New York State Department of Transportation
General Bridge Inspection Report

**Inspection Date:** September 16, 2016

**Structure Information**

- **BIN:** 1066730
- **Region:** 11 - NEW YORK CITY
- **Feature Carried:** 87I87IX1M11001
- **County:** BRONX
- **Feature Crossed:** 278I278IXIM54005
- **Political Unit:** City of NEW YORK
- **Orientation:** 8 - NORTHWEST
- **Approximate Year Built:** 1960

**Primary Owner:** New York State Department of Transportation

**Primary Maintenance Responsibility:** 12 - State - Subcontracted to another Party

**General Type Main Span:** 3 - Steel, 02 - Stringer/Multi-Beam or Girder

This Bridge is not a Ramp

**Number of Spans:** 6

**Postings**

- **Posted Vertical Clearance On:** Not Posted
- **Bridge Load Posting:** Not Posted
- **Posted Vertical Clearance Under:** Not Posted

**Number of Flags Issued**

- **Red PIA:** 0
- **Red:** 0
- **Yellow:** 0
- **Safety PIA:** 0

**New York State Inspection Overview**

- **General Recommendation:** 4

**Federal NBI Ratings**

- **NBI Deck Condition:** 5
- **NBI Channel Condition:** N
- **NBI Superstructure Condition:** 7
- **NBI Culvert Condition:** N
- **NBI Substructure Condition:** 7

**Action Items**

- Non-Structural Condition Observations noted: YES
- Vulnerability Reviews Recommended: NO
- Diving Inspection Requested: NO
- Further Investigation Requested: NO

**Inspector & Reviewer Signature Information**

- **Inspection Signature:** Mohammadreza Gramy, P.E. 064448-1  **Date:** November 14, 2016
- **Review Signature:** Seth D. Medwick, P.E. 065490-1  **Date:** November 14, 2016

Report Printed: November 16, 2016 11:01:18
**Special Emphasis Inspection**

<table>
<thead>
<tr>
<th>Special Emphasis Detail</th>
<th>“Other” Special Emphasis Description</th>
<th>Hands-On Inspect Performed</th>
<th>Hands-On Inspection Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>AASHTO Category D, E, and E' welded details</td>
<td>Category E welds at Spans 2 and 3.</td>
<td>Yes</td>
<td>Fatigue prone Category E welds received 100% hands-on inspection.</td>
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<tr>
<td>Concrete Deck Haunch</td>
<td>Square concrete deck haunches at Spans 1-6.</td>
<td>Yes</td>
<td>Square deck haunches received 100% hands-on inspection.</td>
</tr>
</tbody>
</table>

**Additional Information**

**Overloads Observed**

No overload vehicles observed during this inspection.

**Notes to Next Inspector**

Access to the underside of the deck was gained using a 30' bucket truck and 24' extension ladder with WZTC and permission from KiSKA Construction to enter their contractor's parking lot.

**Improvements Observed**

- High rocker bearings were replaced at Girders G1-G6 at Pier 2 on Span 3 side. Yellow Flag NB15M6W003 was removed.
- High rocker bearings were replaced at Girders G1-G6 at Pier 4 on Span 5 side. Yellow Flag NB15M6W004 was removed.
- High rocker bearings were replaced at Girders G1-G6 at End Abutment. Yellow Flag NB15M6W005 was removed.

**Pedestrian Fence Height**

None

**Snow Fence**

None
## Element Quantities

### Element Assessment Summary Table

<table>
<thead>
<tr>
<th>Element</th>
<th>Total Quantity</th>
<th>Unit</th>
<th>CS-1</th>
<th>CS-2</th>
<th>CS-3</th>
<th>CS-4</th>
<th>CS-5</th>
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<tbody>
<tr>
<td>12 - Reinforced Concrete Deck</td>
<td>16797</td>
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<td>4978</td>
<td>3997</td>
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<td>107 - Steel Open Girder/Beam</td>
<td>2416</td>
<td>ft</td>
<td>2415</td>
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<td>205 - Reinforced Concrete Column</td>
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<td>215 - Reinforced Concrete Abutment</td>
<td>72</td>
<td>ft</td>
<td>60</td>
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<td>220 - Reinforced Concrete Pile/Cap Footing</td>
<td>183</td>
<td>ft</td>
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<td>227 - Reinforced Concrete Pile</td>
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<tr>
<td>234 - Reinforced Concrete Pier Cap</td>
<td>240</td>
<td>ft</td>
<td>171</td>
<td>35</td>
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<td>300 - Strip Seal Expansion Joint</td>
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<td>302 - Compression Joint Seal</td>
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<td>305 - Assembly Joint without Seal</td>
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<td>311 - Movable Bearing</td>
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<td>313 - Fixed Bearing</td>
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<td>321 - Reinforced Concrete Approach Slab</td>
<td>730</td>
<td>ft²</td>
<td>631</td>
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<td>330 - Metal Bridge Railing</td>
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<td>810 - Sidewalk</td>
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<td>811 - Curb</td>
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<td>831 - Steel Beam End</td>
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<td>850 - Backwall</td>
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<td>ft</td>
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### Element Assessment by Span*

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<th>Element**</th>
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<th>CS-1</th>
<th>CS-2</th>
<th>CS-3</th>
<th>CS-4</th>
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<td>BA220 - Reinforced Concrete Pile/Cap Footing</td>
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<td>ft</td>
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<td>CS-1</td>
<td>CS-2</td>
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<tr>
<td>PR220 - Reinforced Concrete Pile/Cap Footing</td>
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<td>ft</td>
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<td>PR234 - Reinforced Concrete Pier Cap</td>
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<td>ft</td>
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<td>ft</td>
<td>22</td>
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<td>ft</td>
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<td>107 - Steel Open Girder/Beam</td>
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<td>PR220 - Reinforced Concrete Pile/Cap Footing</td>
<td>22</td>
<td>ft</td>
<td>22</td>
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<td>PR234 - Reinforced Concrete Pier Cap</td>
<td>49</td>
<td>ft</td>
<td>10</td>
<td>10</td>
<td>29</td>
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<tr>
<td>PR300 - Strip Seal Expansion Joint</td>
<td>39</td>
<td>ft</td>
<td></td>
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<td>12 - Reinforced Concrete Deck</td>
<td>2869</td>
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<td>885</td>
<td>550</td>
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<td>331 - Reinforced Concrete Bridge Railing</td>
<td>122</td>
<td>ft</td>
<td>97</td>
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<tr>
<td>PR220 - Reinforced Concrete Pile/Cap Footing</td>
<td>23</td>
<td>ft</td>
<td>23</td>
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<tr>
<td>PR234 - Reinforced Concrete Pier Cap</td>
<td>50</td>
<td>ft</td>
<td>37</td>
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<td>750</td>
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<td>21</td>
<td>ft</td>
<td>21</td>
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<td>EA220 - Reinforced Concrete Pile/Cap Footing</td>
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<td>ft</td>
<td>39</td>
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<td>EA321 - Reinforced Concrete Approach Slab</td>
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<td>248</td>
<td>1796</td>
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<td>ft</td>
<td>98</td>
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<td>3</td>
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</tbody>
</table>

*For structures with 3 or less spans, all elements of all spans are shown. For structures with 4 or more spans, elements (parent/child) with Condition State values of 3, 4, or 5 are shown.

** Elements with a prefix designate the locations of BA-Begin Abutment, BW-Begin Wingwall, EA-End Abutment, EW-End Wingwall, CO-Culvert Outlet, and PR-Pier. No prefix generally indicates the element is part of the superstructure.

**Inspection Notes**
General Comments

1. The BIN plate is located at the end face of Pier 2 and is slightly damaged.
2. Category E welds at Spans 2 (Girders G1-G8) and Span 3 (Girder G6) received 100% hands-on inspection. See attached special emphasis sketches.
3. Square concrete haunches at Spans 1-6 received 100% hands-on inspection. See attached special emphasis sketches.
4. Yellow Flags NB15M6W003, NB15M6W004 and NB15M6W005 were removed during this inspection due to newly installed high rocker bearings at Piers 2, 4 and End Abutment.
5. Underdeck condition sketch, Underdeck shielding condition report, Joint maintenance report and vertical clearance sketch are attached to the end of this inspection report.

<table>
<thead>
<tr>
<th>Element Condition Notes</th>
<th>Condition State</th>
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<td>Span 1: 12 - Reinforced Concrete Deck</td>
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<tr>
<td>Referenced Photo(s): 7, 8, 9, 10, 11</td>
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<tr>
<td>Referenced Sketch(es): None</td>
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</tr>
</tbody>
</table>

Underside of the concrete deck exhibits large areas of mapcracking up to 1/16" W with efflorescence, moderate scaling and hollow sounding concrete ranging from 60 SF up to 100 SF. See underdeck condition sketch for details.

<table>
<thead>
<tr>
<th>Span 1: PR205 - Reinforced Concrete Column</th>
<th>Condition State 2</th>
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<tr>
<td>Referenced Photo(s): 15</td>
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<td>Referenced Sketch(es): None</td>
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End face of the column at left end exhibits a spall approximately 4 SF x up to 4" D.

<table>
<thead>
<tr>
<th>Span 1: BA215 - Reinforced Concrete Abutment</th>
<th>Condition State 3</th>
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<tr>
<td>Referenced Photo(s): 3, 4</td>
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<td>Referenced Sketch(es): None</td>
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</tbody>
</table>

Left end of the Begin Abutment stem wall exhibits horizontal cracks/mapcracking up to 1/8" W over an area of 80 SF (20' L x 4' H).

<table>
<thead>
<tr>
<th>Span 1: BA220 - Reinforced Concrete Pile/Cap Footing</th>
<th>Condition State 5</th>
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<tbody>
<tr>
<td>Span 1: PR220 - Reinforced Concrete Pile/Cap Footing</td>
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<tr>
<td>Span 2: PR220 - Reinforced Concrete Pile/Cap Footing</td>
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</tr>
<tr>
<td>Span 3: PR220 - Reinforced Concrete Pile/Cap Footing</td>
<td></td>
</tr>
<tr>
<td>Span 4: PR220 - Reinforced Concrete Pile/Cap Footing</td>
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<tr>
<td>Span 5: PR220 - Reinforced Concrete Pile/Cap Footing</td>
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<tr>
<td>Span 6: EA220 - Reinforced Concrete Pile/Cap Footing</td>
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<tr>
<td>Referenced Photo(s): None</td>
<td></td>
</tr>
<tr>
<td>Referenced Sketch(es): None</td>
<td></td>
</tr>
</tbody>
</table>

Begin and End Abutment as well as Piers 1-5 have concrete footings that are buried below grade and are not visible for inspection.

<table>
<thead>
<tr>
<th>Span 1: BA227 - Reinforced Concrete Pile</th>
<th>Condition State 5</th>
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</thead>
<tbody>
<tr>
<td>Span 1: PR227 - Reinforced Concrete Pile</td>
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<tr>
<td>Span 2: PR227 - Reinforced Concrete Pile</td>
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<tr>
<td>Referenced Photo(s): None</td>
<td></td>
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<tr>
<td>Referenced Sketch(es): None</td>
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</tr>
</tbody>
</table>

Begin Abutment as well as Piers 1 and 2 piles are buried below grade and not visible for inspection.
### Span 1: PR234 - Reinforced Concrete Pier Cap
- **Condition State:** 3
- **Referenced Photo(s):** 14
- **Referenced Sketch(es):** None

Left end of the concrete cap beam exhibits a spall approximately 1 SF x up to 2” D and vertical crack/mapcracking up to 1/8” W at the outer edges of the cap beam.

### Span 1: BA300 - Strip Seal Expansion Joint
- **Condition State:** 3
- **Referenced Photo(s):** 1, 2
- **Referenced Sketch(es):** None

Approach side of the Begin Abutment transverse deck joint is settled by up to 1” D and the joint sealer is filled with impacted dirt and sediment accumulation between the joint headers for the full length of the joint.

### Span 1: PR300 - Strip Seal Expansion Joint
- **Condition State:** 3
- **Referenced Photo(s):** 6
- **Referenced Sketch(es):** None

Pier 1 transverse deck joint exhibits impacted dirt and sediment accumulation throughout the full joint length.

### Span 1: BA311 - Movable Bearing
- **Condition State:** 1
- **Referenced Photo(s):** 3, 4, 5
- **Referenced Sketch(es):** None

Begin Abutment high rocker bearings at Girders G1-G7 have been replaced since the previous inspection and are in good condition.

### Span 1: PR313 - Fixed Bearing
- **Condition State:** 3
- **Referenced Photo(s):** 12, 13
- **Referenced Sketch(es):** None

Fixed bearings at Pier 1 exhibit the following conditions:
- Girder G6 bearing exhibits 1 out of 4 missing anchor bolt nuts at the begin-right side with up to 50% section loss to the anchor bolt shank.
- Girder G7 bearing exhibits 1 out of 4 missing anchor bolt nuts at the begin-left side.

### Span 1: BA850 - Backwall
- **Condition State:** 3
- **Referenced Photo(s):** 3, 4
- **Referenced Sketch(es):** None

Begin Abutment backwall at Bays #1 and #2 exhibit several full height diagonal cracks up to 1/8” W.

### Span 2: 12 - Reinforced Concrete Deck
- **Condition State:** 3
- **Referenced Photo(s):** 19, 22
- **Referenced Sketch(es):** None

Approximately 40% of the underside of the deck exhibits mapcracking up to 1/16” W with efflorescence, water stains and light to moderate scaling. See underdeck condition sketch for details. Above deck, the concrete overlay exhibits several concrete patches with cracks up to 1/8” W and slight depressions.
### Span 2: 107 - Steel Open Girder/Beam

**Condition State 3**

**Referenced Photo(s):** 23, 24  
**Referenced Sketch(es):** None

End diaphragm in Bay #1 between Girders G1 and G2 exhibits several corrosion thru holes in the web up to 5" W x 3" H, 7" W x 6" H and 1-1/2" W x 1" H. There are also several adjacent smaller holes. Areas surrounding the holes exhibit pitting and heavy section loss.

### Span 2: PR234 - Reinforced Concrete Pier Cap

**Condition State 3**

**Referenced Photo(s):** 26  
**Referenced Sketch(es):** None

Left end of the cap beam exhibits mapcracking up to 1/8" W on the Span 2 side below Girder G1.

### Span 2: PR305 - Assembly Joint without Seal

**Condition State 2**

**Referenced Photo(s):** 17, 18  
**Referenced Sketch(es):** None

Pier 2 transverse finger joint plates exhibits slight misalignment of the fingers by up to 1/4".

### Span 2: PR311 - Movable Bearing

**Condition State 1**

**Referenced Photo(s):** 16  
**Referenced Sketch(es):** None

High rocker bearings at Girders G1-G8 at Pier 1 on Span 2 side have been replaced since the previous inspection and are in good condition.

### Span 2: PR313 - Fixed Bearing

**Condition State 3**

**Referenced Photo(s):** 29, 30, 31, 32  
**Referenced Sketch(es):** None

Fixed bearings at Pier 2 exhibit the following conditions:
- Girder G5: Fixed bearing exhibits left and right anchor bolt nuts with up to 30% and 50% section loss respectively. In addition, the left anchor bolt is bent.
- Girder G8: Fixed bearing is shifted toward the right side by up ro 3/8" resulting in a missing keeper plate at this location.

### Span 3: 12 - Reinforced Concrete Deck  
Span 4: 12 - Reinforced Concrete Deck

**Condition State 3**

**Referenced Photo(s):** 36, 37, 41  
**Referenced Sketch(es):** None

Approximately 40% of the underside of the deck at Spans 3 and 4 exhibits mapcracking up to 1/16" W with efflorescence, water stains, light to moderate scaling and hollow sounding concrete areas up to 12 SF. See underdeck condition sketch for details. Above deck at Span 3, several concrete patches exhibit cracks up to 1/16" W and a spalled & uneven asphalt concrete patch near mid-span approximately 3 SF x up to 2" D.

### Span 3: PR205 - Reinforced Concrete Column

**Condition State 1**

**Referenced Photo(s):** 44  
**Referenced Sketch(es):** None

End face of the Pier 3 concrete column has been repaired with new concrete since the last inspection and is in good condition.
<table>
<thead>
<tr>
<th>Span 3: PR234 - Reinforced Concrete Pier Cap</th>
<th>Condition State 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Photo(s): 44</td>
<td>Referenced Sketch(es): None</td>
</tr>
</tbody>
</table>

End face of the Pier 3 concrete cap beam between Girders G2 and G4 has been repaired with new concrete since the last inspection and is in good condition.

<table>
<thead>
<tr>
<th>Span 3: PR234 - Reinforced Concrete Pier Cap</th>
<th>Condition State 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Photo(s): 42, 43, 45, 46</td>
<td>Referenced Sketch(es): None</td>
</tr>
</tbody>
</table>

Pier 3 concrete cap beam exhibits the following conditions:
- Begin face below Girder G1 exhibits mapcracking 1/16" W.
- Left end below Girders G1 exhibits mapcracking up to 1/16" W with efflorescence.
- End Face below Girder G1 exhibits a shallow spall up to 1" D and mapcracking up to 1/16" W. In addition, below Girder G6 the cap beam exhibits a horizontal crack approximately 5' L up to 1/8" W.

<table>
<thead>
<tr>
<th>Span 3: PR300 - Strip Seal Expansion Joint</th>
<th>Condition State 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Photo(s): 33, 34, 35</td>
<td>Referenced Sketch(es): None</td>
</tr>
</tbody>
</table>

Pier 3 transverse deck joint steel armor angle exhibits impact damage with dents/bent sections approximately 10' L at the right end of the bridge and covered with a steel plate near mid-span. Joint sealer exhibits impacted debris and sediment accumulation between the headers for the full length of the joint.

<table>
<thead>
<tr>
<th>Span 3: PR311 - Movable Bearing</th>
<th>Condition State 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Photo(s): 25, 26, 27</td>
<td>Referenced Sketch(es): None</td>
</tr>
</tbody>
</table>

High rocker bearings at Girders G1-G6 at Pier 2 on Span 3 side have been replaced with new high rocker bearing assemblies and are in good condition. Yellow Flag NB15M6W003 was removed.

<table>
<thead>
<tr>
<th>Span 3: 331 - Reinforced Concrete Bridge Railing</th>
<th>Condition State 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Photo(s): 39, 40</td>
<td>Referenced Sketch(es): None</td>
</tr>
</tbody>
</table>

Right concrete bridge railing exhibits an on-going concrete repair due to a severe spall approximately 10 SF x up to 5" D with exposed rebar.

<table>
<thead>
<tr>
<th>Span 4: PR234 - Reinforced Concrete Pier Cap</th>
<th>Condition State 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Photo(s): 50</td>
<td>Referenced Sketch(es): None</td>
</tr>
</tbody>
</table>

End face of the cap beam at Bay #2 exhibits a horizontal crack 3' L x up to 1/8" W with rust stains.

<table>
<thead>
<tr>
<th>Span 4: PR300 - Strip Seal Expansion Joint</th>
<th>Condition State 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Photo(s): 47, 48</td>
<td>Referenced Sketch(es): None</td>
</tr>
</tbody>
</table>

Pier 4 transverse deck joint at the Span 3 side exhibits up to 1-1/4" H settlement of the armor angle with debris and sediment accumulation between the headers for the full length of the joint.
### Span 4: PR311 - Movable Bearing

**Condition State 1**

**Referenced Photo(s):** 44, 45, 46  
**Referenced Sketch(es):** None

High rocker bearings at Girders G1-G6 at Pier 3 on Span 4 side have been replaced since the previous inspection and are in good condition.

### Span 5: 12 - Reinforced Concrete Deck

**Condition State 3**

**Referenced Photo(s):** 52  
**Referenced Sketch(es):** None

Approximately 30% of the underside of the deck exhibits mapcracking up to 1/16” W with efflorescence, light to moderate scaling and isolated transverse cracks up to 1/16” W.

### Span 5: PR311 - Movable Bearing

**Condition State 1**

**Referenced Photo(s):** 50, 51  
**Referenced Sketch(es):** None

High rocker bearings at Girders G1-G6 at Pier 4 on Span 5 side have been replaced with new high rocker bearing assemblies and are in good condition. Yellow Flag NB15M6W004 was removed.

### Span 6: 12 - Reinforced Concrete Deck

**Condition State 3**

**Referenced Photo(s):** 53  
**Referenced Sketch(es):** None

Approximately 70% of the underside of the deck exhibits mapcracking up to 1/16” W with efflorescence, moderate scaling and several isolated transverse cracks up to 1/16” W. Above deck, the concrete overlay exhibits several cracked concrete patches and uneven asphalt concrete patches near the End Abutment.

### Span 6: PR300 - Strip Seal Expansion Joint

**Condition State 3**

**Referenced Photo(s):** 56, 57  
**Referenced Sketch(es):** None

End Abutment transverse deck joint exhibits up to 1” H settlement on the approach side of the joint. In addition, the joint sealer exhibits impacted debris and sediment accumulation throughout the full length of the joint.

### Span 6: EA311 - Movable Bearing

**Condition State 1**

**Referenced Photo(s):** 58, 59  
**Referenced Sketch(es):** None

High rocker bearings at Girders G1-G6 at the End Abutment have been replaced with new high rocker bearing assemblies and are in good condition. Yellow Flag NB15M6W005 was removed.

### Span 6: EA321 - Reinforced Concrete Approach Slab

**Condition State 3**

**Referenced Photo(s):** 56, 60  
**Referenced Sketch(es):** None

End Approach exhibits several areas of uneven asphalt patches totaling approximately 40 SF.

### Span 6: 811 - Curb

**Condition State 3**

**Referenced Photo(s):** 54  
**Referenced Sketch(es):** None

Right concrete curb exhibits two spalls 18” L x 5-1/2” W x 2” D and 1’ L x 4” W x 2” D.
<table>
<thead>
<tr>
<th>Category: CLEANING - Top of Cap Beam</th>
<th>Quantity: 2</th>
<th>Unit: ea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Element(s): NONE</td>
<td></td>
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<tr>
<td>Referenced Photo(s): 28,49</td>
<td></td>
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<tr>
<td>Referenced Sketch(es): NONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top of the cap beams at Piers 2 and 4 exhibit sediment and debris accumulations up to 4” H.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category: APPROACH - Railing</th>
<th>Quantity: 40</th>
<th>Unit: ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Element(s): NONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referenced Photo(s): 61,62</td>
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<tr>
<td>Referenced Sketch(es): NONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>End Approach left guide railing exhibits vehicular impact damage over a 40’ L section including broken vertical support posts.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category: DRAINAGE - Scupper issues (clogged, ponding, etc.)</th>
<th>Quantity: 2</th>
<th>Unit: ea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referenced Element(s): NONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referenced Photo(s): 38,55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Referenced Sketch(es): NONE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roadway scuppers are 100% clogged with dirt, debris and sediment at Spans 3 and 6 (near Pier 2 and End Abutment respectively)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category: DRAINAGE - Troughs (clogged, damaged, etc.)</th>
<th>Quantity: 1</th>
<th>Unit: ea</th>
</tr>
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<tbody>
<tr>
<td>Referenced Element(s): NONE</td>
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</tr>
<tr>
<td>Referenced Photo(s): 20</td>
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<td></td>
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<tr>
<td>Referenced Sketch(es): NONE</td>
<td></td>
<td></td>
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<tr>
<td>Drainage trough below the Pier 2 on Span 3 side exhibits debris accumulation from the roadway above.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Staff Present During Inspection

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Kozakis</td>
<td>Assistant Team Leader</td>
<td>HNTB</td>
</tr>
<tr>
<td>Mohammredreza Gramy, P.E.</td>
<td>Team Leader</td>
<td>HNTB</td>
</tr>
<tr>
<td>Pedro Bautista</td>
<td>Assistant Team Leader Trainee</td>
<td>HNTB</td>
</tr>
</tbody>
</table>

### General Equipment Required for Inspection*

<table>
<thead>
<tr>
<th>Access Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 - Walking</td>
</tr>
<tr>
<td>19 - Up to 30 Foot Lift</td>
</tr>
<tr>
<td>29 - Lane Closure With Shadow Vehicle</td>
</tr>
</tbody>
</table>

* For span specific equipment requirements refer to the Active Inventory’s "Access Needs" tab in BDIS.

### Detailed Time & Weather Conditions

<table>
<thead>
<tr>
<th>Field Date</th>
<th>Arrival</th>
<th>Departure</th>
<th>Temp (F)</th>
<th>Weather Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/15/2016</td>
<td>08:00 AM</td>
<td>04:00 PM</td>
<td>74</td>
<td>Sunny</td>
</tr>
<tr>
<td>09/16/2016</td>
<td>08:00 AM</td>
<td>04:00 PM</td>
<td>73</td>
<td>Sunny</td>
</tr>
</tbody>
</table>

### Inspection Times (hours)

<table>
<thead>
<tr>
<th>Time required for travel, inspection and report preparation</th>
<th>25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane closure usage</td>
<td>8</td>
</tr>
<tr>
<td>Railroad flagging time</td>
<td>No</td>
</tr>
</tbody>
</table>
**Attachment Description:**
Location: Begin Abutment, transverse deck joint, looking left. Description: General view. Deck joint exhibits full length debris and impacted sediment accumulation. Deck joint is settled at begin side approximately 1" D.

**Attachment Description:**
Location: Begin Abutment, transverse deck joint, looking left. Description: Close up view. Deck joint exhibits full length debris and impacted sediment accumulation. Deck joint is settled at begin side approximately 1" D.
**Attachment Description:**
Location: Begin Abutment stem wall, looking back and left. Description: General view. Stem wall exhibits several horizontal cracks up to 1/8” W. Rocker bearings have been replaced. Backwall at Bays #1 & #2 exhibit diagonal cracks up to 1/8” W.
**Attachment Description:**
Location: Begin Abutment, Girder G4 high rocker bearing, looking back and left. Description: Close up view. Rocker bearing has been replaced and is in good condition.

**Attachment Description:**
Location: Pier 1, transverse deck joint, looking left. Description: General view. Deck joint exhibits full length debris and impacted sediment accumulation.
Attachment Description:
Location: Span 1, underside of the deck at Panel #3, Bays #1-#3, looking ahead and up. Description: Underside of the deck exhibits moderate scaling and heavy mapcracking. Additionally, Bay #2 deck underside exhibits temporary support that was left in place.

Attachment Description:
Location: Span 1, underside of the deck at Panel #3, Bays #2-#4, looking back and up. Description: General view. Underside of the deck exhibits moderate to heavy scaling and heavy mapcracking. Bay #3 exhibits approximately 100 SF of hollow sounding concrete.
**Attachment Description:**
Location: Span 1, underside of the deck at Panel #2, Bays #3 & #4, looking back and up. Description: Underside of the deck exhibits large areas of mapcracking with efflorescence up to 1/16” W.

**Attachment Description:**
Location: Span 1, underside of the deck at Panel #3, Bay #3, looking ahead and up. Description: Close up view. Underside of the deck exhibits scaling, mapcracking and approximately 100 SF of hollow sounding concrete.
**Attachment Description:**
Location: Span 1, underside of the deck at Panel #3, Bay #4 looking ahead and up.
Description: Underside of the deck exhibits scaling, mapcracking and approximately 60 SF of hollow sounding concrete.

**Attachment Description:**
Location: Pier 1, Girder G6 fixed bearing at Span 1 side, looking ahead and left.
Description: Bearing exhibits 1 out of 4 missing anchor bolt nuts and section loss to the bolt shank.
**Attachment Description:**
Location: Pier 1, Bearing G7 at Span 1 side, looking ahead and right.
Description: Bearing exhibits a missing begin-left anchor bolt nut.

**Attachment Description:**
Location: Pier 1, Cap beam at Left end, looking right.
Description: Cap beam exhibits a spall with exposed rebar approximately 1 SF x 2" D and a full height vertical crack up to 1/8" W.
Attachment Description: Location: Pier 1, end face of the column, looking back and right. Description: Column exhibits a spall with exposed rebar approximately 4 SF x 4" D.

Attachment Description: Location: Pier 1, Girders G1-G6 high rocker bearings at Span 2 side, looking back and left. Description: High rocker bearings were replaced since the previous inspection and are in good condition.
Attachment Description:
Location: Pier 2, Finger plate joint, looking right.
Description: General view. Finger plate joint is misaligned up to 1/4" H near left end.

Attachment Description:
Location: Pier 2, Finger plate joint, looking ahead and down. Description: Close up view. Finger plate joint is misaligned up to 1/4" H near left end.
### Attachment Description:

**Location:** Span 2, top of the concrete deck, looking ahead, left and down.  
**Description:** Deck exhibits approximately 40 SF mapcracking at previously patch area.

### Attachment Description:

**Location:** Pier 2, Downspout trough at Span 3 side, looking right.  
**Description:** Downspout trough exhibits minor debris accumulation.
<table>
<thead>
<tr>
<th>Photo Number</th>
<th>Photo Filename</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>DSCN9583.JPG</td>
</tr>
<tr>
<td>22</td>
<td>DSCN9593.JPG</td>
</tr>
</tbody>
</table>

**Attachment Description:**

Location: Span 2, underside of the deck at Panel #5, Bay #3, looking ahead and up. Description: Underside of the deck exhibits mapcracking with efflorescence up to 1/16" W.

Location: Span 2, underside of the deck at Panel #3, Bays #4 & #5, looking back and up. Description: Underside of the deck exhibits large areas of mapcracking with efflorescence up to 1/16" W.
**Attachment Description:**

Location: Span 2, End diaphragm in Bay #1, looking ahead and up.
Description: General view.
Diaphragm web exhibits corrosion thru holes 5" W x 3" H, 7" W x 6" H and 1 1/2" W x 1". Area surrounding the holes exhibits pitting and section loss.

---

**Attachment Description:**

Location: Span 2, End diaphragm in Bay #1, looking ahead. Description: Close up view. Diaphragm web exhibits corrosion thru holes 5" W x 3" H, 7" W x 6" H and 1 1/2" W x 1". Area surrounding the holes exhibits pitting and section loss.
**Attachment Description:**

Location: Pier 2, Girders G1-G6 high rocker bearings at Span 3 side, looking back. Description: General view. Rocker bearings have been replaced and are in good condition. Yellow Flag NB15M6W003 was removed.

---

**Attachment Description:**

Location: Pier 2, Cap beam at Left end, looking right. Description: Cap beam exhibits mapcracking up to 1/8" W.
Attachment Description:
Location: Pier 2, Girder G1 high rocker bearing at Span 3 side, looking back and right. Description: Close up view. Rocker bearing has been replaced and is in good condition. Rocker bearing is 3 degrees in expansion at 71 degrees F. Yellow Flag NB15M6W003 was removed.

Attachment Description:
Location: Pier 2, Top of the cap beam, looking ahead and left. Description: Top of the cap beam exhibits debris accumulation up to 4" H.
**Attachment Description:**
Location: Pier 2, Girder G5 fixed bearing at Span 2 side, looking ahead and left.
Description: Right anchor bolt shank and nut exhibit 50% section loss.

**Attachment Description:**
Location: Pier 2, Girder G5 fixed bearing at Span 2 side, looking right.
Description: Left anchor bolt is bent and exhibits up to 30% section loss.
Attachment Description:
Location: Pier 2, Girder G8 fixed bearing at Span 2 side, looking left.
Description: General view. Bearing exhibits a slight shift up to 3/8” W to the right. Right keeper plate is missing as a result.

Attachment Description:
Location: Pier 2, Girder G8 fixed bearing at Span 2 side, looking ahead and left.
Description: Close up view. Bearing exhibits a slight shift up to 3/8” W to the right. Right keeper plate is missing as a result.
**Attachment Description:**
Location: Pier 3, transverse deck joint, looking left. Description: General view. Steel armor angle exhibits several dents/bents for approximately 10 LF at right end. Deck joint is cover with a steel plate near midspan. Deck joint exhibits full length impact debris and sediment throughout.

**Attachment Description:**
Location: Pier 3, transverse deck joint, looking left and down. Description: Close up view. Steel armor angle exhibits several dents/bents for approximately 10 LF at right end. Deck joint is cover with a steel plate near midspan. Deck joint exhibits full length impact debris and sediment throughout.
**Attachment Description:**
Location: Pier 3, transverse deck joint, looking right and down. Description: General view. Steel armor angle at left side exhibits missing sections. Deck joint seal is filled with impacted debris, cracked and is protruding outwards.

**Attachment Description:**
Location: Span 3, top of the concrete deck, looking ahead and left. Description: General view. Top of the deck exhibits several uneven and cracked patches.
**Attachment Description:**
Location: Span 3, top of the concrete deck near mid-span, looking right and down. Description: Top of the deck exhibits an uneven and spalled asphalt patch approximately 3 SF x 2" D.

**Attachment Description:**
Location: Span 3, Left roadway scupper near Pier 2, looking back, right and down. Description: Scupper is 100% clogged with debris, sediment and vegetation growth.
**Attachment Description:**
Location: Span 3, Right concrete railing, looking ahead and right.
Description: General view. Right railing is undergoing repair to concrete spall with exposed rebar approximately 10 SF x up to 5" D.

---

**Attachment Description:**
Location: Span 3, Right concrete railing, looking ahead and down.
Description: Close up view. Right railing is undergoing repair to concrete spall with exposed rebar approximately 10 SF x up to 5" D.
**Attachment Description:**

Location: Span 3, underside of the deck, looking ahead and up. Description: General view. Underside of the deck exhibits large areas of mapcracking with efflorescence up to 1/16" W.

---

**Attachment Description:**

Location: Pier 3, Begin face of the cap beam below Girder G1, looking ahead. Description: Cap beam exhibits mapcracking up to 1/16" W.
Attachment Description:
Location: Pier 3, Cap beam at Left end, looking right.
Description: Cap beam exhibits mapcracking with efflorescence up to 1/16" W.

Attachment Description:
Location: Pier 3, End face of the cap beam and column, looking back and right.
Description: General view. Cap beam and column have been repaired with new concrete.
<table>
<thead>
<tr>
<th>Photo Number</th>
<th>Photo Filename</th>
</tr>
</thead>
<tbody>
<tr>
<td>45</td>
<td>DSCN9747.JPG</td>
</tr>
</tbody>
</table>

**Attachment Description:**
Location: Pier 3, End face of the cap beam below Girder G1, looking back.
Description: Cap beam exhibits a shallow spall up to 1” D and mapcracking up to 1/16” W. High rocker bearing has been replaced.

<table>
<thead>
<tr>
<th>Photo Number</th>
<th>Photo Filename</th>
</tr>
</thead>
<tbody>
<tr>
<td>46</td>
<td>DSCN9750.JPG</td>
</tr>
</tbody>
</table>

**Attachment Description:**
Location: Pier 3, End face of the cap beam below Girder G5, looking back and right.
Description: Cap beam exhibits a horizontal crack approximately 5’ L up to 1/8” W. High rocker bearing has been replaced.
### Attachment Description:

**Location:** Pier 4, transverse deck joint, looking left.
**Description:** General view. Deck joint exhibits full length debris and impacted sediment accumulation. Deck joint is settled at Span 3 side approximately 1-1/4" H.

---

### Attachment Description:

**Location:** Pier 4, transverse deck joint, looking left and down.
**Description:** Close up view. Deck joint exhibits full length debris and impacted sediments accumulation. Deck joint is settled at span 3 side approximately 1-1/4" H.
Attachment Description:
Location: Pier 4, Top of the Cap beam at Bay #1, looking ahead and right.
Description: Cap beam exhibits debris accumulation up to 2" H.

Attachment Description:
Location: Pier 4, End face of the cap beam at Bay #2, looking back and right.
Description: Close up view. Cap beam exhibits a horizontal crack approximately 3’ L x up to 1/8" W with rust stains.
Attachment Description:
Location: Pier 4, Girder G4 high rocker bearing at Span 5 side, looking back and right. Description: Close up view. Rocker bearing has been replaced and is in good condition. Bearing is 2 degrees in expansion at 72 degrees F.

Attachment Description:
Location: Span 5, underside of the deck at Bays #2 - #4, looking ahead and up. Description: Underside of the deck exhibits large areas of mapcracking with efflorescence up to 1/16" W.
**Attachment Description:**
Location: Span 6, Top of the concrete deck, looking ahead and left. Description: General view. Top of the deck exhibits 40 SF of uneven asphalt concrete patches and cracked concrete.

---

**Attachment Description:**
Location: Span 6, Right safetywalk curb, looking ahead and down. Description: General view. Curb exhibits two spalls 18" L x 5 1/2" W x 2" D and 12" L x 4" W x 2" D.
Attachment Description:
Location: Span 6, Left roadway scupper near End abutment, looking right and down. Description: Scupper is 100% clogged with debris, sediment and vegetation growth.

Attachment Description:
Location: End Abutment, transverse deck joint, looking left. Description: General view. Deck joint exhibits full length debris and impacted sediment accumulation. Deck joint is settled at approach side approximately 1” H.
Attachment Description:
Location: End Abutment, transverse deck joint, looking left. Description: General view. Deck joint exhibits full length debris and impacted sediment accumulation. Deck joint is settled at approach side approximately 1" H.

Attachment Description:
Location: End Abutment, Girders G1-G6 high rocker bearings, looking ahead and right. Description: General view. Rocker bearings have been replaced and are in good condition. Yellow Flag NB15M6W005 was removed.
Attachment Description:
Location: End Abutment,
Girder G1 high rocker bearing, looking ahead and right. Description: Close up view. Rocker bearing has been replaced and is in good condition. Bearing is 2 degrees in expansion at 72 degrees F. Yellow Flag NB15M6W005 was removed.

Attachment Description:
Location: End approach,
Top of the concrete slab, looking ahead and left. Description: General view. Top of the slab exhibits uneven asphalt patches and shallow spalls.
Attachment Description:
Location: End approach, Left guide railing, looking ahead and right.
Description: Close up view. Guide rail exhibits vehicular impact damage for approximately 40 LF with bent and detached from rail due to impact.

Attachment Description:
Location: End approach, Left guide railing, looking back and left. Description: General view. Guide rail exhibits vehicular impact damage over approximately 40 LF section.
**Inspection Sketches**

**Sketch Number: 1**  
**Sketch Filename: 16_1066730 Under Deck Cond Sketch_Span_1.jpg**

---

**Feature Carried:** 871 Major Deepen Expwy N/B  
**Feature Crossed:** 2781 Bruckner Expwy S/B

---

**Sketch Description:** 16_1066730 Under Deck Cond Sketch_Span_1.jpg
### Sketch Description

**Sketch Number:** 2  
**Sketch Filename:** 16_1066730 Under Deck Cond Sketch_Span_2.jpg

**Sketch Description:**

```
### Sketch Description: 16_1066730 Under Deck Cond Sketch_Span_2.jpg
```

**Sketch Description:**

The image depicts a section of a bridge, labeled "Span 2 Under Deck Condition Sketch." The image shows various components and conditions, with a legend indicating symbols for different features such as cracks, disrepair, and other bridge conditions.

- **BIN:** 1066730
- **Sketch Filename:** 16_1066730 Under Deck Cond Sketch_Span_2.jpg
- **Feature Carried:** Highway
- **Feature Crossed:** Highway

**Legend:**
- **MAP CRACKS:** Direction of Traffic
- **DISC. CONCRETE:** Disrepair
- **CRACKED AGGREGATE:** Cracked concrete
- **Deteriorated EPA Patch:** Deteriorated asphalt patch
- **CONC. PATCH:** Concrete patch
- **SMALL EMBOSSED ROBINS:** Small embossed ribs
- **CRACKED LAC:** Cracked lacquer

**NYS DEPT. OF TRANSPORTATION**  
**BRIDGE INSPECTION REPORT**  
**SHEET 1 OF 1**

**TEAM LEADER:** M. Gramy, P.E.  
**ASST. TEAM LEADER:** J. Kozakis  
**DATE:** 9/16/2016

** BIN 1066730**

---

**Sketch Description:**

The sketch provides a visual representation of the bridge deck condition, highlighting various issues and conditions that require inspection or repair. The legend aids in identifying specific areas of concern, such as cracks and disrepair, which are critical for maintenance planning and ensuring the structural integrity of the bridge.
Sketch Number: 3
Sketch Filename: 16_1066730 Under Deck Cond Sketch_Span_3.jpg

**Sketch Description:** 16_1066730 Under Deck Cond Sketch_Span_3.jpg
Sketch Number: 4  Sketch Filename: 16_1066730 Under Deck Cond Sketch_Span_4.jpg

Span 4 Under Deck Condition Sketch

Sketch Description: 16_1066730 Under Deck Cond Sketch_Span_4.jpg
Sketch Number: 5
Sketch Filename: 16_1066730 Under Deck Cond Sketch_Span_5.jpg

Span 5 Under Deck Condition Sketch

LEGEND:
AK - ARM CRACKING
JH - JALOUSIE HINGE
AP - ARMED PLATE INTERCHANGE
EPP - EXHIBITED PLATE INTERCHANGE
FEP - FORGED PLATE INTERCHANGE
DPS - DAMAGED PLATE INTERCHANGE

BIN 1066730
Sketch Number: 6  Sketch Filename: 16_1066730 Under Deck Cond Sketch_Span_6.jpg

Span 6 Under Deck Condition Sketch
Not to Scale

LEGEND:

- DAMPED AREA
- MAP CRACKING
- HOLLOW CONC.
- CRACKS W/FLUORESCENCE
- CONC. PATCH
- CRACKED LNC
- SMALL UNEXPOSED REPAIRS

HNTB

Sketch Description: 16_1066730 Under Deck Cond Sketch_Span_6.jpg
Sketch Number: 7  
Sketch Filename: 16_1066730 Pier 1 Cond Sketch_Page_1.jpg

NYS DEPT. OF TRANSPORTATION
BRIDGE INSPECTION REPORT

TEAM LEADER: M. Gramy, P.E.
ASST. TEAM LEADER: J. Kozakis

Feature Carried: 871 Major Design Expwy N/B
Feature Crossed: 2781 Bruckner Expwy S/B

Pier 1 Condition Sketch
Not to Scale

Sketch Description: 16_1066730 Pier 1 Cond Sketch_Page_1.jpg
Sketch Number: 8  Sketch Filename: 16_1066730 Pier 1 Cond Sketch_Page_2.jpg

Sketch Description: 16_1066730 Pier 1 Cond Sketch_Page_2.jpg
Sketch Number: 9  Sketch Filename: 16_1066730 Pier 5 Cond Sketch.jpg

Sketch Description: 16_1066730 Pier 5 Cond Sketch.jpg
Sketch Number: 10
Sketch Filename: 16_1066730 Photo Location Spans 1 to 3.jpg

Sketch Description: 16_1066730 Photo Location Spans 1 to 3.jpg
Sketch Description: 16_1066730 Photo Location Spans 4 to 6.jpg
MEMORANDUM

TO: R. Habashy, Operations, Region 11
FROM: R. Fink, Engineering, Region 11
(File copy signed by J. Patel)

SUBJECT: FLAG REMOVAL

DATE: September 30, 2016

In the performance of the Biennial and Interim Bridge Inspections, HNTB Engineering has removed the following flag:

<table>
<thead>
<tr>
<th>FLAG TYPE AND NUMBER:</th>
<th>/ SUPERSEDED FLAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Red Structural Flag</td>
<td>/</td>
</tr>
<tr>
<td>2 Yellow Structural Flag</td>
<td>NB15M6W003 / NM140096</td>
</tr>
<tr>
<td>3 Safety Flag</td>
<td>/</td>
</tr>
</tbody>
</table>

BIN: 1066730  COUNTY: Bronx

FEATURE CARRIED: Ramp to Major Design Defect from RPK Bridge
FEATURE CROSSED: Bruckner Expressway (2701)

Attached is a copy of the Flag Removal Report.

REMARKS:

FLAG STATUS: E

cc: P. Campisi/M. Ruppe, Bridge Inspection Unit, Albany, NY
S. Medwick, HNTB Engineering, New York, NY
K. Adhvaryu/Jaimin Patel, Maintenance, Region 11
J. Wong/J. Patel, Structures, Region 11
H. Vachhsho, Structures, Region 11
FILE: BIN 1066730  FLAG # NB15M6W003

Sketch Description: Remove NB15M6W003_Page_1.jpg
## NYS DOT Bridge Inspection Report

**Sketch Number:** 13  
**Sketch Filename:** Remove NB15M6W003_Page_2.jpg

### Flag Removal/Inactivation Report

**Inspection Date(s):** 09/16/2016  
**Flag Number:** NB15M6W003  
**Type of Flag:**  
- [ ] RED Flag  
- [X] YELLOW Flag  
- [ ] SAFETY Flag  
**Flag is to be:**  
- [X] Removed  
- [ ] Inactivated

**Certification By:** Mohammedreza Gramy, PE#064448

**Action Taken:**  
**Location(s):** Pier 2, Girders G1 thru G6 High Rocker Bearings at Span 3 side.

**Description:** Previously reported high rocker bearings with severe tilts up to 14 degrees in expansion mode at 83 degrees F have been replaced with new high rocker bearing assemblies. Removal of Yellow Flag NB15M6W003 is now recommended. See attached two (2) photos for clarification.

**Prepared By:** Mohammedreza Gramy, P.E.  
**Date:** 09/16/2016

### Photos

**Photo 1:**  
**Location:** Pier 2, Girders G1 thru G6 High Rocker Bearing at Span 3 side; Looking Back.  
**Description:** General view. Previously reported tilted high rocker bearings have been replaced with new bearing assemblies.

**Photo 2:**  
**Location:** Pier 2, Girder G1 High Rocker Bearing at Span 3 side; Looking Back.  
**Description:** Close up view. Previously reported tilted high rocker bearing has been replaced with a new bearing assembly. (Similar at Girders G2 thru G6)

---

**Sketch Description:** Remove NB15M6W003_Page_2.jpg
MEMORANDUM

TO: R. Habashy, Operations, Region 11
FROM: R. Fink, Engineering, Region 11 (File copy signed by J. Patel)
SUBJECT: FLAG REMOVAL
DATE: September 30, 2016

In the performance of the Biennial and Interim Bridge Inspections, NYPRE Engineering has removed the following flag:

FLAG TYPE AND NUMBER: / SUPERSEDED FLAG
1 Red Structural Flag ___________ / ___________
2 Yellow Structural Flag NB15M6W004 / NM140097
3 Safety Flag ___________ / ___________

BIN: 1066730 COUNTY: Bronx
FEATURE CARRIED: Ramp to Major Design Repairs from RFK Bridge
FEATURE CROSSED: Bruckner Expressway (2701)

Attached is a copy of the Flag Removal Report.

REMARKS:

_____________________

FLAG STATUS: E

cc: P. Campisi/M. Ruppe, Bridge Inspection Unit, Albany, NY
S. Medwick, NYPRE Engineering, New York, NY
K. Adhvaryu/Jaime Patel, Maintenance, Region 11
J. Wong/J. Patel, Structures, Region 11
H. Vachhose, Structures, Region 11
FILE: BIN 1066730 FLAG # NB15M6W004

Sketch Description: Remove NB15M6W004_Page_1.jpg
**Sketch Description:** Remove NB15M6W004_Page_2.jpg
MEMORANDUM

TO: R. Habashy, Operations, Region 11
FROM: H. Fink, Engineering, Region 11 (File copy signed by J. Patel)
SUBJECT: FLAG REMOVAL
DATE: September 30, 2016

In the performance of the Biennial and Interim Bridge Inspections, MNYB Engineering has removed the following flag:

FLAG TYPE AND NUMBER: / SUPERSEDED FLAG
1 Red Structural Flag / 
2 Yellow Structural Flag NB15M6W005 / NM140098
3 Safety Flag / 

BIN: 1066730 COUNTY: Bronx
FEATURE CARRIED: Ramp to Major Design Revoy from RPK Bridge
FEATURE CROSSED: Bruckner Expressway (2701)

Attached is a copy of the Flag Removal Report.

REMARKS:

FLAG STATUS: E

cc: P. Campisi/M. Ruppe, Bridge Inspection Unit, Albany, NY
    S. Medwick, MNYB Engineering, New York, NY
    K. Adhvaryu/Jaimin Patel, Maintenance, Region 11
    J. Wong/J. Patel, Structures, Region 11
    N. Vaphiose, Structures, Region 11
    FILE: BIN 1066730 FLAG # NB15M6W005

Sketch Description: Remove NB15M6W005_Page_1.jpg
Sketch Description: Remove NB15M6W005_Page_2.jpg
Sketch Number: 18  Sketch Filename: 16_1066730 Vertical Clearance Span2.jpg

Vertical Clearances Sketch (Span 2)
Not to Scale

Sketch Description: 16_1066730 Vertical Clearance Span2.jpg
### UNDERDECK SHIELDING INSPECTION

<table>
<thead>
<tr>
<th>SPANS</th>
<th>SQ. FEET</th>
<th>SHIELDING TYPE</th>
<th>HARDWARE TYPE</th>
<th>SKETCH FILE NAME</th>
<th>PHOTO NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 &amp; 4</td>
<td>650</td>
<td>STEEL WIRE MESH</td>
<td>CABLES/ANCHORS</td>
<td>16_BIN 1066730_Shielding sketch.jpg</td>
<td>1, 2</td>
</tr>
</tbody>
</table>

- **MIN. VERTICAL CLEARANCE AS RECORDED IN THE INVENTORY IS:**
  - 14 FT.
  - 10 IN.

- **DOES THE VERTICAL CLEARANCE TO THE LOW POINT OF THE NETTING COMPROMISE THE MINIMUM VERTICAL CLEARANCE?**
  - NO

- **IF YES, THEN THE ACTUAL MINIMUM VERTICAL CLEARANCE MEASURED TO THE LOW POINT OF THE NETTING IS:**
  - AT SPAN: __________ FT.
  - __________ IN.

- **IS THERE ANY DEBRIS ON THE SHIELD?**
  - YES

  **IF YES, REFER TO SKETCH **16_BIN 1066730_Shielding sketch.jpg AND PHOTO** 2

- **DOES THE DEBRIS POSE THE POSSIBILITY OF SHIELDING FAILURE?**
  - NO

### TIMBER PLANKING

- **IS TIMBER IN GOOD CONDITION?**
  - N/A

  **IF NO, REFER TO SKETCH AND PHOTO __________**

### WELDED WIRE MESH / NYLON NETTING

*Includes “hands-on” inspection of 10% / 5% [MIN] respectively of the attaching hardware*

- **ARE THERE ANY HOLE, RAMPS OR TEARS IN THE MESHING/NETTING THAT MIGHT ALLOW DEBRIS TO FALL THROUGH?**
  - NO

  **(IF YES, REFER TO SKETCH AND PHOTO __________).**

- **ARE THERE ANY PROBLEMS WITH THE SUPPORTING/ANCHORING HARDWARE?**
  - NO

  **(IF YES, REFER TO SKETCH AND PHOTO __________).**

**COMMENTS:** Steel wire mesh is exhibits pigeon debris at scattered locations up to 4 SF. Refer to shielding sketch for locations.

### RECOMMENDATIONS (REMOVE / REPLACE / REPAIR / MAINTAIN / NO ACTION)

- **No action**
Sketch Description: 16_1066730- Shielding Report_Page_2.jpg
Sketch Description: 16_1066730- Shielding Report_Page_3.jpg
### Worksheet

**Routine Joint Maintenance Repairs**

**BIN:** 1066730  **Feature Carried:** Major Deegan Expwy NB  **Feature Crossed:** Bruckner Expwy  **County:** Bronx

**Consultant:** HNTB  **Preparer’s Name:** Mohammedreza Gramy, P.E.  **Date(s):** 09/15/2016  **Temp(s):** 75°F

<table>
<thead>
<tr>
<th>Abutment / Pier #</th>
<th>Direction (E/B, W/B, N/B, S/B)</th>
<th>Estimated Quantity</th>
<th>Photo Ref.</th>
<th>Ref. Sketch</th>
<th>Condition Codes</th>
<th>Joint Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin Abutment</td>
<td></td>
<td>40 LF</td>
<td></td>
<td></td>
<td>N/A</td>
<td>5 Strip Seal Joint</td>
</tr>
<tr>
<td>Piers 1, 3-5</td>
<td>N/B</td>
<td>40 LF</td>
<td>N/A</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>End Abutment</td>
<td></td>
<td>40 LF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CONDITION CODES**

1. Sealer Appears to be Functioning / Seated Properly / Not Damaged
2. Evidence of leakage
3. Missing Sealer
4. Deteriorated Sealer
5. DebrisFilled
6. Deteriorated Concrete Header
7. Deteriorated Armorining Angle
8. Other, Explain:  **Settled Steel Armor Angle**
9. Other, Explain:  **Misaligned Finger Plate Joint**
10. Other, Explain: **Joint Covered with Steel Cover Plate**

**GUIDELINES:** Must enter code for every joint. Can use multiple codes when applicable. For joint deficiencies, provide the following: estimate quantity (feet), a typical photo for each condition code, sketch for unusual or complicated joint system.

**JOINT TYPE:** (Filled with Sealant, Filled Joint with Sealer, Sliding Plate Joint, Finger Plate Joint, Armor Compression Seal Joint, Strip Seal Joint, Modular Joint, etc.)

**Sketch Description:** 16_1066730_RJMR_Worksheet_Page_1.jpg
<table>
<thead>
<tr>
<th>Sketch Number: 23</th>
<th>Sketch Filename: 16_1066730_RJMR_Worksheet_Page_2.jpg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Abutment / Pier #</strong></td>
<td><strong>Direction (E/B, W/B, N/B, S/B)</strong></td>
</tr>
<tr>
<td>Begin Abutment</td>
<td>N/B</td>
</tr>
<tr>
<td>Piers 4</td>
<td>N/B</td>
</tr>
<tr>
<td>End Abutment</td>
<td>N/B</td>
</tr>
</tbody>
</table>

**Sketch Description:** 16_1066730_RJMR_Worksheet_Page_2.jpg
<table>
<thead>
<tr>
<th>Abutment / Pier #</th>
<th>Direction (E/B, W/B, N/B, S/B)</th>
<th>Estimated Quantity</th>
<th>Photo Ref.</th>
<th>Ref. Sketch</th>
<th>Condition Codes</th>
<th>Joint Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pier 3</td>
<td>N/B</td>
<td>10 LF</td>
<td></td>
<td>N/A</td>
<td>7</td>
<td>Armor Compression Seal Joint</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abutment / Pier #</td>
<td>Direction (E/B, W/B, N/B, S/B)</td>
<td>Estimated Quantity</td>
<td>Photo Ref.</td>
<td>Ref. Sketch</td>
<td>Condition Codes</td>
<td>Joint Type</td>
</tr>
<tr>
<td>Pier 3</td>
<td>N/B</td>
<td>5 LF</td>
<td>BROKEN ARMED ANGLE</td>
<td>N/A</td>
<td>7</td>
<td>Armor Compression Seal Joint</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25 LF</td>
<td></td>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Sketch Description:** 16_1066730_RJMR_Worksheet_Page_3.jpg
Sketch Description: 16_1066730 SpecialEmphasis_2.jpg