**90 Inspection Date -** 2/10/2017 **Inspector -** AGREINER (154)

Overlay Thickness:

Overlay Date:

# Inspection Report with SI&A Data

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

2 District: 09 3 County: Lewis 16 Latitude: 38°23′39.00″ 7 Longitude: 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK **9 Location:** 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS					
<b>5</b> 8	Deck:	6	61 Channel:	5		
<b>59</b>	Superstructure:	6	62 Culvert:	N		
<b>60</b>	Substructure:	6	Sufficiency Rating:	46.1		

**DESIGN** 

Subs	tandard:	Weight
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	Number of Approach Spans:	0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(3) Latex Concrete/Similar
108B	Membrane:	(0) None
108C	Deck Protection:	(0) None
Over	lay Y/N:	Yes
Over	lay Type:	Latex

1.000 in

1987

	APPRAISAL						
36A	Bridge Railings:	(0) Substandard					
36B	Transitions	(0) Substandard					
36C	Approach Guardrail:	(0) Substandard					
36D	Approach Guardrail Ends:	(0) Substandard					
71	Waterway Adequacy:	(5) Above Tolerable					
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit					
92A	Fracture Critical Inspection:	No					
92B	Under Water Inspection:	No					
113	Scour Critical:	(7) Countermeasures					
Reco	mmended Scour Critical:	(3) SC- Unstable					

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truc	k Capacity Type I:	17 tons
Truc	k Capacity Type II:	17 tons
Truc	k Capacity Type III:	17 tons
Truc	k Capacity Type IV:	17 tons

	GEOMETRIC DATA					
48	Max Length Span:	60.039 ft				
49	Structure Length:	61.024 ft				
32	Approach Roadway:	16.076 ft				
33	Median:	(0) No Median				
34	Skew:	0°				
35	Flare:	No Flare				
50A	Curb/Sidewalk Width L:	0.833 ft				
50B	Curb/Sidewalk Width R:	0.833 ft				
47	Horiz. Clearance:	21.982 ft				
51	Width Curb to Curb:	21.982 ft				
52	Width Out to Out:	26.000 ft				

ADMINISTRATIVE					
27	Year Built:	1955			
106	Year Reconstructed:	0			
42A	Type of Service On:	(1) Highway			
42B	Type of Service Under:	(5) Waterway			
37	Historical Significance:	(5) Not Eligible			
21	Maintenance Responsibili	ty:(01) State Hwy Agency			
22	Owner:	(01) State Hwy Agency			
101	Parallel Structure:	(N) No Il Structure Exists			

	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					

POSTINGS							
41 Posting Status: (P) Posted For Load							
Signs Posted Cardinal:	Yes						
Signs Posted Non-Cardinal:	Yes						
Field Postings Gross:	17 tons						
Field Postings Type I:	tons						
Field Postings Type II:	tons						
Field Postings Type III:	tons						
Field Postings Type IV:	tons						

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

	12: Re C	Concrete Deck								
Ī	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	1,586.65	1,463.65	92%	123	8%	0	0%	0	0%

The ends of the deck have minor chipping/spalling and many small pop-out spalls are present throughout the wearing surface. The wearing has some minor sized transverse cracks within each third of the span (e.g.,1/3 of the span from abutment 1, near the middle third, and within the last third of the span from abutment 1). The deck underside has some discoloration near the abutments, indicating full depth moisture penetration. The deck overhangs have some shallow spalls with exposed steel. The overhangs are discolored with some minor delamination cracking around the drains. See photos.

510: We	earing Surfaces								
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	1,346.78	1,236.78	92%	110	8%	0	0%	0	0%

According to old inspection reports this deck had a latex overlay in 1987. The ends of the deck have minor chipping/spalling and many small pop-out spalls are present throughout the wearing surface. The wearing has some minor sized transverse cracks within each third of the span (e.g.,1/3 of the span from abutment 1, near the middle third, and within the last third of the span from abutment 1).

1080: D	elamination/Spal	II/Patched Area							
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	20	0	0%	20	100%	0	0%	0	0%

See element 510 for details.

1130: C	racking (RC and	Other)							
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	90	0	0%	90	100%	0	0%	0	0%

See element 510 for details.

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

1080: D	1080: Delamination/Spall/Patched Area											
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	0	0%	30	100%	0	0%	0	0%			

See element 12 for details.

1090: E	xposed Rebar								
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	3	0	0%	3	100%	0	0%	0	0%

See element 12 for details.

1130: Cracking (RC and Other)										
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	90	0	0%	90	100%	0	0%	0	0%	

See element 12 for details.

107: St	eel Opn Girder/Be	eam							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	244	99	41%	136	56%	9	4%	0	0%

The superstructure of this bridge consists of 4 steel beams. This bridge has been widened in the past and either two beams were added or all 4 beams were replaced at that time. The 2 downstream beams have splices near the 1st and 2nd third of the span. The splices in beam 4 from upstream are bolted and the splices in beam 3 from upstream are mostly riveted. These splice consist of plates bolted/riveted to the bottom of the lower flange, each side of the web, and on the underside of the top flange. These splices appear to be in good condition when viewed at ground level. The beams are painted gray/silver and they typically have areas of freckled rust throughout. The bearing areas of beams 1-3 from upstream have moderate rusting and flaking corrosion at both abutments. Beam 3 from upstream at abutment 1 and beam 2 from upstream at abutment 2 have a little more advanced deterioration than the other beams. The downstream exterior beam has the least corrosion at this time. This evaluation was made from ground level and the entire length of the beams' ends is not visible from ground level. The 2 downstream beams have vertical angle bolted to the ends of the webs at the abutments. Beam 4s angle is flush against the backwall/diaphragm at both abutments, while the upstream face of beam 3s angle has a gap between the angle and backwall/diaphragm (the downstream face of the angle is flush with the backwall). See photos.

# Inspection Report with SI&A Data

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	599.85	310.29	52%	213.36	36%	60.96	10%	15.24	3%			

The beams are painted gray/silver and they typically have areas of freckled rust throughout. The bearing areas of beams 1-3 from upstream have moderate rusting and flaking corrosion at both abutments. Beam 3 from upstream at abutment 1 and beam 2 from upstream at abutment 2 have a little more advanced deterioration than the other beams. The downstream exterior beam has the least corrosion at this time. This evaluation was made from ground level and the entire length of the beams' ends is not visible from ground level. See photos.

3420: Peel/Bub/Crack(Stl Protect Coat)											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4		
FT	51.82	0	0%	0	0%	36.58	71%	15.24	29%		
_											

1000: C	orrosion								
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	0	0%	0	0%	1	100%	0	0%

See element 107 for details.

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	108	22.01	20%	68	63%	17.99	17%	0	0%

These abutments were widened in the past with the newer portion added to the upstream end. Both of the abutments have moderate scaling along their flowline. Abutment 1 has a couple of areas (moderate size) of shallow cover spalling with exposed steel. One location is near the center of the abutment and the other location is approximately 18" below the upstream exterior beam. This abutment also has a minor horizontal crack running from the downstream wingwall to near mid height at midspan of the abutment. Abutment 1 has areas of minor vertical cracking. The downstream end of abutment 1's downstream wingwall is moderately to heavily scaled and spalled. Abutment 2 has a vertical crack (~1/16") near the new/old abutment cold joint. Moderate vertical cracking is present in abutment 2's backwall between beams 3 and 4 from upstream. Minor to moderate spalling is present in abutment 2's backwall adjacent to beams 2 and 3 from upstream. Moderate to heavy cracking/spalling is present at the downstream wingwall/abutment 2 transition next to the downstream exterior beam's seat. The end of the downstream abutment 2 wingwall has spalling/rotten concrete along its top and at the downstream most end and some moderate horizontal spalling along some possible cold joints. The downstream wingwall of abutment 1 has moderate spalling/rotten concrete along its top edge and end.

These abutments are founded on a mostly solid rock streambed. The newer footings are vertically exposed  $\sim$  24". The downstream portion of the newer footing at abutment 1 has up to 6" of undermining for  $\sim$  3' of length". The upstream end of abutment 2s footing near the wingwall transition is vertically exposed up to 24" with  $\sim$  2"- 4" of horizontal undermining. See photos.

1080: D	elamination/Spa	II/Patched Area							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	50	0	0%	50	100%	0	0%	0	0%

See element 215 for details.

1090: Ex	cposed Rebar								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	3	0	0%	3	100%	0	0%	0	0%
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1130: C	racking (RC and	Other)							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	5	0	0%	5	100%	0	0%	0	0%

See element 215 for details.

## Inspection Report with SI&A Data

6000: Sc	6000: Scour									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4	
FT	10	0	0%	10	100%	0	0%	0	0%	

These abutments are founded on a mostly solid rock streambed. The newer footings are vertically exposed  $\sim$  24". The downstream portion of the newer footing at abutment 1 has up to 6" of undermining for  $\sim$  3' of length". The upstream end of abutment 2s footing near the wingwall transition is vertically exposed up to 24" with  $\sim$  2"- 4" of horizontal undermining. 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	61	58	95%	0	0%	3	5%	0	0%

The concrete railing has some areas of minor shallow cover spalling with exposed steel.

1090: Ex	xposed Rebar								
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	1	100%	0	0%	0	0%	0	0%

See element 331 for details.

803: Cu	rb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	61	51	84%	10	16%	0	0%	0	0%

The curbs have some minor scaling.

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	1	100%	0	0%	0	0%	0	0%

The drains were open during this inspection.

857: Em	nbankment Erosi	on							
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%

Heavy embankment erosion is present behind the upstream wingwall of abutment 2. This erosion is largely due to poor channel alignment. A large tree is helping to hold the embankment at this time.

858: Ch	858: Channel Alignment								
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%

The channel alignment is poor. The stream makes a sharp turn approximately 100 ft. upstream of the bridge and the embankment just upstream of abutment 2 is located on the outside of a bend in the stream. This is causing heavy erosion along this embankment and the embankment behind abutment 2's upstream wingwall. A large tree is helping to hold the embankment at this location. The stream then flows along the downstream end of abutment 1 and makes another sharp turn several hundred feet downstream of the bridge. See photos.

#### STRUCTURE NOTES

22.8

Deck overlayed in 1987.

#### **INSPECTION NOTES**

Both 17 tons posting signs are in place at this time. Bridge Inspection by A.Greiner and K.Shugars.

	WORK	
Action:	1: -	

**90 Inspection Date -** 2/18/2016 **Inspector -** APORTER (224)

Overlay Thickness:

**Overlay Date:** 

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

2 District: 09 3 County: Lewis 16 Latitude: 38°23′39.00″ 7 Longitude: 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK **9 Location:** 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS							
<b>5</b> 8	Deck:	6	61 Channel:	5				
59	Superstructure:	5	62 Culvert:	N				
<b>60</b>	Substructure:	5	Sufficiency Rating:	42.7				

**DESIGN** 

Subs	tandard:	vveignt
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	Number of Approach Spans:	0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(3) Latex Concrete/Similar
108B	Membrane:	(0) None
108C	Deck Protection:	(0) None
Over	lay Y/N:	Yes
Over	lay Type:	Latex

1.000 in

1987

	APPRAISAL						
36A	Bridge Railings:	(0) Substandard					
36B	Transitions	(0) Substandard					
36C	Approach Guardrail:	(0) Substandard					
36D	Approach Guardrail Ends:	(0) Substandard					
71	Waterway Adequacy:	(5) Above Tolerable					
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit					
92A	Fracture Critical Inspection:	No					
92B	Under Water Inspection:	No					
113	Scour Critical:	(7) Countermeasures					
Reco	mmended Scour Critical:	(4) Stable, Needs Attention					

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truck	Capacity Type I:	17 tons
Truck	Capacity Type II:	17 tons
Truck	Capacity Type III:	17 tons
Truck	Capacity Type IV:	17 tons

	GEOMETRIC DATA									
48	Max Length Span:	60.039 ft								
49	Structure Length:	61.024 ft								
32	Approach Roadway:	16.076 ft								
33	Median:	(0) No Median								
34	Skew:	0°								
35	Flare:	No Flare								
50A	Curb/Sidewalk Width L:	0.833 ft								
50B	Curb/Sidewalk Width R:	0.833 ft								
47	Horiz. Clearance:	21.982 ft								
51	Width Curb to Curb:	21.982 ft								
<b>52</b>	Width Out to Out:	26.000 ft								

	ADMINISTRATIVE								
27	Year Built:	1955							
106	Year Reconstructed:	0							
42A	Type of Service On:	(1) Highway							
42B	Type of Service Under:	(5) Waterway							
37	Historical Significance:	(5) Not Eligible							
21	Maintenance Responsibility	:(01) State Hwy Agency							
22	Owner:	(01) State Hwy Agency							
101	Parallel Structure:	(N) No II Structure Exists							

	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								
<b>56</b>	Min. Lat. Underclearance L:	0.000 ft								

POST	POSTINGS									
41 Posting Status:	(P) Posted For Load									
Signs Posted Cardinal:	Yes									
Signs Posted Non-Cardinal:	Yes									
Field Postings Gross:	17 tons									
Field Postings Type I:	tons									
Field Postings Type II:	tons									
Field Postings Type III:	tons									
Field Postings Type IV:	tons									

12: Re 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	1,587	1,457	92%	124	8%	6	0%	0	0%	

- The deck underside has some discoloration near the abutments, indicating full depth moisture penetration.
- The deck overhangs have some shallow spalls with exposed steel.
- The overhangs are discolored with some minor delamination cracking around the drains.

510: Wearing Surfaces									
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	1,341	1,231	92%	110	8%	0	0%	0	0%

According to old inspection reports this deck had a latex overlay in 1987. The ends of the deck have minor chipping/spalling and many small pop-out spalls are present throughout the wearing surface. The wearing has some minor sized transverse cracks within each third of the span (e.g.,1/3 of the span from abutment 1, near the middle third, and within the last third of the span from abutment 1).

1080: Delamination/Spall/Patched Area										
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	20	0	0%	20	100%	0	0%	0	0%	

- See element 510 for details.

1130: C	1130: Cracking (RC and Other)										
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	90	0	0%	90	100%	0	0%	0	0%		

<sup>-</sup> See element 510 for details.

1080: Delamination/Spall/Patched Area										
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	0	0%	30	100%	0	0%	0	0%	

- See element 12 for details.

1090: E	1090: Exposed Rebar										
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	10	0	0%	4	40%	6	60%	0	0%		

- See element 12 for details.

1130: Cracking (RC and Other)										
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	90	0	0%	90	100%	0	0%	0	0%	

- See element 12 for details.

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	244	102	42%	136	56%	6	2%	0	0%	

- The superstructure of this bridge consists of 4 steel beams.
- This bridge has been widened in the past and either two beams were added or all 4 beams were replaced at that time.
- The 2 downstream beams have splices near the 1st and 2nd third of the span. The splices in beam 4 from upstream are bolted and the splices in beam 3 from upstream are mostly riveted. These splice consist of plates bolted/riveted to the bottom of the lower flange, each side of the web, and on the underside of the top flange. These splices have no deficiencies noted when viewed at ground level. The beams are painted gray/silver and they typically have areas of freckled rust throughout.
- The bearing areas of beams 1-3 from upstream have moderate rusting and flaking corrosion at both abutments.
- Beam 3 from upstream at abutment 1 and beam 2 from upstream at abutment 2 have a little more advanced deterioration than the other beams.
- The downstream exterior beam has the least corrosion at this time. This evaluation was made from ground level and the entire length of the beams' ends is not visible from ground level.

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	599.85	548.03	91%	0	0%	36.58	6%	15.24	3%			

- The beams are painted gray/silver and they typically have areas of freckled rust throughout.
- The bearing areas of beams 1-3 from upstream have moderate rusting and flaking corrosion at both abutments.
- Beam 3 from upstream at abutment 1 and beam 2 from upstream at abutment 2 have a little more advanced deterioration than the other beams.
- The downstream exterior beam has the least corrosion at this time. This evaluation was made from ground level and the entire length of the beams' ends is not visible from ground level.
- The protective coating on the bottom flanges of beams provides limited effectiveness.

3440: Eff (Stl Protect Coat)										
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4	
FT	51.82	0	0%	0	0%	36.58	71%	15.24	29%	

- See El 515 for details.

1000: Corrosion										
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4	
FT	6	0	0%	0	0%	6	100%	0	0%	

<sup>-</sup> See element 107 for details.

90 Inspection Date - 2/18/2016 Inspector - APORTER (224)

**Inspection Report with SI&A Data** 

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	108	50	46%	58	54%	0	0%	0	0%	

- These abutments were widened in the past with the newer portion added to the upstream end.
- Both of the abutments have moderate scaling along their flowline.
- Abutment 1 has a couple of areas (moderate size) of shallow cover spalling with exposed steel. One location is near the center of the abutment and the other location is approximately 18 in. below the upstream exterior beam.
- Abutment 1also has a minor horizontal crack running from the downstream wingwall to near mid height at mid-span of the abutment.
- Abutment 1 has areas of minor vertical cracking.
- The downstream end of abutment 1 wingwall is moderately scaled and spalled.
- Abutment 2 has a vertical crack (~1/16") near the new/old abutment cold joint.
- Moderate vertical cracking is present in abutment 2 backwall between beams 3 and 4 from upstream.
- Minor to moderate spalling is present in abutment 2 backwall adjacent to beams 2 and 3 from upstream.
- Moderate spalling and cracking are present at the downstream wingwall/abutment 2 transition next to the downstream exterior beam seat.
- The end of the downstream abutment 2 wingwall has spalling/rotten concrete along its top and at the downstream most end.
- The downstream wingwall of abutment 1 has moderate spalling/rotten concrete along its top edge and end.

1080: De	elamination/Spal	I/Patched Area							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	50	0	0%	50	100%	0	0%	0	0%

- See element 215 for details.

1090: Ex	xposed Rebar								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	3	0	0%	3	100%	0	0%	0	0%

- See FI 215.

1130: C	1130: Cracking (RC and Other)											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4			
FT	5	0	0%	5	100%	0	0%	0	0%			

- See element 215 for details.

Inspector - APORTER (224)

# Inspection Report with SI&A Data

220: Re	Conc Pile Cap/F	tg							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	44	0	0%	34	77%	10	23%	0	0%

- Both abutments have portions of their footing exposed for the newer widened portion.
- These abutments are founded on a mostly solid rock streambed.
- The downstream portion of the new footing at abutment 1 has up to 6 in. of undermining for ~2 ft. of the footings width.
- The upstream footing of abutment 2 is vertically exposed up to 24" with ~ 2"- 4" of horizontal undermining.

6000: Scour									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	44	0	0%	34	77%	10	23%	0	0%

- See El 220.

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	122	119	98%	0	0%	3	2%	0	0%	

- The rails were partially covered with snow during the 2016 inspection.
- The concrete railing has some areas of spalling with exposed steel.

1090: Ex	xposed Rebar								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	3	0	0%	0	0%	3	100%	0	0%

- See element 331 for details.

Inspector - APORTER (224)

Inspection Report with SI&A Data

803: Cu	rb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	122	122	100%	0	0%	0	0%	0	0%

- The curbs were covered in snow during the 2014 and 2016 inspections. The previous inspections stated - The curbs have some minor scaling.

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	1	100%	0	0%	0	0%	0	0%

The drains were covered with snow and ice during the 2014 and 2016 inspections.

857: Em	nbankment Erosi	on							
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%

- Heavy embankment erosion is present behind the upstream wingwall of abutment 2. This erosion is largely due to poor channel alignment. A large tree is helping to hole the embankment at this time.

858: Ch	annel Alignment								
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%

<sup>-</sup> The channel alignment is poor.

<sup>-</sup> The stream makes a sharp turn approximately 100 ft. upstream of the bridge and the embankment just upstream of abutment 2 is located on the outside of a bend in the stream. This is causing heavy erosion along the embankment and behind abutment 2 upstream wingwall. A large tree is helping to hold the embankment at this location.

#### STRUCTURE NOTES

22.8

Deck overlayed in 1987.

#### **INSPECTION NOTES**

- Inspection by A. Porter and M. Crossley (DLZ).
- Bridge is posted for 17 Tons at both approaches.
- NBI 59, Superstructure Lowered from 6 to 5 due to moderate beam end corrosion at abutments.
- NBI 60, Substructure Lowered from 6 to 5 due to scour and undermining of abutment footings.

#### **WORK**

Action:

1062 - Paint-Structural

Generated by user "APORTER" on 2/26/2016 - Beams ends could use cleaning and painting along with bottom flanges.

Action: 1075 - Substructure-Scour Mitigate

Generated by user "APORTER" on 2/26/2016 - Provide protection/scour mitigation to abutment footings and embankment erosion around wingwalls.

**90 Inspection Date -** 2/25/2015 **Inspector -** AGREINER (154)

Overlay Thickness:

**Overlay Date:** 

# Inspection Report with SI&A Data

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

**2 District:** 09 **3 County:** Lewis **16 Latitude:** 38°23′39.00″ **7 Longitude:** 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK **9 Location:** 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS					
58	Deck:	6	61 Channel:	5		
59	Superstructure:	6	62 Culvert:	N		
60	Substructure:	6	Sufficiency Rating:	46.1		

**DESIGN** 

Subs	tandard:	Weight
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	<b>Number of Approach Spans:</b>	0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(3) Latex Concrete/Similar
108B	Membrane:	(0) None
108C	Deck Protection:	(0) None
Overl	ay Y/N:	Yes
Overl	ay Type:	Latex

1.000 in

1987

	APPRAISAL				
36A	Bridge Railings:	(0) Substandard			
36B	Transitions	(0) Substandard			
36C	Approach Guardrail:	(0) Substandard			
36D	Approach Guardrail Ends:	(0) Substandard			
71	Waterway Adequacy:	(5) Above Tolerable			
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit			
92A	Fracture Critical Inspection:	No			
92B	Under Water Inspection:	No			
113	Scour Critical:	(7) Countermeasures			
Reco	mmended Scour Critical:	(3) SC- Unstable			

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truc	k Capacity Type I:	17 tons
Truc	k Capacity Type II:	17 tons
Truc	k Capacity Type III:	17 tons
Truc	k Capacity Type IV:	17 tons

	GEOMETRIC DATA				
48	Max Length Span:	60.039 ft			
49	Structure Length:	61.024 ft			
32	Approach Roadway:	16.076 ft			
33	Median:	(0) No Median			
34	Skew:	0°			
35	Flare:	No Flare			
50A	Curb/Sidewalk Width L:	0.833 ft			
50B	Curb/Sidewalk Width R:	0.833 ft			
47	Horiz. Clearance:	21.982 ft			
51	Width Curb to Curb:	21.982 ft			
52	Width Out to Out:	26.000 ft			

	ADMINISTRATIVE				
27	Year Built:	1955			
106	Year Reconstructed:	0			
42A	Type of Service On:	(1) Highway			
42B	Type of Service Under:	(5) Waterway			
37	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			

	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				
<b>56</b>	Min. Lat. Underclearance L:	0.000 ft				

POSTINGS									
41 Posting Status:	(P) Posted For Load								
Signs Posted Cardinal:	Yes								
Signs Posted Non-Cardinal:	Yes								
Field Postings Gross:	17 tons								
Field Postings Type I:	tons								
Field Postings Type II:	tons								
Field Postings Type III:	tons								
Field Postings Type IV:	tons								

# Inspection Report with SI&A Data

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	1,586.65	1,463.65	92%	123	8%	0	0%	0	0%

The ends of the deck have minor chipping/spalling and many small pop-out spalls are present throughout the wearing surface. The wearing has some minor sized transverse cracks within each third of the span (e.g.,1/3 of the span from abutment 1, near the middle third, and within the last third of the span from abutment 1). The deck underside has some discoloration near the abutments, indicating full depth moisture penetration. The deck overhangs have some shallow spalls with exposed steel. The overhangs are discolored with some minor delamination cracking around the drains. See photos.

510: We	earing Surfaces								
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	1,346.78	1,236.78	92%	110	8%	0	0%	0	0%

According to old inspection reports this deck had a latex overlay in 1987. The ends of the deck have minor chipping/spalling and many small pop-out spalls are present throughout the wearing surface. The wearing has some minor sized transverse cracks within each third of the span (e.g.,1/3 of the span from abutment 1, near the middle third, and within the last third of the span from abutment 1).

1080: D	elamination/Spal	II/Patched Area							
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	20	0	0%	20	100%	0	0%	0	0%

See element 510 for details.

1130: Cracking (RC and Other)									
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	90	0	0%	90	100%	0	0%	0	0%

See element 510 for details.

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

1080: De	1080: Delamination/Spall/Patched Area										
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	0	0%	30	100%	0	0%	0	0%		

See element 12 for details.

1090: E	xposed Rebar								
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	3	0	0%	3	100%	0	0%	0	0%

See element 12 for details.

1130: Cracking (RC and Other)									
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	90	0	0%	90	100%	0	0%	0	0%

See element 12 for details.

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	244	100	41%	136	56%	8	3%	0	0%

The superstructure of this bridge consists of 4 steel beams. This bridge has been widened in the past and either two beams were added or all 4 beams were replaced at that time. The 2 downstream beams have splices near the 1st and 2nd third of the span. The splices in beam 4 from upstream are bolted and the splices in beam 3 from upstream are mostly riveted. These splice consist of plates bolted/riveted to the bottom of the lower flange, each side of the web, and on the underside of the top flange. These splices appear to be in good condition when viewed at ground level. The beams are painted gray/silver and they typically have areas of freckled rust throughout. The bearing areas of beams 1-3 from upstream have moderate rusting and flaking corrosion at both abutments. Beam 3 from upstream at abutment 1 and beam 2 from upstream at abutment 2 have a little more advanced deterioration than the other beams. The downstream exterior beam has the least corrosion at this time. This evaluation was made from ground level and the entire length of the beams' ends is not visible from ground level. See photos.

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

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	599.85	548.03	91%	0	0%	36.58	6%	15.24	3%		

The beams are painted gray/silver and they typically have areas of freckled rust throughout. The bearing areas of beams 1-3 from upstream have moderate rusting and flaking corrosion at both abutments. Beam 3 from upstream at abutment 1 and beam 2 from upstream at abutment 2 have a little more advanced deterioration than the other beams. The downstream exterior beam has the least corrosion at this time. This evaluation was made from ground level and the entire length of the beams' ends is not visible from ground level. See photos.

3420: Peel/Bub/Crack(Stl Protect Coat)											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4		
FT	51.82	0	0%	0	0%	36.58	71%	15.24	29%		
_											

1000: C	orrosion								
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	1	100%	0	0%	0	0%	0	0%

See element 107 for details.

90 Inspection Date - 2/25/2015 **Inspector - AGREINER (154)** 

Inspection Report with SI&A Data

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	108	22.01	20%	68	63%	17.99	17%	0	0%

These abutments were widened in the past with the newer portion added to the upstream end. Both of the abutments have moderate scaling along their flowline. Abutment 1 has a couple of areas (moderate size) of shallow cover spalling with exposed steel. One location is near the center of the abutment and the other location is approximately 18 in. below the upstream exterior beam. This abutment also has a minor horizontal crack running from the downstream wingwall to near mid height at midspan of the abutment. Abutment 1 has areas of minor vertical cracking. The downstream end of abutment 1's downstream wingwall is moderately scaled and spalled. Abutment 2 has a vertical crack (~1/16") near the new/old abutment cold joint. Moderate vertical cracking is present in abutment 2's backwall between beams 3 and 4 from upstream. Minor to moderate spalling is present in abutment 2's backwall adjacent to beams 2 and 3 from upstream. Moderate spalling and cracking are present at the downstream wingwall/abutment 2 transition next to the downstream exterior beam's seat. The end of the downstream abutment 2 wingwall has spalling/rotten concrete along its top and at the downstream most end. The downstream wingwall of abutment 1 has moderate spalling/rotten concrete along its top edge and end. These abutments are founded on a mostly solid rock streambed. Abutment 1's footing was not accessible due to very thick ice. The following note is from the previous inspection " The downstream portion of the new footing at abutment 1 has up to 6 in. of undermining for ~2 ft. of the footings width". The upstream footing of abutment 2 is vertically exposed up to 24" with ~ 2"- 4" of horizontal undermining. The remaining portion of abutment 2's footing was not accessible due to very thick ice. See photos.

1080: De	1080: Delamination/Spall/Patched Area									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4	
FT	50	0	0%	50	100%	0	0%	0	0%	

See element 215 for details.

1090: Ex	xposed Rebar								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	3	0	0%	3	100%	0	0%	0	0%

1130: C	1130: Cracking (RC and Other)									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4	
FT	5	0	0%	5	100%	0	0%	0	0%	

See element 215 for details.

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

6000: Sc	6000: Scour										
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4		
FT	10	0	0%	10	100%	0	0%	0	0%		

These abutments are founded on a mostly solid rock streambed. Abutment 1's footing was not accessible due to very thick ice. The following note is from the previous inspection " The downstream portion of the new footing at abutment 1 has up to 6 in. of undermining for  $\sim$ 2 ft. of the footings width". The upstream footing of abutment 2 is vertically exposed up to 24" with  $\sim$  2"- 4" of horizontal undermining. The remaining portion of abutment 2's footing was not accessible due to very thick ice. See photos.

331: Re	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	61	58	95%	0	0%	3	5%	0	0%	

The concrete railing has some areas of minor shallow cover spalling with exposed steel.

1090: Ex	xposed Rebar								
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	1	100%	0	0%	0	0%	0	0%

See element 331 for details.

803: Cu	ırb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	61	61	100%	0	0%	0	0%	0	0%

During this inspection, the curbs were covered in snow. The previous inspections stated, "The curbs have some minor scaling". See photos.

852: Dr	rains								
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%

The drains were covered with snow and ice during this inspection.

1	857: Em	bankment Erosi	on							
ı	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%

Heavy embankment erosion is present behind the upstream wingwall of abutment 2. This erosion is largely due to poor channel alignment. A large tree is helping to hole the embankment at this time.

858: Channel Alignment									
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%

The channel alignment is poor. The stream makes a sharp turn approximately 100 ft. upstream of the bridge and the embankment just upstream of abutment 2 is located on the outside of a bend in the stream. This is causing heavy erosion along the embankment and behind abutment 2's upstream wingwall. A large tree is helping to hold the embankment at this location. See photos.

#### STRUCTURE NOTES

22.8

Deck overlayed in 1987.

#### **INSPECTION NOTES**

Both 17 tons posting signs are in place at this time. Bridge Inspection by A.Greiner.

	WORK
Action: -	

**90 Inspection Date -** 2/10/2014 **Inspector -** BCOMBS (217)

Substandard:

Overlay Date:

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

**2 District:** 09 **3 County:** Lewis **16 Latitude:** 38°23′39.00″ **7 Longitude:** 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK **9 Location:** 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS							
<b>58</b>	Deck:	6	61 Channel:	5				
59	Superstructure:	6	62 Culvert:	N				
<b>60</b>	Substructure:	6	Sufficiency Rating:	55.6				

**DESIGN** 

Weight

43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	Number of Approach Spans:	0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(3) Latex Concrete/Similar
108B	Membrane:	(0) None
108C	Deck Protection:	(0) None
Overl	ay Y/N:	Yes
Overl	ау Туре:	Latex
Overl	ay Thickness:	1.000 in

1987

	APPRAISAL							
36A	Bridge Railings:	(0) Substandard						
36B	Transitions	(0) Substandard						
36C	Approach Guardrail:	(0) Substandard						
36D	Approach Guardrail Ends:	(0) Substandard						
71	Waterway Adequacy:	(5) Above Tolerable						
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit						
92A	Fracture Critical Inspection:	No						
92B	Under Water Inspection:	No						
113	Scour Critical:	(7) Countermeasures						
Reco	mmended Scour Critical:	(3) SC- Unstable						

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truck Capacity Type I:		17 tons
Truc	k Capacity Type II:	17 tons
Truc	k Capacity Type III:	17 tons
Truc	k Capacity Type IV:	17 tons

	GEOMETRIC DATA						
48	Max Length Span:	60.039 ft					
49	Structure Length:	61.024 ft					
32	Approach Roadway:	16.076 ft					
33	Median:	(0) No Median					
34	Skew:	0°					
35	Flare:	No Flare					
50A	Curb/Sidewalk Width L:	0.833 ft					
50B	Curb/Sidewalk Width R:	0.833 ft					
47	Horiz. Clearance:	21.982 ft					
51	Width Curb to Curb:	21.982 ft					
<b>52</b>	Width Out to Out:	26.000 ft					

	ADMINISTRATIVE					
27	Year Built:	1955				
106	Year Reconstructed:	0				
42A	Type of Service On:	(1) Highway				
42B	Type of Service Under:	(5) Waterway				
37	Historical Significance:	(5) Not Eligible				
21	Maintenance Responsibility	:(01) State Hwy Agency				
22	Owner:	(01) State Hwy Agency				
101	Parallel Structure:	(N) No II Structure Exists				

	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							

POSTINGS							
41 Posting Status:	(P) Posted For Load						
Signs Posted Cardinal:	Yes						
Signs Posted Non-Cardinal:	Yes						
Field Postings Gross:	17 tons						
Field Postings Type I:	tons						
Field Postings Type II:	tons						
Field Postings Type III:	tons						
Field Postings Type IV:	tons						

**90** Inspection Date - 2/10/2014 Inspector - BCOMBS (217)

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

12: Re 0	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	1,586.65	1,491.45	94%	95.2	6%	0	0%	0	0%

Overall, the deck wearing surface is in good condition at this time. The ends of the deck have minor chipping. The deck also has minor areas of transverse cracking.

510: Wearing Surfaces									
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	1,346.78	1,265.97	94%	80.81	6%	0	0%	0	0%
			•						•

7358: DO NOT USE Concrete Cracking									
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	80.52	0	0%	80.52	100%	0	0%	0	0%

Overall, the deck wearing surface is in good condition at this time. The ends of the deck have minor chipping. The deck also has minor areas of transverse cracking.

7359: D	7359: DO NOT USE Concrete Efflorescenc											
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	10.76	10.76	100%	0	0%	0	0%	0	0%			

Overall, the deck wearing surface is in good condition at this time. The ends of the deck have minor chipping. The deck also has minor areas of transverse cracking.

Inspector - BCOMBS (217)

Substandard (12 months) - Primary Inspection Type

Inspection	Report with	SI&A Data

107: Ste	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	244	100	41%	136	56%	8	3%	0	0%			

The super structure on this bridge consists of 4 steel I-beams. At some point, this bridge has been widened and either two beams were added or all 4 beams were replaced at that time. The 2 downstream beams have bolted splices that appear to be in good condition from what can be seen, These bolted splice consist of plates bolted to the bottom of the lower flange, each side of the web, and on the underside of the top flange. The beams typically have areas of freckled rust throughout. The beam bearing areas have more advanced corrosion at both abutments. Beams 1-2 at abutment 2 and beams 1-3 at abutment 1 are in the worst condition. The elevation of the bridge hinders a proper inspection of the beam ends. 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%			

215: Re	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	108	40.01	37%	50	46%	17.99	17%	0	0%			

These abutments were widened in the past with the newer portion added to the upstream end. Both of the abutments have moderate scaling along their flowline. Abutment 1 has a couple of areas (moderate size) of shallow cover spalling with exposed steel. One location is near the center of the abutment and the other location is approximately 18 in. below the upstream exterior beam. This abutment also has a minor horizontal crack running from the downstream wingwall to near mid height at midspan of the abutment. Abutment 1 has areas of minor vertical cracking. Abutment 2 has a minor vertical crack near the new/old abutment cold joint that has not changed since the previous inspection. Spalling and random cracking is present in the downstream wingwall/ abutment 2 transition next to the downstream exterior beam. The end of the downstream abutment 2 wingwall also has areas of spalling/rotten concrete along its top. The downstream wingwall of abutment 1 has moderate spalling/rotten concrete along its top edge and end. The downstream portion of the new footing at abutment 1 has up to 6 in. of undermining for ~2 ft. of the footings width. The footing appears to be founded on bedrock so this isn ft.t an issue. See photos.

331: Re	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	61	58	95%	0	0%	3	5%	0	0%			

The concrete railing has some areas of minor shallow cover spalling with exposed steel. See photos.

90 Inspection Date - 2/10/2014 Inspector - BCOMBS (217)

**Inspection Report with SI&A Data** 

803: Cu	803: Curb											
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4			
(LF)	61	61	100%	0	0%	0	0%	0	0%			

During this inspection, the curbs were covered in snow. This is from the previous inspection: in.The curbs have some minor scaling. See photos. in.

850: 2nd	850: 2nd 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%			

The concrete diaphragms between the beams at the abutments have some areas of cracking and spalling. Some moderate spalling is present adjacent to beam 2 from upstream at abutment 2. See photos.

852: Dra	852: Drains											
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%			

The drains are open at this time.

857: Em	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%	0	0%	1	100%	0	0%			

Moderate to heavy erosion is present at the upstream end of abutment 2. This erosion is due to poor channel alignment. A large tree is holding the embankment at this location. See photos.

Substandard (12 months) - Primary Inspection Type

Inspection Report with SI&A Data

858: Ch	858: Channel Alignment												
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%				

The channel alignment is poor. The stream makes a sharp turn approximately 100 ft. upstream of the bridge and the embankment just upstream of abutment 2 is located on the outside of a bend in the stream. This is causing moderate to heavy erosion along the embankment and behind abutment 2 ft.s upstream wingwall. A large tree is helping to hold the embankment at this location. The stream below the bridge appears to be migrating and trying to cut a new path. See photos.

7361: D	7361: DO NOT USE Scour											
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	1	100%	0	0%	0	0%	0	0%			

Both abutment ft.s footings are exposed vertically at varying amounts due to silt and creek rock. Abutment 1 has up to 6 in. of horizontal undermining for approximately 2 ft. in length at the downstream portion of the new abutments footing at the widening interface. This undermining is only a couple of inches off of the solid rock streambed. Abutment 2 ft.s footing is vertically exposed up to 2 ft. at the upstream end. Both of these abutments are founded on a solid rock streambed. See photos.

	STRUCTURE NOTES	
22.8		
Dack overlayed in 1087		

#### **INSPECTION NOTES**

Both 17 tons posting signs are in place at this time. Bridge Inspection by B.Combs.

	WORK
Action:	

**90 Inspection Date -** 2/18/2013 **Inspector -** AGREINER (154)

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

2 District: 09 3 County: Lewis 16 Latitude: 38°23′39.00″ 7 Longitude: 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK **9 Location:** 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS				
<b>5</b> 8	Deck:	6	61 Channel:	5	
59	Superstructure:	6	62 Culvert:	N	
60	Substructure:	6	Sufficiency Rating:	60.1	

	DESIGN				
Subs	tandard:	Weight			
43A	Main Span Material:	(3) Steel			
43B	Main Span Design:	(02) Stringer / Girder			
45	Number of Spans Main:	1			
44A	Approach Span Material:	Not Applicable (0)			
44B	Approach Span Design:	Not Applicable (00)			
46	Number of Approach Spans	<b>s:</b> 0			
107	Deck Type:	(1) Concrete-Cast-in-Place			
108A	Wearing Surface:	(3) Latex Concrete/Similar			

108B Membrane: (0) None
108C Deck Protection: (0) None
Overlay Y/N: Yes
Overlay Type: Latex
Overlay Thickness: 1.000 in

**Overlay Date:** 

	APPRAISAL				
36A	Bridge Railings:	(0) Substandard			
36B	Transitions	(0) Substandard			
36C	Approach Guardrail:	(0) Substandard			
36D	Approach Guardrail Ends:	(0) Substandard			
71	Waterway Adequacy:	(5) Above Tolerable			
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit			
92A	Fracture Critical Inspection:	No			
92B	Under Water Inspection:	No			
113	Scour Critical:	(7) Countermeasures			
Reco	mmended Scour Critical:	(3) SC- Unstable			

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truc	k Capacity Type I:	17 tons
Truc	k Capacity Type II:	17 tons
Truc	k Capacity Type III:	17 tons
Truck Capacity Type IV:		17 tons

	GEOMETRIC DATA					
48	Max Length Span:	60.039 ft				
49	Structure Length:	61.024 ft				
32	Approach Roadway:	16.076 ft				
33	Median:	(0) No Median				
34	Skew:	0°				
35	Flare:	No Flare				
50A	Curb/Sidewalk Width L:	0.833 ft				
50B	Curb/Sidewalk Width R:	0.833 ft				
47	Horiz. Clearance:	21.982 ft				
51	Width Curb to Curb:	21.982 ft				
<b>52</b>	Width Out to Out:	26.000 ft				

	ADMINISTRATIVE				
27	Year Built:	1955			
106	Year Reconstructed:	0			
42A	Type of Service On:	(1) Highway			
42B	Type of Service Under:	(5) Waterway			
37	Historical Significance:	(5) Not Eligible			
21	Maintenance Responsibility	:(01) State Hwy Agency			
22	Owner:	(01) State Hwy Agency			
101	Parallel Structure:	(N) No II Structure Exists			

	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				

POSTINGS				
41 Posting Status:	(P) Posted For Load			
Signs Posted Cardinal:	Yes			
Signs Posted Non-Cardinal:	Yes			
Field Postings Gross:	17 tons			
Field Postings Type I:	tons			
Field Postings Type II:	tons			
Field Postings Type III:	tons			
Field Postings Type IV:	tons			

# Inspection Report with SI&A Data

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	1,586.65	1,491.45	94%	95.2	6%	0	0%	0	0%

The wearing surface has some minor chipping at the ends of the deck and areas of light transverse cracking. Light transverse cracks are present at the following locations: approximately 20 ft. from abutment 1, 9 ft. from abutment 2, and 22 ft. from abutment 2. See photos.

510: Wearing Surfaces									
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	1,346.78	1,265.97	94%	80.81	6%	0	0%	0	0%

7358: DO NOT USE Concrete Cracking										
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	80.52	0	0%	80.52	100%	0	0%	0	0%	

The wearing surface has some minor chipping at the ends of the deck and areas of light transverse cracking. Light transverse cracks are present at the following locations: approximately 20 ft. from abutment 1, 9 ft. from abutment 2, and 22 ft. from abutment 2. See photos.

7359: DO NOT USE Concrete Efflorescenc										
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	10.76	10.76	100%	0	0%	0	0%	0	0%	

The wearing surface has some minor chipping at the ends of the deck and areas of light transverse cracking. Light transverse cracks are present at the following locations: approximately 20 ft. from abutment 1, 9 ft. from abutment 2, and 22 ft. from abutment 2. See photos.

## Inspection Report with SI&A Data

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	244	100	41%	136	56%	8	3%	0	0%	

The superstructure consists of four steel I-beams. The bridge was widened in the past and the two upstream beams are different than the two downstream beams. The 2 downstream beams have large drilled holes (approximately 2 in. diameter) spaced throughout the upper web. Both of these beams also have bolted splices in two different locations. One splice is in the first third of the span from abutment 1 and the other is in the first third of the span from abutment 2. These splices appear to be in good condition at this time. Typically all of the beams have some areas of light freckled surface rust throughout. At the bearings the beams have some active corrosion with some flaking rust along the top and bottom flanges that may be causing some loss of section. Beam 2 from upstream appears to have the most advanced flaking corrosion at its bearings. These beams should be cleaned and painted. 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%		

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	108	40.01	37%	50	46%	17.99	17%	0	0%	

These abutments were widened in the past with the newer portion added to the upstream end. Both of the abutments have moderate scaling along their flowline. Abutment 1 has a couple of areas (moderate size) of shallow cover spalling with exposed steel. One location is near the center of the abutment and the other location is approximately 18 in. below the upstream exterior beam. This abutment also has a minor horizontal crack running from the downstream wingwall to near mid height at midspan of the abutment. Abutment 1 has areas of minor vertical cracking. Moderate spalling is present at the downstream end of the downstream wingwall. This abutment has up to 6 in. of undermining of the footing for approximately 2 ft. in length near the center of the abutment. Abutment 2 has a vertical crack that extends from the footing to the top of the abutment. This crack measures approximately 1/16 in. to 1/8 in. and is located near mid-length at the widening interface of the newer and older portions of the abutment. This abutment also has moderate vertical cracking and moderate spalling just downstream of the downstream beam ft.s seat. The downstream wingwall of abutment 2 has shallow scaling/spalling along a cold joint in the upper portion of the wingwall. This wingwall also has moderate spalling along the top and downstream most end the wall. See photos.

**90 Inspection Date -** 2/18/2013 **Inspector -** AGREINER (154)

**Inspection Report with SI&A Data** 

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	61	58	95%	0	0%	3	5%	0	0%	

The concrete railing has some areas of minor shallow cover spalling with exposed steel. See photos.

803: Cu	rb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	61	61	100%	0	0%	0	0%	0	0%

The curbs have some minor scaling. See photos.

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%

The concrete diaphragms between the beams at the abutments have some areas of cracking and spalling. Some moderate spalling is present adjacent to beam 2 from upstream at abutment 2. 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%	1	100%	0	0%	0	0%

The drains are open at this time.

856: Ch	an Drift								
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%

A moderate sized gravel bar is present in the center of the channel just downstream of the bridge. Large logs and branches are caught within the trees upstream and downstream of the bridge.

## Inspection Report with SI&A Data

857: En	nbankment Erosi	on							
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%

Moderate to heavy erosion is present at the upstream end of abutment 2. This erosion is due to poor channel alignment. A large tree is holding the embankment at this location. See photos.

858: Ch	annel Alignment								
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%

The channel alignment is poor. The stream makes a sharp turn approximately 100 ft. upstream of the bridge and the embankment just upstream of abutment 2 is located on the outside of a bend in the stream. This is causing moderate to heavy erosion along the embankment and behind abutment 2 ft.s upstream wingwall. A large tree is helping to hold the embankment at this location. The stream below the bridge appears to be migrating and trying to cut a new path. See photos.

7361: D	O NOT USE Scor	ur							
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	1	100%	0	0%	0	0%	0	0%

Both abutment ft.s footing are exposed vertically at varying amounts due to silt and creek rock. Abutment 1 has up to 6 in. of horizontal undermining for approximately 2 ft. in length near the center of the abutment at the widening interface. This undermining is only a couple of inches off of the solid rock streambed. Abutment 2 ft.s footing is vertically exposed up to 2 ft. at the upstream end. Both of these abutments are founded on a solid rock streambed. See photos.

#### STRUCTURE NOTES

22.8

Deck overlayed in 1987.

#### **INSPECTION NOTES**

Both 17 tons posting signs are in place at this time. The sign at abutment 2 has been moderately defaced. Inspected by A.Greiner.

	WORK	
Action: -		

**90 Inspection Date -** 2/15/2012 **Inspector -** AGREINER (154)

**Overlay Date:** 

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

2 District: 09 3 County: Lewis 16 Latitude: 38°23′39.00″ 7 Longitude: 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK **9 Location:** 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS				
<b>5</b> 8	Deck:	6	61 Channel:	5	
<b>59</b>	Superstructure:	6	62 Culvert:	N	
<b>60</b>	Substructure:	6	Sufficiency Rating:	60.1	

	DESIGN				
Subs	Substandard: Weight				
43A	Main Span Material:	(3) Steel			
43B	Main Span Design:	(02) Stringer / Girder			
45	Number of Spans Main:	1			
44A	Approach Span Material:	Not Applicable (0)			
44B	Approach Span Design:	Not Applicable (00)			
46	Number of Approach Spans	: 0			
107	Deck Type:	(1) Concrete-Cast-in-Place			
108A	Wearing Surface:	(3) Latex Concrete/Similar			

108A Wearing Surface:
(3) Latex Concrete/Similar
108B Membrane:
(0) None
108C Deck Protection:
(0) None
Overlay Y/N:
Yes
Overlay Type:
Latex
Overlay Thickness:
1.000 in

	APPRAISAL				
36A	Bridge Railings:	(0) Substandard			
36B	Transitions	(0) Substandard			
36C	Approach Guardrail:	(0) Substandard			
36D	Approach Guardrail Ends:	(0) Substandard			
71	Waterway Adequacy:	(5) Above Tolerable			
72	Approach Alignment:	(8) Equal Desirable Crit			
92A	Fracture Critical Inspection:	No			
92B	Under Water Inspection:	No			
113	Scour Critical:	(7) Countermeasures			
Reco	mmended Scour Critical:	(3) SC- Unstable			

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truck Capacity Type I:		17 tons
Truck	k Capacity Type II:	17 tons
Truck	k Capacity Type III:	17 tons
Truck	k Capacity Type IV:	17 tons

	GEOMETRIC DATA					
48	Max Length Span:	60.039 ft				
49	Structure Length:	61.024 ft				
32	Approach Roadway:	16.076 ft				
33	Median:	(0) No Median				
34	Skew:	0°				
35	Flare:	No Flare				
50A	Curb/Sidewalk Width L:	0.833 ft				
50B	Curb/Sidewalk Width R:	0.833 ft				
47	Horiz. Clearance:	21.982 ft				
51	Width Curb to Curb:	21.982 ft				
<b>52</b>	Width Out to Out:	26.000 ft				

	ADMINISTRATIVE				
27	Year Built:	1955			
106	Year Reconstructed:	0			
42A	Type of Service On:	(1) Highway			
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			

	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				

POSTINGS				
41 Posting Status:	(P) Posted For Load			
Signs Posted Cardinal:	Yes			
Signs Posted Non-Cardinal:	Yes			
Field Postings Gross:	17 tons			
Field Postings Type I:	tons			
Field Postings Type II:	tons			
Field Postings Type III:	tons			
Field Postings Type IV:	tons			

**90 Inspection Date -** 2/15/2012 **Inspector -** AGREINER (154)

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

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	1,586.65	1,491.45	94%	95.2	6%	0	0%	0	0%

The wearing surface has some minor transverse cracking throughout, but it is in satisfactory condition at this time. See photos.

510: We	earing Surfaces								
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	1,346.78	1,265.97	94%	80.81	6%	0	0%	0	0%
		-							

7358: D	O NOT USE Con	crete Cracking							
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	80.52	0	0%	80.52	100%	0	0%	0	0%

The wearing surface has some minor transverse cracking throughout, but it is in satisfactory condition at this time. See photos.

7359: D	7359: DO NOT USE Concrete Efflorescenc										
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	10.76	10.76	100%	0	0%	0	0%	0	0%		

The wearing surface has some minor transverse cracking throughout, but it is in satisfactory condition at this time. See photos.

244

FT

% in 4

0%

3%

**Inspection Report with SI&A Data** 

128

52%

		••	.opoot.	on Roport		o, i Data		
107: Ste	el Opn Girder/Be	eam						
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4

108

44%

The superstructure consists of four steel beams. The bridge was widened in the past and the two upstream beams are different than the two downstream beams. The downstream beams have large drilled holes spaced throughout the web. Both of these beams are spliced in two different locations. One splice is in the first third of the span from abutment 1 and the other is in the first of the span from abutment 2. These splices appear to be in good condition at this time. The beams have some light freckled surface rust throughout and some active corrosion with minor section loss is present in the bottom flanges at the bearings. Beam 2 from upstream appears to have slightly more advanced section loss at the beam ft.s bearings. These beams should be cleaned and painted, especially at the bearings. 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%		

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	108	63	58%	39	36%	6	6%	0	0%

These abutments were widened in the past with the newer portion added to the upstream end. The abutments have moderate scaling along their flowline. Abutment 1 has a couple of areas of shallow cover spalling with exposed steel, near midspan and at the upstream end. This abutment also has a minor horizontal crack running from the downstream wingwall to near mid height at midspan of the abutment. Abutment 1 also has areas of minor vertical cracking. Abutment 2 has a vertical crack that extends from the footing to the top of the abutment. This crack measures approximately 1/8 in. and is located near midspan at the interface of the newer and older portions of the abutment. This abutment also has moderate vertical cracking and spalling at the top of the downstream end adjacent to the downstream exterior beam. The downstream wingwall of abutment 2 has some moderate scaling near midheight and moderate spalling at the downstream end. See photos.

331: Re	Conc Bridge Rai	iling							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	61	58	95%	0	0%	3	5%	0	0%

The railing has some minor shallow cover spalling with exposed steel. See photos.

**90 Inspection Date -** 2/15/2012 **Inspector -** AGREINER (154)

Inspection Report with SI&A Data

803: Cu	rb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	61	61	100%	0	0%	0	0%	0	0%

The curbs have some minor scaling. See photos.

850: 2nd	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%

The concrete diaphragms between the beams at the abutments have some areas of cracking and spalling. Some moderate spalling is present adjacent to beam 2 from upstream at abutment 2. 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%	0	0%	1	100%

The drains are blocked at this time.

857: Em	nbankment Erosi	on							
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%

Moderate to heavy erosion is present at the upstream end of abutment 2. This erosion is due to poor channel alignment. A large tree is holding the embankment at this location. See photos.

Substandard (12 months) - Primary Inspection Type

Inspection Report with SI&A Data

858: Ch	nannel Alignment	:							
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%

The channel alignment is poor. The stream makes a sharp turn approximately 100 ft. upstream of the bridge. The outside of the bend in the stream is located along abutment 2 ft.s upstream embankment and this is causing moderate to heavy erosion behind abutment 2 ft.s upstream wingwall. A large tree is helping to hold the embankment at this location. See photos.

7361: D	O NOT USE Scor	ur							
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	1	100%	0	0%	0	0%	0	0%

The upstream footings of both abutments are exposed at this time. No undermining was found during this inspection. See photos.

	STRUCTURE NOTES	
22.8 Deck overlayed in 1987.		

#### **INSPECTION NOTES**

Bridge is posted at 17 tons. Both signs are in place at this time. Inspected by A.Greiner.

	WORK
Action:	-

**90 Inspection Date** - 2/1/2011 **Inspector** - RROGERS (35)

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

**2 District:** 09 **3 County:** Lewis **16 Latitude:** 38°23′39.00″ **7 Longitude:** 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

6A Feature Intersected: LAUREL FORK9 Location: 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS					
<b>5</b> 8	Deck:	6	61 Channel:	5		
59	Superstructure:	6	62 Culvert:	N		
<b>60</b>	Substructure:	6	Sufficiency Rating:	55.6		

	DES	SIGN
Subs	standard:	Weight
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)

Number of Approach Spans: 0Deck Type: (1) Concrete-Cast-in-Place

**108A Wearing Surface:** (3) Latex Concrete/Similar

108B Membrane:(0) None108C Deck Protection:(0) NoneOverlay Y/N:NoOverlay Type:NoneOverlay Thickness:in

**Overlay Date:** 

	APPRAISAL						
36A	Bridge Railings:	(0) Substandard					
36B	Transitions	(0) Substandard					
36C	Approach Guardrail:	(0) Substandard					
36D	Approach Guardrail Ends:	(0) Substandard					
71	Waterway Adequacy:	(5) Above Tolerable					
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit					
92A	Fracture Critical Inspection:	No					
92B	Under Water Inspection:	No					
113	Scour Critical:	(7) Countermeasures					
Reco	mmended Scour Critical:	(6) Calcs Not Made					

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truck	Capacity Type I:	17 tons
Truck	Capacity Type II:	17 tons
Truck	Capacity Type III:	17 tons
Truck	Capacity Type IV:	17 tons

	GEOMETRIC DATA					
48	Max Length Span:	60.039 ft				
49	Structure Length:	61.024 ft				
32	Approach Roadway:	16.076 ft				
33	Median:	(0) No Median				
34	Skew:	0°				
35	Flare:	No Flare				
50A	Curb/Sidewalk Width L:	0.833 ft				
50B	Curb/Sidewalk Width R:	0.833 ft				
47	Horiz. Clearance:	21.982 ft				
51	Width Curb to Curb:	21.982 ft				
<b>52</b>	Width Out to Out:	26.000 ft				

	ADMINISTRATIVE					
27	Year Built:	1955				
106	Year Reconstructed:	0				
42A	Type of Service On:	(1) Highway				
42B	Type of Service Under:	(5) Waterway				
37	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				

	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				

POSTINGS									
41 Posting Status:	(P) Posted For Load								
Signs Posted Cardinal:	Unknown								
Signs Posted Non-Cardinal:	Unknown								
Field Postings Gross:	tons								
Field Postings Type I:	tons								
Field Postings Type II:	tons								
Field Postings Type III:	tons								
Field Postings Type IV:	tons								

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	1,586.65	1,491.45	94%	95.2	6%	0	0%	0	0%

Deck has minor transverse cracking throughout, but is in satisfactory condition at this time. See photos.

510: We	510: Wearing Surfaces											
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	1,346.78	1,265.97	94%	80.81	6%	0	0%	0	0%			
		-		-								

7358: DO NOT USE Concrete Cracking										
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	80.52	0	0%	80.52	100%	0	0%	0	0%	

Deck has minor transverse cracking throughout, but is in satisfactory condition at this time. See photos.

7359: D	7359: DO NOT USE Concrete Efflorescenc											
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	10.76	10.76	100%	0	0%	0	0%	0	0%			

Deck has minor transverse cracking throughout, but is in satisfactory condition at this time. See photos.

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	244	108	44%	128	52%	8	3%	0	0%	

Beams have light freckled surface rust throughout with the bottom flanges rust being slightly more advanced. Beams have active corrosion with minor section loss at bearing areas. Beam 2 from upstream bearing is the worse having slightly more advanced section loss at beam ends at abutments 1 and 2. Beams need to be cleaned and painted. 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%			

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	108	63	58%	39	36%	6	6%	0	0%

Abutments have scaling along their flowline. Abutment 1 has some areas of shallow cover spalling with exposed steel. This abutment also has an approximate 1/32 in. horizontal crack running from the downstream wingwall near mid height at midspan of the abutment. Abutment 2 has a vertical crack that extends from the footing to the top of the abutment. This crack is between beams 2 and 3 at the interface of the newer and older portions of the abutment. This abutment also has vertical cracking at the top downstream end adjacent to the downstream exterior beam. Otherwise abutments have some minor cracking with efflorescence. 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	61	58	95%	0	0%	3	5%	0	0%	

Railing has some minor shallow cover spalling with exposed steel. Steel has little or no section loss at this time. See photos.

803: Cu	rb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	61	61	100%	0	0%	0	0%	0	0%

Curbs have some minor scaling but remain in good satisfactory condition at this time. See photos.

**90 Inspection Date** - 2/1/2011 **Inspector** - RROGERS (35)

**Inspection Report with SI&A Data** 

850: 2nd	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%

Concrete diaphragms have areas of cracking and spalling. 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%	1	100%	0	0%	0	0%

Drains are open at this time.

857: Em	bankment Erosi	on							
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%

Erosion is present at the upstream end of abutment 2. This erosion is due to poor channel alignment. See photos.

858: Ch	annel Alignment								
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%

Poor channel alignment is causing erosion at the upstream end of abutment 2. See photos.

859: Ve	getation								
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%

Vines growing on bridge overhangs need to be removed.

Substandard (12 months) - Primary Inspection Type

Inspection Report with SI&A Data

7361: D	O NOT USE Scot	ur							
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	1	100%	0	0%	0	0%	0	0%

Minor scour is present at the footing of both abutments. No undermining at this time. Need to monitor.

S <sup>*</sup>	TRUCTURE NOTES
22.8	
Deck overlayed in 1987.	

#### **INSPECTION NOTES**

Bridge is posted at 17 tons. Both signs are in place at this time. See photos. Inspected by R.Rogers and A.Greiner.

	WORK
Action: -	

**90 Inspection Date -** 2/12/2010 **Inspector -** RROGERS (35)

Overlay Thickness:

**Overlay Date:** 

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

**2 District:** 09 **3 County:** Lewis **16 Latitude:** 38°23′39.00″ **7 Longitude:** 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

6A Feature Intersected: LAUREL FORK9 Location: 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS				
<b>5</b> 8	Deck:	6	61 Channel:	5	
59	Superstructure:	6	62 Culvert:	N	
<b>60</b>	Substructure:	6	Sufficiency Rating:	56.6	

	DESIGN				
Subs	tandard:	Weight			
43A	Main Span Material:	(3) Steel			
43B	Main Span Design:	(02) Stringer / Girder			
45	Number of Spans Main:	1			
44A	Approach Span Material:	Not Applicable (0)			
44B	Approach Span Design:	Not Applicable (00)			
46	<b>Number of Approach Spans:</b>	: 0			
107	Deck Type:	(1) Concrete-Cast-in-Place			
108A	Wearing Surface:	(3) Latex Concrete/Similar			
108B	Membrane:	(0) None			
108C	Deck Protection:	(0) None			
Overl	ay Y/N:	No			
Overl	ay Type:	None			

in

	APPRAISAL					
36A	Bridge Railings:	(0) Substandard				
36B	Transitions	(0) Substandard				
36C	Approach Guardrail:	(0) Substandard				
36D	Approach Guardrail Ends:	(0) Substandard				
71	Waterway Adequacy:	(6) Equal Minimum				
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit				
92A	Fracture Critical Inspection:	No				
92B	Under Water Inspection:	No				
113	Scour Critical:	(7) Countermeasures				
Reco	mmended Scour Critical:	(3) SC- Unstable				

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truck	Capacity Type I:	17 tons
Truck	Capacity Type II:	17 tons
Truck	Capacity Type III:	17 tons
Truck	Capacity Type IV:	17 tons

	GEOMETRIC DATA				
48	Max Length Span:	60.039 ft			
49	Structure Length:	61.024 ft			
32	Approach Roadway:	16.076 ft			
33	Median:	(0) No Median			
34	Skew:	0°			
35	Flare:	No Flare			
50A	Curb/Sidewalk Width L:	0.833 ft			
50B	Curb/Sidewalk Width R:	0.833 ft			
47	Horiz. Clearance:	21.982 ft			
51	Width Curb to Curb:	21.982 ft			
<b>52</b>	Width Out to Out:	26.000 ft			

	ADMINISTE	RATIVE
07	7.5	
27	Year Built:	1955
106	Year Reconstructed:	0
42A	Type of Service On:	(1) Highway
42B	Type of Service Under:	(5) Waterway
37	Historical Significance:	(5) Not Eligible
21	Maintenance Responsibility	:(01) State Hwy Agency
22	Owner:	(01) State Hwy Agency
101	Parallel Structure:	(N) No II Structure Exists

	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									

POSTINGS										
41 Posting Status:	(P) Posted For Load									
Signs Posted Cardinal:	Yes									
Signs Posted Non-Cardinal:	Yes									
Field Postings Gross:	17 tons									
Field Postings Type I:	17 tons									
Field Postings Type II:	17 tons									
Field Postings Type III:	17 tons									
Field Postings Type IV:	17 tons									

12: Re 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	1,586.65	1,491.45	94%	95.2	6%	0	0%	0	0%	

Deck has transverse cracking throughout. See photos.

510: We	510: Wearing Surfaces												
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	1,346.78	1,265.97	94%	80.81	6%	0	0%	0	0%				

7358: DO NOT USE Concrete Cracking										
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	80.52	0	0%	80.52	100%	0	0%	0	0%	

Deck has transverse cracking throughout. See photos.

7359: D	7359: DO NOT USE Concrete Efflorescenc											
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	10.76	10.76	100%	0	0%	0	0%	0	0%			

Deck has transverse cracking throughout. See photos.

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	244	108	44%	128	52%	8	3%	0	0%	

Beams have light freckled surface rust throughout with the bottom flanges rust being slightly more advanced. Beams have active corrosion with minor section loss at bearing areas. Beams need to be cleaned and painted. See photos.

Inspector - RROGERS (35)

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

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%				

215: Re	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	108	63	58%	39	36%	6	6%	0	0%			

Abutments have scaling along their flowline. Abutment 1 has some areas of shallow cover spalling with exposed steel. This abutment also has an approximate 1/32 in. horizontal crack running from the downstream wingwall near mid height to near midspan of the abutment. Abutment 2 has a vertical crack the extends from the footing to the top of the abutment between beams 2 and 3 from upstream. This abutment also has vertical cracking at the top downstream end at the wingwall interface. Otherwise abutments have some minor cracking with efflorescence. See photos.

331: Re	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	61	58	95%	0	0%	3	5%	0	0%			

Railing has some shallow cover spalling eith exposed steel.

803: Cu	ırb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	61	61	100%	0	0%	0	0%	0	0%

< none >

Substandard (12 months) -Primary Inspection Type

Inspection Report with SI&A Data

850: 2nd	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%

Concrete diaphragms have areas of cracking and spalling. See photos.

7361: D	O NOT USE Scor	ur							
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	1	100%	0	0%	0	0%	0	0%

Minor scour is present at the footing of both abutments. No undermining at this time. Need to monitor.

	STRUCTURE NOTES	
22.8		-

Deck overlayed in 1987.

#### **INSPECTION NOTES**

Bridge is posted at 17 tons. Both signs are in place at this time. Inspected by R.Rogers and A.Greiner.

	WORK
Action:	-

**90 Inspection Date -** 2/6/2009 **Inspector -** RROGERS (35)

Overlay Thickness:

**Overlay Date:** 

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

**2 District:** 09 **3 County:** Lewis **16 Latitude:** 38°23′39.00″ **7 Longitude:** 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK **9 Location:** 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS				
<b>5</b> 8	Deck:	6	61 Channel:	5	
59	Superstructure:	6	62 Culvert:	N	
60	Substructure:	6	Sufficiency Rating:	61.1	

DESIGN				
andard:	Weight			
Main Span Material:	(3) Steel			
Main Span Design:	(02) Stringer / Girder			
Number of Spans Main:	1			
Approach Span Material:	Not Applicable (0)			
Approach Span Design:	Not Applicable (00)			
Number of Approach Spans:	0			
Deck Type:	(1) Concrete-Cast-in-Place			
Wearing Surface:	(3) Latex Concrete/Similar			
Membrane:	(0) None			
Deck Protection:	(0) None			
ny Y/N:	No			
ny Type:	None			
	andard: Main Span Material: Main Span Design: Number of Spans Main: Approach Span Material: Approach Span Design: Number of Approach Spans: Deck Type: Wearing Surface: Membrane: Deck Protection: by Y/N:			

in

	APPRAISAL				
36A	Bridge Railings:	(0) Substandard			
36B	Transitions	(0) Substandard			
36C	Approach Guardrail:	(0) Substandard			
36D	Approach Guardrail Ends:	(0) Substandard			
71	Waterway Adequacy:	(6) Equal Minimum			
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit			
92A	Fracture Critical Inspection:	No			
92B	Under Water Inspection:	No			
113	Scour Critical:	(7) Countermeasures			
Reco	mmended Scour Critical:	(3) SC- Unstable			

		LOAD RATINGS
		LOAD NATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truck	Capacity Type I:	17 tons
Truck	Capacity Type II:	17 tons
Truck	Capacity Type III:	17 tons
Truck	Capacity Type IV:	17 tons

	GEOMETRIC DATA				
48	Max Length Span:	60.039 ft			
49	Structure Length:	61.024 ft			
32	Approach Roadway:	16.076 ft			
33	Median:	(0) No Median			
34	Skew:	0°			
35	Flare:	No Flare			
50A	Curb/Sidewalk Width L:	0.833 ft			
50B	Curb/Sidewalk Width R:	0.833 ft			
47	Horiz. Clearance:	21.982 ft			
51	Width Curb to Curb:	21.982 ft			
<b>52</b>	Width Out to Out:	26.000 ft			

	ADMINISTRATIVE				
27	Year Built:	1955			
106	Year Reconstructed:	0			
42A	Type of Service On:	(1) Highway			
42B	Type of Service Under:	(5) Waterway			
37	Historical Significance:	(5) Not Eligible			
21	Maintenance Responsibility	:(01) State Hwy Agency			
22	Owner:	(01) State Hwy Agency			
101	Parallel Structure:	(N) No II Structure Exists			

	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			
<b>56</b>	Min. Lat. Underclearance L:	0.000 ft			

POST	POSTINGS									
41 Posting Status:	(P) Posted For Load									
Signs Posted Cardinal:	Yes									
Signs Posted Non-Cardinal:	Yes									
Field Postings Gross:	17 tons									
Field Postings Type I:	17 tons									
Field Postings Type II:	17 tons									
Field Postings Type III:	17 tons									
Field Postings Type IV:	17 tons									

**90 Inspection Date -** 2/6/2009 **Inspector -** RROGERS (35)

### Inspection Report with SI&A Data

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	1,586.65	1,316.92	83%	269.73	17%	0	0%	0	0%

Deck has transverse cracking throughout. See photos.

510: We	510: Wearing Surfaces											
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	1,346.78	1,117.83	83%	228.95	17%	0	0%	0	0%			
							•					

7358: D	O NOT USE Con	crete Cracking							
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	228.14	0	0%	228.14	100%	0	0%	0	0%

Deck has transverse cracking throughout. See photos.

7359: DO NOT USE Concrete Efflorescenc										
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	10.76	10.76	100%	0	0%	0	0%	0	0%	

Deck has transverse cracking throughout. See photos.

107: Ste	eel Opn Girder/B	eam							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	244	176	72%	68	28%	0	0%	0	0%

Beams end have light to moderate rusting with section loss especially at beam ends of bottom flange. Beams need to be cleaned and painted. Beam flanges have some light to moderate freckled rusting. See photo.

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		,				1				

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	108	98	91%	8	7%	2	2%	0	0%

Abutments have areas of light cracking with efflorescence and shallow cover spalling. East abutment has some vertical cracking. See photo.

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	61	61	100%	0	0%	0	0%	0	0%		

< none >

Units Total Qty Qty. St. 1 % in 1 Qty. St. 2 % in 2	Otiv. Ct. 2	0/ : 0	01 01 1	
Office Total Qty Qty. St. 1 /6 III 1 Qty. St. 2 /6 III 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF) 61 61 100% 0 0%	0	0%	0	0%

< none >

851: Tra	nsitions								
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%

7361: D	O NOT USE Scot	ur							
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	1	100%	0	0%	0	0%	0	0%

Scour and erosion is present at the footing of both abutments. No undermining at this time. Need to monitor.

STRUCTURE NOTES	
22.8	
Deck overlayed in 1987.	

INSPECTION NOTES	
Bridge is posted at 17 tons. Both signs are in place at this time. Inspected by R.Rogers and A.Gr	einer.

	WORK
Action:	-

**90 Inspection Date - 1/31/2008** Inspector - RROGERS (35)

#### Inspection Report with SI&A Data

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

2 District: 09 3 County: Lewis **16 Latitude:** 38°23′39.00″ 7 Longitude: 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK 9 Location: 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS			
<b>5</b> 8	Deck:	6	61 Channel:	5
59	Superstructure:	6	62 Culvert:	N
<b>60</b>	Substructure:	6	Sufficiency Rating:	56.6

DESIGN		
Subs	tandard:	Weight
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	Number of Approach Spans:	0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(3) Latex Concrete/Similar
108B	Membrane:	(0) None
108C	Deck Protection:	(0) None
Overl	ov V/N:	No

<b>3.</b>	( )
108A Wearing Surface:	(3) Latex Concrete/Similar
108B Membrane:	(0) None
108C Deck Protection:	(0) None
Overlay Y/N:	No
Overlay Type:	None
Overlay Thickness:	in
Overlay Date:	

APPRAISAL		
36A	Bridge Railings:	(0) Substandard
36B	Transitions	(0) Substandard
36C	Approach Guardrail:	(0) Substandard
36D	Approach Guardrail Ends:	(0) Substandard
71	Waterway Adequacy:	(8) Equal Desirable
72	Approach Alignment:	(8) Equal Desirable Crit
92A	Fracture Critical Inspection:	No
92B	Under Water Inspection:	No
113	Scour Critical:	(7) Countermeasures
Reco	mmended Scour Critical:	(3) SC- Unstable

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truc	k Capacity Type I:	17 tons
Truc	k Capacity Type II:	17 tons
Truc	k Capacity Type III:	17 tons
Truc	k Capacity Type IV:	17 tons

	GEOMETRIC DATA		
48	Max Length Span:	60.039 ft	
49	Structure Length:	61.024 ft	
32	Approach Roadway:	16.076 ft	
33	Median:	(0) No Median	
34	Skew:	0°	
35	Flare:	No Flare	
50A	Curb/Sidewalk Width L:	0.833 ft	
50B	Curb/Sidewalk Width R:	0.833 ft	
47	Horiz. Clearance:	21.982 ft	
51	Width Curb to Curb:	21.982 ft	
52	Width Out to Out:	26.000 ft	

ADMINISTRATIVE		
27	Year Built:	1955
106	Year Reconstructed:	0
42A	Type of Service On:	(1) Highway
42B	Type of Service Under:	(5) Waterway
37	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

	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		

POST	INGS
41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Yes
Signs Posted Non-Cardinal:	No
Field Postings Gross:	17 tons
Field Postings Type I:	17 tons
Field Postings Type II:	17 tons
Field Postings Type III:	17 tons
Field Postings Type IV:	17 tons

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	1,586.65	1,316.92	83%	269.73	17%	0	0%	0	0%

Deck has transverse cracking throughout.

510: We	510: Wearing Surfaces											
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	1,346.78	1,117.83	83%	228.95	17%	0	0%	0	0%			

7358: D	O NOT USE Con	crete Cracking							
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	228.14	0	0%	228.14	100%	0	0%	0	0%

Deck has transverse cracking throughout.

7359: DO NOT USE Concrete Efflorescenc										
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	10.76	10.76	100%	0	0%	0	0%	0	0%	

Deck has transverse cracking throughout.

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	244	176	72%	68	28%	0	0%	0	0%	

Beams end have light to moderate rusting with section loss especially at beam ends of bottom flange. Beams need to be cleaned and painted. See photo.

**90 Inspection Date -** 1/31/2008 **Inspector -** RROGERS (35)

## Inspection Report with SI&A Data

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%		
		,						,			

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	108	98	91%	8	7%	2	2%	0	0%

Abutments have areas of light cracking with efflorescence and shallow cover spalling. East abutment has some vertical cracking. See photo.

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	61	61	100%	0	0%	0	0%	0	0%	
			Į.				ļ			

< none >

803: Curb										
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4	
(LF)	61	61	100%	0	0%	0	0%	0	0%	

< none >

851: Tra	nsitions								
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	1	100%	0	0%	0	0%	0	0%

Inspector - RROGERS (35)

Substandard (12 months) - Primary Inspection Type

### Inspection Report with SI&A Data

7361: D	O NOT USE Scor	ur							
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	1	100%	0	0%	0	0%	0	0%

Scour and erosion is present at the footing of both abutments. Need to monitor.

STRUCTURE NOTES	
22.8	
Deck overlayed in 1987.	

INSPECTION	NOTES
Bridge is posted at 17 tons. East sign is missing and needs to be replaced.	

	WORK
Action:	

90 Inspection Date - 1/16/2007 Inspector - JSAMS (44)

Overlay Thickness:

**Overlay Date:** 

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

**2 District:** 09 **3 County:** Lewis **16 Latitude:** 38°23′39.00″ **7 Longitude:** 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK **9 Location:** 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS			
58	Deck:	7	61 Channel:	5
59	Superstructure:	6	62 Culvert:	N
60	Substructure:	6	Sufficiency Rating:	61.1

DESIGN		
Subs	tandard:	Weight
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	Number of Approach Spans:	: 0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(3) Latex Concrete/Similar
108B	Membrane:	(0) None
108C	Deck Protection:	(0) None
Overl	ay Y/N:	No
Overl	ay Type:	None

in

	APPRAISAL		
36A	Bridge Railings:	(0) Substandard	
36B	Transitions	(0) Substandard	
36C	Approach Guardrail:	(0) Substandard	
36D	Approach Guardrail Ends:	(0) Substandard	
71	Waterway Adequacy:	(8) Equal Desirable	
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit	
92A	Fracture Critical Inspection:	No	
92B	Under Water Inspection:	No	
113	Scour Critical:	(8) Stable above footing	
Reco	mmended Scour Critical:	(6) Calcs Not Made	

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truck	Capacity Type I:	17 tons
Truck	Capacity Type II:	17 tons
Truck	Capacity Type III:	17 tons
Truck	Capacity Type IV:	17 tons

	GEOMETRIC DATA		
48	Max Length Span:	60.039 ft	
49	Structure Length:	61.024 ft	
32	Approach Roadway:	16.076 ft	
33	Median:	(0) No Median	
34	Skew:	0°	
35	Flare:	No Flare	
50A	Curb/Sidewalk Width L:	0.833 ft	
50B	Curb/Sidewalk Width R:	0.833 ft	
47	Horiz. Clearance:	21.982 ft	
51	Width Curb to Curb:	21.982 ft	
<b>52</b>	Width Out to Out:	26.000 ft	

ADMINISTRATIVE		
27	Year Built:	1955
106	Year Reconstructed:	0
42A	Type of Service On:	(1) Highway
42B	Type of Service Under:	(5) Waterway
37	Historical Significance:	(5) Not Eligible
21	Maintenance Responsibility	:(01) State Hwy Agency
22	Owner:	(01) State Hwy Agency
101	Parallel Structure:	(N) No II Structure Exists

	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	
<b>56</b>	Min. Lat. Underclearance L:	0.000 ft	

POSTINGS		
41 Posting Status:	(P) Posted For Load	
Signs Posted Cardinal:	Yes	
Signs Posted Non-Cardinal:	Yes	
Field Postings Gross:	17,000 tons	
Field Postings Type I:	tons	
Field Postings Type II:	tons	
Field Postings Type III:	tons	
Field Postings Type IV:	tons	

12: Re 0	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	1,586.65	1,316.92	83%	269.73	17%	0	0%	0	0%

Deck has transverse cracking throughout.

510: We	510: Wearing Surfaces											
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	1,346.78	1,117.83	83%	228.95	17%	0	0%	0	0%			

7358: D	O NOT USE Con	crete Cracking							
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	248.54	0	0%	248.54	100%	0	0%	0	0%

Deck has transverse cracking throughout.

7359: D	7359: DO NOT USE Concrete Efflorescenc											
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	10.76	10.76	100%	0	0%	0	0%	0	0%			

Deck has transverse cracking throughout.

107: Ste	eel Opn Girder/B	eam							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	244	176	72%	68	28%	0	0%	0	0%

Beams end have light to moderate rusting with section loss especially at beam ends of bottom flange. Beams need to be cleaned and painted.

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%				

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	108	98	91%	8	7%	2	2%	0	0%

Abutments have areas of light cracking with efflorescence and shallow cover spalling. East abutment has some vertical cracking.

331: Re	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	61	61	100%	0	0%	0	0%	0	0%			

< none >

803: Cu	rb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	61	61	100%	0	0%	0	0%	0	0%

< none >

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%	0	0%	0	0%	1	100%

Pavement at bridge ends is cracked and spalled. Pavement at bridge ends needs to be repaired.

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%	0	0%	1	100%

Drains are blocked with gutterline debris and needs to be cleaned out.

855: De	ebris on Super								
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%	0	0%	1	100%

Gutterline debris is blocking drains and needs to be cleaned out.

7361: DO NOT USE Scour									
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	1	100%	0	0%	0	0%	0	0%

Scour and erosion is present at the footing of both abutments. Need to monitor.

#### STRUCTURE NOTES

22.8

Deck overlayed in 1987.

#### **INSPECTION NOTES**

WORK	
Action: -	

90 Inspection Date - 2/10/2006 Inspector - RROGERS (35)

#### Inspection Report with SI&A Data

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

**2 District**: 09 **3 County**: Lewis **16 Latitude**: 38°23′39.00″ **7 Longitude**: 83°18′32.00″

7 Facility Carried KY-1068 Milepoint: 1.750

6A Feature Intersected: LAUREL FORK9 Location: 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	Χ
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS							
<b>5</b> 8	Deck:	7	61 Channel:	5				
<b>59</b>	Superstructure:	6	62 Culvert:	N				
<b>60</b>	Substructure:	6	Sufficiency Rating:	56.5				

	DESI	GN
Subs	tandard:	Weight
43A	Main Span Material:	(3) Steel
43B	Main Span Design:	(02) Stringer / Girder
45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)
46	Number of Approach Spans:	: 0
107	Deck Type:	(1) Concrete-Cast-in-Place
108A	Wearing Surface:	(3) Latex Concrete/Similar

108A Wearing Surface:
(3) Latex Concrete/Similar
108B Membrane:
(0) None
108C Deck Protection:
(0) None
Overlay Y/N:
No
Overlay Type:
None
Overlay Thickness:
in

**Overlay Date:** 

**Scour Critical:** 

**Recommended Scour Critical:** 

113

**APPRAISAL** 36A **Bridge Railings:** (0) Substandard (0) Substandard 36B **Transitions** 36C Approach Guardrail: (0) Substandard 36D Approach Guardrail Ends: (0) Substandard 71 Waterway Adequacy: (8) Equal Desirable 72 **Approach Alignment:** (8) Equal Desirable Crit 92A Fracture Critical Inspection: No **Under Water Inspection:** 

LOAD RATINGS

63 Operating Type: (1) Load Factor (LF)

64 Operating Rating: 17.0 tons

65 Inventory Type: (1) Load Factor (LF)

66 Inventory Rating: 17.0 tons

Truck Capacity Type I: 17 tons

Truck Capacity Type II: 17 tons

Truck Capacity Type III: 17 tons

Truck Capacity Type IV: 17 tons

(8) Stable above footing

(6) Calcs Not Made

	GEOMETRIC DATA							
48	Max Length Span:	60.039 ft						
49	Structure Length:	61.024 ft						
32	Approach Roadway:	16.076 ft						
33	Median:	(0) No Median						
34	Skew:	0°						
35	Flare:	No Flare						
50A	Curb/Sidewalk Width L:	0.833 ft						
50B	Curb/Sidewalk Width R:	0.833 ft						
47	Horiz. Clearance:	21.982 ft						
51	Width Curb to Curb:	21.982 ft						
<b>52</b>	Width Out to Out:	26.000 ft						

	ADMINISTRATIVE					
27	Year Built:	1955				
106	Year Reconstructed:	0				
42A	Type of Service On:	(1) Highway				
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				

	CLEARAN	NCES
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

POS	TINGS
41 Posting Status:	(P) Posted For Load
Signs Posted Cardinal:	Unknown
Signs Posted Non-Cardinal:	Unknown
Field Postings Gross:	tons
Field Postings Type I:	tons
Field Postings Type II:	tons
Field Postings Type III:	tons
Field Postings Type IV:	tons

12: Re 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	1,586.65	1,316.92	83%	269.73	17%	0	0%	0	0%

Deck has transverse cracking throughout.

510: Wearing Surfaces									
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	1,346.78	1,117.83	83%	228.95	17%	0	0%	0	0%

7358: DO NOT USE Concrete Cracking									
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	248.54	0	0%	248.54	100%	0	0%	0	0%

Deck has transverse cracking throughout.

7359: D	O NOT USE Cond	crete Efflorescen	С						
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	10.76	10.76	100%	0	0%	0	0%	0	0%

Deck has transverse cracking throughout.

107: Ste	eel Opn Girder/B	eam							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	244	184	75%	60	25%	0	0%	0	0%

Beams end have light to moderate rusting especially at beam ends.

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%

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	108	108	100%	0	0%	0	0%	0	0%

Abutments have areas of light cracking and shallow cover spalling.

331: Re	Conc Bridge Rai	iling							
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
FT	61	61	100%	0	0%	0	0%	0	0%
							-	1	

803: Cui	rb								
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
(LF)	61	61	100%	0	0%	0	0%	0	0%

7361: DO NOT USE Scour								
/. St. 4	% in							
0	0%							

STRUCTURE NOTES
22.8 Deck overlayed in 1987.
Deck overlayed in 1987.
INSPECTION NOTES
WORK
Action: -

**90 Inspection Date - 1/1/2005** Inspector - RROGERS (35)

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

Structure Description: 61.02 Foot - Single Span Steel Stringer/Multi-beam or Girder

2 District: 09 3 County: Lewis **16 Latitude:** 38°23′39.00″ 7 Longitude: 83°18'32.00"

7 Facility Carried KY-1068 Milepoint: 1.750

**6A Feature Intersected:** LAUREL FORK 9 Location: 5.0 MI S.W. OF JCT KY 59

NBI	Χ
Element	
Fracture Critical	
Underwater	
Special	

	NBI CONDITION RATINGS					
<b>5</b> 8	Deck:	7	61 Channel:	5		
<b>59</b>	Superstructure:	6	62 Culvert:	N		
<b>60</b>	Substructure:	6	Sufficiency Rating:	-1		

<b>59</b>	Superstructure:	6	62 Culvert:	N
<b>60</b>	Substructure:	6	Sufficiency Rating	: -1
			·	
			DESIGN	
			220.0	
Su	bstandard:		Weight	
43/	A Main Span Mat	erial:	(3) Steel	
43B Main Span Design:		(02) Stringer / Girder		

45	Number of Spans Main:	1
44A	Approach Span Material:	Not Applicable (0)
44B	Approach Span Design:	Not Applicable (00)

46 Number of Approach Spans: 0

107 Deck Type: (1) Concrete-Cast-in-Place 108A Wearing Surface: (3) Latex Concrete/Similar

108B Membrane: (0) None 108C Deck Protection: (0) None Overlay Y/N: Yes Overlay Type: Latex Overlay Thickness: 0.000 in

**Overlay Date:** 

	APPRAISAL					
36A	Bridge Railings:	(0) Substandard				
36B	Transitions	(0) Substandard				
36C	Approach Guardrail:	(0) Substandard				
36D	Approach Guardrail Ends:	(0) Substandard				
71	Waterway Adequacy:	(8) Equal Desirable				
<b>72</b>	Approach Alignment:	(8) Equal Desirable Crit				
92A	Fracture Critical Inspection:	No				
92B	Under Water Inspection:	No				
113	Scour Critical:	(4) Stable, needs action				
Reco	mmended Scour Critical:	(6) Calcs Not Made				

		LOAD RATINGS
63	Operating Type:	(1) Load Factor (LF)
64	Operating Rating:	17.0 tons
65	Inventory Type:	(1) Load Factor (LF)
66	Inventory Rating:	17.0 tons
Truc	k Capacity Type I:	17 tons
Truc	k Capacity Type II:	17 tons
Truc	k Capacity Type III:	17 tons
Truc	k Capacity Type IV:	17 tons

	GEOMETRIC DATA		
48	Max Length Span:	60.039 ft	
49	Structure Length:	61.024 ft	
32	Approach Roadway:	16.076 ft	
33	Median:	(0) No Median	
34	Skew:	0°	
35	Flare:	No Flare	
50A	Curb/Sidewalk Width L:	0.833 ft	
50B	Curb/Sidewalk Width R:	0.833 ft	
47	Horiz. Clearance:	21.982 ft	
51	Width Curb to Curb:	21.982 ft	
52	Width Out to Out:	26.000 ft	

	ADMINISTRATIVE		
27	Year Built:	1955	
106	Year Reconstructed:	0	
42A	Type of Service On:	(1) Highway	
42B	Type of Service Under:	(5) Waterway	
37	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	

	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			
<b>56</b>	Min. Lat. Underclearance L:	0.000 ft			

POSTINGS			
41 Posting Status:	(P) Posted For Load		
Signs Posted Cardinal:	Yes		
Signs Posted Non-Cardinal:	Yes		
Field Postings Gross:	19 tons		
Field Postings Type I:	tons		
Field Postings Type II:	tons		
Field Postings Type III:	tons		
Field Postings Type IV:	tons		

**90 Inspection Date -** 1/1/2005 **Inspector -** RROGERS (35)

#### Initial Inspection - Primary Inspection Type

## Inspection Report with SI&A Data

:									
Units	Total Qty	Qty. St. 1	% in 1	Qty. St. 2	% in 2	Qty. St. 3	% in 3	Qty. St. 4	% in 4
			%		%		%		%

	STRUCTURE NOTES	
22.8		
Deck overlayed in 1987.		

	INSPECTION NOTES
_	

	WORK
Action:	-



17 tons posting near abutment 1.



Typical view of the wearing surface.



Minor sized transverse cracking in the wearing surface near abutment 1.



Minor sized transverse cracking in the wearing surface near mid-length.



Minor sized transverse cracking in the wearing surface near abutment 2.



17 tons posting near abutment 2.



View from upstream.



Heavy embankment erosion just upstream of abutment 2.



Heavy embankment erosion adjacent to abutment 2.



Typical view of the beams, deck underside, and abutment 1.



Approximately 2" of horizontal undermining along the upstream footing of abutment 2. This extends for  $\sim$  3' in length.



Abutment 2s footing is vertically exposed ~ 2' at the upstream end.



Minor sized vertical crack in abutment 2 near the old/new abutment interface.



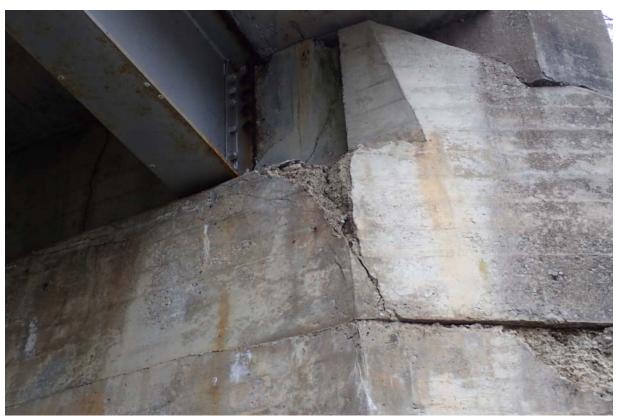
Moderate scaling along the flowline of abutment 2.



Spalling near and along the top of abutment 2s downstream wingwall.



Spalling along the top and at the end of abutment 2s downstream wingwall.



Moderate to heavy cracking/spalling in abutment 2 adjacent to the downstream exterior beam.



Typical view of the upstream beam at abutment 2. Notice the moderate rust/corrosion of the web and flanges.



Typical view of beam 2 from upstream at abutment 2. Notice the moderate rust/corrosion of the web and flanges.



Typical view of beam 3 from upstream at abutment 2. Notice the moderate rust/corrosion of the flanges.



Typical view of beam 4 from upstream at abutment 2. Notice there is only minor rust/corrosion at this time. Notice the moderate sized vertical crack in the adjacent backwall/diaphragm.



Typical view of the beams near midspan.



Moderate to heavy spalling at the downstream end of abutment 1s downstream wingwall.



Moderate scaling along the flowline of abutment 1.



Typical view of the beams, deck underside, and abutment 2.



Up to 6" of horizontal undermining under the downstream portion of the newer footing of abutment 1. This extends for  $\sim$ 3' in length.



Moderate spalling with exposed steel in abutment 1 below the upstream beam.



Moderate spalling with exposed steel in abutment 1 near the centerline of the abutment.



Minor sized horizontal, diagonal, and vertical cracking in abutment 1 between beams 3 and 4 from upstream.



Typical view of the upstream beam at abutment 1. Notice the moderate rust/corrosion of the web and flanges.



Typical view of beam 2 from upstream at abutment 1. Notice the moderate rust/corrosion of the web and flanges.



Typical view of beam 3 from upstream at abutment 1. Notice the moderate rust/corrosion of the web and flanges. Also notice the piece of concrete behind the vertical angle at the end of the beam.



Typical view of beam 4 from upstream at abutment 1. Notice the minor rust/corrosion of the flanges.



Spalling with exposed steel, delamination cracking, and discoloration in the upstream deck overhang.



Typical view of beam 3 from upstream at abutment 1 (downstream face). Notice the moderate rust/corrosion of the web and flanges.



Typical view of beam 3 from upstream at abutment 1 (upstream face). Notice the moderate rust/corrosion of the web and flanges. Also notice the piece of concrete behind the vertical angle at the end of the beam.



Exposed upstream footing of abutment 1.



Looking downstream.



Looking upstream.



View from upstream.