

<b>Facility</b>	<b>Federal Structure ID</b>	<b>Inspector Name</b>	<b>Agency/Consultant</b>	<b>Inspection Date</b>	<b>Legend</b> 9 New 7-8 Good 5-6 Fair 3-4 Poor 2 or Less Critical		
MICH AVE	13200030000B010	Lindsey Renner	Alfred Benesch & Co.	09/05/2012			
<b>Feature</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Struc Num</b>	<b>Insp Freq</b>		<b>Insp Key</b>	
RICE CREEK	42 16' 34."	84 55' 50.25"	1310	12		WXJT	
<b>Location</b>	<b>Length</b>	<b>Width</b>	<b>Year Built</b>	<b>Year Recon</b>		<b>Br Type</b>	<b>Scour Eval</b>
MARENGO TWP SEC 19	49.9	30.51	1923		1	25	U

10  11  12

**NBI INSPECTION**

1. Surface SIA-58A	7	7	6	Concrete overlay. Hairline alligator cracking. Diagonal cracks at corners and longitudinal cracks in middle of eastbound and westbound lanes. Block cracking of hairline width over all of deck surface. ( 12) Concrete overlay. Hairline alligator cracking. Diagonal cracks at corners and longitudinal cracks in middle of eastbound and westbound lanes. ( 11) Concrete overlay. Hairline alligator cracking. Diagonal cracks at corners and longitudinal cracks in middle of eastbound and westbound lanes. ( 10)
2. Expansion Jts	N	N	N	( 12) ( 11) ( 10)
3. Other Joints	4	6	5	Joints have been patched and appear to be mostly sealed. E joint is open to 1/4". W joint between HMA and concrete deck surface is beginning to open. ( 12) Joints have been patched and appear to be mostly sealed. ( 11) Large voids present in approach HMA at east joint. Voids filled with debris. Hot poured rubber stripping is absent. ( 10)
4. Railings	5	5	5	Rectangular concrete barrier wall with steel retrofit guardrail. Much of concrete is spalled and scaled (25%). Collision damage in southeast quadrant at approach guardrail. Approach guardrail in all approach quadrants. Toe of north railing exhibits excessive spalling. New approach railing in NW approach. ( 12) Rectangular concrete barrier wall with steel retrofit guardrail. Much of concrete is spalled and scaled (25%). Collision damage in southeast quadrant at approach guardrail. Approach guardrail in all approach quadrants. Toe of north railing exhibits excessive spalling. New approach railing in NW approach. ( 11) Rectangular concrete barrier wall with steel retrofit guardrail. Much of concrete is spalled and scaled (25%). Collision damage in southeast quadrant at approach guardrail. Approach guardrail in all approach quadrants ( 10)
5. Sidewalks or curbs	3	3	3	2" curb below barrier. 75% scaled and spalled. No trip hazard. Curbs located below guardrail at approaches. ( 12) 2" curb below barrier. 75% scaled and spalled. No trip hazard. Curbs located below guardrail at approaches. ( 11) 2" curb below barrier. 75% scaled and spalled. No trip hazard. Curbs located below guardrail at approaches. ( 10)

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MARENGO TWP SEC 19	49.9	30.51	1923		1 1 U		

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**NBI INSPECTION**

6. Deck  
Bottom  
Surface  
SIA-58B

3 3 3

Spalls to steel in all bays. Honeycombing throughout. Heavy leaching cracks with stalactites in all bays. BAY 1W: STS at south deck drain (3'x4') and north deck drain (5'x4'). Severe efflorescence through cracks at north deck drain. STS next to floor beam 1W caused by honeycombed concrete (10'x 1 1/2') with 5 exposed bars. Repair attempted at this area is not in fact. BAY 2W: 5'x5' STS with 10 exposed bars at south deck drain. 1'x1' STS at north deck drain. Longitudinal cracks typical with heavy efflorescence and stalactite growth to 6". Several spalls incipient. Efflorescence and leaking onto floor beam 2W. BAY 3W: 1/2" maximum width lopen longitudinal cracks with heavy efflorescence. Stalactites up to 2" long. Efflorescence from crack leaching onto beams 2W and 3W. No deck drains, therefore no STS. Delamination and honeycombing at east side of beam 2w in soffit (6'x6'). BAY 4W: STS 1'x1 1/2' at center of bay. Longitudinal cracking with efflorescence and stalactite growth to 3". 2'x2' STS with surrounding delamination at north deck drain. Popouts due to honeycombing exposing steel in five locations. Several more incipient. STS at south deck drain 3'x3' with 3" concrete scaling behind steel. BAY 5W: Forming boards and patch near Girder 1S. Delaminated area 4'x2' at south deck drain. Longitudinal cracks with stalactites and efflorescence. ( 12)

Spalls to steel in all bays. Honeycombing throughout. Heavy leaching cracks with stalactites in all bays. BAY 1W: STS at south deck drain (3'x4') and north deck drain (5'x4'). Severe efflorescence through cracks at north deck drain. STS next to floor beam 1W caused by honeycombed concrete (10'x 1 1/2'). Repair attempted at this area is not in fact. BAY 2W: 5'x5' STS at south deck drain. 1'x1' STS at north deck drain. Longitudinal cracks typical with heavy efflorescence and stalactite growth to 6". Several spalls incipient. Efflorescence and leaking onto floor beam 2W. BAY 3W: 1/2" maximum width lopen longitudinal cracks with heavy efflorescence. Stalactites up to 12" long. Efflorescence from crack leaching onto beams 2W and 3W. No deck drains, therefore no STS. Delamination and honeycombing at east side of beam 2w in soffit (6'x6'). BAY 4W: STS 1'x1 1/2' at center of bay. Longitudinal cracking with efflorescence and stalactite growth to 3". 2'x2' STS with surrounding delamination at north deck drain. Popouts due to honeycombing exposing steel in five locations. Several more incipient. STS at south deck drain 3'x3' with 3" concrete scaling behind steel. BAY 5W: Forming boards and patch near Girder 1S. Delaminated area 4'x2' at south deck drain. Longitudinal cracks with stalactites and efflorescence. ( 11)

Spalls to steel in all bays. Honeycombing throughout. Heavy leaching cracks with stalactites in all bays. BAY 1W: STS at south deck drain (3'x4') and north deck drain (5'x4'). Severe efflorescence through cracks at north deck drain. STS next to floor beam 1W caused by honeycombed concrete (10'x 1 1/2'). Repair attempted at this area is not in fact. BAY 2W: 5'x5' STS at south deck drain. 1'x1' STS at north deck drain. Longitudinal cracks typical with heavy efflorescence and stalactite growth to 6". Several spalls incipient. Efflorescence and leaking onto floor beam 2W. BAY 3W: 1/2" maximum width lopen longitudinal cracks with heavy efflorescence. Stalactites up to 12" long. Efflorescence from crack leaching onto beams 2W and 3W. No deck drains, therefore no STS. Delamination and honeycombing at east side of beam 2w in soffit (6'x6'). BAY 4W: STS 1'x1 1/2' at center of bay. Longitudinal cracking with efflorescence and stalactite growth to 3". 2'x2' STS with surrounding delamination at north deck drain. Popouts due to honeycombing exposing steel in five locations. Several more incipient. STS at south deck drain 3'x3' with 3" concrete scaling behind steel. BAY 5W: Forming boards and patch near Girder 1S. Delaminated area 4'x2' at south deck drain. Longitudinal cracks with stalactites and efflorescence.

( 10)

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MICH AVE	13200030000B010	Lindsey Renner	Alfred Benesch & Co.	09/05/2012			
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RICE CREEK	42 16' 34."	84 55' 50.25"	1310	12		WXJT	
<b>Location</b>	<b>Length</b>	<b>Width</b>	<b>Year Built</b>	<b>Year Recon</b>	<b>Br Type</b>	<b>Scour Eval</b>	<b>No.Pins</b>
MARENGO TWP SEC 19	49.9	30.51	1923		1 1 U		
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

NBI INSPECTION

7. Deck SIA-58      5   5   5

Deck overlayed by HMA. See Deck Bottom Surface for more information. Hairline cracks with efflorescence at both fascias. ( 12)  
 Year 10 - Spalls to steel in all bays. Honeycombing throughout. Heavy leaching cracks with stalactites in all bays. BAY 1W: STS at south deck drain (3'x4') and north deck drain (5'x4'). Severe efflorescence through cracks at north deck drain. STS next to floor beam 1W caused by honeycombed concrete (10'x 1 1/2'). Repair attempted at this area is not in tact. BAY 2W: 5'x5' STS at south deck drain. 1'x1' STS at north deck drain. Longitudinal cracks typical with heavy efflorescence and stalactite growth to 6". Several spalls incipient. Efflorescence and leaking onto floor beam 2W. 10 bars exposed. BAY 3W: 1/2" maximum width lopen longitudinal cracks with heavy efflorescence. Stalactites up to 12" long. Efflorescence from crack leaching onto beams 2W and 3W. No deck drains, therefore no STS. Delamination and honeycombing at east side of beam 2w in soffit (6'x6'). BAY 4W: STS 1'x1 1/2' at center of bay. Longitudinal cracking with efflorescence and stalactite growth to 3". 2'x2' STS with surrounding delamination at north deck drain. Popouts due to honeycombing exposing steel in five locations. Several more incipient. STS at south deck drain 3'x3' with 3" concrete scaling behind steel. BAY 5W: Forming boards and patch near Girder 1S. Delaminated area 4'x2' at south deck drain. Longitudinal cracks with stalactites and efflorescence. ( 11)  
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( 10)

8. Drainage

( 12)  
( 11)  
( 10)

<b>Facility</b> MICH AVE	<b>Federal Structure ID</b> 13200030000B010	<b>Inspector Name</b> Lindsey Renner	<b>Agency/Consultant</b> Alfred Benesch & Co.	<b>Inspection Date</b> 09/05/2012	<b>Legend</b> 9 New 7-8 Good 5-6 Fair 3-4 Poor 2 or Less Critical	
<b>Feature</b> RICE CREEK	<b>Latitude</b> 42 16' 34."	<b>Longitude</b> 84 55' 50.25"	<b>Struc Num</b> 1310	<b>Insp Freq</b> 12		<b>Insp Key</b> WXJT
<b>Location</b> MARENGO TWP SEC 19	<b>Length</b> 49.9	<b>Width</b> 30.51	<b>Year Built</b> 1923	<b>Year Recon</b>		<b>Br Type</b> 1 1 U
						<b>No.Pins</b>

10  11  12

**NBI INSPECTION**

<p>9. Stringer SIA-59</p>	<p>3 3 3</p>	<p>FLOORBEAM 1W: Cracks at bottom of beam. Poor finish/honeycombing covers much of bottom of beam. Horizontal cracks at west beam face. Stalactites at north end at bottom of beam approximately 1" long. FLOORBEAM 2W: 50% of bottom of beam has STS revealing all bottom layers of reinforcing steel. Much of bottom of beam is incipient spall. FLOORBEAM 3W: Previous repairs at south end of bottom of beam. Horizontal cracks at west side of beam. 4" long rebar exposed at west side of beam. FLOORBEAM 4W: Incipient spall caused by longitudinal crack at bottom of beam. Stalactites at hairline cracks in bottom of beam. Efflorescence on beam originating from deck water infiltration. GIRDER 1S: Previous repair at bottom of girder in bay 1W. Spall at bottom of girder in bay 4W exposing 3 long bars (6sft). Forming wood/fabric at north and south faces in Bay 1w. GIRDER 2S: Horizontal crack along south side of bottom of girder in Bays 1w, 2w and 5w. Efflorescence at fascia and small delamination midspan. In north face, vertical steel stirrups present at bottom of girders. Exposed steel: Floor beam 1w 3 exp bars; Floor beam 2w, 1 exp bar. Girder 2s: 4 exp bars and stirrups. ( 12)                  FLOORBEAM 1W: Cracks at bottom of beam. Poor finish/honeycombing covers much of bottom of beam. Horizontal cracks at west beam face. Stalactites at north end at bottom of beam approximately 1" long. FLOORBEAM 2W: 50% of bottom of beam has STS revealing all bottom layers of reinforcing steel. Much of bottom of beam is incipient spall. FLOORBEAM 3W: Previous repairs at south end of bottom of beam. Horizontal cracks at west side of beam. 4" long rebar exposed at west side of beam. FLOORBEAM 4W: Stalactites at hairline cracks in bottom of beam. Efflorescence on beam originating from deck water infiltration. GIRDER 1S: Previous repair at bottom of girder in bay 1W. Spall at bottom of girder in bay 4W exposing 3 long bars (6sft). Forming wood/fabric at north and south faces in Bay 1w. GIRDER 2S: Horizontal crack along south side of bottom of girder in Bays 1w, 2w and 5w. Efflorescence at fascia and small delamination midspan. In north face, vertical steel stirrups present at bottom of girders. Exposed steel: Floor beam 1w 3 exp bars; Floor beam 2w, 1 exp bar. Girder 2s: 4 exp bars and stirrups. ( 11)                  FLOORBEAM 1W: Cracks at bottom of beam. Poor finish/honeycombing covers much of bottom of beam. Horizontal cracks at west beam face. Stalactites at north end at bottom of beam. FLOORBEAM 2W: 50% of bottom of beam has STS revealing all bottom layers of reinforcing steel. 50-75% LOS in transverse steel. FLOORBEAM 3W: Previous repairs at south end of bottom of beam. Horizontal cracks at west side of beam. 4" long rebar exposed at west side of beam. FLOORBEAM 4W: Stalactites at hairline cracks in bottom of beam. Efflorescence on beam originating from deck water infiltration. GIRDER 1S: Previous repair at bottom of girder in bay 1W. Spall at bottom of girder in bay 4W exposing 2 long bars (6sft). Forming wood/fabric at north and south faces in Bay 1w. GIRDER 2S: Horizontal crack along south side of bottom of girder in Bays 1w, 2w and 5w. Efflorescence at fascia and small delamination midspan. In north face, vertical steel stirrups present at bottom of girders. Exposed steel: Floor beam 1w 3 exp bars; Floor beam 2w, 1 exp bar. Girder 2s: 4 exp bars and stirrups. ( 10)</p>
<p>10. Paint SIA-59A</p>	<p>N N N</p>	<p>( 12) ( 11) ( 10)</p>
<p>11. Section Loss</p>	<p>N N N</p>	<p>( 12) ( 11) ( 10)</p>
<p>12. Bearings</p>	<p>N N N</p>	<p>Concrete girders rest directly on abutments. ( 12)                  Concrete girders rest directly on abutments. ( 11)                  Concrete girders rest directly on abutments. ( 10)</p>

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MICH AVE	13200030000B010	Lindsey Renner	Alfred Benesch & Co.	09/05/2012	9 New			
Feature	Latitude	Longitude	Struc Num	Insp Freq	Insp Key	7-8 Good		
RICE CREEK	42 16' 34."	84 55' 50.25"	1310	12	WXJT	5-6 Fair		
Location	Length	Width	Year Built	Year Recon	Br Type	Scour Eval	No.Pins	3-4 Poor
MARENGO TWP SEC 19	49.9	30.51	1923		1 1 U			2 or Less Critical
	10	11	12	<b>NBI INSPECTION</b>				

- 13. Abutments SIA-60
 

5	5	5	ABUTMENT 1W: Delamination over entire length of backwall. Moderate efflorescence from soffit/backwall interface. 1/4" vertical crack approximately midwidth of the abutment. Longitudinal crack at top of backwall. Several hairline vertical cracks at waterline. ABUTMENT 2W: Vertical cracks 1/2" approximately midwidth of the abutment. Scaling, spalling along bottom face of abutment cap. Southeast wingwall scaling heavily. Efflorescence at south half of abutment approximately midheight of the abutment. Heavy efflorescence at upper half/backwall interface due to horizontal cracks at top of backwall. WINGWALLS: SE and SW winwalls delaminated 10% with leaching cracks. NE wingwall 30% delaminated with STS. ( 12) ABUTMENT 1W: Delamination over entire length of backwall. Moderate efflorescence from soffit/backwall interface. 1/4" vertical crack approximately midwidth of the abutment. Longitudinal crack at top of backwall. Several hairline vertical cracks at waterline. ABUTMENT 2W: Vertical cracks 1/2" approximately midwidth of the abutment. Scaling, spalling along bottom face of abutment cap. Southeast wingwall scaling heavily. Efflorescence at south half of abutment approximately midheight of the abutment. Heavy efflorescence at upper half/backwall interface due to horizontal cracks at top of backwall. WINGWALLS: SE and SW winwalls delaminated 10% with leaching cracks. NE wingwall 30% delaminated with STS. ( 11) ABUTMENT 1W: Delamination over entire length of backwall. Moderate efflorescence from soffit/backwall interface. 1/4" vertical crack approximately midwidth of the abutment. Longitudinal crack at top of backwall. Several hairline vertical cracks at waterline. ABUTMENT 2W: Vertical cracks 1/2" approximately midwidth of the abutment. Scaling, spalling along bottom face of abutment cap. Southeast wingwall scaling heavily. Efflorescence at south half of abutment approximately midheight of the abutment. Heavy efflorescence at upper half/backwall interface due to horizontal cracks at top of backwall. WINGWALLS: SE and SW winwalls delaminated 10% with leaching cracks. NE wingwall 30% delaminated with STS. ( 10)
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- 14. Piers SIA-60
 

N	N	N	( 12) ( 11) ( 10)
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- 15. Slope Protection
 

5	5	5	Timber sheeting with sand filler at west abutment. No slope protection at E abutment. ( 12) Timber sheeting with sand filler at west abutment. ( 11) Timber sheeting with sand filler at west abutment. ( 10)
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- 16. Approach Pavt
 

7	7	7	West approach has new HMA overlay with transverse cracks at reference line. East approach has small cracks that have been sealed with HPR and patching that is in tact at reference line. Longitudinal cracking at centerline. ( 12) West approach has new HMA overlay. East approach has small cracks that have been sealed with HPR and patching that is in tact at reference line. ( 11) West approach has new HMA overlay. Pothole in east approach near eastbound shoulder. ( 10)
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- 17. Approach Shldrs Swalks
 

N	N	N	Bridge tapers. Shoulders widen to full gravel shoulder 50' each side of bridge reference lines. HMA shoulders 2.5' wide at approach. ( 12) Bridge tapers. Shoulders widen to full gravel shoulder 50' each side of bridge reference lines. HMA shoulders 2.5' wide at approach. ( 11) Bridge tapers. Shoulders widen to full gravel shoulder 50' each side of bridge reference lines. HMA shoulders 2.5' wide at approach. ( 10)
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- 18. Approach Slopes
 

			Heavy vegetation. ( 12) Heavy vegetation. ( 11) Heavy vegetation. ( 10)
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- 19. Utilities
 

			Three 1" cables attached to south fascia. Overhead lines 25' north of bridge. ( 12) Three 1" cables attached to south fascia. Overhead lines 25' north of bridge. ( 11) Three 1" cables attached to south fascia. Overhead lines 25' north of bridge. ( 10)
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- 20. Channel SIA-61
 

6	6	6	Sandy bottom with gravel and occassional pieces of concrete from spalls overhead. HMA at southeast end of bridge deck slopes. Cobble spillway at northeast of deck and onto slope. ( 12) Sandy bottom with gravel and occassional pieces of concrete from spalls overhead. HMA at southeast end of bridge deck slopes. Cobble spillway at northeast of deck and onto slope. ( 11) Sandy bottom with gravel and occassional pieces of concrete from spalls overhead. HMA at southeast end of bridge deck slopes. Cobble spillway at northeast of deck and onto slope. ( 10)
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<b>Location</b> MARENGO TWP SEC 19	<b>Length</b> 49.9	<b>Width</b> 30.51	<b>Year Built</b> 1923	<b>Year Recon</b> 		<b>Br Type</b> 1 1 U
						<b>No.Pins</b> 

10  11  12

**NBI INSPECTION**

21. Drainage Culverts (12)  
(11)  
(10)

<b>Guard Rail</b>	<b>Crit Feat Insp(SIA-92)</b>	71 Watr Adeq	8	<b>General Notes</b> 15P
36A <input type="checkbox"/> 1	<b>Freq Date</b>	72 Appr Align	8	
36B <input type="checkbox"/> 1	92A Frac Crit	Temp Supp	0	
36C <input type="checkbox"/> 1	92B Und. Watr	Hi Ld Hit (M)	0	
36D <input type="checkbox"/> 1	92C Spl.Insp	Special Insp Equip.	2	
	Fatg Sntv.Insp		0 -	

**MDOT Bridge ID**

13 2 0003001B01

**Control Section**

13 2 000..

**NBI Bridge ID**

13200030000B010

**Struct Num**

1310

**Region**

05

**TSC**

5C

**County**

13

**City Resp**

**City Location**

0

**7- Facility Carried**

MICH AVE

**6- Feature Intersected**

RICE CREEK

**9- Location**

MARENGO TWP SEC 19

**Latitude**

42 16' 34."

**Longitude**

84 55' 50.25"

**Owner**

2

**Maint Resp**

2

**Bridge History, Type, Materials**

27 - Year Built	1923
106 - Year Reconstructed	
202 - Year Painted	
203 - Year Overlay	
43 - Main Span Bridge Type	1 25
44 - Appr Span Bridge Type	
77 - Steel Type	0
78 - Paint Type	0
79 - Rail Type	5
80 - Post Type	0
107 - Deck Type	1
108A - Wearing Surface	6
108B - Membrane	0
108C - Deck Protection	0

**Structure Dimensions**

34 - Skew	0
35 - Struct Flared	0
45 - Num Main Spans	1
46 - Num Apprs Spans	0
48 - Max Span Length	49.9
49 - Structure Length	49.9
50A - Width Left Curb/SW	0
50B - Width Right Curb/SW	0
33 - Median	0
51 - Width Curb to Curb	24.0
52 - Width Out to Out	30.51
112 - NBIS Length	Y

**Inspection Data**

90 - Inspection Date	09/05/2012
91 - Inspection Freq	12
92A - Frac Crit Req/Freq	N
93A - Frac Crit Insp Date	
92B - Und Water Req/Freq	N
93B - Und Water Insp Date	
92C - Oth Spec Insp Req/F..	N
93C - Oth Spec Insp Date	
176A - Und Water Insp Met..	
58 - Deck Rating	5
58A - Deck Surface Rtg	6
59 - Superstructure Rating	3
59A - Paint Rating	N
60 - Substructure Rating	5
61 - Channel Rating	6
62 - Culvert Rating	N

**Navigation Data**

38 - Navigation Control	0
39 - Vertical Clearance	0
40 - Horizontal Clearance	0
111 - Pier Protection	
116 - Lift Brdg Vert Clear	

**Route Carried By Structure(ON Record)**

5A - Record Type	1
5B - Route Signing	4
5C - Level of Service	0
5D - Route Number	01366
5E - Direction Suffix	0
10L - Best 3m Unclr-Lt	0 0
10R - Best 3m Unclr- Rt	99 99
PR Number	
Control Section	0
11- Mile Point	0.0
12- Base Highway Network	0
13- LRS Route-Subroute	000.. -
19- Detour Length	10
20- Toll Facility	3
26- Functional Class	06
28A - Lanes On	2
29 - ADT	1155
30 - Year of ADT	1995
32- Appr Roadway Width	38.0
32A/B - Ap Pvt Type/Width	4 38.0
42A- Service Type On	1
47L - Left Horizontal Clear	0.0
47R- Right Horizontal Clear	24.3
53- Min Vert Clr Ov Deck	99 99
100- STRAHNET	0
102 - Traffic Direct	2
109 - Truck %	14
110 - Truck Network	0
114 - Future ADT	2067
115 - Year Future ADT	2023
Freeway	0

**Structure Appraisal**

36A- Bridge Railing	1
36B-Rail Transition	1
36C- Approach Rail	1
36D- Rail Termination	1
67- Structure Evaluation	
68- Deck Geometry	
69- Underclearance	
71- Waterway Adequacy	8
72- Approach Alignment	8
103- Temporary Structure	
113- Scour Criticality	U

**Miscellaneous**

37- Historical Significance	5
98A- Border Bridge State	
98B- Border Bridge %	
101- Parallel Structure	N
EPA ID	
Stay in Place Forms	

**Route Under Structure(UNDER Record)**

5A - Record Type	
5B - Route Signing	
5C - Level of Service	
5D - Route Number	
5E - Direction Suffix	
10L - Best 3m Unclr-Lt	
10R - Best 3m Unclr- Rt	
PR Number	
Control Section	
11- Mile Point	
12- Base Highway Network	
13- LRS Route-Subroute	
19- Detour Length	
20- Toll Facility	
26- Functional Class	
28B - Lanes Under	
29 - ADT	
30 - Year of ADT	
42B- Service Type Under	5
47L - Left Horizontal Clear	
47R- Right Horizontal Clear	
54A - Left Feature	N
54B- Left Underclearance	99 99
54C- Right Feature	N
54D- Right Underclearance	99 99
Under Clearance Year	
55A - Reference Feature	N
55B- Right Horiz Clearance	0
56- Left Horiz Clearance	0
100- STRAHNET	
102 - Traffic Direct	
109 - Truck %	
110 - Truck Network	
114 - Future ADT	
115 - Year Future ADT	
Freeway	

**Proposed Improvements**

75 - Type of Work	
76- Length of Improvement	
94- Bridge Cost	
95- Roadway Cost	
96- Total Cost	
97- Year of Cost Estimate	

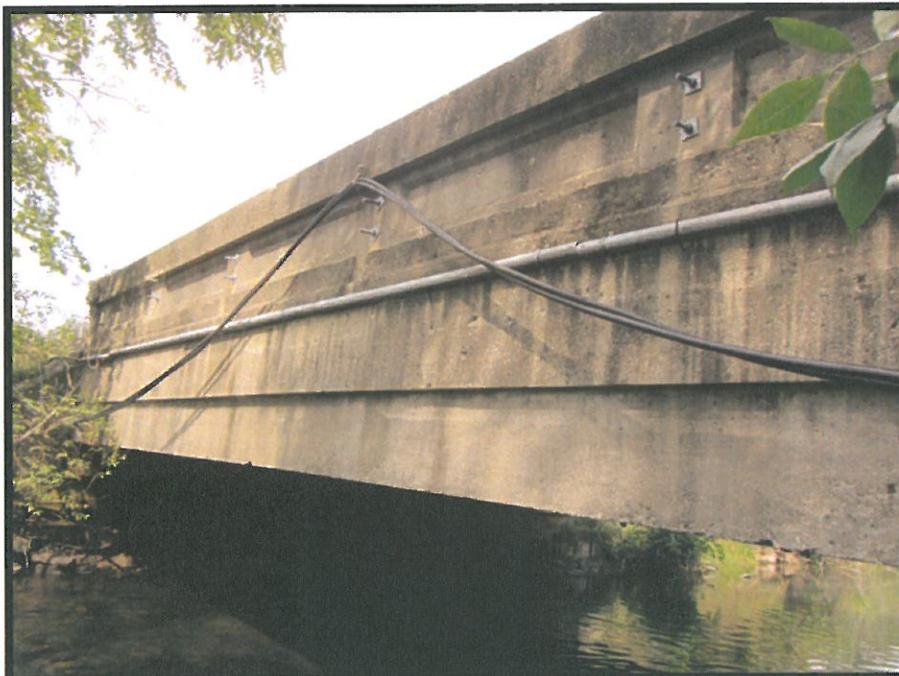
**Load Rating and Posting**

31- Design Load	0
41- Open, Posted, Closed	P
63- Oper Rtg Method	1
64F- Fed Rtg Method	35.5
64M- Mich Oper Rtg	9 53
65- Inv Rtg Method	1
66- Inventory Load	21.2
70- Posting	1
141- Posted Loading	183535
195- Analysis ID	
193- Overload Class	

CALHOUN COUNTY BRIDGE # 15P  
STRUCTURE #1310  
MARENGO TOWNSHIP  
9/5/2012



Elevation view of North fascia.



Elevation view of South fascia.

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STRUCTURE #1310  
MARENGO TOWNSHIP  
9/5/2012

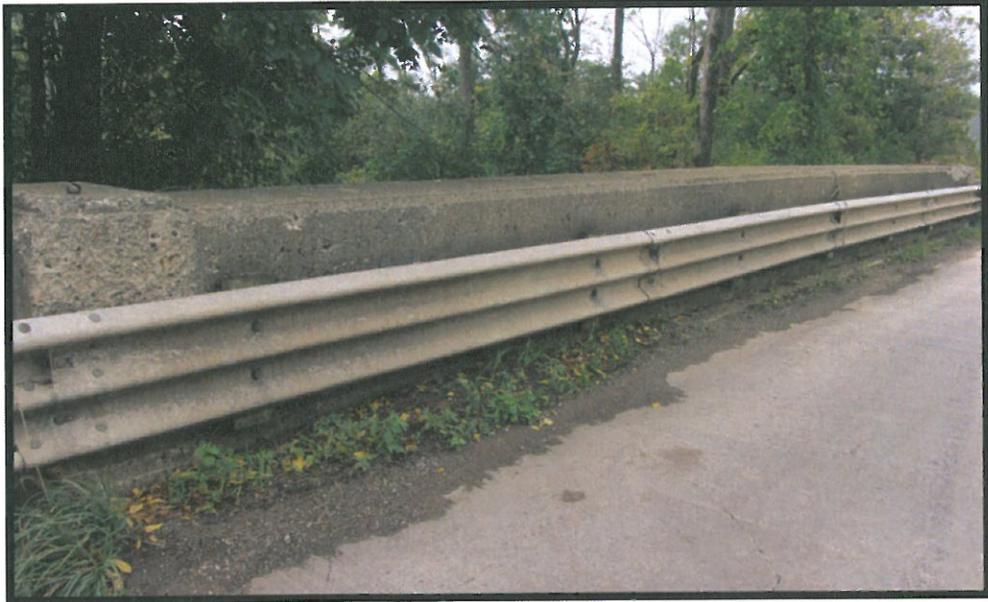


Looking west through bridge deck



Looking east from center of structure.

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South railing



Looking west through structure

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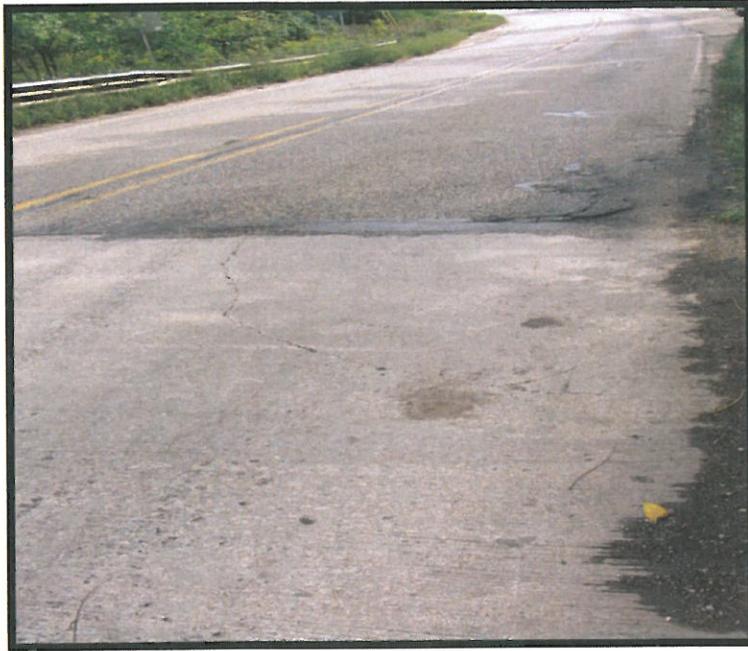


North barrier and railing and deck.



East end joint

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Looking east onto southeast quadrant of bridge deck and approach.



West end joint.

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Deterioration in south railing, west end.



Looking east along top of north barrier.

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Looking north off of structure



Looking south off of structure

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West Abutment.



East abutment

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Deteriorated concrete beam 2 West.



Bay 1W

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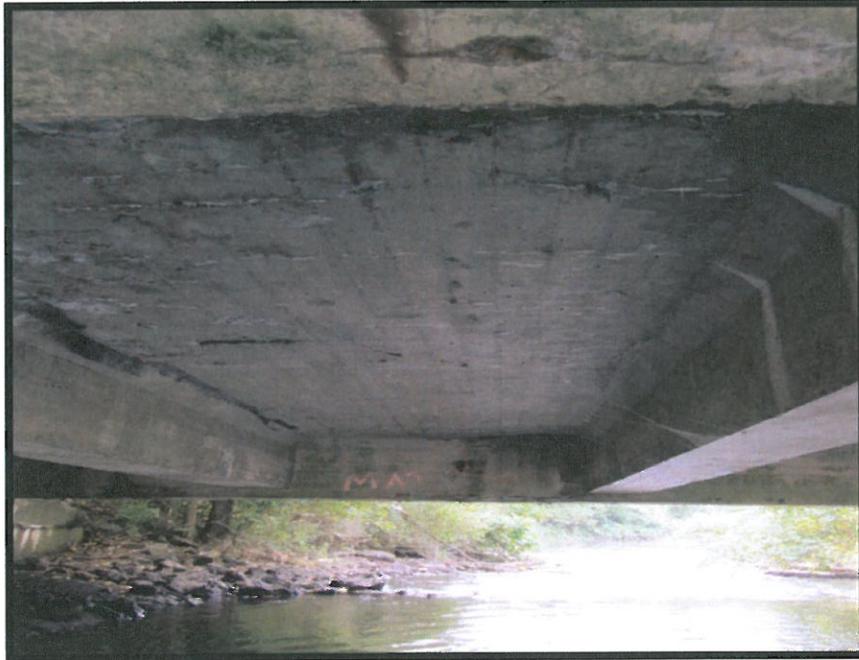


Bay 2W

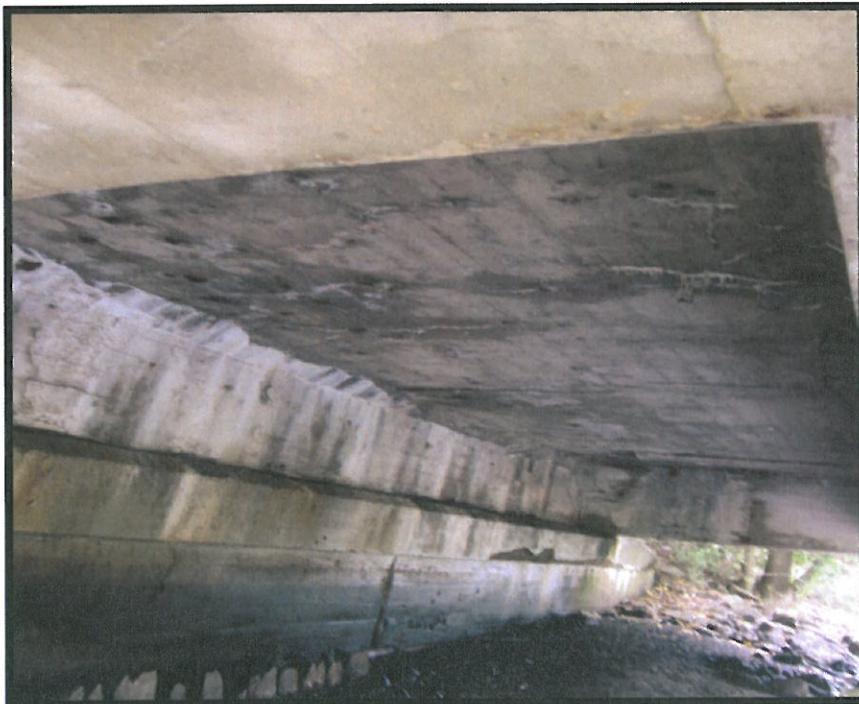


Bay 3W

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Bay 4w



Bay 5w

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North girder near east abutment



North girder near east abutment

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Deck bottom at northeast deck drain.



Deck bottom at southeast deck drain

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South girder



South East return wall (typ.)

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South girder, west end.



Spalling at southwest

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Northwest deck drain



Bridge plaque on north barrier.