## **Inspection Report with SI&A Data**

Milepoint: 11.430

**Structure Description:** 

**2 District:** 06 **3 County:** Pendleton **16 Latitude:** 38°40′40.00″ **7 Longitude:** 84°19′41.00″

7 Facility Carried KY-22

6A Feature Intersected: LICKING RIVER9 Location: 1.1 MI EAST JCT US-27

NBI	Х
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS							
<b>58</b>	<b>68 Deck:</b> 8 <b>61 Channel:</b> 7							
59	Superstructure:	8	62 Culvert:	N				
60	Substructure:	8	Sufficiency Rating:	90.5				

	DESIGN						
Subs	standard:	No					
Fract	ture Critical:	No FC Details					
43A	Main Span Material:	(4) Steel Continuous					
43B	Main Span Design:	(02) Stringer / Girder					
45	Number of Spans Main:	4					
44A	Approach Span Material:	Not Applicable					

44B Approach Span Design: Not Applicable
 46 Number of Approach Spans: 0
 107 Deck Type: (1) Concrete-Cast-in-Place

108A Wearing Surface: (1) Monolithic Concrete

108B Membrane: (0) None

**108C Deck Protection:** (1) Epoxy Coated Reinforcing

Overlay Y/N: No
Overlay Type: None
Overlay Thickness: -1.000 in

**Overlay Date:** 

48	Max Length Span:	207.590 ft
49	Structure Length:	747.090 ft
32	Approach Roadway:	28.020 ft
33	Median:	(0) No Median
34	Skew:	0°
35	Flare:	No Flare
50A	Curb/Sidewalk Width L:	4.760 ft
50B	Curb/Sidewalk Width R:	4.760 ft
47	Horiz. Clearance:	28.020 ft
51	Width Curb to Curb:	28.020 ft
<b>52</b>	Width Out to Out:	40.280 ft
JZ	Width Out to Out.	40.200 It

**GEOMETRIC DATA** 

	ADMINISTRATIVE					
27	Year Built:	2012				
106	Year Reconstructed:	0				
42A	Type of Service On:	(5) Hyw - Ped				
42B	Type of Service Under:	(5) Waterway				
<b>37</b>	Historical Significance:	(5) Not Eligible				
21	<b>Maintenance Responsibility</b>	:(01) State Hwy Agency				
22	Owner:	(01) State Hwy Agency				
101	Parallel Structure:	(N) No II Structure Exists				

	APPRAISAL						
36A	Bridge Railings:	(1) Meets Standards					
36B	Transitions	(1) Meets Standards					
36C	Approach Guardrail:	(1) Meets Standards					
36D	Approach Guardrail Ends:	(1) Meets Standards					
71	Waterway Adequacy:	(9) Above Desirable					
72	Approach Alignment:	(6) Equal Minimum Crit					
113	Scour Critical:	(8) Stable above footing					
Reco	mmended Scour Critical:	(8) Stable above footing					

	CLEARANCES						
10	Vert. Clearance:	99.999 ft					
53	Min. Vert. Clearance Over:	99.999 ft					
54A	Vert. Under Reference:	(N) Feature not hwy or RR					
54B	Min. Vert. Underclearance:	0.000 ft					
55A	Lateral Under Reference:	(N) Feature not hwy or RR					
55B	Min. Lat. Underclearance R:	0.000 ft					
56	Min. Lat. Underclearance L:	0.000 ft					

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	75.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	45.0 tons
Truck	Capacity Type I:	tons
Truck	Capacity Type II:	tons
Truck	Capacity Type III:	tons
Truck	Capacity Type IV:	tons

POSTINGS							
41 Posting Status:	(A) Open, No Restriction						
Signs Posted Cardinal:	No						
Signs Posted Non-Cardinal:	No						
Field Postings Gross:	-1 tons						
Field Postings Type I:	-1 tons						
Field Postings Type II:	-1 tons						
Field Postings Type III:	-1 tons						
Field Postings Type IV:	-1 tons						

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12: Re C	Concrete Deck								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	30,092.78	30,092.78	100%	0	0%	0	0%	0	0%

#### Deck\*

Note that minor transverse cracking was found randomly in the deck surface.

Note that cold joints were found to be at random throughout the deck surface area.

A moderate amount of dirt and debris buildup was found throughout the deck surface gutter lines.

Note that bottom side of deck (soffit) could not be viewed for inspection, due to metal stay-in-place deck pan forms.

Note that that there was approximately an inch gap between the concrete of the deck and the asphalt of both approaches.

See Photos

520: Conc Re Prot Sys									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
SQ.FT	30,092.78	30,092.78	100%	0	0%	0	0%	0	0%

107: Steel Opn Girder/Beam									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	2,988.36	2,988.36	100%	0	0%	0	0%	0	0%

## Steel Girders\*

Steel girder elements throughout structure that were viewed from ground level appear to be performing as design at this time. Note that sometime in future inspections, due to height of structure, may want to consider an inspection with a under bridge crane in snooper in. to get a closer view of superstructure elements.

Both the rear and forward most ends of the beams at abutment locations could not be seen, due to concrete encasement. Note that both exterior girder elements #1 and #4 were found to have a protective paint coating which is becoming faded and chalky.

See Photos

515: Ste	515: Steel Protective Coating											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4			
FT	0.3	0.3	100%	0	0%	0	0%	0	0%			
				1								

Inspection Report with SI&A Data

205: Re Conc Column									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
EACH	6	6	100%	0	0%	0	0%	0	0%

### Columns\*

Note that all concrete columns were found to be performing as design.

210: Re Conc Pier Wall									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	57.3	57.3	100%	0	0%	0	0%	0	0%

#### Pier Wall\*

Note that all concrete pier walls were found to be performing as design at this time.

215: Re Conc Abutment											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4		
FT	157.84	157.84	100%	0	0%	0	0%	0	0%		

## Abutments\*

Both the rear and forward abutment elements were found to be performing as design at this time.

The forward abutment element was found to have graffiti along the left side of the abutment.

See Photos

234: Re	Conc Pier Cap								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	114.96	114.96	100%	0	0%	0	0%	0	0%

## Pier Cap\*

Pier caps throughout structure were found to have rust staining typical throughout, due to weathered steel, otherwise performing as design.

Inspection Report with SI&A Data

310: Elastomeric Bearing											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4		
EACH	20	20	100%	0	0%	0	0%	0	0%		

Bearing Devices\*

Bearing devices throughout this structure are of elastomeric bearing pad design.

Note that only the front exterior face of the bearing pads could be seen at both the rear and forward abutments, due to concrete diaphragm design.

Elastomeric bearing pads at pier locations could only be viewed at ground level. Note that only exterior faces could be seen at this time, due to design.

All bearing pads devices appear to be performing as design at this time.

See Photos

331: Re Conc Bridge Railing											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4		
FT	1,494.18	1,474.18	99%	20	1%	0	0%	0	0%		

Bridge Railing\*

Concrete bridge railing was found to be on both left and right sides of the structure.

Vertical flexure cracking with efflorescence was found randomly spaced throughout both concrete railings.

Cracking conditions was found at the right forward most end of the railing at the approach guardrail transition to the structure.

Area should be watched in future inspections.

Anchor bolts for utility lighting were found to be anchored into the topside of both railings, which lighting system was found not to be attached at this time.

Note that since last one on each side USGS box was found to be mounted to the top of both the bridge railings and to be hanging over the exterior sides of the railing.

See Photos

804: Sidewalk											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4		
(LF)	1,494.18	1,474.18	99%	20	1%	0	0%	0	0%		

Sidewalks\*

Pedestrian sidewalks were found on both left and right sides of the structure.

Both sidewalks were found to have transverse cracking conditions in both, which the right sidewalk was found to be worse at this time.

A moderate amount of dirt and debris was found throughout the surface of the sidewalks.

See Photos

Inspection Report with SI&A Data

850: 2n	d Elem								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

2nd Element Dist\*

Note that steel diaphragms throughout structure were found to be performing as design.

See Photos

851: Tra	ansitions								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Transition\*

Note that that there was approximately an inch gap between the concrete of the deck and the asphalt of both approaches. See Photos

852: Dra	ains								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	0	0%	1	100%	0	0%

Drains\*

Drains were cast through the deck surface along the right side of the structure only. Random drains throughout were found to be clogged at this time, which debris needs to be removed.

May want to consider placing erosion control system along bottom side under spans where outlet of drains pour out. It has caused eroding conditions along bottom side of structure.

See Photos

853: Uti	lities								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

Utilities\*

Anchor bolts for utility lighting were found to be anchored into the topside of both railings, which lighting system was found not to be attached at this time.

Note that since last one on each side USGS box was found to be mounted to the top of both the bridge railings and to be hanging over the exterior sides of the railing.

See Photos

# Inspection Report with SI&A Data

857: Embankment Erosion									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

**Embankment Erosion\*** 

Eroding conditions was found along the embankment slope of the rear abutment. Note erosion control protection system should be placed as soon as possible to prevent further damage. See Photos

860: Erosion Ctrl/Prt									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(EA)	1	0	0%	1	100%	0	0%	0	0%

**Erosion Control\*** 

Erosion control protection system was found along the face of the forward abutment embankment slope as well as channel lining under span #4.

Protection system was found to be performing as design at this time.

See Photos

OTDI	IDE	NIC	TEO
STRU	 IKE	NO	11 - 5

\*Structure Replaced 096B00007N

\*Structure Stamped 2011

Plan # 25955

## **INSPECTION NOTES**

	WORK
Action	-