-3	130	M	178	M	104	S	174	S	2.16	M	2.80	M	2.74	S
S09	SU4	66	M	91	M	53	S	89	S	1.63	M	2.11	M	2.07	S
S09	SU5	76	M	104	M	61	S	102	S	1.63	M	2.11	M	2.07	S
S09	SU6	84	M	116	M	68	S	113	S	1.62	M	2.10	M	2.06	S
S09	SU7	97	V	134	V	79	V	131	V	1.69	M	2.19	M	2.15	S

Member Descr: 03-ES001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S10	HL93	70	M	97	M	57	S	95	S	1.06	M	1.38	M		
S10	H15	39	M	54	M	31	S	52	S	1.74	M	2.25	M		
S10	HS20	70	M	97	M	57	S	95	S	1.30	M	1.69	M		
S10	3	64	M	88	M	51	S	86	S	1.71	M	2.21	M	2.17	S
S10	3S2	98	M	134	M	78	S	131	S	1.62	M	2.11	M	2.07	S
S10	3-3	125	M	171	M	100	S	167	S	2.07	M	2.69	M	2.63	S
S10	SU4	63	M	87	M	51	S	85	S	1.56	M	2.02	M	1.98	S
S10	SU5	72	M	100	M	58	S	97	S	1.56	M	2.02	M	1.98	S
S10	SU6	80	M	110	M	65	S	108	S	1.54	M	2.00	M	1.96	S
S10	SU7	93	M	128	M	75	S	125	S	1.60	M	2.08	M	2.04	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 03-IS002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S11	HL93	96	M	132	M	77	S	129	S	1.43	M	1.85	M		
S11	H15	53	M	73	M	43	S	71	S	2.33	M	3.02	M		
S11	HS20	96	M	132	M	77	S	129	S	1.75	M	2.27	M		
S11	3	87	M	120	M	70	S	117	S	2.29	M	2.97	M	2.91	S
S11	3S2	133	M	183	M	107	S	179	S	2.18	M	2.83	M	2.77	S
S11	3-3	170	M	233	M	137	S	228	S	2.78	M	3.61	M	3.54	S
S11	SU4	86	M	118	M	69	S	116	S	2.09	M	2.71	M	2.66	S
S11	SU5	99	M	136	M	79	S	133	S	2.09	M	2.71	M	2.66	S
S11	SU6	109	M	150	M	88	S	147	S	2.07	M	2.68	M	2.63	S
S11	SU7	127	M	175	M	102	S	171	S	2.15	M	2.79	M	2.74	S

Member Descr: 03-IS003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S12	HL93	96	M	132	M	77	S	129	S	1.43	M	1.85	M		
S12	H15	53	M	73	M	43	S	71	S	2.33	M	3.02	M		
S12	HS20	96	M	132	M	77	S	129	S	1.75	M	2.27	M		
S12	3	87	M	120	M	70	S	117	S	2.29	M	2.97	M	2.91	S
S12	3S2	133	M	183	M	107	S	179	S	2.18	M	2.83	M	2.77	S
S12	3-3	170	M	233	M	137	S	228	S	2.78	M	3.61	M	3.54	S
S12	SU4	86	M	118	M	69	S	116	S	2.09	M	2.71	M	2.66	S
S12	SU5	99	M	136	M	79	S	133	S	2.09	M	2.71	M	2.66	S
S12	SU6	109	M	150	M	88	S	147	S	2.07	M	2.68	M	2.63	S
S12	SU7	127	M	175	M	102	S	171	S	2.15	M	2.79	M	2.74	S

Member Descr: 03-IS004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S13	HL93	96	M	132	M	77	S	129	S	1.43	M	1.85	M		
S13	H15	53	M	73	M	43	S	71	S	2.33	M	3.02	M		
S13	HS20	96	M	132	M	77	S	129	S	1.75	M	2.27	M		
S13	3	87	M	120	M	70	S	117	S	2.29	M	2.97	M	2.91	S
S13	3S2	133	M	183	M	107	S	179	S	2.18	M	2.83	M	2.77	S
S13	3-3	170	M	233	M	137	S	228	S	2.78	M	3.61	M	3.54	S
S13	SU4	86	M	118	M	69	S	116	S	2.09	M	2.71	M	2.66	S
S13	SU5	99	M	136	M	79	S	133	S	2.09	M	2.71	M	2.66	S
S13	SU6	109	M	150	M	88	S	147	S	2.07	M	2.68	M	2.63	S
S13	SU7	127	M	175	M	102	S	171	S	2.15	M	2.79	M	2.74	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 03-IS005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S14	HL93	96	M	132	M	77	S	129	S	1.43	M	1.85	M		
S14	H15	53	M	73	M	43	S	71	S	2.33	M	3.02	M		
S14	HS20	96	M	132	M	77	S	129	S	1.75	M	2.27	M		
S14	3	87	M	120	M	70	S	117	S	2.29	M	2.97	M	2.91	S
S14	3S2	133	M	183	M	107	S	179	S	2.18	M	2.83	M	2.77	S
S14	3-3	170	M	233	M	137	S	228	S	2.78	M	3.61	M	3.54	S
S14	SU4	86	M	118	M	69	S	116	S	2.09	M	2.71	M	2.66	S
S14	SU5	99	M	136	M	79	S	133	S	2.09	M	2.71	M	2.66	S
S14	SU6	109	M	150	M	88	S	147	S	2.07	M	2.68	M	2.63	S
S14	SU7	127	M	175	M	102	S	171	S	2.15	M	2.79	M	2.74	S

Member Descr: 03-IS006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S15	HL93	96	M	132	M	77	S	129	S	1.43	M	1.85	M		
S15	H15	53	M	73	M	43	S	71	S	2.33	M	3.02	M		
S15	HS20	96	M	132	M	77	S	129	S	1.75	M	2.27	M		
S15	3	87	M	120	M	70	S	117	S	2.29	M	2.97	M	2.91	S
S15	3S2	133	M	183	M	107	S	179	S	2.18	M	2.83	M	2.77	S
S15	3-3	170	M	233	M	137	S	228	S	2.78	M	3.61	M	3.54	S
S15	SU4	86	M	118	M	69	S	116	S	2.09	M	2.71	M	2.66	S
S15	SU5	99	M	136	M	79	S	133	S	2.09	M	2.71	M	2.66	S
S15	SU6	109	M	150	M	88	S	147	S	2.07	M	2.68	M	2.63	S
S15	SU7	127	M	175	M	102	S	171	S	2.15	M	2.79	M	2.74	S

Member Descr: 03-IS007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S16	HL93	81	V	112	V	65	V	109	V	1.43	M	1.85	M		
S16	H15	46	V	63	V	37	V	62	V	2.33	M	3.02	M		
S16	HS20	81	V	112	V	65	V	109	V	1.75	M	2.27	M		
S16	3	60	V	82	V	48	V	81	V	2.29	M	2.97	M	2.91	S
S16	3S2	95	V	130	V	77	V	128	V	2.18	M	2.83	M	2.77	S
S16	3-3	117	V	160	V	94	V	157	V	2.78	M	3.61	M	3.54	S
S16	SU4	57	V	78	V	46	V	77	V	2.09	M	2.71	M	2.66	S
S16	SU5	62	V	86	V	50	V	84	V	2.09	M	2.71	M	2.66	S
S16	SU6	69	V	95	V	56	V	93	V	2.07	M	2.68	M	2.63	S
S16	SU7	76	V	104	V	61	V	102	V	2.15	M	2.79	M	2.74	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 03-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S17	HL93	96	M	132	M	77	S	129	S	1.43	M	1.85	M		
S17	H15	53	M	73	M	43	S	71	S	2.33	M	3.02	M		
S17	HS20	96	M	132	M	77	S	129	S	1.75	M	2.27	M		
S17	3	87	M	120	M	70	S	117	S	2.29	M	2.97	M	2.91	S
S17	3S2	133	M	183	M	107	S	179	S	2.18	M	2.83	M	2.77	S
S17	3-3	170	M	233	M	137	S	228	S	2.78	M	3.61	M	3.54	S
S17	SU4	86	M	118	M	69	S	116	S	2.09	M	2.71	M	2.66	S
S17	SU5	99	M	136	M	79	S	133	S	2.09	M	2.71	M	2.66	S
S17	SU6	109	M	150	M	88	S	147	S	2.07	M	2.68	M	2.63	S
S17	SU7	127	M	175	M	102	S	171	S	2.15	M	2.79	M	2.74	S

Member Descr: 03-ES009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S18	HL93	70	M	97	M	57	S	95	S	1.06	M	1.38	M		
S18	H15	39	M	54	M	31	S	52	S	1.74	M	2.25	M		
S18	HS20	70	M	97	M	57	S	95	S	1.30	M	1.69	M		
S18	3	64	M	88	M	51	S	86	S	1.71	M	2.21	M	2.17	S
S18	3S2	98	M	134	M	78	S	131	S	1.62	M	2.11	M	2.07	S
S18	3-3	125	M	171	M	100	S	167	S	2.07	M	2.69	M	2.63	S
S18	SU4	63	M	87	M	51	S	85	S	1.56	M	2.02	M	1.98	S
S18	SU5	72	M	100	M	58	S	97	S	1.56	M	2.02	M	1.98	S
S18	SU6	80	M	110	M	65	S	108	S	1.54	M	2.00	M	1.96	S
S18	SU7	93	M	128	M	75	S	125	S	1.60	M	2.08	M	2.04	S

Member Descr: 04-ES001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S19	HL93	67	M	93	M	54	S	91	S	1.00	M	1.30	M		
S19	H15	37	M	51	M	30	S	50	S	1.67	M	2.16	M		
S19	HS20	67	M	93	M	54	S	91	S	1.25	M	1.62	M		
S19	3	61	M	83	M	49	S	81	S	1.62	M	2.10	M	2.06	S
S19	3S2	93	M	127	M	75	S	125	S	1.54	M	2.00	M	1.96	S
S19	3-3	118	M	162	M	95	S	159	S	1.96	M	2.54	M	2.50	S
S19	SU4	59	M	82	M	48	S	80	S	1.47	M	1.90	M	1.86	S
S19	SU5	68	M	94	M	55	S	92	S	1.47	M	1.90	M	1.86	S
S19	SU6	75	M	103	M	60	S	101	S	1.44	M	1.87	M	1.83	S
S19	SU7	87	M	119	M	70	S	117	S	1.49	M	1.93	M	1.90	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 04-IS002

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
S20	HL93	92	M	126	M	74	S	124	S	1.35	M	1.75	M		
S20	H15	51	M	70	M	41	S	68	S	2.24	M	2.90	M		
S20	HS20	92	M	126	M	74	S	124	S	1.68	M	2.18	M		
S20	3	82	M	113	M	66	S	111	S	2.17	M	2.81	M	2.76	S
S20	3S2	126	M	174	M	102	S	170	S	2.07	M	2.68	M	2.63	S
S20	3-3	161	M	221	M	129	S	216	S	2.63	M	3.41	M	3.35	S
S20	SU4	81	M	111	M	65	S	109	S	1.97	M	2.55	M	2.50	S
S20	SU5	93	M	128	M	75	S	125	S	1.97	M	2.55	M	2.50	S
S20	SU6	102	M	141	M	82	S	137	S	1.93	M	2.50	M	2.46	S
S20	SU7	118	M	163	M	95	S	159	S	2.00	M	2.60	M	2.55	S

Member Descr: 04-IS003

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
S21	HL93	92	M	126	M	74	S	124	S	1.35	M	1.75	M		
S21	H15	51	M	70	M	41	S	68	S	2.24	M	2.90	M		
S21	HS20	92	M	126	M	74	S	124	S	1.68	M	2.18	M		
S21	3	82	M	113	M	66	S	111	S	2.17	M	2.81	M	2.76	S
S21	3S2	126	M	174	M	102	S	170	S	2.07	M	2.68	M	2.63	S
S21	3-3	161	M	221	M	129	S	216	S	2.63	M	3.41	M	3.35	S
S21	SU4	81	M	111	M	65	S	109	S	1.97	M	2.55	M	2.50	S
S21	SU5	93	M	128	M	75	S	125	S	1.97	M	2.55	M	2.50	S
S21	SU6	102	M	141	M	82	S	137	S	1.93	M	2.50	M	2.46	S
S21	SU7	118	M	163	M	95	S	159	S	2.00	M	2.60	M	2.55	S

Member Descr: 04-IS004

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
S22	HL93	92	M	126	M	74	S	124	S	1.35	M	1.75	M		
S22	H15	51	M	70	M	41	S	68	S	2.24	M	2.90	M		
S22	HS20	92	M	126	M	74	S	124	S	1.68	M	2.18	M		
S22	3	82	M	113	M	66	S	111	S	2.17	M	2.81	M	2.76	S
S22	3S2	126	M	174	M	102	S	170	S	2.07	M	2.68	M	2.63	S
S22	3-3	161	M	221	M	129	S	216	S	2.63	M	3.41	M	3.35	S
S22	SU4	81	M	111	M	65	S	109	S	1.97	M	2.55	M	2.50	S
S22	SU5	93	M	128	M	75	S	125	S	1.97	M	2.55	M	2.50	S
S22	SU6	102	M	141	M	82	S	137	S	1.93	M	2.50	M	2.46	S
S22	SU7	118	M	163	M	95	S	159	S	2.00	M	2.60	M	2.55	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 04-IS005

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
S23	HL93	92	M	126	M	74	S	124	S	1.35	M	1.75	M		
S23	H15	51	M	70	M	41	S	68	S	2.24	M	2.90	M		
S23	HS20	92	M	126	M	74	S	124	S	1.68	M	2.18	M		
S23	3	82	M	113	M	66	S	111	S	2.17	M	2.81	M	2.76	S
S23	3S2	126	M	174	M	102	S	170	S	2.07	M	2.68	M	2.63	S
S23	3-3	161	M	221	M	129	S	216	S	2.63	M	3.41	M	3.35	S
S23	SU4	81	M	111	M	65	S	109	S	1.97	M	2.55	M	2.50	S
S23	SU5	93	M	128	M	75	S	125	S	1.97	M	2.55	M	2.50	S
S23	SU6	102	M	141	M	82	S	137	S	1.93	M	2.50	M	2.46	S
S23	SU7	118	M	163	M	95	S	159	S	2.00	M	2.60	M	2.55	S

Member Descr: 04-IS006

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
S24	HL93	92	M	126	M	74	S	124	S	1.35	M	1.75	M		
S24	H15	51	M	70	M	41	S	68	S	2.24	M	2.90	M		
S24	HS20	92	M	126	M	74	S	124	S	1.68	M	2.18	M		
S24	3	82	M	113	M	66	S	111	S	2.17	M	2.81	M	2.76	S
S24	3S2	126	M	174	M	102	S	170	S	2.07	M	2.68	M	2.63	S
S24	3-3	161	M	221	M	129	S	216	S	2.63	M	3.41	M	3.35	S
S24	SU4	81	M	111	M	65	S	109	S	1.97	M	2.55	M	2.50	S
S24	SU5	93	M	128	M	75	S	125	S	1.97	M	2.55	M	2.50	S
S24	SU6	102	M	141	M	82	S	137	S	1.93	M	2.50	M	2.46	S
S24	SU7	118	M	163	M	95	S	159	S	2.00	M	2.60	M	2.55	S

Member Descr: 04-IS007

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
S25	HL93	92	M	126	M	74	S	124	S	1.35	M	1.75	M		
S25	H15	51	M	70	M	41	S	68	S	2.24	M	2.90	M		
S25	HS20	92	M	126	M	74	S	124	S	1.68	M	2.18	M		
S25	3	82	M	113	M	66	S	111	S	2.17	M	2.81	M	2.76	S
S25	3S2	126	M	174	M	102	S	170	S	2.07	M	2.68	M	2.63	S
S25	3-3	161	M	221	M	129	S	216	S	2.63	M	3.41	M	3.35	S
S25	SU4	81	M	111	M	65	S	109	S	1.97	M	2.55	M	2.50	S
S25	SU5	93	M	128	M	75	S	125	S	1.97	M	2.55	M	2.50	S
S25	SU6	102	M	141	M	82	S	137	S	1.93	M	2.50	M	2.46	S
S25	SU7	118	M	163	M	95	S	159	S	2.00	M	2.60	M	2.55	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 04-IS008

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
S26	HL93	92	M	126	M	74	S	124	S	1.35	M	1.75	M		
S26	H15	51	M	70	M	41	S	68	S	2.24	M	2.90	M		
S26	HS20	92	M	126	M	74	S	124	S	1.68	M	2.18	M		
S26	3	82	M	113	M	66	S	111	S	2.17	M	2.81	M	2.76	S
S26	3S2	126	M	174	M	102	S	170	S	2.07	M	2.68	M	2.63	S
S26	3-3	161	M	221	M	129	S	216	S	2.63	M	3.41	M	3.35	S
S26	SU4	81	M	111	M	65	S	109	S	1.97	M	2.55	M	2.50	S
S26	SU5	93	M	128	M	75	S	125	S	1.97	M	2.55	M	2.50	S
S26	SU6	102	M	141	M	82	S	137	S	1.93	M	2.50	M	2.46	S
S26	SU7	118	M	163	M	95	S	159	S	2.00	M	2.60	M	2.55	S

Member Descr: 04-ES009

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
S27	HL93	67	M	93	M	54	S	91	S	1.00	M	1.30	M		
S27	H15	37	M	51	M	30	S	50	S	1.67	M	2.16	M		
S27	HS20	67	M	93	M	54	S	91	S	1.25	M	1.62	M		
S27	3	61	M	83	M	49	S	81	S	1.62	M	2.10	M	2.06	S
S27	3S2	93	M	127	M	75	S	125	S	1.54	M	2.00	M	1.96	S
S27	3-3	118	M	162	M	95	S	159	S	1.96	M	2.54	M	2.50	S
S27	SU4	59	M	82	M	48	S	80	S	1.47	M	1.90	M	1.86	S
S27	SU5	68	M	94	M	55	S	92	S	1.47	M	1.90	M	1.86	S
S27	SU6	75	M	103	M	60	S	101	S	1.44	M	1.87	M	1.83	S
S27	SU7	87	M	119	M	70	S	117	S	1.49	M	1.93	M	1.90	S

Member Descr: 05-ES001

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
S17	HL93	51	M	70	M	41	S	68	S	0.74	M	0.96	M		
S17	H15	28	M	39	M	22	S	38	S	1.25	M	1.62	M		
S17	HS20	51	M	70	M	41	S	68	S	0.94	M	1.22	M		
S17	3	44	M	61	M	36	S	60	S	1.19	M	1.54	M	1.51	S
S17	3S2	71	M	98	M	57	S	96	S	1.19	M	1.54	M	1.51	S
S17	3-3	87	M	120	M	70	S	117	S	1.45	M	1.87	M	1.84	S
S17	SU4	42	M	59	M	34	S	57	S	1.05	M	1.37	M	1.34	S
S17	SU5	49	M	67	M	39	S	66	S	1.05	M	1.37	M	1.34	S
S17	SU6	55	M	76	M	44	S	74	S	1.05	M	1.37	M	1.34	S
S17	SU7	61	M	84	M	49	S	82	S	1.05	M	1.37	M	1.34	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 05-IS002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S18	HL93	82	V	113	V	66	V	111	V	1.36	M	1.76	M		
S18	H15	47	V	65	V	38	V	64	V	2.30	M	2.98	M		
S18	HS20	82	V	113	V	66	V	111	V	1.73	M	2.24	M		
S18	3	65	V	90	V	53	V	88	V	2.18	M	2.83	M	2.78	S
S18	3S2	105	V	144	V	85	V	142	V	2.18	M	2.83	M	2.78	S
S18	3-3	128	V	175	V	103	V	172	V	2.65	M	3.44	M	3.38	S
S18	SU4	63	V	86	V	51	V	85	V	1.93	M	2.51	M	2.46	S
S18	SU5	69	V	95	V	56	V	93	V	1.93	M	2.51	M	2.46	S
S18	SU6	77	V	106	V	62	V	104	V	1.93	M	2.51	M	2.46	S
S18	SU7	86	V	119	V	70	V	116	V	1.93	M	2.51	M	2.46	S

Member Descr: 05-IS003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S19	HL93	82	V	113	V	66	V	111	V	1.36	M	1.76	M		
S19	H15	47	V	65	V	38	V	64	V	2.30	M	2.98	M		
S19	HS20	82	V	113	V	66	V	111	V	1.73	M	2.24	M		
S19	3	65	V	90	V	53	V	88	V	2.18	M	2.83	M	2.78	S
S19	3S2	105	V	144	V	85	V	142	V	2.18	M	2.83	M	2.78	S
S19	3-3	128	V	175	V	103	V	172	V	2.65	M	3.44	M	3.38	S
S19	SU4	63	V	86	V	51	V	85	V	1.93	M	2.51	M	2.46	S
S19	SU5	69	V	95	V	56	V	93	V	1.93	M	2.51	M	2.46	S
S19	SU6	77	V	106	V	62	V	104	V	1.93	M	2.51	M	2.46	S
S19	SU7	86	V	119	V	70	V	116	V	1.93	M	2.51	M	2.46	S

Member Descr: 05-IS004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S20	HL93	82	V	113	V	66	V	111	V	1.91	M	2.48	M		
S20	H15	47	V	65	V	38	V	64	V	3.24	M	4.20	M		
S20	HS20	82	V	113	V	66	V	111	V	2.43	M	3.15	M		
S20	3	65	V	90	V	53	V	88	V	3.07	M	3.98	M	3.91	S
S20	3S2	105	V	144	V	85	V	142	V	3.07	M	3.98	M	3.91	S
S20	3-3	128	V	175	V	103	V	172	V	3.73	M	4.84	M	4.75	S
S20	SU4	63	V	86	V	51	V	85	V	2.72	M	3.53	M	3.47	S
S20	SU5	69	V	95	V	56	V	93	V	2.72	M	3.53	M	3.47	S
S20	SU6	77	V	106	V	62	V	104	V	2.72	M	3.53	M	3.46	S
S20	SU7	86	V	119	V	70	V	116	V	2.72	M	3.53	M	3.46	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 05-IS005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S21	HL93	83	V	114	V	67	V	111	V	2.75	M	3.57	M		
S21	H15	48	V	66	V	38	V	64	V	4.66	M	6.04	M		
S21	HS20	83	V	114	V	67	V	111	V	3.49	M	4.53	M		
S21	3	66	V	91	V	53	V	89	V	4.42	M	5.73	M	5.62	S
S21	3S2	106	V	145	V	85	V	143	V	4.42	M	5.73	M	5.62	S
S21	3-3	129	V	176	V	104	V	173	V	5.37	M	6.96	M	6.83	S
S21	SU4	63	V	87	V	51	V	85	V	3.92	M	5.08	M	4.98	S
S21	SU5	70	V	95	V	56	V	94	V	3.92	M	5.08	M	4.98	S
S21	SU6	78	V	107	V	63	V	105	V	3.91	M	5.07	M	4.97	S
S21	SU7	87	V	119	V	70	V	117	V	3.91	M	5.07	M	4.97	S

Member Descr: 05-IS006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S22	HL93	83	V	114	V	67	V	111	V	2.75	M	3.57	M		
S22	H15	48	V	66	V	38	V	64	V	4.66	M	6.04	M		
S22	HS20	83	V	114	V	67	V	111	V	3.49	M	4.53	M		
S22	3	66	V	91	V	53	V	89	V	4.42	M	5.73	M	5.62	S
S22	3S2	106	V	145	V	85	V	143	V	4.42	M	5.73	M	5.62	S
S22	3-3	129	V	176	V	104	V	173	V	5.37	M	6.96	M	6.83	S
S22	SU4	63	V	87	V	51	V	85	V	3.92	M	5.08	M	4.98	S
S22	SU5	70	V	95	V	56	V	94	V	3.92	M	5.08	M	4.98	S
S22	SU6	78	V	107	V	63	V	105	V	3.91	M	5.07	M	4.97	S
S22	SU7	87	V	119	V	70	V	117	V	3.91	M	5.07	M	4.97	S

Member Descr: 05-IS007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S23	HL93	83	V	114	V	67	V	111	V	2.75	M	3.57	M		
S23	H15	48	V	66	V	38	V	64	V	4.66	M	6.04	M		
S23	HS20	83	V	114	V	67	V	111	V	3.49	M	4.53	M		
S23	3	66	V	91	V	53	V	89	V	4.42	M	5.73	M	5.62	S
S23	3S2	106	V	145	V	85	V	143	V	4.42	M	5.73	M	5.62	S
S23	3-3	129	V	176	V	104	V	173	V	5.37	M	6.96	M	6.83	S
S23	SU4	63	V	87	V	51	V	85	V	3.92	M	5.08	M	4.98	S
S23	SU5	70	V	95	V	56	V	94	V	3.92	M	5.08	M	4.98	S
S23	SU6	78	V	107	V	63	V	105	V	3.91	M	5.07	M	4.97	S
S23	SU7	87	V	119	V	70	V	117	V	3.91	M	5.07	M	4.97	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 05-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S24	HL93	83	V	114	V	67	V	111	V	2.75	M	3.57	M		
S24	H15	48	V	66	V	38	V	64	V	4.66	M	6.04	M		
S24	HS20	83	V	114	V	67	V	111	V	3.49	M	4.53	M		
S24	3	66	V	91	V	53	V	89	V	4.42	M	5.73	M	5.62	S
S24	3S2	106	V	145	V	85	V	143	V	4.42	M	5.73	M	5.62	S
S24	3-3	129	V	176	V	104	V	173	V	5.37	M	6.96	M	6.83	S
S24	SU4	63	V	87	V	51	V	85	V	3.92	M	5.08	M	4.98	S
S24	SU5	70	V	95	V	56	V	94	V	3.92	M	5.08	M	4.98	S
S24	SU6	78	V	107	V	63	V	105	V	3.91	M	5.07	M	4.97	S
S24	SU7	87	V	119	V	70	V	117	V	3.91	M	5.07	M	4.97	S

Member Descr: 05-IS009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S25	HL93	83	V	114	V	67	V	111	V	2.75	M	3.57	M		
S25	H15	48	V	66	V	38	V	64	V	4.66	M	6.04	M		
S25	HS20	83	V	114	V	67	V	111	V	3.49	M	4.53	M		
S25	3	66	V	91	V	53	V	89	V	4.42	M	5.73	M	5.62	S
S25	3S2	106	V	145	V	85	V	143	V	4.42	M	5.73	M	5.62	S
S25	3-3	129	V	176	V	104	V	173	V	5.37	M	6.96	M	6.83	S
S25	SU4	63	V	87	V	51	V	85	V	3.92	M	5.08	M	4.98	S
S25	SU5	70	V	95	V	56	V	94	V	3.92	M	5.08	M	4.98	S
S25	SU6	78	V	107	V	63	V	105	V	3.91	M	5.07	M	4.97	S
S25	SU7	87	V	119	V	70	V	117	V	3.91	M	5.07	M	4.97	S

Member Descr: 05-IS010

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		ASD		LFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S26	HL93	83	V	114	V	67	V	111	V	2.75	M	3.57	M		
S26	H15	48	V	66	V	38	V	64	V	4.66	M	6.04	M		
S26	HS20	83	V	114	V	67	V	111	V	3.49	M	4.53	M		
S26	3	66	V	91	V	53	V	89	V	4.42	M	5.73	M	5.62	S
S26	3S2	106	V	145	V	85	V	143	V	4.42	M	5.73	M	5.62	S
S26	3-3	129	V	176	V	104	V	173	V	5.37	M	6.96	M	6.83	S
S26	SU4	63	V	87	V	51	V	85	V	3.92	M	5.08	M	4.98	S
S26	SU5	70	V	95	V	56	V	94	V	3.92	M	5.08	M	4.98	S
S26	SU6	78	V	107	V	63	V	105	V	3.91	M	5.07	M	4.97	S
S26	SU7	87	V	119	V	70	V	117	V	3.91	M	5.07	M	4.97	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 05-IS011

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S27	HL93	83	V	114	V	67	V	111	V	2.75	M	3.57	M		
S27	H15	48	V	66	V	38	V	64	V	4.66	M	6.04	M		
S27	HS20	83	V	114	V	67	V	111	V	3.49	M	4.53	M		
S27	3	66	V	91	V	53	V	89	V	4.42	M	5.73	M	5.62	S
S27	3S2	106	V	145	V	85	V	143	V	4.42	M	5.73	M	5.62	S
S27	3-3	129	V	176	V	104	V	173	V	5.37	M	6.96	M	6.83	S
S27	SU4	63	V	87	V	51	V	85	V	3.92	M	5.08	M	4.98	S
S27	SU5	70	V	95	V	56	V	94	V	3.92	M	5.08	M	4.98	S
S27	SU6	78	V	107	V	63	V	105	V	3.91	M	5.07	M	4.97	S
S27	SU7	87	V	119	V	70	V	117	V	3.91	M	5.07	M	4.97	S

Member Descr: 05-IS012

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S28	HL93	83	V	114	V	67	V	111	V	2.75	M	3.57	M		
S28	H15	48	V	66	V	38	V	64	V	4.66	M	6.04	M		
S28	HS20	83	V	114	V	67	V	111	V	3.49	M	4.53	M		
S28	3	66	V	91	V	53	V	89	V	4.42	M	5.73	M	5.62	S
S28	3S2	106	V	145	V	85	V	143	V	4.42	M	5.73	M	5.62	S
S28	3-3	129	V	176	V	104	V	173	V	5.37	M	6.96	M	6.83	S
S28	SU4	63	V	87	V	51	V	85	V	3.92	M	5.08	M	4.98	S
S28	SU5	70	V	95	V	56	V	94	V	3.92	M	5.08	M	4.98	S
S28	SU6	78	V	107	V	63	V	105	V	3.91	M	5.07	M	4.97	S
S28	SU7	87	V	119	V	70	V	117	V	3.91	M	5.07	M	4.97	S

Member Descr: 05-ES013

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S29	HL93	46	M	63	M	37	S	62	S	0.67	M	0.87	M		
S29	H15	25	M	35	M	20	S	34	S	1.14	M	1.47	M		
S29	HS20	46	M	63	M	37	S	62	S	0.85	M	1.11	M		
S29	3	40	M	56	M	32	S	54	S	1.08	M	1.40	M	1.38	S
S29	3S2	65	M	89	M	52	S	87	S	1.08	M	1.40	M	1.38	S
S29	3-3	79	M	108	M	63	S	106	S	1.31	M	1.70	M	1.67	S
S29	SU4	38	M	53	M	31	S	52	S	0.96	M	1.24	M	1.22	S
S29	SU5	44	M	61	M	36	S	60	S	0.96	M	1.24	M	1.22	S
S29	SU6	50	M	68	M	40	S	67	S	0.95	M	1.24	M	1.22	S
S29	SU7	55	M	76	M	45	S	75	S	0.95	M	1.24	M	1.22	S

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

CALCULATIONS - LARS MEMBER SUMMARY (TABULAR) REPORT: (EV Ratings)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v10.06.00.18 PAGE 1

BRIDGE / MEMBER DATA

SUMMARY REPORT

Bridge ID: 02M4216_20190101cy01_LR_SHV_06of08
 Bridge Name: 02M4216
 Path Name: O:\1026_02F8_67 Bergen County_NJDOT\Load Rating\65_02M4216
 File Name: 02M4216_20190101cy01_LR_EV_06of08

(Truss)

Comments:

1SEE LARS MIS SKETCH FOR DETAILS

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
3	L 8L10 EV2	52		85		53		88		1.29		1.68		1.74	
	EV3	53		87		54		91		0.89		1.15		1.20	

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

CALCULATIONS - LARS MEMBER SUMMARY (TABULAR) REPORT: (EV Ratings)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v10.06.00.18 PAGE 1

BRIDGE / MEMBER DATA

SUMMARY REPORT

Bridge ID: 02M4216_20190101cy01_LR_EV_04of08
 Bridge Name: 02M4216
 Path Name: O:\1026_02F8_67 Bergen County_NJDOT\Load Rating\65_02M4216\
 File Name: 02M4216_20190101cy01_LR_EV_04of08.BMD

(Floorbeams)

Comments:

1SEE LARS MIS SKETCH FOR DETAILS

Member Descr: 01-IB001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
B01	EV2	85	M	121	M	71	S	118	S	1.66	M	2.15	M
B01	EV3	80	M	114	M	67	S	112	S	1.05	M	1.36	M

Member Descr: 01-IB002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
B02	EV2	87	M	123	M	72	S	120	S	1.71	M	2.21	M
B02	EV3	83	M	116	M	68	S	114	S	1.08	M	1.40	M

Member Descr: 01-IB003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
B03	EV2	87	M	123	M	72	S	120	S	1.71	M	2.21	M
B03	EV3	83	M	116	M	68	S	114	S	1.08	M	1.40	M

Member Descr: 01-IB004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
B04	EV2	87	M	123	M	72	S	120	S	1.71	M	2.21	M
B04	EV3	83	M	116	M	68	S	114	S	1.08	M	1.40	M

Member Descr: 02-IB001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
B05	EV2	87	M	123	M	72	S	120	S	1.70	M	2.20	M
B05	EV3	82	M	116	M	68	S	113	S	1.07	M	1.38	M

Member Descr: 02-IB002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
B06	EV2	87	M	123	M	72	S	120	S	1.70	M	2.20	M
B06	EV3	82	M	116	M	68	S	113	S	1.07	M	1.38	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 02-IB003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B07	EV2	87	M	123	M	72	S	120	S	1.70	M	2.20	M	2.29	M
B07	EV3	82	M	116	M	68	S	113	S	1.07	M	1.38	M	1.44	M

Member Descr: 02-IB004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B08	EV2	87	M	123	M	72	S	120	S	1.70	M	2.20	M	2.29	M
B08	EV3	82	M	116	M	68	S	113	S	1.07	M	1.38	M	1.44	M

Member Descr: 02-IB005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B09	EV2	87	M	123	M	72	S	120	S	1.70	M	2.20	M	2.29	M
B09	EV3	82	M	116	M	68	S	113	S	1.07	M	1.38	M	1.44	M

Member Descr: 02-IB006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B10	EV2	87	M	123	M	72	S	120	S	1.70	M	2.20	M	2.29	M
B10	EV3	82	M	116	M	68	S	113	S	1.07	M	1.38	M	1.44	M

Member Descr: 02-IB007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B11	EV2	87	M	123	M	72	S	120	S	1.70	M	2.20	M	2.29	M
B11	EV3	82	M	116	M	68	S	113	S	1.07	M	1.38	M	1.44	M

Member Descr: 02-IB008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B12	EV2	87	M	123	M	72	S	120	S	1.70	M	2.20	M	2.29	M
B12	EV3	82	M	116	M	68	S	113	S	1.07	M	1.38	M	1.44	M

Member Descr: 03-IB001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B13	EV2	87	M	123	M	72	S	120	S	1.69	M	2.19	M	2.28	M
B13	EV3	81	M	115	M	67	S	112	S	1.06	M	1.37	M	1.42	M

Member Descr: 03-IB002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
B14	EV2	87	M	123	M	72	S	120	S	1.69	M	2.19	M	2.28	M
B14	EV3	81	M	115	M	67	S	112	S	1.06	M	1.37	M	1.42	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 03-IB003

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
B15	EV2	85	M	121	M	70	S	118	S	1.65	M	2.14	M	2.22	M
B15	EV3	79	M	113	M	66	S	110	S	1.03	M	1.34	M	1.39	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

CALCULATIONS - LARS MEMBER SUMMARY (TABULAR) REPORT: (EV Ratings)

LOAD ANALYSIS AND RATING SYSTEM -- ASD/LFD/LRFD v10.06.00.18 PAGE 1

BRIDGE / MEMBER DATA

SUMMARY REPORT

Bridge ID: 02M4216_20190101cy01_LR_EV_02of08
 Bridge Name: 02M4216
 Path Name: O:\1026_02F8_67 Bergen County_NJDOT\Load Rating\65_02M4216\
 File Name: 02M4216_20190101cy01_LR_EV_02of08.BMD

(Stringers)

Comments:

1SEE LARS MIS SKETCH FOR DETAILS

Member Descr: 01-ES001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S01	EV2	45	M	62	M	36	S	60	S	2.07	M	2.69	M
S01	EV3	50	M	68	M	40	S	67	S	1.54	M	1.99	M

Member Descr: 01-IS002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S02	EV2	126	M	174	M	102	S	170	S	2.32	M	3.01	M
S02	EV3	140	M	193	M	113	S	188	S	1.72	M	2.23	M

Member Descr: 01-IS003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S03	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M
S03	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M

Member Descr: 01-IS004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S04	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M
S04	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M

Member Descr: 01-IS005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S05	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M
S05	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M

Member Descr: 01-IS006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S06	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M
S06	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M

Structure No.:	02M4216	Route:	9102	Cycle No.:	02
Name:	PATRIOTS WAY OVER RAMAPO RIVER			Insp. Date:	06/17/2020

Member Descr: 01-IS007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	LGL	Contr	LGL	Contr
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
S07	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M	4.66	S
S07	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M	3.45	S

Member Descr: 01-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	LGL	Contr	LGL	Contr
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
S08	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M	4.66	S
S08	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M	3.45	S

Member Descr: 01-IS009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	LGL	Contr	LGL	Contr
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
S09	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M	4.66	S
S09	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M	3.45	S

Member Descr: 01-IS010

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	LGL	Contr	LGL	Contr
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
S10	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M	4.66	S
S10	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M	3.45	S

Member Descr: 01-IS011

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	LGL	Contr	LGL	Contr
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
S11	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M	4.66	S
S11	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M	3.45	S

Member Descr: 01-IS012

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	LGL	Contr	LGL	Contr
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
S12	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M	4.66	S
S12	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M	3.45	S

Member Descr: 01-IS013

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	LGL	Contr	LGL	Contr
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
S13	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M	4.66	S
S13	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M	3.45	S

Member Descr: 01-IS014

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LRFD		LRFD		LRFD	
INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	INV	Contr	OPR	Contr	LGL	Contr	LGL	Contr
Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type	Type
S14	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M	4.66	S
S14	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M	3.45	S

Structure No.: 02M4216	Route: 9102	Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER	Insp. Date: 06/17/2020	

Member Descr: 01-IS015

		Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S15	EV2	198	M	272	M	159	S	266	S	3.66	M	4.75	M
S15	EV3	220	M	302	M	177	S	295	S	2.72	M	3.52	M

Member Descr: 01-ES016

		Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S16	EV2	45	M	62	M	36	S	60	S	0.62	M	0.81	M
S16	EV3	50	M	68	M	40	S	67	S	0.46	M	0.60	M

Member Descr: 02-ES001

		Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S01	EV2	43	M	60	M	35	S	58	S	1.28	M	1.66	M
S01	EV3	49	M	68	M	40	S	67	S	0.97	M	1.26	M

Member Descr: 02-IS002

		Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S02	EV2	97	M	133	M	78	S	130	S	1.75	M	2.28	M
S02	EV3	110	M	152	M	89	S	148	S	1.33	M	1.73	M

Member Descr: 02-IS003

		Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S03	EV2	97	M	133	M	78	S	130	S	1.75	M	2.28	M
S03	EV3	110	M	152	M	89	S	148	S	1.33	M	1.73	M

Member Descr: 02-IS004

		Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S04	EV2	97	M	133	M	78	S	130	S	1.75	M	2.28	M
S04	EV3	110	M	152	M	89	S	148	S	1.33	M	1.73	M

Member Descr: 02-IS005

		Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S05	EV2	97	M	133	M	78	S	130	S	1.75	M	2.28	M
S05	EV3	110	M	152	M	89	S	148	S	1.33	M	1.73	M

Member Descr: 02-IS006

		Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S06	EV2	97	M	133	M	78	S	130	S	1.75	M	2.28	M
S06	EV3	110	M	152	M	89	S	148	S	1.33	M	1.73	M

Structure No.:	02M4216	Route:	9102	Cycle No.:	02
Name:	PATRIOTS WAY OVER RAMAPO RIVER			Insp. Date:	06/17/2020

Member Descr: 02-IS007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LFD		LRFD		LRFD		LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S07	EV2	97	M	133	M	78	S	130	S	1.75	M	2.28	M	2.23	S
S07	EV3	110	M	152	M	89	S	148	S	1.33	M	1.73	M	1.70	S

Member Descr: 02-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		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
S08	EV2	97	M	133	M	78	S	130	S	1.75	M	2.28	M	2.23	S
S08	EV3	110	M	152	M	89	S	148	S	1.33	M	1.73	M	1.70	S

Member Descr: 02-ES009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S09	EV2	43	M	60	M	35	S	58	S	1.28	M	1.66	M	1.63	S
S09	EV3	49	M	68	M	40	S	67	S	0.97	M	1.26	M	1.24	S

Member Descr: 03-ES001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S10	EV2	42	M	58	M	34	S	57	S	1.25	M	1.61	M	1.58	S
S10	EV3	48	M	65	M	38	S	64	S	0.94	M	1.21	M	1.19	S

Member Descr: 03-IS002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		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
S11	EV2	94	M	130	M	76	S	127	S	1.71	M	2.21	M	2.17	S
S11	EV3	106	M	146	M	85	S	143	S	1.28	M	1.66	M	1.63	S

Member Descr: 03-IS003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S12	EV2	94	M	130	M	76	S	127	S	1.71	M	2.21	M	2.17	S
S12	EV3	106	M	146	M	85	S	143	S	1.28	M	1.66	M	1.63	S

Member Descr: 03-IS004

		Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S13	EV2	94	M	130	M	76	S	127	S	1.71	M	2.21	M	2.17	S
S13	EV3	106	M	146	M	85	S	143	S	1.28	M	1.66	M	1.63	S

Member Descr: 03-IS005

		Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
Mem ID	Truck	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S14	EV2	94	M	130	M	76	S	127	S	1.71	M	2.21	M	2.17	S
S14	EV3	106	M	146	M	85	S	143	S	1.28	M	1.66	M	1.63	S

Structure No.:	02M4216	Route:	9102	Cycle No.:	02
Name:	PATRIOTS WAY OVER RAMAPO RIVER			Insp. Date:	06/17/2020

Member Descr: 03-IS006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD		LFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S15	EV2	94	M	130	M	76	S	127	S	1.71	M	2.21	M
S15	EV3	106	M	146	M	85	S	143	S	1.28	M	1.66	M

Member Descr: 03-IS007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD		LFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S16	EV2	94	M	130	M	76	S	127	S	1.71	M	2.21	M
S16	EV3	106	M	146	M	85	S	143	S	1.28	M	1.66	M

Member Descr: 03-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD		LFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S17	EV2	94	M	130	M	76	S	127	S	1.71	M	2.21	M
S17	EV3	106	M	146	M	85	S	143	S	1.28	M	1.66	M

Member Descr: 03-ES009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD		LFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S18	EV2	42	M	58	M	34	S	57	S	1.25	M	1.61	M
S18	EV3	48	M	65	M	38	S	64	S	0.94	M	1.21	M

Member Descr: 04-ES001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD		LFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S19	EV2	40	M	56	M	33	S	55	S	1.20	M	1.55	M
S19	EV3	45	M	62	M	36	S	61	S	0.89	M	1.15	M

Member Descr: 04-IS002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD		LFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S20	EV2	90	M	124	M	73	S	122	S	1.64	M	2.12	M
S20	EV3	100	M	138	M	81	S	135	S	1.21	M	1.57	M

Member Descr: 04-IS003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD		LFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S21	EV2	90	M	124	M	73	S	122	S	1.64	M	2.12	M
S21	EV3	100	M	138	M	81	S	135	S	1.21	M	1.57	M

Member Descr: 04-IS004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD		LFD		LRFD		LRFD		LRFD		LRFD	
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S22	EV2	90	M	124	M	73	S	122	S	1.64	M	2.12	M
S22	EV3	100	M	138	M	81	S	135	S	1.21	M	1.57	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

Member Descr: 04-IS005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S23	EV2	90	M	124	M	73	S	122	S	1.64	M	2.12	M	2.08	S
S23	EV3	100	M	138	M	81	S	135	S	1.21	M	1.57	M	1.54	S

Member Descr: 04-IS006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S24	EV2	90	M	124	M	73	S	122	S	1.64	M	2.12	M	2.08	S
S24	EV3	100	M	138	M	81	S	135	S	1.21	M	1.57	M	1.54	S

Member Descr: 04-IS007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S25	EV2	90	M	124	M	73	S	122	S	1.64	M	2.12	M	2.08	S
S25	EV3	100	M	138	M	81	S	135	S	1.21	M	1.57	M	1.54	S

Member Descr: 04-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S26	EV2	90	M	124	M	73	S	122	S	1.64	M	2.12	M	2.08	S
S26	EV3	100	M	138	M	81	S	135	S	1.21	M	1.57	M	1.54	S

Member Descr: 04-ES009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S27	EV2	40	M	56	M	33	S	55	S	1.20	M	1.55	M	1.52	S
S27	EV3	45	M	62	M	36	S	61	S	0.89	M	1.15	M	1.13	S

Member Descr: 05-ES001

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S17	EV2	42	M	57	M	33	S	56	S	0.90	M	1.16	M	1.14	S
S17	EV3	45	M	62	M	36	S	61	S	0.65	M	0.85	M	0.83	S

Member Descr: 05-IS002

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S18	EV2	66	V	91	V	53	V	89	V	1.68	M	2.18	M	2.14	S
S18	EV3	62	V	85	V	50	V	83	V	1.22	M	1.58	M	1.56	S

Member Descr: 05-IS003

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD				LFD				LRFD					
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S19	EV2	66	V	91	V	53	V	89	V	1.68	M	2.18	M	2.14	S
S19	EV3	62	V	85	V	50	V	83	V	1.22	M	1.58	M	1.56	S

Structure No.:	02M4216	Route:	9102	Cycle No.:	02
Name:	PATRIOTS WAY OVER RAMAPO RIVER			Insp. Date:	06/17/2020

Member Descr: 05-IS004

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S20	EV2	66	V	91	V	53	V	89	V	2.37	M	3.07	M
S20	EV3	62	V	85	V	50	V	83	V	1.72	M	2.23	M

Member Descr: 05-IS005

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S21	EV2	67	V	92	V	54	V	90	V	3.42	M	4.43	M
S21	EV3	62	V	85	V	50	V	84	V	2.48	M	3.22	M

Member Descr: 05-IS006

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S22	EV2	67	V	92	V	54	V	90	V	3.42	M	4.43	M
S22	EV3	62	V	85	V	50	V	84	V	2.48	M	3.22	M

Member Descr: 05-IS007

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S23	EV2	67	V	92	V	54	V	90	V	3.42	M	4.43	M
S23	EV3	62	V	85	V	50	V	84	V	2.48	M	3.22	M

Member Descr: 05-IS008

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S24	EV2	67	V	92	V	54	V	90	V	3.42	M	4.43	M
S24	EV3	62	V	85	V	50	V	84	V	2.48	M	3.22	M

Member Descr: 05-IS009

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S25	EV2	67	V	92	V	54	V	90	V	3.42	M	4.43	M
S25	EV3	62	V	85	V	50	V	84	V	2.48	M	3.22	M

Member Descr: 05-IS010

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S26	EV2	67	V	92	V	54	V	90	V	3.42	M	4.43	M
S26	EV3	62	V	85	V	50	V	84	V	2.48	M	3.22	M

Member Descr: 05-IS011

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor			
		ASD				LFD				LRFD			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type
S27	EV2	67	V	92	V	54	V	90	V	3.42	M	4.43	M
S27	EV3	62	V	85	V	50	V	84	V	2.48	M	3.22	M

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

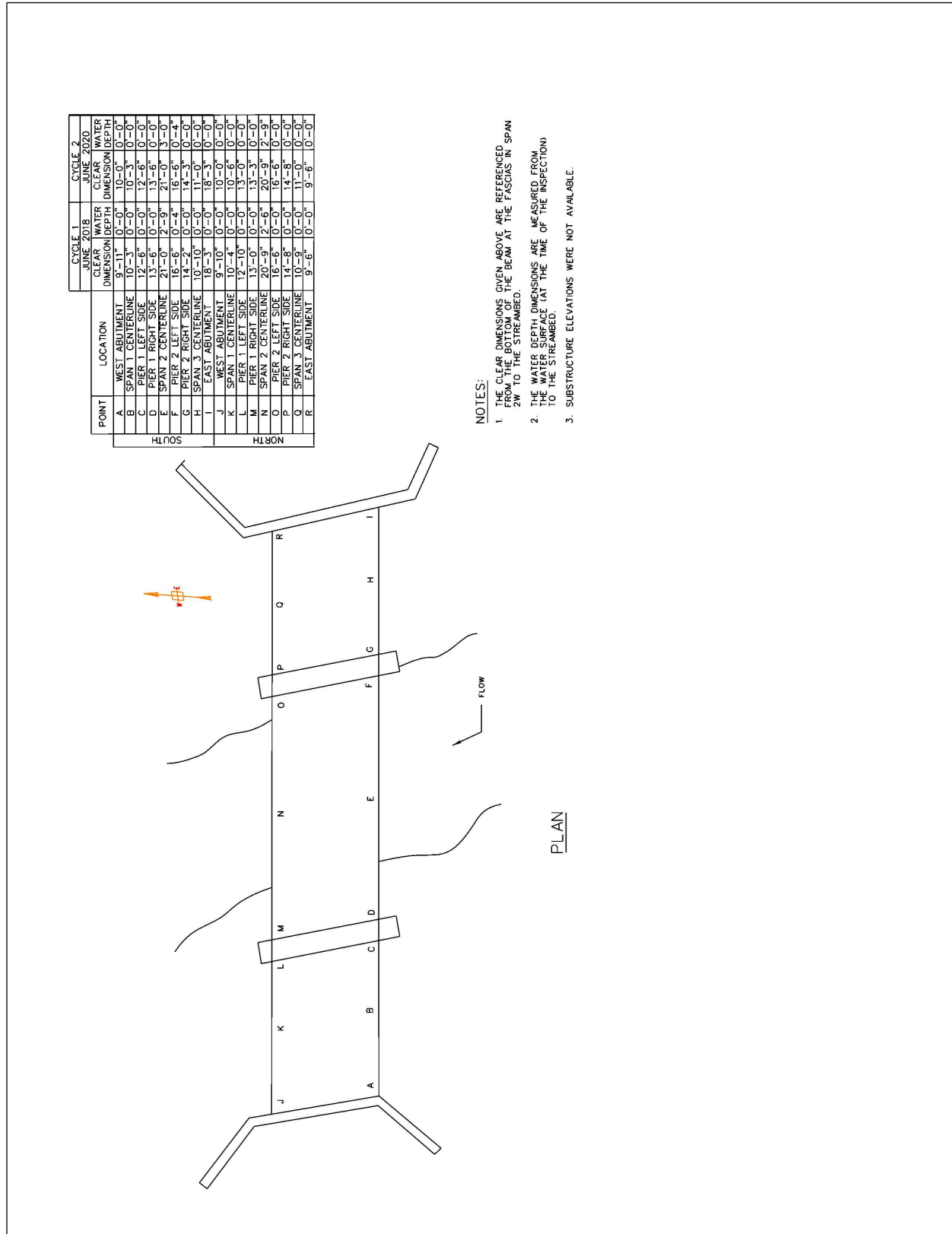
Member Descr: 05-IS012

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LGL		Contr			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S28	EV2	67	V	92	V	54	V	90	V	3.42	M	4.43	M	4.34	S
S28	EV3	62	V	85	V	50	V	84	V	2.48	M	3.22	M	3.15	S

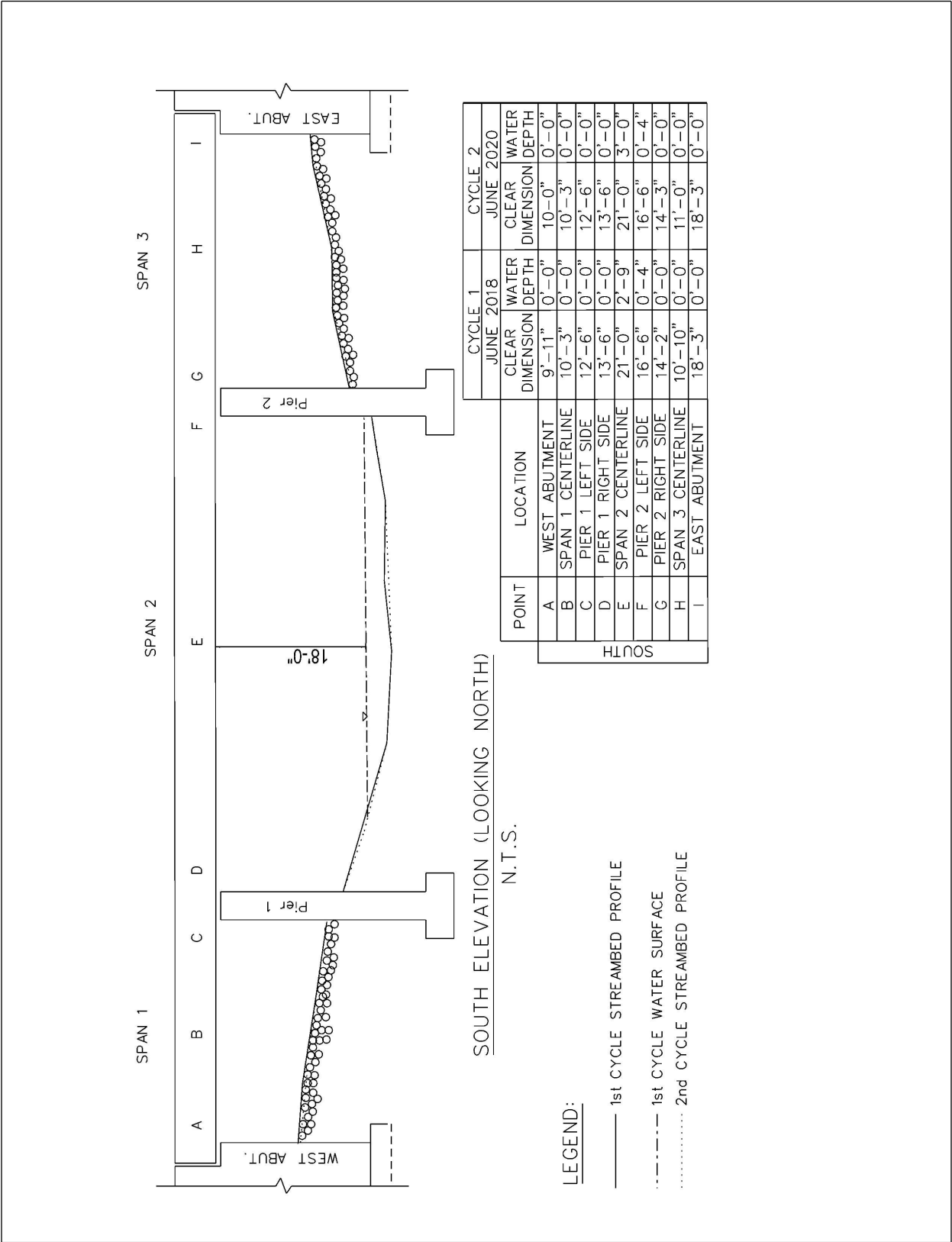
Member Descr: 05-ES013

Mem ID	Truck	Rating (Tons)				Rating (Tons)				Rating Factor					
		ASD		LFD		LRFD		LRFD		LGL		Contr			
		INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	INV	Contr Type	OPR	Contr Type	LGL	Contr Type
S29	EV2	42	M	57	M	33	S	56	S	0.81	M	1.06	M	1.04	S
S29	EV3	45	M	62	M	36	S	61	S	0.59	M	0.77	M	0.75	S

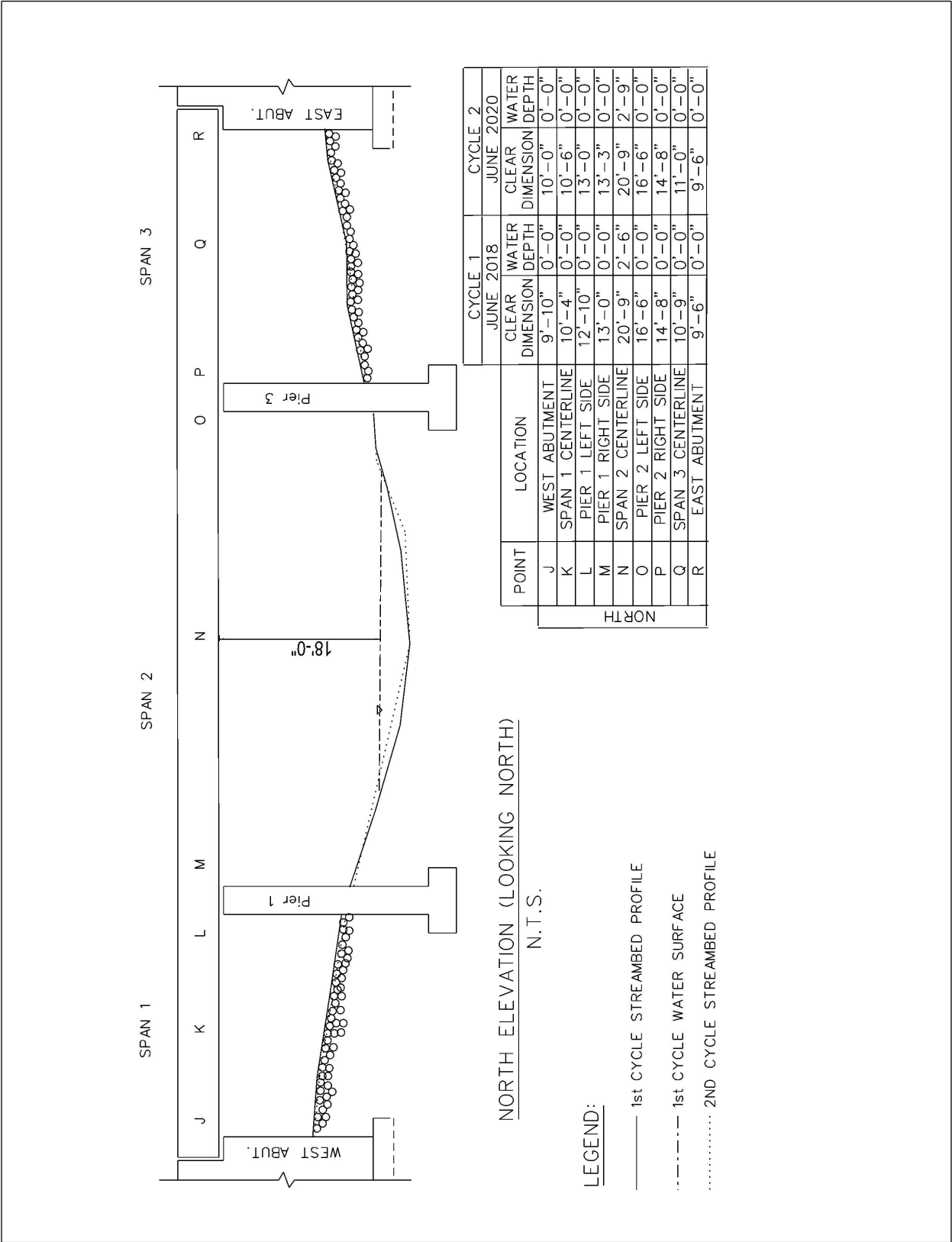
Plan View



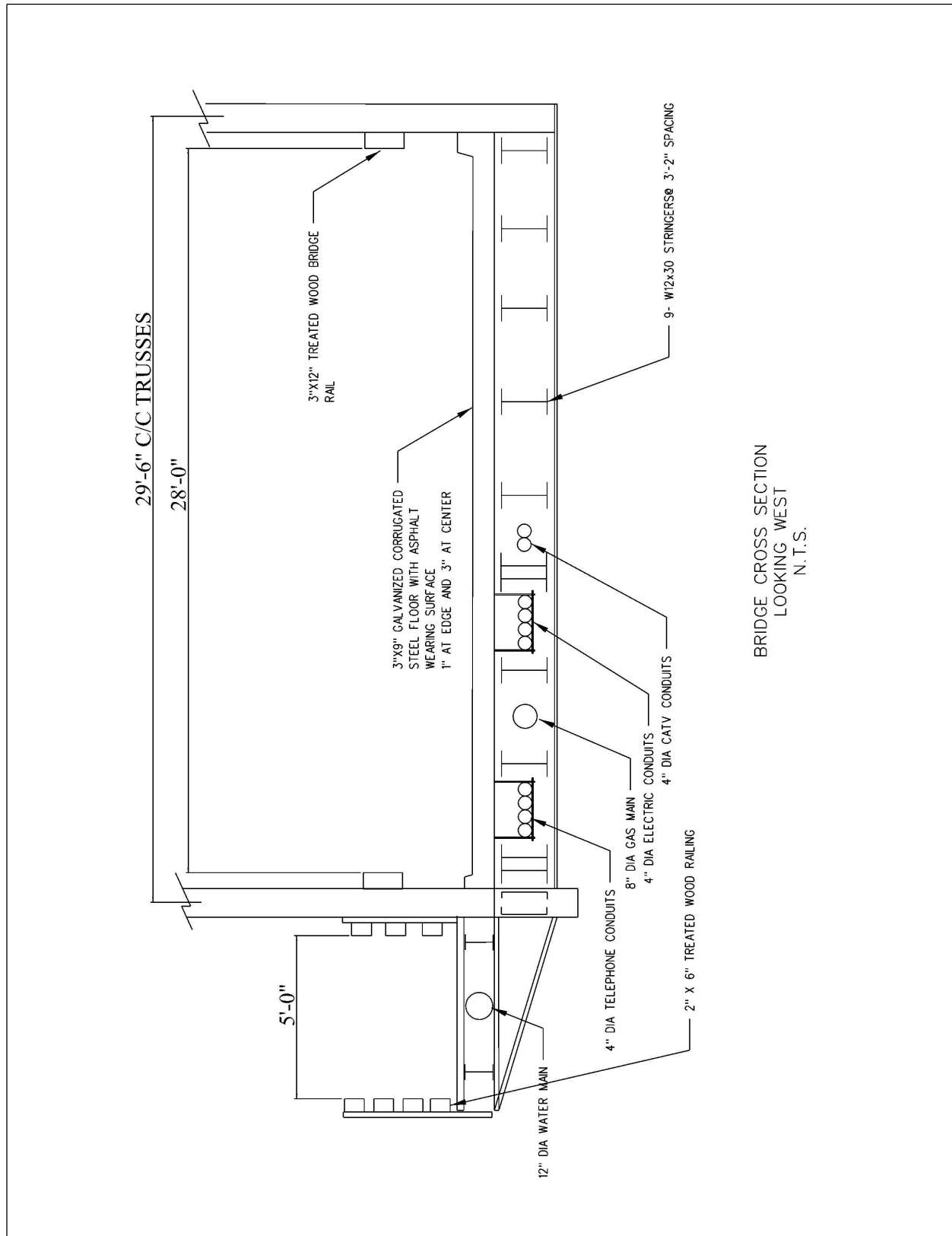
Soundings Sketch



Soundings Sketch



Deck Cross Section Sketch



Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 1	Category:	00 - General View
	Description:	South elevation, looking north.



Photo 2	Category:	00 - General View
	Description:	North Elevation, looking south.

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 3 Category: 00 - General View, 02 - Approaches

Description: East approach roadway, looking west. One wide longitudinal cracking along centerline of roadway. Several medium longitudinal and transverse cracks throughout the approachway.



Photo 4 Category: 00 - General View, 02 - Approaches

Description: West approach roadway, looking east. One wide longitudinal cracking along centerline of roadway. Several medium longitudinal and transverse cracks throughout the approachway

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 5	Category:	00 - General View
	Description:	Upstream channel, looking south.



Photo 6	Category:	00 - General View
	Description:	Downstream channel, looking north.

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 7	Category:	00 - General View, 14 - Underdeck Defects
	Description:	Underside of structure, span 1, looking east. Moderately corroded SIP panels at underside of deck. Typical underside defect for all spans.



Photo 8	Category:	05 - Sidewalks/Safetywalks/Curbs, 60 - Priority Repair
	Description:	Southeast approach sidewalk, looking southwest. Priority Repair 2: Erosion below southeast approach sidewalk causing undermining and settlement of sidewalk by up to 2 inch.

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 9	Category:	04 - Deck & Relief Joints
	Description:	Span 3 deck joint, looking south. Deteriorated asphalt and minor cracking along header, also minor debris accumulation in deck joint.



Photo 10	Category:	04 - Deck & Relief Joints
	Description:	Span 1 deck joint, looking north. Deteriorated asphalt and minor cracking along header, also minor debris accumulation in deck joint.

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 11	Category:	01 - Deck Defects, 61 - Work Done
	Description:	Top of deck, span 2, looking northeast. Fine to medium transverse cracking throughout the deck surface. Work done: New steel plate section has been installed in eastbound lane.



Photo 12	Category:	06 - Parapets/Balustrades/Median/Railings
	Description:	Span 2 railing, looking northeast. Rotten and wore out timber railing. Note: Minor checks and cracking throughout timber railing on all spans along both sides.

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 13	Category:	20 - Superstructure Defects
	Description:	Span 3 superstructure, looking Northwest. Floor beams exhibit moderate corrosion with pack rust majorly at both west and east ends, along with the bottom flange. Typical defect at all spans. Note: Cross bracings exhibit moderate rusting throughout. (typical for all spans)



Photo 14	Category:	22 - Bearings, 34 - Pier Cap/Bridge Seat
	Description:	Span 3 bearings, east abutment, looking south. Elastomeric expansion Bearing with sliding pads and anchor bolts exhibit moderate rust with all anchor bolts bent and not fully engaged. (Typical defect for bearings at pier 1, 2 and west abutment).

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 15	Category:	20 - Superstructure Defects
	Description:	Span 2, underside of superstructure, looking east. Stringers exhibit moderate rusting. Also floorbeams exhibit moderate corrosion with pack rust majorly at both west and east ends, along with the bottom flange.



Photo 16	Category:	01 - Deck Defects, 61 - Work Done
	Description:	Top of deck, span 1, looking east. Work Done: Previously reported priority repair E for two small holes in the deck has been repaired with resurfacing of asphalt.

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 17	Category:	01 - Deck Defects, 61 - Work Done
	Description:	Top of deck, span 3, looking southwest. Work done: New asphalt patches have been applied over existing asphalt patches in west bound lane.



Photo 18	Category:	02 - Approaches, 61 - Work Done
	Description:	Southwest approach sidewalk, looking east. Work done: Previously reported priority repair for 3" settlement on the walkway has been taken care with putting caution sign for the pedestrians.

Structure No.: 02M4216 Route: 9102

Cycle No.: 02

Name: PATRIOTS WAY OVER RAMAPO RIVER

Insp. Date: 06/17/2020



Photo 19	Category:	05 - Sidewalks/Safetywalks/Curbs, 61 - Work Done
	Description:	Span 2 south sidewalk, looking east. Work Done: Previously reported rotten wood planks on span 2 has been repaired by inserting new plywood on top of the sidewalks.



Photo 20	Category:	20 - Superstructure Defects, 61 - Work Done
	Description:	Span 1, stringer 7, looking southwest. Work done: Previously reported priority E for 2 small holes in span 1 over the top of flange of stringer 7 & 8 and section loss near west abutment has been taken care by inserting 2 new girders adjacent to existing stringers.

Structure No.: 02M4216	Route: 9102	Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER		Insp. Date: 06/17/2020



Photo 21	Category:	20 - Superstructure Defects, 61 - Work Done
	Description:	Span 3, stringer 7, looking south. Previously reported 100% section loss of the stringer web has been repaired by inserting new additional (2) girders.



Photo 22	Category:	10 - Signs/Posting, 61 - Work Done
	Description:	North east corner, looking west Work done: Previously posted weight Limit signage of 10 tons has been removed and is replaced by 25 mph speed sign post.

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

NEW JERSEY DEPARTMENT OF TRANSPORTATION
STRUCTURAL EVALUATION AND BRIDGE MANAGEMENT
FIELD NOTES

City or Municipal Highway Agency

Inspectors: Kalpesh Patel

Name: PATRIOTS WAY OVER RAMAPO RIVER

Crew Chief: Patel, P.E., Rajesh Weather: Sunny

Temperature: 85 °F Special Equipment Used: _____

RATINGS:

- N Not applicable.
9 Excellent Condition.
8 Very Good Condition - no problems noted.
7 Good Condition - some minor problems.
6 Satisfactory Condition - some minor deterioration of structural elements.
5 Fair Condition - minor section loss to primary structural elements.
4 Poor Condition - advanced section loss to primary structural elements.
3 Serious Condition - seriously deteriorated primary structural elements.
2 Critical Condition - facility should be closed until repairs are made.
1 Imminent Failure Condition - facility closed. Study of repairs is feasible.
0 Failed Condition - facility is closed and beyond repair.

GPS COORDINATES		
@ Southwest Corner		
Lat.	N	41.04815
Long.	W	-74.22880

GENERAL

Type of Bridge: Three span steel truss, rolled steel stringers and floorbeams

Year Built: 1996 Year of Widening/Major Repairs: 0000

No. of Lanes: On 02 Under 00

Vertical Clearances: Over Deck: 99.99 ft

Minimum Under: 00.00 ft

Maximum Under (Item 10): 99.99 ft

Horizontal Underclearance: Total Horizontal Clearance: 28 ft Curb to curb

Right 00.0 ft

Left 00.0 ft

Overall Physical Condition of Structure: The structure is in satisfactory condition due to the condition of the superstructure.

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

DECK

SI&A Item 58 Condition Rating: 6

SPAN # 1 from West

RATING	COMPONENT	REMARKS
7	Wearing Surface	Galvanized steel floor with asphalt wearing surface: Work Done: New asphalt patch has been constructed in the previously reported small holes and cracks in the bituminous deck near the west (span 1) deck joint. [See Photo(s): 7, 16]
6	Underside of Deck	Work Done: New 2 girders has been inserted in span 1, adjacent to existing girders. Moderately corroded SIP panels at underside of deck. Typical for all spans. [See Photo(s): 7, 20]
N	Median	None
N	Curbs	None
7	Sidewalks	Work Done: New plywood has been constructed on top of the sidewalk. [See Photo(s): 19]
N	Parapets	None
6	Railings	Minor checks and cracking throughout timber railing on all spans. [See Photo(s): 12]
6	Deck Joints/Filler Material	Deteriorated asphalt and minor cracking along header, also minor debris accumulation in deck joint. [See Photo(s): 10]
N	Drains and Scuppers	None
N	Light Stands	None
7	Utilities	4- 4: Diameter Electrical conduits 4- 4" Diameter telephone conduits 2- 4" CATV conduits 8" Diameter Gas Main 12" Diameter Water Main
N	Other	None

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

DECK

SI&A Item 58 Condition Rating: 6

SPAN # 2 from West

RATING	COMPONENT	REMARKS
6	Wearing Surface	Galvanized steel floor with asphalt wearing surface. Fine to medium cracking throughout the deck surface, majorly in southbound lane. Work done: New steel plate section has been installed in eastbound lane. [See Photo(s): 11]
6	Underside of Deck	Moderately corroded SIP panels at underside of deck. Typical for all spans. [See Photo(s): 7]
N	Median	None
N	Curbs	None
7	Sidewalks	Work done: New plywood has been constructed on top of the sidewalk. [See Photo(s): 19]
N	Parapets	None
6	Railings	Rotten and weared out timber railing at east side. Also minor checks and cracking throughout timber railing on all spans along both sides. [See Photo(s): 12]
N	Deck Joints/Filler Material	None
N	Drains and Scuppers	None
N	Light Stands	None
7	Utilities	4- 4: Diameter Electrical conduits 4- 4" Diameter telephone conduits 2- 4" CATV conduits 8" Diameter Gas Main 12" Diameter Water Main
N	Others	None

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

DECK

SI&A Item 58 Condition Rating: 6

SPAN # 3 from West

RATING	COMPONENT	REMARKS
6	Wearing Surface	Galvanized steel floor with asphalt wearing surface. Work done: New asphalt patches have been applied over existing asphalt patches in west bound lane. [See Photo(s): 17]
6	Underside of Deck	Moderately corroded SIP panels at underside of deck. Typical for all spans. [See Photo(s): 7]
N	Median	None
N	Curbs	None
7	Sidewalks	Work done: New plywood has been constructed on top of the sidewalk. [See Photo(s): 19]
N	Parapets	None
6	Railings	Minor checks and cracking throughout timber railing on all spans along both sides. [See Photo(s): 12]
6	Deck Joints/Filler Material	East abutment deck joint has a deteriorated header and minor debris accumulation. [See Photo(s): 9]
N	Drains and Scuppers	None
N	Light Stands	None
7	Utilities	4- 4: Diameter Electrical conduits 4- 4" Diameter telephone conduits 2- 4" CATV conduits 8" Diameter Gas Main 12" Diameter Water Main
N	Others	None

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

APPROACHES

SI&A Item BA Rating: 6
 SI&A Item 72 Rating: 6

WEST APPROACH

RATING	COMPONENT	REMARKS
6	Pavement	One wide longitudinal cracking along centerline of roadway. Several medium longitudinal and transverse cracks throughout the approachway. [See Photo(s): 4]
N	Approach Shoulder	None
	Approach Roadway Vertical & Horizontal Alignment	Vertical: Level Horizontal: Tangent
7	Guide Rail Condition	No significant defects.
5	Sidewalks	Work done: Previously reported priority repair for 3" settlement on the walkway has been taken care with putting caution sign for the pedestrians. [See Photo(s): 18]
N	Curbs	None
N	Utilities	None
7	Approach Roadway Embankment	No significant defects.
N	Others	None

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

APPROACHES

SI&A Item BA Rating: 6
 SI&A Item 72 Rating: 6

EAST APPROACH

RATING	COMPONENT	REMARKS
6	Pavement	One wide longitudinal cracking along centerline of roadway. Several medium longitudinal and transverse cracks throughout the approachway. [See Photo(s): 3]
N	Approach Shoulder	None
	Approach Roadway Vertical & Horizontal Alignment	Vertical: Level Horizontal: Tangent
7	Guide Rail Condition	No significant defects.
6	Sidewalks	Sidewalk panel at southeast approach sidewalk exhibits erosion below causing undermining and settlement up to 2 inch. [See Photo(s): 8]
N	Curbs	None
N	Utilities	None
7	Approach Roadway Embankment	No significant defects.
N	Others	None

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUPERSTRUCTURE

SI&A Item 59 Condition Rating: 6

SPAN # 1 from West

RATING	COMPONENT	REMARKS
6	Truss-FB-Stringer	Steel truss on all spans: No significant defects. 11 Stringers (9 stringer supporting deck, 2 stringer supporting sidewalk). Work done: Previously noted section loss in stringer 7 has been taken care with installing 2 new additional girders adjacent to existing stringers. 5 Floorbeams: Floorbeams exhibit moderate corrosion with pack rust majorly at both west and east ends, along with the bottom flange. Typical defect at all spans. [See Photo(s): 13, 20]
N	Diaphragms	None
6	Bearings	West abutment has Elastomeric expansion Bearing with sliding pads and anchor bolts which exhibit moderate rust with all anchor bolts bent and not fully engaged. Fixed bearings at pier 1 also exhibit exhibit moderate rust with all anchor bolts bent and not fully engaged. [See Photo(s): 14]
	Deflection and Vibration	Minor vibrations observed of vehicular traffic
6	Cross Bracings	Cross bracings exhibit moderate rusting throughout. [See Photo(s): 13]

Additional Remarks:

FATIGUE DETAILS

Estimated percentage of Large trucks in ADT = 01%

Category	Detail Description and Location
N/A	

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUPERSTRUCTURE

SI&A Item 59 Condition Rating: 6

SPAN # 2 from West

RATING	COMPONENT	REMARKS
6	Truss-FB-Stringer	Steel truss on all spans: No significant defects. 11 Stringers (9 stringer supporting deck, 2 stringer supporting sidewalk): Moderate corrosion on deck stringers along web and flange. 9 Floorbeams: Floorbeams exhibit moderate corrosion with pack rust majorly at both west and east ends, along with the bottom flange. Typical defect at all spans. [See Photo(s): 15]
N	Diaphragms	None
6	Bearings	Pier 2 has elastomeric expansion bearings with sliding pads and anchor bolts exhibit moderate rust with all anchor bolts bent and not fully engaged. [See Photo(s): 14]
	Deflection and Vibration	Minor vibrations observed of vehicular traffic
6	Cross Bracings	Cross bracings exhibit moderate rusting throughout. [See Photo(s): 13]

Additional Remarks:

FATIGUE DETAILS

Estimated percentage of Large trucks in ADT = 01%

Category	Detail Description and Location
N/A	

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUPERSTRUCTURE

SI&A Item 59 Condition Rating: 6

SPAN # 3 from West

RATING	COMPONENT	REMARKS
6	Truss-FB-Stringer	Steel truss on all spans: No significant defects. 11 Stringers (9 stringer supporting deck, 2 stringer supporting sidewalk). Work done: Previously noted section loss in stringer 7 has been taken care with installing 2 new additional girders adjacent to existing stringers. 4 Floorbeams: Floorbeams exhibit moderate corrosion with pack rust majorly at both west and east ends, along with the bottom flange. Typical defect at all spans. [See Photo(s): 13, 21]
N	Diaphragms	None
6	Bearings	East abutment has elastomeric expansion bearings with sliding pads and anchor bolts exhibit moderate rust with all anchor bolts bent and not fully engaged. [See Photo(s): 14]
	Deflection and Vibration	Minor vibrations observed of vehicular traffic near girder 7.
6	Cross Bracings	Cross bracings exhibit moderate rusting throughout. [See Photo(s): 13]

Additional Remarks:

FATIGUE DETAILS

Estimated percentage of Large trucks in ADT = 01%

Category	Detail Description and Location
N/A	

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUBSTRUCTURE

SI&A Item 60 Condition Rating: 7

WEST ABUTMENT

RATING	COMPONENT	REMARKS
7	Breastwall	No significant defects
7	Backwall	No significant defects
7	Bridge Seat	Minor debris accumulation on bridge seat.
7	Wingwalls	No significant defects
7	Embankment	No significant defects
N	Footings	Not visible

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUBSTRUCTURE

SI&A Item 60 Condition Rating: 7

EAST ABUTMENT

RATING	COMPONENT	REMARKS
7	Breastwall	No significant defects
7	Backwall	No significant defects
7	Bridge Seat	Minor debris accumulation on bridge seat.
7	Wingwalls	No significant defects
7	Embankment	No significant defects
N	Footings	Not visible.

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUBSTRUCTURE

SI&A Item 60 Condition Rating: 7

PIER # 1 from West

RATING	COMPONENT	REMARKS
7	Columns	No significant defects
7	Pier Cap	No significant defects
7	Bridge Seat	No significant defects
N	Others	None

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUBSTRUCTURE

SI&A Item 60 Condition Rating: 7

PIER # 2 from West

RATING	COMPONENT	REMARKS
7	Columns	No significant defects
7	Pier Cap	No significant defects
7	Bridge Seat	No significant defects
N	Others	None

Additional Remarks:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUBSTRUCTURE/SCOUR

SI&A Item 60 Condition Rating: 7

Abutment West

RATING	COMPONENT	REMARKS
--------	-----------	---------

COUNTERMEASURES

	Description	Riprap
7	Condition	Intact

PROBING/SCOUR

7	Findings	No significant defects
	Changes Since Prior Inspection	None
	Debris	None

Repair Quantities:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUBSTRUCTURE/SCOUR

SI&A Item 60 Condition Rating: 7

Abutment East

RATING	COMPONENT	REMARKS
--------	-----------	---------

COUNTERMEASURES

	Description	Riprap
7	Condition	Intact

PROBING/SCOUR

7	Findings	No significant defects.
	Changes Since Prior Inspection	None
	Debris	None

Repair Quantities:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUBSTRUCTURE/SCOUR

SI&A Item 60 Condition Rating: 7

Pier 1

RATING	COMPONENT	REMARKS
--------	-----------	---------

COUNTERMEASURES

	Description	None
N	Condition	N/A

PROBING/SCOUR

7	Findings	No exposed footing
	Changes Since Prior Inspection	None
	Debris	None

Repair Quantities:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

SUBSTRUCTURE/SCOUR

SI&A Item 60 Condition Rating: 7

Pier 2

RATING	COMPONENT	REMARKS
--------	-----------	---------

COUNTERMEASURES

	Description	None
N	Condition	N/A

PROBING/SCOUR

7	Findings	No exposed footing
	Changes Since Prior Inspection	None
	Debris	None

Repair Quantities:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

WATERWAY/CHANNEL

SI&A Item No. 61: 7

SI&A Item No. 71: 8

Prioritization Category:

Scour Sufficiency Rating:

WATERWAY # 1

RATING	COMPONENT	REMARKS
--------	-----------	---------

FLOW CONDITIONS

	Direction	South to north.
	Magnitude	Bridge opening is consistent with upstream channel width. Laminar flow throughout.
	Velocity	<1 ft/sec

EMBANKMENTS

7	Upstream	Stable along both banks.
7	Downstream	Stable along both banks.
N	Channel Countermeasures	None

CHANNEL MOVEMENT AND CHANGES

	Horizontal Location	The structure is in general alignment with the natural stream flow.
	Cross Section	Refer to sounding sketches
	Alignment	Upstream: Tangent Downstream: Tangent
	Changes Since Previous Inspection	N/A
	Navigation Clearances	N/A
	Waterway Opening	Adequate for normal flow
N	Other	None

Repair Quantities:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

HIGHWAY SAFETY

Coding of SI&A Item 36: 0 0 0 0

RATING		COMPONENT	REMARKS
0		Bridge Railing	Timber railing on both sides.
0	0	Transition to Bridge Railing	Timber railing transition to timber guiderail with metal post on south side.
	0	Sidewalk Terminations	Timber guiderail with steel post end terminal at south west corner.
0		Approach Guide Rails	Timber railing guiderail with steel posts at west side.
0		Approach Guide Rail End Terminals	Continuous at west side.

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

DECK GEOMETRY

SI&A Item 68 Rating: 6

COMPONENT	REMARKS
Bridge Cross Section	The approach roadway widths are consistent with the structure roadway width.
Adequacy of Lane/Shoulder Widths	2 lanes, 2 way traffic. Curb to curb width = 28' ADT = 153 (estimated 2020)
Vertical Clearance over Deck	

Posting for Load/Speed/Clearance Restrictions

☐ None

☐ Posting for Load

☒ Posting for Speed

☐ Posting for Clearance

☐ Posting for Others

Speed Limit 25 MPH posting.
[See Photo(s): 22]

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
 Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

FENCING

Coding of SI&A Item FN: N
 Coding of SI&A Item FO: N
 Coding of SI&A Item FP:

Warranted (Per Design Manual Section 23): No

If Yes: () Description:

Current Status of Fence & Sidewalk:

LEFT SIDE

RIGHT SIDE

a. Fence:

No

No

b. Sidewalk Width:

5.0

FT

0.0

FT

c. Total height of fence above curb/sidewalk:

FT

FT

d. Type of Fence (per Design Manual Section 23):

Action Recommended:

Estimated Cost: \$

NOTES:

Structure No.: 02M4216 Route: 9102 Cycle No.: 02
Name: PATRIOTS WAY OVER RAMAPO RIVER Insp. Date: 06/17/2020

WORK DONE HISTORICAL DATA

CYCLE NO.	YEAR	WORK DONE SUMMARY
02	2020	New bituminous concrete has been resurfaced over span 1. New steel plate section has been installed in eastbound lane at span 2. New asphalt patches have been applied over existing asphalt patches in span 3. New "CAUTION" sign is written at southwest approach sidewalk. New plywood has been constructed on top of the sidewalk. New 2 girders have been inserted adjacent to existing stringers in span1 & 3.
CYCLE NO.	YEAR	WORK DONE SUMMARY
01	2018	None

Structure No.: 02M4216 Route: 9102 Milepost: _____
Name: PATRIOTS WAY OVER RAMAPO RIVER

CoMBIS Priority Repair Form

In Progress Items

Item Number: 2018_07573 Maintenance Recommendation Type: PR - Priority Repair 2 (Medium)
Current Work Spec.: Maintenance Recommendation Category: Approach
Original Work Spec. Identified In: Maintenance Recommendation Activity: Sidewalk - Repair settled approach sidewalk
Date Originally Entered: 06/23/2020 Originally Reported By: MP Engineers
Date Closed: Closed By:

Inspector

Describe Deficiency: Bridge Owner: Oakland City.
Sidewalk panel at southeast approach sidewalk exhibits erosion below causing undermining and settlement up to 2 inch. Similar settlement up to 2 inch is observed at southwest sidewalk.
Description of Proposed Work: Back fill and compact area below sidewalk panel and rebuild/feather the approach sidewalk panels to eliminate settlement for a smooth transition between sidewalk panels.
Note: City of Oakland to contact Bergen County when repairs are completed.

Is Interim Work Needed: No

Description of Interim Work Required to Maintain Structure Until Proposed Work can be Accomplished: None

Date Email Sent: 07/09/2018 Email Sent By: Patel, Mahendra

Email Sent To:
mpatel@mpengs.com;
jyakimik@boswellengineering.com;rmejia@boswellengineering.com;BoroAdmin@Oakland-NJ.org;Harjit.Bal@dot.nj.gov;mpatel@mpengs.com;chandrahas.shah@dot.nj.gov;bhaveshkumar.patel@dot.nj.gov;rcpatel@mpengs.com;dpatel@mpengs.com;jandow@co.bergen.nj.us;jaraneo@co.bergen.nj.us;mkhanal@mpengs.com

Estimated Quantity/Costs

Quantity: Unit:

Structure No.: 02M4216 Route: 9102 Milepost: _____
Name: PATRIOTS WAY OVER RAMAPO RIVER

CoMBIS Priority Repair Form

Unit Cost:

Man Hours:

Total Cost:

Bridge Owner - Engineering Section

Date Completed:

Work Order # (NJDOT) Only:

Final Work Description:

Interim Work
Description:

Date Email Sent:

Email Sent By:

Email Sent To:

Comments:

Date Final Work Verified as Completed:

Structure No.: 02M4216 Route: 9102 Milepost: _____
Name: PATRIOTS WAY OVER RAMAPO RIVER

CoMBIS Priority Repair Form

Bridge Owner - Maintenance Section

Beyond Capacity of Maintenance Dept. - Recommend Contractor Be Hired:

Contract Number:

Date Work Assigned:

Personnel Assigned:

What Was

Done/Materials Used:

Maintenance Comments:

Was Interim Work Completed:

Date Interim Work Flagged as Complete:

Date Final Work Completed:

Flagged as Complete By:



Photo 1	Category:	05 - Sidewalks/Safetywalks/Curbs, 60 - Priority Repair
	Description:	Southeast approach sidewalk, looking southwest. Priority Repair 2: Erosion below southeast approach sidewalk causing undermining and settlement of sidewalk by up to 2 inch.

NJDOT Fracture Critical Member (FCM) Checklist

Structure Number:	02M4216	Date of Inspection:	06/17/2020
Name of Structure:	PATRIOTS WAY OVER RAMAPO RIVER	Cycle Number:	02
Type of Bridge:	Three span steel truss, rolled steel stringers and floorbeams		

NOTE: For Definition of 'Fracture Critical Bridge', Refer to the 2012 BIRM and Section X.E from NJDOT Explanation of SOW.

Is the Structure Fracture Critical?: Yes

FC Member Type - 1:	Welded FCM Member	FC Member Type - 2:		FC Member Type - 3:	
---------------------	-------------------	---------------------	--	---------------------	--

Plans/Sketches showing FCM members provided for Fracture Critical Bridge? Yes

Fracture Critical Member Identification Information: 3 Spans Welded truss.

Hand On Inspection Performed for FC Member:	No	Photo/s attached for Special Equipment used for Hands On Inspection?:	No
---	----	---	----

Access Information for FC Member Hands On Inspection:

Fracture Critical Inspection Frequency Item (92A):	24	Fracture Critical Inspection Date Item (93A):	06/17/2020
--	----	---	------------

NOTE: Special Testing & Special Testing Date is Applicable to Welded FC Member and Pin & Hanger FC Members only.

Special Equipment - 1:		Special Testing Type - 1:		Date of Special Testing:	
------------------------	--	---------------------------	--	--------------------------	--

Special Equipment - 2:		Special Testing Type - 2:	
------------------------	--	---------------------------	--

Special Equipment - 3:		Special Testing Type - 3:	
------------------------	--	---------------------------	--

Reason for Fracture Critical classified in the C&R Section?:		Comments on Condition Rating of FC Member:	
--	--	--	--

Additional Structure Type - 1:		Additional Structure Type - 2:	
--------------------------------	--	--------------------------------	--

Additional Structure Type Remarks:

Fatigue Detail - 1:		Fatigue Detail - 2:		Fatigue Detail - 3:	
---------------------	--	---------------------	--	---------------------	--

Fatigue Location - 1:		Fatigue Location - 2:		Fatigue Location - 3:	
-----------------------	--	-----------------------	--	-----------------------	--

Comments on Load induced Fatigue Details:	1. Pin & Hanger FCM Member: Additional Structure Type must be coded as 1, 2, or 3. 2. Welded FCM Member: Additional Structure Type must be coded as 4. 3. Riveted/Bolted FCM Member: Additional Structure Type must be coded as F.
---	---

Fatigue Detail/Location Remark:

(FQ) Latest In-Depth FC/Pin-Hanger Inspection Date:	FC Members Inspected:	
---	-----------------------	--

Special FCM Insp. Required:		Special FCM Insp. Date:		Special FCM Insp. Consultant:	
-----------------------------	--	-------------------------	--	-------------------------------	--

Special P/H Insp. Required:		Special P/H Insp. Date:		Special P/H Insp. Consultant:	
-----------------------------	--	-------------------------	--	-------------------------------	--