

# Fracture Critical Bridge Inspection Report

NBI Bridge No.: 03024

Local ID: O-127

Route DOUGLAS BLVD. over WEST ELM CREEK  
City of Oklahoma City



Prepared for:

Oklahoma Department of Transportation  
Field Division 04

Inspection Date:

1/9/2017



Report Prepared By:

**BURGESS & NIPLE, INC.**

5085 Reed Rd.  
Columbus, Ohio 43220  
614-459-2050

**BURGESS & NIPLE**  
Engineers ■ Surveyors ■ Planners

# BURGESS & NIPLE

---

5085 Reed Road | Columbus, OH 43220 | 614.459.2050

Mr. Wes Kellogg, P.E.  
Field Service Engineer  
Oklahoma Department of  
Transportation  
200 Northeast 21st Street  
Oklahoma City, OK 73102-3204

Re: Fracture Critical Bridge Inspection Report  
Structure No.: 14N3160E1170001  
Local ID: O-127  
NBI No.: 03024  
S. Douglas Blvd. over West Elm Creek  
Cleveland County, District 2

February 8, 2017

Dear Mr. Kellogg:

Burgess & Niple (B&N) performed a fracture critical and routine inspection of the above referenced bridge on January 9, 2017. The bridge is a one span structure (**photos 1 and 2**) with panel points numbered south to north and consisting of:

Span 1: 61-foot riveted pony truss

The limits of the inspection were from the south abutment to the north abutment. Inspection team members included Michael Seal, PE (Team Leader), and Mike Kronander, EI.

The bridge is currently open with a 7-ton load restriction as per the 2013 load rating analysis (**photos 3 and 4**).

This report includes appendices containing:

- Condition photographs
- Oklahoma DOT Bridge Inspection Form
- PONTIS element report
- FCM Inspection Frequency worksheet

The current and previous NBI ratings for the bridge are:

NBI Item	Previous Rating (2016)	Current Rating (2017)
NBI Item 58 (Deck)	6 = Satisfactory	6 = Satisfactory
NBI Item 59 (Superstructure)	5 = Fair	5 = Fair
NBI Item 60 (Substructure)	4 = Poor	4 = Poor
NBI Item 61 (Channel)	4 = Protection Undermined	4 = Protection Undermined
Sufficiency Rating	20.3 (SD,FO)	20.3 (SD, FO)

The bridge is structurally deficient and functionally obsolete.

**RECOMMENDED ACTIONS**, in order of decreasing priority, are as follows:

Priority Code **CX** – *Bridge condition is bad enough that there is a possibility of failure of a major structural component if repairs are not completed within the next few days.*

- There are no CX repair items required at this time.

Priority Code **PX** – *Bridge condition is such that immediate repair is not necessary, but should be completed within the next several weeks or months.*

- Stand up the northeast bridge end marker laying on the ground.
- Abrasively clean and paint areas of corrosion and significant section loss, predominantly on the bottoms of stringers at floor beam connections and both abutments.
- Apply mortar to fill in voids for both masonry abutment walls.
- Install countermeasures along the base of the north abutment retaining wall.
- Repair patches and add asphalt to any potholes in the north approach roadway 100 feet from the bridge.

Priority Code **FX** – *Bridge condition is such that repair should not be necessary any time soon, monitor during future inspections.*

- Monitor any further distortion or defects on the U3, west truss gusset plate.
- Monitor any further section loss of the steel piles at the north abutment.
- Monitor scour conditions of the bridge upstream and downstream along the channel embankments.

In addition to these recommendations it is recommended that this structure be inspected on a 24 month Routine/Fracture Critical inspection frequency and a 24 month Other/Special inspection frequency.

We thank you for the opportunity to provide our engineering services. Please contact me if you have any questions or comments.

Sincerely,  
**BURGESS & NIPLE, INC.**



---

Michael A. Seal, PE  
Team Leader  
Attachments



**SIGNIFICANT FINDINGS** are as follows:

**NBI Item 36 – Traffic Safety** (5 = Fair condition)

- **PX** – The northeast bridge marker sign is currently laying on the ground (**photo 4**).
- A “One Lane Bridge Ahead” sign exists at the north approach (**photo 5**).
- W-beam guardrail is in place across the full length of the bridge being placed in front of the old steel bridge railing. The ends of the guardrail are turned down and buried into the ground at the north end of the bridge.
- All of the traffic safety items meet current standards for a non-National Highway System roadway.

**NBI Item 58 – Deck** (6 = Satisfactory condition)

**Driving Surface** – (6 = Satisfactory condition)

- Moderate wear and longitudinal checks and splits occur throughout the timber runners of the deck. The defects appear heavier towards the ends of the bridge (**photo 6**). The edge runners appear warped and bowed with cracking in random locations.
- The transverse planks have moderate checks along their entire length.

**Soffit** – (6 = Satisfactory condition)

- No significant defects were observed in the underside of the deck.

**NBI Item 59 – Superstructure** (5 = Fair condition)

Fracture Critical Member Rating Summary	
Floor Beam	6 = Satisfactory condition
Truss Lower Chord	6 = Satisfactory condition
Truss Web Members	6 = Satisfactory condition

**Stringers** – (5 = Fair condition)

- **PX** – Stringer 5 has up to 1/4-inch section loss to the bottom face of the bottom flange at the connection to the top flange of the north abutment steel pile cap (**photo 7**). Stringers 3, 4 and 6 only have up to 1/16-inch loss to their bottom flanges. Section loss to stringers at intermediate floor beam connections is typical throughout the bridge.
- Surface corrosion is typical throughout the entire length of the stringers.

**[FCM] Floor Beams** – (6 = Satisfactory condition)

- Typically, the bolt shanks are not long enough to extend all the way through the bolt nuts at floor beam/truss connections (**photo 8**). At least half of the bolts at connections exhibit this condition. A mixture of square (bearing type bolts) and hex (friction bolts) headed bolts exist at the floor beam connections.



- Floor beams typically have surface corrosion throughout their flanges and webs.

**Floor System Bracing** – (6 = Satisfactory condition)

- Lower lateral bracing rods are bent at the following locations:
  - Between floor beams 3 and 5, under stringers 3 and 4 (**photo 9**).
  - Between floor beam 6 and the north abutment under stringer 6.

**Truss Upper Chord** – (5 = Fair condition)

- **FX – Member Alignment** – The gusset plate at U3, west truss, has a local bow of up to 1 1/8 inches from previous impact damage. This condition has not changed from the last inspection.
- Minor pitting up to 1/32-inch deep is present to all surfaces of the truss upper chord, with surface corrosion throughout.

**[FCM] Truss Lower Chord** – (6 = Satisfactory condition)

- Minor pitting and surface rust with no significant loss occurs throughout the truss lower chord.
- L0L2 of the west truss was replaced with the batten plates being welded to the lower chord bottom angle leg (**photos 10**). This condition creates a category E' fatigue prone detail.

**[FCM] Truss Web Members** – (6 = Satisfactory condition)

- Minor pitting with surface rust occurs throughout truss web members.
- Bridge railing is welded to the truss web members with no defects or cracks observed at the time of inspection.
- Truss members M1L2, U2L2, and L2U3 have all been replaced for the west truss due to previous impact damage.

**Truss End Posts** – (6 = Satisfactory condition)

- A welded plate repair occurs for end post L0U2 at L0 for the west truss.
- Minor pitting with surface rust occurs throughout truss end posts.
- Bridge railing is welded to all end posts with no defects or cracks observed at the time of inspection.

**Paint/Coating System** – (0 = Failed condition)

- **PX** – The paint system has failed throughout the truss and steel floor system of the bridge with surface corrosion common (**photo 11**).

**Load Deflection** – (7 = Good condition)

- No visual defects were observed during live loads traveling over the bridge.

**NBI Item 60 – Substructure (4 = Poor condition)****Abutments – (5 = Fair condition)**

- **PX** – Both masonry abutment breastwalls exhibit open joints with no mortar where soil spills through the openings (**photo 12**). This has caused some undermining and settlement under the north approach pavement due to the loss of fill.
- **FX** – Located approximately 1-foot above the ground line, pile 2 at the south abutment in the southwest corner of one of the flanges has up to 1/8-inch deep section loss to the overall thickness of the flange (**photo 13**). Pile 3 at the same abutment has up to 1/16-inch loss.

**Bearings – (6 = Satisfactory condition)**

- Surface corrosion and light amounts of pitting exist on all truss bearings. The truss rests on steel bearing plates at each end of both steel bent caps (**photo 14**).

**NBI Item 61 – Channel and Channel Protection (4 = Protection Undermined condition)****Channel Scour – (4 = Poor condition)**

- **PX** – An area of 1 1/2 feet transversely and 7 feet longitudinally on the northwest corner of the old concrete abutment in front of the existing north abutment has an exposed rock foundation due to channel scour (**photo 15**). Concrete wear from channel scour has effected all along the front face of the base of the north abutment breastwall up to 2 feet above the waterline. The north abutment is supported on steel piles and most likely does not rely on the old abutment; however, failure of the old abutment would cause a restriction in the channel.
- **FX** – The upstream and downstream channel embankment exhibit significant sloughing up to 15 feet deep (**photo 16**).
- Rock channel protection was previously installed in front of the north abutment embankment to help stabilize the slope. It appeared to be functioning as intended.
- The northeast wingwall has previous channel scour around the end of the wall. Riprap has been installed as a countermeasure, and this condition has not changed since the previous inspection.

**Embankment Erosion – (5 = Fair condition)**

- **PX** – The northeast corner of the north approach roadway is undermined for up to 2 feet of penetration due to erosion from soil spilling through the open joints of the masonry breastwalls (**photo 17**).

**Debris – (6 = Satisfactory condition)**

- A debris island occurs downstream of the bridge but has not yet significantly affected the flow of channel going under the bridge.

**Vegetation** – (7 = Good condition)

- Channel banks are well vegetated with scour undercutting some of the trees along the stream.

**NBI Item 72 – Approach** (5 = Fair condition)**Approach Alignment** – (6 = Satisfactory condition)

- A slight horizontal curve exists at the north approach roadway, while the south approach roadway has a much sharper turn at the bridge.

**Approach Roadway Condition** – (5 = Fair condition)

- **PX** – Extensive patches and potholes exist on the south approach roadway approximately 100 feet north of the bridge (**photo 18**).

**Approach Roadway Settlement** – (5 = Fair condition)

- **PX** – The northeast corner of the north approach roadway is undermined for up to 2 feet of penetration due to erosion from soil spilling through the open voids of the masonry abutment (**photo 17**).

**NBI Item 113 – Scour Rating** (4 = Foundations Stable for Calculated Scour) No change to scour rating is recommended.

- **PX** – The northwest corner of the old north concrete abutment has an exposed the rock foundation due to scour (**photo 15**).
- Previous channel scour has caused erosion of the channel embankments upstream and downstream of the bridge (**photo 16**).
- Minor erosion occurs behind the northeast wingwall with added riprap in place as a countermeasure.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 1 - End view looking north.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 2 - Elevation view looking southwest.



NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 3 - Looking north at 7-ton load posting sign at south approach.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 4 - Looking south at 7-ton load posting sign at north approach. Note: The northeast bridge marker is laying on the ground.



NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 5 - Looking south at "One Lane Bridge Ahead" sign located at north approach.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 6 - Looking north at the south end of the bridge deck. Note: The longitudinal runners have checks and splits along their length, which appear heavier towards the ends of the bridge.



NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 7 - Looking north at the stringer 5 bottom flange connection to the north abutment pile cap. Note: Up to 1/4-inch loss to bottom flange.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 8 - Looking south at east truss L2, bolted connection of vertical to floor beam. Note: Bolt shanks are not long enough to extend through nut. Typical to all floor beam connections.



NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 9 - Looking southwest at lower lateral bracing bar between floor beams 3 and 5 between stringers 3 and 4. Note: Bar is bent down, no change from last inspection.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 10 - Looking southeast at west truss, lower chord. Note: L0L2 has been replaced with batten plates welded to lower chord in this section.



NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 11 - Looking southwest at overall typical condition of steel floor system with corrosion and failing paint throughout.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 12 - Looking south at overall view of north abutment breastwall. Note: Masonry blocks have no mortar between stones throughout abutment wall.



NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 13 - Looking northeast at southwest corner of pile 2 at north abutment. Note: Section loss up to 1/8-inch deep on south flange for approximately a 4-inch height of the steel bent.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 14 - Looking northeast at L0, west truss. Note: The steel plate bearings exhibit surface corrosion with light amounts of minor pitting.



NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 15 - Looking southeast at base of the old concrete abutment in front of the current north abutment. Note: east end of old abutment has rock foundation exposed.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 16 - Looking east downstream of bridge. Note: channel slopes are sloughing heavily and washing out due to channel scour.



NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 17 - Looking west at the north approach roadway which is undermined up to 2 feet at the northeast corner of the bridge up due to erosion.

NBI #	Structure #	County	Fac. Carried	Fac. Intersected	Insp. Date
03024	14N3160E1170001		DOUGLAS BLVD.	WEST ELM CREEK	1/9/2017



Photograph 18 - Looking northwest approximately 100 feet north of the bridge. Note: Extensive patches and potholes exist in the south approach roadway.



**OKLAHOMA DEPARTMENT OF TRANSPORTATION - Bridge Inspection Report**

NBI No.: **03024**    Structure No.: **14N3160E1170001**    Local ID: **O-127**    Suff. Rating: **20.3**    Health Index : **SD**    **35.7**

IDENTIFICATION			INSPECTION																																																																																							
Description: 61' PONY TRUSS SPAN 1. State: Oklahoma    2. SHD District: Division 3 3. County Code: CLEVELAND    4. Place Code: OKLA. CITY Admin. Area: Cnty. District 2 5. Inventory Route (Route On Structure): 1 - 5 - 1 - N3160 - 0 6. Feature Intersected: CREEK 7. Facility Carried: DOUGLAS BLVD.    DOUGLAS BLVD. (1408C) 9. Location: .1S OF 149TH ON DOUGLAS    11. Mile Post: 0.100 mi 13. LRS Inv. Route./ Subroute.: -1    -1 16. Latitude: 35 19 06.08    17. Longitude: 097 22 14.23 98. Border Br. Code: Jkknown (P) % Resp.: 0    99. Border Br. #: Unknown			<table border="1"> <thead> <tr> <th>Type</th> <th>Insp Req.</th> <th>Insp Done</th> <th>Freq:</th> <th>Insp. Date:</th> <th>Next Insp.:</th> </tr> </thead> <tbody> <tr> <td>NBI:</td> <td></td> <td>Y</td> <td>24</td> <td>1/9/2017</td> <td>1/9/2019</td> </tr> <tr> <td>FC Freq.:</td> <td>Y</td> <td>Y</td> <td>24</td> <td>1/9/2017</td> <td>1/9/2019</td> </tr> <tr> <td>UW Freq.:</td> <td>N</td> <td>N</td> <td>NA</td> <td>NA</td> <td>NA</td> </tr> <tr> <td>OS Freq.:</td> <td>Y</td> <td>N</td> <td>24</td> <td>1/4/2016</td> <td>1/9/2018</td> </tr> </tbody> </table>			Type	Insp Req.	Insp Done	Freq:	Insp. Date:	Next Insp.:	NBI:		Y	24	1/9/2017	1/9/2019	FC Freq.:	Y	Y	24	1/9/2017	1/9/2019	UW Freq.:	N	N	NA	NA	NA	OS Freq.:	Y	N	24	1/4/2016	1/9/2018																																																							
Type	Insp Req.	Insp Done	Freq:	Insp. Date:	Next Insp.:																																																																																					
NBI:		Y	24	1/9/2017	1/9/2019																																																																																					
FC Freq.:	Y	Y	24	1/9/2017	1/9/2019																																																																																					
UW Freq.:	N	N	NA	NA	NA																																																																																					
OS Freq.:	Y	N	24	1/4/2016	1/9/2018																																																																																					
<table border="1"> <thead> <tr> <th colspan="2">STRUCTURE TYPE AND MATERIALS</th> </tr> </thead> <tbody> <tr> <td>43. Main Span Material and Design Type Steel    Truss-Thru</td> <td></td> </tr> <tr> <td>44. Approach Span Material and Design Type Not Applicable (P)    Not Applicable (P)</td> <td></td> </tr> <tr> <td>45. No. of Spans Main Unit: 1    46. No. of Approach Spans: 0</td> <td></td> </tr> <tr> <td>107. Deck Type: 8 Wood or Timber</td> <td></td> </tr> <tr> <td>108A. Wearing Surface: 7 Wood or Timber</td> <td></td> </tr> <tr> <td>108B. Membrane: 0 None</td> <td></td> </tr> <tr> <td>108C. Deck Protection: None</td> <td></td> </tr> </tbody> </table>			STRUCTURE TYPE AND MATERIALS		43. Main Span Material and Design Type Steel    Truss-Thru		44. Approach Span Material and Design Type Not Applicable (P)    Not Applicable (P)		45. No. of Spans Main Unit: 1    46. No. of Approach Spans: 0		107. Deck Type: 8 Wood or Timber		108A. Wearing Surface: 7 Wood or Timber		108B. Membrane: 0 None		108C. Deck Protection: None		<table border="1"> <thead> <tr> <th colspan="2">CLASSIFICATION</th> </tr> </thead> <tbody> <tr> <td>12. Base Hwy Network : Not on Base Network</td> <td>20. Toll Facility: 3 On free road</td> </tr> <tr> <td>21. Custodian: 04City/Municipal Hwy Agenc</td> <td>22. Owner: 04 City/Municipal Hwy Agenc</td> </tr> <tr> <td>26. Functional Class: 09 Rural Local</td> <td>37. Historical Sig.: 2 Br eligible for NRHP</td> </tr> <tr> <td>100. Defense Highway: 0 Not a STRAHNET h</td> <td>101. Parallel Structure: No    bridge exists</td> </tr> <tr> <td>102. Dir. of Traffic: 3 1-lane Br for 2-way</td> <td>103. Temp. Structure: Not Applicable (P)</td> </tr> <tr> <td>104. Highway System: 0 Not on NHS</td> <td>105. Fed. Land Hwy 0 N/A (NBI)</td> </tr> <tr> <td>110. National Truck Network: 0 Not part of na</td> <td>112. NBIS Length: Long Enough</td> </tr> </tbody> </table>			CLASSIFICATION		12. Base Hwy Network : Not on Base Network	20. Toll Facility: 3 On free road	21. Custodian: 04City/Municipal Hwy Agenc	22. Owner: 04 City/Municipal Hwy Agenc	26. Functional Class: 09 Rural Local	37. Historical Sig.: 2 Br eligible for NRHP	100. Defense Highway: 0 Not a STRAHNET h	101. Parallel Structure: No    bridge exists	102. Dir. of Traffic: 3 1-lane Br for 2-way	103. Temp. Structure: Not Applicable (P)	104. Highway System: 0 Not on NHS	105. Fed. Land Hwy 0 N/A (NBI)	110. National Truck Network: 0 Not part of na	112. NBIS Length: Long Enough																																																					
STRUCTURE TYPE AND MATERIALS																																																																																										
43. Main Span Material and Design Type Steel    Truss-Thru																																																																																										
44. Approach Span Material and Design Type Not Applicable (P)    Not Applicable (P)																																																																																										
45. No. of Spans Main Unit: 1    46. No. of Approach Spans: 0																																																																																										
107. Deck Type: 8 Wood or Timber																																																																																										
108A. Wearing Surface: 7 Wood or Timber																																																																																										
108B. Membrane: 0 None																																																																																										
108C. Deck Protection: None																																																																																										
CLASSIFICATION																																																																																										
12. Base Hwy Network : Not on Base Network	20. Toll Facility: 3 On free road																																																																																									
21. Custodian: 04City/Municipal Hwy Agenc	22. Owner: 04 City/Municipal Hwy Agenc																																																																																									
26. Functional Class: 09 Rural Local	37. Historical Sig.: 2 Br eligible for NRHP																																																																																									
100. Defense Highway: 0 Not a STRAHNET h	101. Parallel Structure: No    bridge exists																																																																																									
102. Dir. of Traffic: 3 1-lane Br for 2-way	103. Temp. Structure: Not Applicable (P)																																																																																									
104. Highway System: 0 Not on NHS	105. Fed. Land Hwy 0 N/A (NBI)																																																																																									
110. National Truck Network: 0 Not part of na	112. NBIS Length: Long Enough																																																																																									
<table border="1"> <thead> <tr> <th colspan="2">AGE AND SERVICE</th> </tr> </thead> <tbody> <tr> <td>27. Year Built: 1930    106. Year Reconstructed: Unknown</td> <td></td> </tr> <tr> <td>28A. Lanes on: 1    28B. Lanes Under: 0    19. Detour Length: 4.0 mi</td> <td></td> </tr> <tr> <td>29. ADT: 300    30. Year of ADT: 2014    109. Truck ADT %: 10</td> <td></td> </tr> <tr> <td>42A. Type of Service on: 1 Highway</td> <td></td> </tr> <tr> <td>42B. Type of Service under: 5 Waterway</td> <td></td> </tr> </tbody> </table>			AGE AND SERVICE		27. Year Built: 1930    106. Year Reconstructed: Unknown		28A. Lanes on: 1    28B. Lanes Under: 0    19. Detour Length: 4.0 mi		29. ADT: 300    30. Year of ADT: 2014    109. Truck ADT %: 10		42A. Type of Service on: 1 Highway		42B. Type of Service under: 5 Waterway		<table border="1"> <thead> <tr> <th colspan="2">CONDITION</th> </tr> </thead> <tbody> <tr> <td>58. Deck: 6 Satisfactory</td> <td>59. Super.: 5 Fair    60. Sub.: 4 Poor</td> </tr> <tr> <td>62. Culvert: N N/A (NBI)</td> <td>61. Channel/Channel Protection: 4 Protection Undermined</td> </tr> </tbody> </table> <p>Flowline Notes: 1/9/17 - FL to top of Timber Planks = 25.3' at pp 4, east truss FL = 25.3' to top of deck on DS at L3.</p>			CONDITION		58. Deck: 6 Satisfactory	59. Super.: 5 Fair    60. Sub.: 4 Poor	62. Culvert: N N/A (NBI)	61. Channel/Channel Protection: 4 Protection Undermined																																																																			
AGE AND SERVICE																																																																																										
27. Year Built: 1930    106. Year Reconstructed: Unknown																																																																																										
28A. Lanes on: 1    28B. Lanes Under: 0    19. Detour Length: 4.0 mi																																																																																										
29. ADT: 300    30. Year of ADT: 2014    109. Truck ADT %: 10																																																																																										
42A. Type of Service on: 1 Highway																																																																																										
42B. Type of Service under: 5 Waterway																																																																																										
CONDITION																																																																																										
58. Deck: 6 Satisfactory	59. Super.: 5 Fair    60. Sub.: 4 Poor																																																																																									
62. Culvert: N N/A (NBI)	61. Channel/Channel Protection: 4 Protection Undermined																																																																																									
<table border="1"> <thead> <tr> <th colspan="2">GEOMETRIC DATA</th> </tr> </thead> <tbody> <tr> <td>10. Inv. Rte. Min. Vert. Clr.: 328.1 ft</td> <td></td> </tr> <tr> <td>32. Approach Roadway Width (W/ Shoulders): 25.0 ft</td> <td></td> </tr> <tr> <td>Deck Area: 1,079.7 sq. ft    33. Median: 0 No median</td> <td></td> </tr> <tr> <td>34. Skew: 0    35. Structure Flared: 0 No flare</td> <td></td> </tr> <tr> <td>47. Inv. Rte. Total Horiz. Clr.: 15.7 ft</td> <td></td> </tr> <tr> <td>48. Length Maximum Span: 60.0 ft    49. Structure Length: 61.0 ft</td> <td></td> </tr> <tr> <td>50A. Curb/Sdwk Wdth L: 0.0 ft    50B. Curb/Sidewalk Width R: 0.0 ft</td> <td></td> </tr> <tr> <td>51. Width Curb to Curb: 15.7 ft    52. Width Out to Out: 17.7 ft</td> <td></td> </tr> <tr> <td>53. Minimum Vertical Clearance Over Bridge: 328.1 ft</td> <td></td> </tr> <tr> <td>54A/54B. Min. Vert. Underclearance : N Feature not hwy or RR    0.0 ft</td> <td></td> </tr> <tr> <td><u>Meas.</u>    -1    -1    -1    -1    -1</td> <td></td> </tr> <tr> <td><u>Post.</u>    DO NOT U    DO NOT U    DO NOT U    DO NOT U    DO NOT U    -1</td> <td></td> </tr> <tr> <td>55A/55B. Minimum Lateral Underclearance R: N Feature not hwy or RR    0.0 ft</td> <td></td> </tr> <tr> <td>56. Minimum Lateral Underclearance L: 0.0 ft</td> <td></td> </tr> </tbody> </table>			GEOMETRIC DATA		10. Inv. Rte. Min. Vert. Clr.: 328.1 ft		32. Approach Roadway Width (W/ Shoulders): 25.0 ft		Deck Area: 1,079.7 sq. ft    33. Median: 0 No median		34. Skew: 0    35. Structure Flared: 0 No flare		47. Inv. Rte. Total Horiz. Clr.: 15.7 ft		48. Length Maximum Span: 60.0 ft    49. Structure Length: 61.0 ft		50A. Curb/Sdwk Wdth L: 0.0 ft    50B. Curb/Sidewalk Width R: 0.0 ft		51. Width Curb to Curb: 15.7 ft    52. Width Out to Out: 17.7 ft		53. Minimum Vertical Clearance Over Bridge: 328.1 ft		54A/54B. Min. Vert. Underclearance : N Feature not hwy or RR    0.0 ft		<u>Meas.</u> -1    -1    -1    -1    -1		<u>Post.</u> DO NOT U    DO NOT U    DO NOT U    DO NOT U    DO NOT U    -1		55A/55B. Minimum Lateral Underclearance R: N Feature not hwy or RR    0.0 ft		56. Minimum Lateral Underclearance L: 0.0 ft		<table border="1"> <thead> <tr> <th colspan="2">LOAD RATING AND POSTING</th> </tr> </thead> <tbody> <tr> <td>31. Design Load: 0 Unknown</td> <td>41. Posting status: P Posted for load</td> </tr> <tr> <td>63. Op. Rating Method: 1 LF Load Factor-Ton</td> <td>Alt. Op. Rating Meth.: 1 LF Load Factor-To</td> </tr> <tr> <td>64. Operating Rating (H / HS / 3-3):</td> <td>12.3    22.2    -1.1</td> </tr> <tr> <td>66. Inventory Rating (H / HS / 3-3):</td> <td>7.4    13.3    -1.1</td> </tr> <tr> <td>65. Inv. Rating Method: 1 LF Load Factor-Ton</td> <td>Alt. Inv. Rating Meth.: 1 LF Load Factor-To</td> </tr> <tr> <td>70. Posting: 0 &gt;39.9% below</td> <td>Date Rated : 4/18/2013</td> </tr> </tbody> </table>			LOAD RATING AND POSTING		31. Design Load: 0 Unknown	41. Posting status: P Posted for load	63. Op. Rating Method: 1 LF Load Factor-Ton	Alt. Op. Rating Meth.: 1 LF Load Factor-To	64. Operating Rating (H / HS / 3-3):	12.3    22.2    -1.1	66. Inventory Rating (H / HS / 3-3):	7.4    13.3    -1.1	65. Inv. Rating Method: 1 LF Load Factor-Ton	Alt. Inv. Rating Meth.: 1 LF Load Factor-To	70. Posting: 0 >39.9% below	Date Rated : 4/18/2013																																									
GEOMETRIC DATA																																																																																										
10. Inv. Rte. Min. Vert. Clr.: 328.1 ft																																																																																										
32. Approach Roadway Width (W/ Shoulders): 25.0 ft																																																																																										
Deck Area: 1,079.7 sq. ft    33. Median: 0 No median																																																																																										
34. Skew: 0    35. Structure Flared: 0 No flare																																																																																										
47. Inv. Rte. Total Horiz. Clr.: 15.7 ft																																																																																										
48. Length Maximum Span: 60.0 ft    49. Structure Length: 61.0 ft																																																																																										
50A. Curb/Sdwk Wdth L: 0.0 ft    50B. Curb/Sidewalk Width R: 0.0 ft																																																																																										
51. Width Curb to Curb: 15.7 ft    52. Width Out to Out: 17.7 ft																																																																																										
53. Minimum Vertical Clearance Over Bridge: 328.1 ft																																																																																										
54A/54B. Min. Vert. Underclearance : N Feature not hwy or RR    0.0 ft																																																																																										
<u>Meas.</u> -1    -1    -1    -1    -1																																																																																										
<u>Post.</u> DO NOT U    DO NOT U    DO NOT U    DO NOT U    DO NOT U    -1																																																																																										
55A/55B. Minimum Lateral Underclearance R: N Feature not hwy or RR    0.0 ft																																																																																										
56. Minimum Lateral Underclearance L: 0.0 ft																																																																																										
LOAD RATING AND POSTING																																																																																										
31. Design Load: 0 Unknown	41. Posting status: P Posted for load																																																																																									
63. Op. Rating Method: 1 LF Load Factor-Ton	Alt. Op. Rating Meth.: 1 LF Load Factor-To																																																																																									
64. Operating Rating (H / HS / 3-3):	12.3    22.2    -1.1																																																																																									
66. Inventory Rating (H / HS / 3-3):	7.4    13.3    -1.1																																																																																									
65. Inv. Rating Method: 1 LF Load Factor-Ton	Alt. Inv. Rating Meth.: 1 LF Load Factor-To																																																																																									
70. Posting: 0 >39.9% below	Date Rated : 4/18/2013																																																																																									
<table border="1"> <thead> <tr> <th colspan="2">PROPOSED IMPROVEMENTS</th> </tr> </thead> <tbody> <tr> <td>94. Bridge Cost: \$245,000</td> <td>75. Type of Work: 31 Repl-Load Capacit</td> </tr> <tr> <td>95. Roadway Cost: \$135,000</td> <td>76. Lgth. of Improvement: 157.3 ft</td> </tr> <tr> <td>96. Total Cost: \$390,000</td> <td>114. Future ADT: 480</td> </tr> <tr> <td>97. Year of Cost Est.: 2009</td> <td>115. Year of Future ADT: 2034</td> </tr> </tbody> </table>			PROPOSED IMPROVEMENTS		94. Bridge Cost: \$245,000	75. Type of Work: 31 Repl-Load Capacit	95. Roadway Cost: \$135,000	76. Lgth. of Improvement: 157.3 ft	96. Total Cost: \$390,000	114. Future ADT: 480	97. Year of Cost Est.: 2009	115. Year of Future ADT: 2034	<table border="1"> <thead> <tr> <th colspan="2">NAVIGATION DATA</th> </tr> </thead> <tbody> <tr> <td>38. Navigation Control: Permit Not Required</td> <td></td> </tr> <tr> <td>39. Vertical Clearance: 0.0 ft</td> <td>40. Horizontal Clearance: 0.0 ft</td> </tr> <tr> <td>111. Pier Protection: 1 Not Required</td> <td>116. Lift Bridge Vert. Clear.: 0.0 ft</td> </tr> </tbody> </table>			NAVIGATION DATA		38. Navigation Control: Permit Not Required		39. Vertical Clearance: 0.0 ft	40. Horizontal Clearance: 0.0 ft	111. Pier Protection: 1 Not Required	116. Lift Bridge Vert. Clear.: 0.0 ft																																																																			
PROPOSED IMPROVEMENTS																																																																																										
94. Bridge Cost: \$245,000	75. Type of Work: 31 Repl-Load Capacit																																																																																									
95. Roadway Cost: \$135,000	76. Lgth. of Improvement: 157.3 ft																																																																																									
96. Total Cost: \$390,000	114. Future ADT: 480																																																																																									
97. Year of Cost Est.: 2009	115. Year of Future ADT: 2034																																																																																									
NAVIGATION DATA																																																																																										
38. Navigation Control: Permit Not Required																																																																																										
39. Vertical Clearance: 0.0 ft	40. Horizontal Clearance: 0.0 ft																																																																																									
111. Pier Protection: 1 Not Required	116. Lift Bridge Vert. Clear.: 0.0 ft																																																																																									
<table border="1"> <thead> <tr> <th colspan="2">APPRAISAL</th> </tr> </thead> <tbody> <tr> <td>36A. Bridge Rail: 0 Substandard</td> <td>36C. Approach Rail: 0 Substandard</td> </tr> <tr> <td>36B. Transition: 0 Substandard</td> <td>36D. Approach Rail Ends: 0 Substandard</td> </tr> <tr> <td>67. Str. Evaluation: 4 Minimum Tolerable</td> <td>68. Deck Geometry: 3 Intolerable - Correct</td> </tr> <tr> <td>69. Underclearance, Vertical and Horizontal: N Not applicable (NBI)</td> <td></td> </tr> <tr> <td>71. Waterway Adequacy: 7 Above Minimum</td> <td></td> </tr> <tr> <td>72. Approach Alignment: 3 Intolerable - Correct</td> <td></td> </tr> <tr> <td>113. Scour Critical: 4 Stable, needs action</td> <td></td> </tr> </tbody> </table>			APPRAISAL		36A. Bridge Rail: 0 Substandard	36C. Approach Rail: 0 Substandard	36B. Transition: 0 Substandard	36D. Approach Rail Ends: 0 Substandard	67. Str. Evaluation: 4 Minimum Tolerable	68. Deck Geometry: 3 Intolerable - Correct	69. Underclearance, Vertical and Horizontal: N Not applicable (NBI)		71. Waterway Adequacy: 7 Above Minimum		72. Approach Alignment: 3 Intolerable - Correct		113. Scour Critical: 4 Stable, needs action		<table border="1"> <tbody> <tr> <td>200c. Temperature: 60</td> <td>214a. Posted Weight Limit: 070707</td> <td>243. Girder Spacing/Number : -1.0 / -1</td> </tr> <tr> <td>200d. Weather: PARTLY CLOUDY</td> <td>b. Posted Speed Limit : 25</td> <td>244. Span Lengths :</td> </tr> <tr> <td>201. Structural Steel ASTM Desig.: -1    -1</td> <td>c. Narrow/One Lane Bridge sign : NO</td> <td>61    -1    -1</td> </tr> <tr> <td>202. Waterproof Membrane : -1</td> <td>d. Vertical Clearance Sign: NO</td> <td>-1    -1    -1</td> </tr> <tr> <td>Date Installed : 1/1/1901</td> <td>Advanced Warning Sign : NO</td> <td>-1    -1</td> </tr> <tr> <td>203. Type Exp. Dev. : _</td> <td></td> <td>245. Girder Depth : -1.000</td> </tr> <tr> <td></td> <td>e. Navigation Lights : NO</td> <td>246. Type of Overlay : Timber Running Plank</td> </tr> <tr> <td>204. Type of Handrail: Metal Railing (other)</td> <td>Working/Not Working : NO</td> <td>246. Overlay Thickness : 2.0</td> </tr> <tr> <td>205. Material and Quantity : -1.0</td> <td></td> <td>246. Overlay Date : 4/17/2013</td> </tr> <tr> <td>208. Type of Abutment : Skeleton</td> <td>215. Overpass : O - ACOG (OKC Metro)</td> <td>246. Overlay Depth Changed &gt; 1"?: _</td> </tr> <tr> <td>Type of Foundation : Steel Piling</td> <td>221. Substructure Cond. (U/W) : _</td> <td>247. Protective Systems : 1: _</td> </tr> <tr> <td>209. Type of Pier / Found.: _</td> <td>222. Fill over RCB: -1</td> <td>2: _    3: _</td> </tr> <tr> <td></td> <td>223. Appr. Slab/Rdwy Cond.: Satisfactory</td> <td>4: _    5: _</td> </tr> <tr> <td>210. Foundation Elev.    -1.0    -1.0</td> <td>225. Paint Type : Red Lead Ready</td> <td>248. No. of Field Splices w/ Corrosion : -1</td> </tr> <tr> <td>                                 -1.0    -1.0    -1.0</td> <td>Overcoat : Not Applicable</td> <td>249. Scour Crit. POA exists?: _</td> </tr> <tr> <td>211. Wear. Surf. Prot. System : _</td> <td>226. Date Painted: 3001</td> <td>250. Culvert Headwall Dist.: -1.0</td> </tr> <tr> <td>Date Installed : 1/1/1901</td> <td>227. Paint Coloring: Silver</td> <td></td> </tr> <tr> <td>213. Utilities Attached : Communication</td> <td>233. Deck Forming:</td> <td>256. Chan. Profile Up/Down Stream?: _</td> </tr> <tr> <td>-1    -1    -1</td> <td></td> <td>257a. OkiePROS Auto. Truck Routing    NA</td> </tr> <tr> <td>-1    -1    -1</td> <td>238. School Bus Rte: Desired Bus Route</td> <td>258. Plans w/ found. are in file at ODOT:</td> </tr> <tr> <td></td> <td>240. Appr. Roadway Type: Asphalt/Bituminous</td> <td>259. Scour Eval. is in file at ODOT:</td> </tr> <tr> <td></td> <td></td> <td>263. Interchange at Intersection:</td> </tr> <tr> <td></td> <td></td> <td>264. Interstate Milepoint: -1.00</td> </tr> </tbody> </table>			200c. Temperature: 60	214a. Posted Weight Limit: 070707	243. Girder Spacing/Number : -1.0 / -1	200d. Weather: PARTLY CLOUDY	b. Posted Speed Limit : 25	244. Span Lengths :	201. Structural Steel ASTM Desig.: -1    -1	c. Narrow/One Lane Bridge sign : NO	61    -1    -1	202. Waterproof Membrane : -1	d. Vertical Clearance Sign: NO	-1    -1    -1	Date Installed : 1/1/1901	Advanced Warning Sign : NO	-1    -1	203. Type Exp. Dev. : _		245. Girder Depth : -1.000		e. Navigation Lights : NO	246. Type of Overlay : Timber Running Plank	204. Type of Handrail: Metal Railing (other)	Working/Not Working : NO	246. Overlay Thickness : 2.0	205. Material and Quantity : -1.0		246. Overlay Date : 4/17/2013	208. Type of Abutment : Skeleton	215. Overpass : O - ACOG (OKC Metro)	246. Overlay Depth Changed > 1"?: _	Type of Foundation : Steel Piling	221. Substructure Cond. (U/W) : _	247. Protective Systems : 1: _	209. Type of Pier / Found.: _	222. Fill over RCB: -1	2: _    3: _		223. Appr. Slab/Rdwy Cond.: Satisfactory	4: _    5: _	210. Foundation Elev.    -1.0    -1.0	225. Paint Type : Red Lead Ready	248. No. of Field Splices w/ Corrosion : -1	-1.0    -1.0    -1.0	Overcoat : Not Applicable	249. Scour Crit. POA exists?: _	211. Wear. Surf. Prot. System : _	226. Date Painted: 3001	250. Culvert Headwall Dist.: -1.0	Date Installed : 1/1/1901	227. Paint Coloring: Silver		213. Utilities Attached : Communication	233. Deck Forming:	256. Chan. Profile Up/Down Stream?: _	-1    -1    -1		257a. OkiePROS Auto. Truck Routing    NA	-1    -1    -1	238. School Bus Rte: Desired Bus Route	258. Plans w/ found. are in file at ODOT:		240. Appr. Roadway Type: Asphalt/Bituminous	259. Scour Eval. is in file at ODOT:			263. Interchange at Intersection:			264. Interstate Milepoint: -1.00
APPRAISAL																																																																																										
36A. Bridge Rail: 0 Substandard	36C. Approach Rail: 0 Substandard																																																																																									
36B. Transition: 0 Substandard	36D. Approach Rail Ends: 0 Substandard																																																																																									
67. Str. Evaluation: 4 Minimum Tolerable	68. Deck Geometry: 3 Intolerable - Correct																																																																																									
69. Underclearance, Vertical and Horizontal: N Not applicable (NBI)																																																																																										
71. Waterway Adequacy: 7 Above Minimum																																																																																										
72. Approach Alignment: 3 Intolerable - Correct																																																																																										
113. Scour Critical: 4 Stable, needs action																																																																																										
200c. Temperature: 60	214a. Posted Weight Limit: 070707	243. Girder Spacing/Number : -1.0 / -1																																																																																								
200d. Weather: PARTLY CLOUDY	b. Posted Speed Limit : 25	244. Span Lengths :																																																																																								
201. Structural Steel ASTM Desig.: -1    -1	c. Narrow/One Lane Bridge sign : NO	61    -1    -1																																																																																								
202. Waterproof Membrane : -1	d. Vertical Clearance Sign: NO	-1    -1    -1																																																																																								
Date Installed : 1/1/1901	Advanced Warning Sign : NO	-1    -1																																																																																								
203. Type Exp. Dev. : _		245. Girder Depth : -1.000																																																																																								
	e. Navigation Lights : NO	246. Type of Overlay : Timber Running Plank																																																																																								
204. Type of Handrail: Metal Railing (other)	Working/Not Working : NO	246. Overlay Thickness : 2.0																																																																																								
205. Material and Quantity : -1.0		246. Overlay Date : 4/17/2013																																																																																								
208. Type of Abutment : Skeleton	215. Overpass : O - ACOG (OKC Metro)	246. Overlay Depth Changed > 1"?: _																																																																																								
Type of Foundation : Steel Piling	221. Substructure Cond. (U/W) : _	247. Protective Systems : 1: _																																																																																								
209. Type of Pier / Found.: _	222. Fill over RCB: -1	2: _    3: _																																																																																								
	223. Appr. Slab/Rdwy Cond.: Satisfactory	4: _    5: _																																																																																								
210. Foundation Elev.    -1.0    -1.0	225. Paint Type : Red Lead Ready	248. No. of Field Splices w/ Corrosion : -1																																																																																								
-1.0    -1.0    -1.0	Overcoat : Not Applicable	249. Scour Crit. POA exists?: _																																																																																								
211. Wear. Surf. Prot. System : _	226. Date Painted: 3001	250. Culvert Headwall Dist.: -1.0																																																																																								
Date Installed : 1/1/1901	227. Paint Coloring: Silver																																																																																									
213. Utilities Attached : Communication	233. Deck Forming:	256. Chan. Profile Up/Down Stream?: _																																																																																								
-1    -1    -1		257a. OkiePROS Auto. Truck Routing    NA																																																																																								
-1    -1    -1	238. School Bus Rte: Desired Bus Route	258. Plans w/ found. are in file at ODOT:																																																																																								
	240. Appr. Roadway Type: Asphalt/Bituminous	259. Scour Eval. is in file at ODOT:																																																																																								
		263. Interchange at Intersection:																																																																																								
		264. Interstate Milepoint: -1.00																																																																																								

**OKLAHOMA DEPARTMENT OF TRANSPORTATION -**

**Bridge Inspection Report**

Suff. Rating: 20.3

Health Index :

NBI No.: 03024 Structure No.: 14N3160E1170001 Local ID: O-127

SD

35.7

Inspection Date: 1/9/2017 Reported By: MSEAL  
 Invoice No.: 0 Inspected With: -1  
 Agency :

**Michael Seal**  
 Digitally signed by Michael Seal  
 DN: cn=Michael Seal, o=Burgess and Niple,  
 ou=Facility Inspection Group,  
 email=michael.seal@burgessniple.com, c=US  
 Date: 2017.03.13 12:56:43 -04'00'

**Structure / Inspection Notes**

61' long riveted pony truss.

OS inspection items include: Undermining of edge of approach roadway at north abutment; Upstream channel eroding north approach embankment; Welds on truss members; Section loss to steel piles at abutments; Section loss to stringers at abutments on bottom flanges.

PX – Stand up the northeast bridge end marker laying on ground; Abrasively clean and paint areas of section loss and corrosion; Apply mortar in masonry abutment voids; Install countermeasures along base of old north abutment; Repair patches and potholes in north approach roadway 100 feet from bridge.

FX - Monitor: any further distortion or defects of U3, west truss gusset plate; section loss on steel piles at north abutment; scour conditions upstream and downstream of bridge.

Elm.	Env.	Description	Un.	Qty.	Qty.St. 1	% 1	Qty.St. 2	% 2	Qty.St. 3	% 3	Qty.St. 4	% 4	Qty.St. 5	% 5
31	4	Timber Deck	(SF)	958	335	35 %	479	50 %	144	15 %	0	0 %	0	0 %
113	1	Steel Stringer/Floorbeam	(LF)	488	0	0 %	0	90 %	488	10 %	0	0 %	0	0 %
120	1	Steel Truss (Pony)	(LF)	122	0	0 %	110	90 %	12	10 %	0	0 %	0	0 %
162	1	Steel Gusset Plate	(EA)	22	0	0 %	22	100 %	0	0 %	0	0 %	0	0 %
202	1	Steel Column or Pile Extension	(EA)	10	0	0 %	8	80 %	2	20 %	0	0 %	0	0 %
217	4	Masonry Abutment	(LF)	40	0	0 %	0	0 %	40	100 %	0	0 %	0	0 %
231	4	Steel Pier Cap	(LF)	36	0	0 %	36	100 %	0	0 %	0	0 %	0	0 %
313	1	Fixed Bearing	(EA)	4	4	100 %	0	0 %	0	0 %	0	0 %	0	0 %
330	1	Metal Bridge Railing	(LF)	244	122	50 %	0	0 %	122	50 %	0	0 %	0	0 %
510	1	Wearing Surfaces	(SF)	610	0	0 %	585	96 %	25	4 %	0	0 %	0	0 %
515	1	Steel (Superstructure) Protective Coating	(SF)	5,155	0	0 %	0	0 %	0	0 %	5,155	100 %	0	0 %
918	1	Steel (Substructure) Protective Coating	(SF)	454	0	0 %	0	0 %	0	0 %	454	100 %	0	0 %
919	1	Steel (Railing) Protective Coating	(SF)	716	716	100 %	0	0 %	0	0 %	0	0 %	0	0 %
957	4	Pack Rust	(EA)	1	0	0 %	1	100 %	0	0 %	0	0 %	0	0 %
962	1	Superstructure Traffic Impact	(EA)	1	0	0 %	1	100 %	0	0 %	0	0 %	0	0 %
963	4	Steel Section Loss	(EA)	1	0	0 %	1	100 %	0	0 %	0	0 %	0	0 %
965	1	Debris	(EA)	1	0	0 %	1	100 %	0	0 %	0	0 %	0	0 %
968	1	Erosion	(EA)	1	0	0 %	1	100 %	0	0 %	0	0 %	0	0 %
970	1	Wing	(EA)	2	0	0 %	1	50 %	1	50 %	0	0 %	0	0 %

Additional Elements

Elem.	Element Notes (Include Size and Location of Deterioration)
31	The transverse planks have moderate checks along their entire length.
113	PX-Stringer 5 at north abutment has up to 1/4" section loss to the bottom flange. Stringers 3, 4 and 6 at north abutment have up to 1/16" loss to their bottom flanges. Section loss to stringers at intermediate floor beam connections is typical throughout the bridge. Surface corrosion is typical throughout the entire length of the stringers.
120	W L0L2, W M1L2, W U2L2 and W U3L2 replaced with welded connections and batten plates. Bridge railing welded to truss web members. Areas of pitting with failing paint and surface corrosion throughout.
162	FX – The gusset plate at U3, west truss, has a local bow of up to 1 1/8 inches from previous impact damage. This condition has not changed from the last inspection.
202	FX – Located approximately 1-foot above the ground line, pile 2 at the south abutment in the southwest corner of one of the flanges has up to 1/8-inch deep section loss to the overall thickness of the flange. Pile 3 at the same abutment has up to 1/16-inch loss.
217	PX – Both masonry abutment breastwalls exhibit open voids with no mortar where soil spills through the openings. This has caused some undermining and settlement under the north approach slab due to the loss of fill.
231	Surface corrosion throughout with minor pitting.
313	Surface corrosion and light amounts of pitting exist on all truss bearings. The truss rests on steel bearing plates at each end of both steel bent caps
330	W-beam guardrail is in place across the full length of the bridge being placed in front of the old steel bridge railing. The ends of the guardrail are turned down and buried into the ground at the south end of the bridge. Old railing has many areas of failed paint and surface corrosion throughout.
510	Moderate wear and longitudinal checks and splits occur throughout the timber runners of the deck. The defects appear heavier towards the ends of the bridge. The edge runners appear warped and bowed with cracking in random locations.
515	PX – The paint system has failed throughout the truss and steel floor system of the bridge with rust and surface corrosion common.
918	The paint has failed throughout most the pier cap and section loss exists on the piles. Limited effectiveness of paint.
919	Protective coating for w-beam is very effective.
957	Minor pack rust at connections of floor beams/truss web verticals and at stringers/floor beams.
962	FX – The gusset plate at U3, west truss, has a local bow of up to 1 1/8 inches from previous impact damage. This condition has not changed from the last inspection.
963	1/4-inch section loss exists at lower portions of piles. Stringers have minor pitting and section loss at random locations of the bottom flanges from 1/16 to 1/4-inch at the abutments.
965	Debris island exists downstream of bridge.

**OKLAHOMA DEPARTMENT OF TRANSPORTATION -**

**Bridge Inspection Report**

NBI No.: **03024**

Structure No.: 14N3160E1170001

Local ID: O-127

Suff. Rating: 20.3  
SD

Health Index :  
35.7

Elem.	Element Notes (Include Size and Location of Deterioration)
968	PX – The northeast corner of the north approach roadway is undermined for up to 2 feet of penetration due to erosion from soil spilling through the open voids of the masonry abutment
970	The northeast wingwall has previous channel scour around the end of the wall. Riprap has been installed as a countermeasure, and this condition has not changed since the previous inspection.

Structure No. 14N3160E1170001  
 NBI No. 03024  
 Facility Douglas Blvd.  
 Feature Int. Creek

Overall Score	57
Inspection Frequency	24mo FC/Routine & 24mo OS

12mo FC/Routine & 12mo OS ≤ 45  
 45 < 24mo FC/Routine & 24mo OS ≤ 60  
 24mo FC/Routine > 60

**Screening Phase**

Five points are given for each of the eight criteria in the screening phase. For each "positive" quality the bridge/FCM possesses, five points are added to its overall score.

		<b>Points</b>
1. New/Recently Retrofitted or Rehabilitated .....	No	5
2. Pin and Hangers .....	No	5
3. Non-redundant Eye bars .....	No	5
4. Plug Welds or Discontinuous Backup Bars .....	No	5
5. Active Fatigue Cracks .....	No	5
6. Susceptibility to Constraint Induced Fracture .....	No	5
7. Existing Maintenance Problem or Load Posted .....	Yes	0
8. NBI rating of FCM .....	6	5
		<b>35</b>

**Scoring Phase**

		<b>Points</b>
1. Fabricated under the AASHTO/AWS FCP .....	No	0
<i>(refer to plans)</i>		
2. AASHTO Temperature Zone .....	2	5
<i>(refer to AASHTO LFRD Bridge Design Specifications 2007 Table 6.6.2-1)</i>		
3. ADTT (single lane) .....	30	10
Was the data field measured? .....	No	
<i>(refer to inspection report)</i>		
4. Truck traffic is completely prohibited .....	No	0
<i>(refer to inspection report)</i>		
5. Fabricated using High Performance Steel .....	No	0
<i>(refer to plans)</i>		
6. NBI rating of FCM(s) .....	6	7
Exposed to deicers or hash environment? .....	No	
<i>(refer to fracture critical report)</i>		
7. Internal Redundancy .....	No	0
Was analysis performed? .....	No	
<i>(refer to plans)</i>		
8. Structural Redundancy .....	No	0
<i>(refer to plans)</i>		
9. Remaining Fatigue Life (years) .....	≤25	0
<i>(refer to calculations)</i>		
10. Fatigue Detail Category .....	E or E'	0
<i>(refer to AASHTO LFRD Bridge Design Specifications 2007 Table 6.6.1.2.3-1)</i>		
11. Tack Welds to FCM's or in tension zones .....	Yes	0
<i>(refer to inspection report)</i>		
12. Owner's/ Engineer's Discretion .....	0	0
		<b>0</b>

5 points can be added or deducted to total assessment score at the owner's/ engineer's discretion (*enter justification here*).