

Bridge Inspection Report (English Units)

Bridge Key: 00000000002000 Agency ID: 020001 Sufficiency Rating: 79.1

IDENTIFICATION

State 1: 44 Rhode Island Struc Num 8: 00000000002000
 Facility Carried 7: I-195 EB Location 9: 1.0 Mi E of JCT I-95&195
 Rte.(On/Under)5A: Route On Structure Rte. Signing Prefix 5B: 1 Interstate Hwy
 Level of Service 5C: 1 Mainline Rte. Number 5D: 00195
 Directional Suffix 5E: 2 East % Responsibility: NA
 SHD District 2: District 3 County Code 3: Providence
 Place Code 4: East Providence Mile Post 11: 0.000 mi
 Feature Intersected 6: SEEKONK RVR & STS
 Latitude 16: 41d 49' 08" Longitude 17: 071d 23' 13"
 Border Bridge Code 98: Not Applicable (P)
 Border Bridge Number 99: NA

INSPECTION

Frequency 91: 24 months Inspection Date 90: 8/3/2011 Next Inspection: 08/03/2013
 FC Frequency 92A: NA FC Inspection Date 93A: NA Next FC Inspection: NA
 UW Frequency 92B: 60 months UW Inspection Date 93B: 7/2/2009 Next UW Inspection: 7/2/2014
 SI Frequency 92C: NA SI Date 93C: NA Next SI: NA
 Element Frequency: 24 months Element Inspection Date: 08/03/2011 Next Elem. Insp. Due: 08/03/2013

CLASSIFICATION

Defense Highway 100: 1 On Interstate STRAHNE Parallel Structure 101: Right of || bridge
 Direction of Traffic 102: 1 1-way traffic Temporary Structure 103: Not Applicable (P)
 Highway System 104: 1 On the NHS NBIS Length 112: Long Enough
 Toll Facility 20: 3 On free road Functional Class 26: 11 Urban Interstate
 Historical Significance 37: 5 Not eligible for NRHP
 Owner 22: 01 01 State Highway Agency
 Custodian 21: 01 01 State Highway Agency

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0 Number of Spans Main Unit 45: 14
 Main Span Material/Design 43A/B:
 4 Steel Continuous 02 Stringer/Girder
 Deck Type 107: 1 Concrete-Cast-in-Place
 Wearing Surface 108A: 1 Monolithic Concrete
 Membrane 108B: 0 None
 Deck Protection 108C: 1 Epoxy Coated Reinforci

CONDITION

Deck 58: 8 Very Good Super 59: 8 Very Good Sub 60: 7 Good
 Culvert 62: N N/A (NBI) Channel/Channel Protection 61: 7 Minor Damage

LOAD RATING AND POSTING

Inventory Rating Method 65: 3 LRFR Load & Res. Operating Rating Method 63: 3 LRFR Load & Res. F.
 Inventory Rating 66: HS16.7 Operating Rating 64: HS22.2
 Design Load 31: 0 Unknown Posting 70: 5 At/Above Legal Loads
 Posting status 41: A Open, no restriction

AGE AND SERVICE

Year Built 27: 1930 Year Reconstructed 106: 2008
 Type of Service on 42A: 1 Highway
 Type of Service under 42B: 6 Highway-waterway
 Lanes on 28A: 5 Lanes Under 28B: 4 Detour Length 19: 3.1 mi
 ADT 29: 72,100 Truck ADT 109: 10 % Year of ADT 30: 2008

APPRAISAL

Bridge Rail 36A: 1 Meets Standards Approach Rail 36C: 1 Meets Standards
 Transition 36B: 1 Meets Standards Approach Rail Ends 36D: 1 Meets Standards
 Str. Evaluation 67: 6 Deck Geometry 68: 4 Tolerable
 Underclearance, Vertical and Horizontal 69: 9 Above Desirable
 Waterway Adequacy 71: 9 Above Desirable Approach Alignment 72: 6 Equal Min Criteria
 Scour Critical 113: 3 SC - Unstable

GEOMETRIC DATA

Length Max Span 48: 160.4 ft Structure Length 49: 1,670.8 ft
 Curb/Sdwk Width L 50A: 0.0 ft Curb/Sidewalk Width R 50B: 0.0 ft
 Width Curb to Curb 51: 68.0 ft Width Out to Out 52: 71.5 ft
 Approach Roadway Width 32: 68.0 ft Median 33: 0 No median (w shoulders)
 Deck Area: 119,461.5 sq. ft
 Skew 34: 0.00 ° Structure Flared 35: 1 Yes, flared
 Minimum Vertical Clearance Over Bridge 53: 17.0 ft
 Minimum Vertical Underclearance Reference 54A: H Hwy beneath struct
 Minimum Vertical Underclearance 54B: 26.6 ft
 Minimum Lateral Underclearance Reference R 55A: H Hwy beneath struct
 Minimum Lateral Underclearance R 55: 14.5 ft
 Minimum Lateral Underclearance L 56: 0.0 ft

PROPOSED IMPROVEMENTS

Bridge Cost 94: \$ 82,878,000 Type of Work 75: 35 Rehabilitate-gen.
 Roadway Cost 95: \$ 8,287,800 Length of Improvement 76: 1,863.8 ft
 Total Cost 96: \$ 124,317,000 Future ADT 114: 80,000
 Year of Cost Estimate 97: 2007 Year of Future ADT 115: 2030

NAVIGATION DATA

Navigation Control 38: 1 Permit Required
 Vertical Clearance 39: 41.0 ft Horizontal Clearance 40: 98.1 ft
 Pier Protection 111: 2 In-Place, Functioning Lift Bridge Vertical Clearance 116:

ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
0	26/3	Conc Deck/Coatd Bars	(SF)	119,494	100 %	119,494	0 %	0	0 %	0	0 %	0	0 %	0
0	60/3	Scupper	(EA)	26	0 %	0	100 %	26	0 %	0	0 %	0	0 %	0
0	106/3	Unpnt Stl Opn Girder	(LF)	16,674	100 %	16,674	0 %	0	0 %	0	0 %	0	0 %	0
0	205/3	R/Conc Column	(EA)	39	100 %	39	0 %	0	0 %	0	0 %	0	0 %	0
0	210/3	R/Conc Pier Wall	(LF)	587	95 %	558	5 %	29	0 %	0	0 %	0	0 %	0
0	214/3	R/Conc Wingwall	(LF)	70	100 %	70	0 %	0	0 %	0	0 %	0	0 %	0

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
0	215/3	R/Conc Abutment	(LF)	171	95 %	162	5 %	9	0 %	0	0 %	0	0 %	0
0	218/3	Backwall, All Types	(LF)	171	99 %	169	1 %	2	0 %	0	0 %	0	0 %	0
0	234/3	R/Conc Cap	(LF)	920	100 %	920	0 %	0	0 %	0	0 %	0	0 %	0
0	300/3	Strip Seal Exp Joint	(LF)	68	100 %	68	0 %	0	0 %	0	0 %	0	0 %	0
0	301/3	Pourable Joint Seal	(LF)	161	100 %	161	0 %	0	0 %	0	0 %	0	0 %	0
0	303/3	Assembly Joint/Seal	(LF)	220	100 %	220	0 %	0	0 %	0	0 %	0	0 %	0
0	316/3	Isolation Bearing	(EA)	172	100 %	172	0 %	0	0 %	0	0 %	0	0 %	0
0	321/3	R/Conc Approach Slab	(EA)	2	100 %	2	0 %	0	0 %	0	0 %	0	0 %	0
0	335/3	Guardrail, Vehicular	(LF)	200	100 %	200	0 %	0	0 %	0	0 %	0	0 %	0
0	336/3	Conc Bridge Parapet	(LF)	3,318	100 %	3,318	0 %	0	0 %	0	0 %	0	0 %	0
0	359/3	Soffit Smart Flag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
0	360/3	Settlement Sm Flag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
0	368/3	Graffiti Smart Flag	sq.ft	800	0 %	0	90 %	720	10 %	80	0 %	0	0 %	0
0	370/3	Steel Diaphragms	(EA)	805	100 %	804	0 %	1	0 %	0	0 %	0	0 %	0
0	374/3	Loose or Missing Bol	each	63	0 %	0	100 %	63	0 %	0	0 %	0	0 %	0

Str Unit	Elem/Env	Description	Element Notes
0	26/3	Concrete Deck -	The bare concrete deck surface has small chips, isolated cracks and scrapes throughout. There is light sand and debris in the right shoulder (photo 10). There is a ± 4" wide patch along the construction joint in the right lane for the full length of the bridge (photo 11). In span 12 the center lane and the right center lane have areas of light scale full width x 5' long. In span 14 the four mainline through lanes have full width light scale throughout (photo 12).
0	60/3	Scupper, all Types	The scupper grates are typically partially clogged with debris and vegetation growth. The south scupper at pier 11 is 100% clogged (photo 13). The scupper grates in the left lane are in the wheel line and make a loud banging noise heard below when traffic passes over. The PVC drain pipes are clear and in good condition (photos 25 and 26).

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	106/3	Unpainted Steel Open	<p>The superstructure consist of ten continuous welded weathering steel plate girders with two additional partial length rolled sections attached to the south side of G-10 in span 14 (photos 14-16). The girder ends at the deck joints are painted (abutments and piers 4 and 9). There are steel drip plates welded to the top of the bottom flanges near the piers with no deficiencies.</p> <p>The girders have uniform normal surface rust, random areas of minor pigeon debris, isolated areas of light laminated rust and random areas of spotty orange rust on the top flanges throughout. The bottom flanges of the fascia girders typically have light surface rust, areas of laminated rust with negligible loss and random areas of concrete debris (photos 18 & 21). Girders 1, 2 and 3 have negative camber in span 11 (photo 23). Girder 10 in span 1 has a rolling defect on the south bottom flange 11' from pier 1, 5" long x 1/8" deep (photo 17). There are bolted field splices in all spans except span 1. The following deficiencies were found at the bolted field splices:</p> <p>Span 7, girder 7, west bolted field splice bottom flange has three missing bolts (photo 19) and the east bolted field splice bottom flange has one bolt with one short thread.</p> <p>Span 8, girder 7, east bolted field splice bottom flange, north side, there is a 1/8" gap between the top plate and the bottom flange (photo 20).</p> <p>Span 9, girder 1, bottom flange, north side, one bolt is smaller size than all other bolts (photo 22).</p> <p>Span 14, girder 1, east bolted field splice on the web above the north bottom flange plate there is 62" long x 1 1/2" high laminated rust with negligible loss (photo 24).</p>
0	205/3	Reinforced Conc Column	<p>There are 3 reinforced concrete columns at each of the 13 piers. The columns have random areas of concrete discoloration, graffiti and painted over graffiti (photos 25 and 26).</p>

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	210/3	Reinforced Conc Pier	<p>Typical all pier walls: Pier column 1 is supported on an independent 7' diameter drilled shaft. Columns 2 and 3 are supported on the original bridge pier wall/foundation. The original pier walls under columns 2 and 3 have a stone masonry veneer (photo 26). There are scattered areas of missing mortar between the veneer stones and random vertical hairline cracks at the pier bases. There are areas of heavy graffiti typically at the piers in land areas. See attached "Element 210 Additional Pontis Notes.doc" file for more notes on the pier walls.</p>
0	214/3	Reinforced Conc	<p>Wingwalls only exist at the southwest and northeast corners of the bridge due to continuous abutments between bridge 020001, bridge 070001 and the remaining portion of the original bridge. The southwest wingwall has light to moderate leakage and rust stains and painted over graffiti full length x 3' high (photo 36). The northeast wingwall is an architectural concrete finish with vertical hairline cracks typically extending from drain pipes in the wingwall up to 10' high and light vegetation growth along the bottom of the wingwall (photos 37 and 38).</p>

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	215/3	Reinforced Conc	<p>The west abutment is continuous with bridge 070001 and the east abutment is continuous with the remaining portion of the original bridge. Both abutments have scattered areas of light rust/leakage staining. The pedestals at both abutments typically have hollow/dull sounding corners up to 1' long x 2' wide with hairline cracks between the bottom of the pedestal and abutment seat (photos 39 & 40).</p> <p>West Abutment: There are scattered vertical and diagonal hairline cracks, most have been ground out and sealed, two areas of light graffiti at the north and south end of the abutment (photo 39). There are random areas of hairline map cracking along the top 10' of the stem. There is a cable left on the top of the seat from construction. The south corner along the top of the stem of the stem adjacent to the southwest wingwall there is an 8' high x 1' wide hollow area with perimeter cracks with efflorescence (photo 36).</p> <p>East Abutment: There are random cracks with efflorescence (photo 40). The north corner along the top of the stem adjacent to the northeast wingwall there is a 9' high x 1' wide hollow area with a perimeter crack and adjacent 3' high x 10" wide x up to 8" deep spall (photo 41).</p>
0	218/3	Back Wall, All Types	<p>The abutment backwalls have minor leakage stains and random full height hairline cracks with and without efflorescence. There is a 2' wide x 1' high x up to 1' deep spall at the top of the north end of the east abutment (photo 42).</p>
0	234/3	Reinforced Conc Cap	<p>The reinforced concrete caps have random full height hairline cracks with and without efflorescence, minor concrete discoloration, light honeycombing and minor debris on top at random locations (photo 45). Pier 1 has a 6" wide x 3" high x 1/2" deep chip on the west side between columns 1 and 2 (photo 43). There are steel cables left from construction on top of pier caps 7 and 8, on pier 7 the cable is attached to bearing 7 anchor bolt (photo 44). Isolated bearing pedestals have minor rust stains and light honeycombing.</p>

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	300/3	Strip Seal Expansion	There is a strip seal expansion joint at the west abutment that has light to moderate sand debris along the full length especially in the shoulders (photo 46). The seal is settled at random locations along the joints. There are galvanized steel parapet joint plates that have random scrapes (photo 47).
0	301/3	Pourable Joint Seal	There are pourable seals at both approach slab joints (photos 46, 51 & 63). The joints are typically filled with dirt and debris.
0	303/3	Assembly Joint/Seal	There are modular expansion joints at the deck joints over piers 4 and 9 and the east abutment (photos 48-51). There are galvanized steel parapet joint plates at all joints with no notable deficiencies. Piers 4 and 9 deck joints have moderate to heavy sand accumulation in the joint at the right shoulder and right lane and light to moderate sand accumulation in the joints in the remaining lanes. Pier 4 joint has four areas of the seal squeezing up, up to 1" high in the right shoulder and random areas of the seal depressed up to 1" (photo 49).
0	316/3	Isolation Bearing	There are isolation bearings are all piers and both abutments. The bearings have minor gaps up to 1/2", (typically 1/4"), under the masonry plates along the edges of random bearings (photo 58). There are random missing anchor bolt washers throughout the bridge. The fascia girder bearings have light rust staining. There are random 1/16" gaps between the bottom flange and the sole plate (photo 55). There are missing/loose anchor bolts/nuts throughout the bridge; see attached "Element 316 Additional Pontis Notes.doc" file for detailed description of these areas.
0	321/3	Reinforced Conc	The west approach slab is not visible and therefore its condition is based on the bituminous concrete pavement, the bituminous concrete overlay has cracks along the stage construction paving seam in the right lane (photo 62). The grooved bare concrete pavement at the east approach has minor scrapes and gouges (photo 63).
0	335/3	Guardrail, Vehicular	The west approach has temporary precast concrete barriers on both sides with no notable deficiencies. The east approach has an extension of the concrete bridge parapets with isolated hairline cracks with isolated efflorescence (photos 7 and 8).

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	336/3	Reinforced Conc Bridge	The reinforced concrete parapets have isolated vertical hairline cracks, some extending across top of parapet, with isolated efflorescence and random scrapes throughout (photo 64). The inside face of the south parapet has light graffiti in spans 4, 7 and 10 (photo 65). The north parapet in span 7 near pier 7 has two gouges from impact 1' long x 2" high x 1" deep (photo 66).
0	359/3	Soffit of Concrete Deck	The underside of the reinforced concrete deck has stay-in-place (SIP) forms except in bay 7 and at the fascias (photos 14-17). The stay-in-place forms have no notable deficiencies. The exposed concrete deck has less than 2% total deterioration with shrinkage cracks and isolated transverse hairline cracks with and without efflorescence. The longitudinal construction joint in bay 7 has random areas of minor leakage through the joint with light efflorescence staining throughout (photos 67 & 68). There are 1½" diameter anchor bolt holes spaced ± 4' apart adjacent to the construction joint with some anchors still hanging from the deck (photo 67).
0	360/3	Settlement	There is a full height to 1/16" wide crack on both sides between columns 2 and 3 with two previously installed settlement gauges missing on the east side and one broken (detached from pier at south side) and one painted over on west side (photos 32-35). The previously measured west side settlement of counterclockwise rotation of the north half of the wall (1mm vertical x 20mm horizontal), could not be verified this inspection due to top gauge painted over and bottom gauge south side detached from pier. There is a full height 1/8" to 1/2" wide vertical crack (repaired with epoxy) on the east face between Bridge 020001 and the original bridge to the south which is missing a settlement gauge mentioned in the previous inspection report.
0	368/3	Graffiti Smart Flag	There is graffiti on the west abutment and moderate to heavy graffiti at piers 1-3, 7, 9 and 10-13 (photos 25, 28-35, 39, 40 and 72). Total substructure surface area covered in graffiti is approximately 800 sq. ft. There is also light graffiti along the inside face of the south parapet in spans 4, 7 and 10 (photo 65).

Bridge Inspection Report (English Units)

Str Unit	Elem/Env	Description	Element Notes
0	370/3	Steel Diaphragms	<p>Interior diaphragms are welded steel angle cross frames (photos 67 and 68). End diaphragms at piers and abutments at welded plate girders designed for jacking for bearing repair (photo 69). Diaphragms in span 14 between girders B1 and B2 are rolled steel sections. All diaphragms have bolted girder connections. The weathering steel diaphragms have normal uniform rust throughout. The end diaphragms below the deck joints are painted. The end diaphragms at pier 4 have isolated minor leakage stains. Random nuts and bolts at the end diaphragms at pier 9 and west abutment are not painted (photos 69-71).</p> <p>The end diaphragm connections at pier 9 span 10 between girders 7 and 8 have 30 bolts per connection that are not fully engaged, each bolt is approximately 1/2" unthreaded and most are loose. There is a 1/2" gap between stiffener and diaphragm at the north side (photo 70) and an 11/16" at the south side (photo 71).</p>
0	374/3	Loose or Missing Bolts	<p>Span 7, girder 7, west bolted field splice bottom flange has three missing bolts (photo 19).</p> <p>The end diaphragm connections at pier 9 span 10 between girders 7 and 8 have 30 bolts per connection that are not fully engaged, each bolt is approximately 1/2" unthreaded and most are loose (photos 70 & 71).</p>

Bridge Inspection Report (English Units)

BRIDGE NOTES

Equipment Used: 30' Lift truck, 40' Manlift and Barge with 60' Manlift.

Traffic Control: Lane restrictions on Gano Street, Water Street, and shoulder closures on I-195 Eastbound with local police and state police details.

Vertical Clearance: The minimum vertical clearance in span 1 (Gano Street) and span 14 (Water Street) is greater than 25'. Minimum vertical clearance of 26'-1" is posted on G10 in span 1 over Gano Street (photo 2) and 27'-2" posted on G10 in span 14 over Water Street (photo 5).

Deflection and Vibration: There was moderate vibration and deflection noted under heavy live load.

Utilities: There are three underside luminaires with three junction boxes and rigid metal conduit mounted to the east side of the pier 6 cap and the west side of the pier 7 cap in the navigation channel (photo 72). The rigid metal conduit runs down the east side of pier 6 column 3 and the west side of pier 7 column 3. The conduit at the base of pier 7 column 3 is disconnected in two areas exposing the wires (wires are still intact) (photos 72 and 73). The lights were off at the time of inspection.

There are also three luminaires attached to the bottom flange of the girders in span 14 over Water Street with a rigid metal conduit and junction box attached to the underside of deck in bay 7 with no notable deficiencies (photos 5 and 15).

On the top of the deck there are 19 aluminum light poles mounted to the top of the parapets along both sides of the bridge. The north light pole in span 1 is missing 3 of 4 anchor bolt covers (photo 74). The south light pole in span 5 is missing 2 of 4 anchor bolt covers. The south light pole at pier 6 has scrapes and the light and cover are missing (photo 75). The south light pole over pier 9 has a broken anchor bolt cover.

Curbs: Sloped face reinforced concrete curbs along both sides of the bridge show isolated vertical hairline cracks and scrapes (photos 6-12, 47 and 62-66).

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 08/03/2011 Type: 1 Regular NBI
Inspector: SWATROUS Pontis User Key: SYS - -1 -1

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

Routine Inspection by Michael Baker Engineering, Inc. on 7/18/11-7/20/11, 7/27/11-7/29/11, 8/1/11 & 8/3/11.

Crew: SW, YS, BH, BS

Weather: Varied cloudy to sunny and 70°F to 90°F.

The bridge is logged from west to east with girder 1 on the north fascia. Span 14 has two additional partial length girders at the south fascia lettered B-1 & B-2 from north to south. Based on the results of this inspection the bridge overall is in good condition (rated 7) and the condition ratings for the deck (item 58, rated 8), superstructure (item 59, rated 7), substructure (item 60, rated 7) and channel (item 61, rated 7) remain unchanged.

Structure Notes Continued:

Sign Structure: There is a full span overhead sign structure mounted to the top of the concrete parapets over pier 13 with no notable deficiencies (photo 76).

Channel: The Seekonk River is tidal and flows under spans 4-10. See Underwater Inspection Report (photos 77 & 78).

Span 7 Fender System and Navigation Lights: There is a timber fender system composed of piles and walers which extend along the east side of pier 6 and the west side of pier 7 (photos 79 & 80). The fender system continues through the original bridge to the south and through bridge 070001 to the north. The piles and walers have light to moderate marine growth in the tidal zone with minor checks, splits and cracks. The top waler has random chips up to 1' long x 3" high x 1" deep. There is a 3½' long split in the 2nd whaler from the top below girder 1 (photo 81). The dolphins have moderate to heavy algae/marine growth and a few have moderate splits in the tidal zone (photo 82). Both fender system walkways have six 'red' navigation lights each, with a utility conduit and junction box, all attached to the top surface (photo 80). There is a 'green' navigation light at the south fascia girder of the original portion of the bridge and the north fascia girder of bridge 070001 (photo 79). All navigation lights were off at the time of inspection.

Bridge Inspection Report (English Units)

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 08/07/2009

Type: 1 Regular NBI

Inspector: PONTIS

Pontis User Key: PONTIS - -1 -1

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

Dates: 07/01/09, 07/02/09, 07/20/09 - 07/22/09 & 08/07/09.

Inspected by TranSystems

Crew Chief: Russell Bruno

Team Members: Efrain Grajeda, Bernie Sulikowski, Kevin Isu, Christian Diaz, Christian Gomez

Weather Conditions: Varied from Showers, 65°F to Clear, 90°F

Equipment Used: 30' Lift Truck, 40' Manlift and Spudbarge with 66' Manlift

Traffic Control: Lane restrictions on Gano Street and Water Street. Shoulder closure on I-195 Eastbound with TMA and police assistance.

NBI Rating: The overall structure condition rating is 7 - Good. The ratings for the Deck (Item 58), Superstructure (Item 59), Substructure (Item 60) and Channel (Item 61) were found to be 8 - Very Good, 8 - Very Good, 7 - Good and 7 - Minor Damage respectively.

Deflection and Vibration: There was no vibration or deflection noted.

Vertical Clearance: The minimum measured vertical underclearance for span 1 (over Gano Street) and span 14 (over Water Street) is greater than 25'. Posted 26'-1" on G-10, span 1 and 27'-2" on G-10 span 14.

Utilities: (3) underside luminaires with (3) junction boxes & rigid metal conduit mounted on the east side of Pier 6 cap & west side of Pier 7 cap in the navigation channel; the rigid metal conduit also runs along the east side of column 3 (Pier 6) along the west side of column 3 (Pier 7). The lights were off at the time of the inspection; no notable deficiencies (Photo 30).

(3) underside luminaires in span 14 at Water Street also there is a rigid metal conduit with junction box attached to deck underside in bay 7 (Photo 23) with no visible deficiencies.

(19) aluminum light poles mounted to the top of the parapets along both sides of the bridge (Photos 5 & 11). (1) Light pole has a broken anchor bolt cover, at the south parapet over Pier 9 (Photo 62). The lights were off during daytime inspection.

Curbs: Sloped face reinforced concrete curbs along both sides of the bridge show isolated vertical hairline cracks (Photo 61).

Bridge Inspection Report (English Units)

Sidewalks: N/A

PAST INSPECTION

Inspection Date: 07/07/2009

Type: D UW-Contract SCUBA

Inspector: PONTIS

Pontis User Key: PONTIS - -1 -1

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

See Sub-Aqueous Report 2009

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 02/16/2007

Type: 5 Other

Inspector: LPERKINS

Pontis User Key: APECKHAM - ANI

Scope:

NBI:

Other:

Element:

Underwater:

Fracture Critical:

INSPECTION NOTES

< none >

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 10/07/2002 Type: 1 Regular NBI

Inspector: TOM Pontis User Key: 3

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

TOM inspection comments -
Structure 000000000002000 -
Date 10/07/2002 -
Previous comments > TARASANKO inspection comments -
Structure 000000000002000 -
Date 8/31/99 -
Previous comments > CRISCIONE inspection comments -
Structure 000000000002000 -
Date 5/11/98 -
Previous comments > (none)

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 08/31/1999 Type: 1 Regular NBI

Inspector: TARASANKO Pontis User Key: 5

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

TARASANKO inspection comments -
Structure 000000000002000 -
Date 8/31/99 -
Previous comments > CRISCIONE inspection comments -
Structure 000000000002000 -
Date 5/11/98 -
Previous comments > (none)

PAST INSPECTION

Inspection Date: 05/11/1998 Type: 1 Regular NBI

Inspector: CRISCIONE Pontis User Key: CRISCIONE - DA\

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

CRISCIONE inspection comments -
Structure 000000000002000 -
Date 5/11/98 -
Previous comments > (none)

Bridge Inspection Report (English Units)

PAST INSPECTION

Inspection Date: 04/26/1997 Type: 1 Regular NBI

Inspector: TOM Pontis User Key: 3

Scope:

NBI: Other: Element:
Underwater: Fracture Critical:

INSPECTION NOTES

TOM inspection comments -
Structure 000000000002000 -
Date 4/26/97 -
Previous comments > CRISCIONE inspection comments -
Structure 000000000002000 -
Date 5/11/98 -
Previous comments > (none)

INSPECTOR WORK CANDIDATES