

## Inspection Report with SI&A Data

**Structure Description:** 40.03 Foot - 3 Span Concrete Culvert (includes frame culverts)

**2 District:** 10      **3 County:** Perry      **16 Latitude:** 37°10'51.00"      **7 Longitude:** 83°08'58.00"

**7 Facility Carried:** KY-1166

**Milepoint:** 4.290

**6A Feature Intersected:** LEFT FORK OF MACES CREEK

**9 Location:** .05 MI W OF JCT KY 1165

|                   |   |
|-------------------|---|
| NBI               | X |
| Element           | X |
| Fracture Critical |   |
| Underwater        |   |
| Special           |   |

| NBI CONDITION RATINGS      |      |
|----------------------------|------|
| <b>58 Deck:</b>            | N    |
| <b>59 Superstructure:</b>  | N    |
| <b>60 Substructure:</b>    | N    |
| <b>61 Channel:</b>         | 7    |
| <b>62 Culvert:</b>         | 7    |
| <b>Sufficiency Rating:</b> | 33.5 |

| DESIGN                              |                       |
|-------------------------------------|-----------------------|
| <b>Substandard:</b>                 | Not Sub-Standard      |
| <b>43A Main Span Material:</b>      | (1) Concrete          |
| <b>43B Main Span Design:</b>        | (19) Culvert          |
| <b>45 Number of Spans Main:</b>     | 3                     |
| <b>44A Approach Span Material:</b>  | Not Applicable (0)    |
| <b>44B Approach Span Design:</b>    | Not Applicable (00)   |
| <b>46 Number of Approach Spans:</b> | 0                     |
| <b>107 Deck Type:</b>               | N/A (NBI)             |
| <b>108A Wearing Surface:</b>        | (N) N/A no deck (NBI) |
| <b>108B Membrane:</b>               | (N) N/A no deck (NBI) |
| <b>108C Deck Protection:</b>        | (N) N/A no deck (NBI) |
| <b>Overlay Y/N:</b>                 | No                    |
| <b>Overlay Type:</b>                | None                  |
| <b>Overlay Thickness:</b>           | -1.000 in             |
| <b>Overlay Date:</b>                |                       |

| APPRAISAL                                |                           |
|--|---------------------------|
| <b>36A Bridge Railings:</b>              | (0) Substandard           |
| <b>36B Transitions</b>                   | (0) Substandard           |
| <b>36C Approach Guardrail:</b>           | (0) Substandard           |
| <b>36D Approach Guardrail Ends:</b>      | (0) Substandard           |
| <b>71 Waterway Adequacy:</b>             | (8) Equal Desirable       |
| <b>72 Approach Alignment:</b>            | (3) Intolerable - Correct |
| <b>92A Fracture Critical Inspection:</b> | Not Coded                 |
| <b>92B Under Water Inspection:</b>       | No                        |
| <b>113 Scour Critical:</b>               | (8) Stable above footing  |
| <b>Recommended Scour Critical:</b>       | (8) Stable Above Footing  |

| LOAD RATINGS                    |                      |
|---------------------------------|----------------------|
| <b>63 Operating Type:</b>       | (1) Load Factor (LF) |
| <b>64 Operating Rating:</b>     | 25.0 tons            |
| <b>65 Inventory Type:</b>       | (1) Load Factor (LF) |
| <b>66 Inventory Rating:</b>     | 15.0 tons            |
| <b>Truck Capacity Type I:</b>   | tons                 |
| <b>Truck Capacity Type II:</b>  | tons                 |
| <b>Truck Capacity Type III:</b> | tons                 |
| <b>Truck Capacity Type IV:</b>  | tons                 |

| GEOMETRIC DATA                    |               |
|-----------------------------------|---------------|
| <b>48 Max Length Span:</b>        | 12.139 ft     |
| <b>49 Structure Length:</b>       | 40.026 ft     |
| <b>32 Approach Roadway:</b>       | 18.045 ft     |
| <b>33 Median:</b>                 | (0) No Median |
| <b>34 Skew:</b>                   | 0°            |
| <b>35 Flare:</b>                  | No Flare      |
| <b>50A Curb/Sidewalk Width L:</b> | 0.500 ft      |
| <b>50B Curb/Sidewalk Width R:</b> | 0.000 ft      |
| <b>47 Horiz. Clearance:</b>       | 19.357 ft     |
| <b>51 Width Curb to Curb:</b>     | 18.000 ft     |
| <b>52 Width Out to Out:</b>       | 20.670 ft     |

| ADMINISTRATIVE                        |                            |
|---------------------------------------|----------------------------|
| <b>27 Year Built:</b>                 | 1952                       |
| <b>106 Year Reconstructed:</b>        | 0                          |
| <b>42A Type of Service On:</b>        | (1) Highway                |
| <b>42B Type of Service Under:</b>     | (5) Waterway               |
| <b>37 Historical Significance:</b>    | (5) Not Eligible           |
| <b>21 Maintenance Responsibility:</b> | (01) State Hwy Agency      |
| <b>22 Owner:</b>                      | (01) State Hwy Agency      |
| <b>101 Parallel Structure:</b>        | (N) No II Structure Exists |

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

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

### Inspection Report with SI&A Data

**241: Re Conc Culvert**

| Units | Total Qty | Qty. St. 1 | % in 1 | Qty. St. 2 | % in 2 | Qty. St. 3 | % in 3 | Qty. St. 4 | % in 4 |
|-------|-----------|------------|--------|------------|--------|------------|--------|------------|--------|
| FT    | 63        | 55         | 87%    | 8          | 13%    | 0          | 0%     | 0          | 0%     |

Barrel ceilings have small spalls with short sections of re-bar exposed. Exposed steel has approximately 15 - 20% LOS. Light abrasion wear along the splash zone in barrels #1 and 2. Scour at the N/W corner wingwall footer is from the convergence of the right fork of Maces creek with the main fork at the structure. Footer is not undermined as yet and appears stable but needs stone placed to prevent further erosion and possible undermining.

**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 |
|-------|-----------|------------|--------|------------|--------|------------|--------|------------|--------|
| FT    | 6         | 0          | 0%     | 6          | 100%   | 0          | 0%     | 0          | 0%     |

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**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    | 1         | 0          | 0%     | 1          | 100%   | 0          | 0%     | 0          | 0%     |

Scour at the N/W corner wingwall footer is from the convergence of the right fork of Maces creek with the main fork at the structure. Footer is not undermined as yet and appears stable but needs stone placed to prevent further erosion and possible undermining.

**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    | 82        | 82         | 100%   | 0          | 0%     | 0          | 0%     | 0          | 0%     |

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### Inspection Report with SI&A Data

| 800: Culv Wingwall          |           |            |        |            |        |            |        |            |        |
|-----------------------------|-----------|------------|--------|------------|--------|------------|--------|------------|--------|
| Units                       | Total Qty | Qty. St. 1 | % in 1 | Qty. St. 2 | % in 2 | Qty. St. 3 | % in 3 | Qty. St. 4 | % in 4 |
| (LF)                        | 64        | 62         | 97%    | 2          | 3%     | 0          | 0%     | 0          | 0%     |
| The N/E wingwall has cracks |           |            |        |            |        |            |        |            |        |

| 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 |
| (LF)                          | 2         | 0          | 0%     | 2          | 100%   | 0          | 0%     | 0          | 0%     |
| -                             |           |            |        |            |        |            |        |            |        |

| 801: Culv Headwall                 |           |            |        |            |        |            |        |            |        |
|------------------------------------|-----------|------------|--------|------------|--------|------------|--------|------------|--------|
| Units                              | Total Qty | Qty. St. 1 | % in 1 | Qty. St. 2 | % in 2 | Qty. St. 3 | % in 3 | Qty. St. 4 | % in 4 |
| (LF)                               | 84        | 82         | 98%    | 2          | 2%     | 0          | 0%     | 0          | 0%     |
| Headwalls have some exposed steel. |           |            |        |            |        |            |        |            |        |

| 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 |
| (LF)                | 2         | 0          | 0%     | 2          | 100%   | 0          | 0%     | 0          | 0%     |
| -                   |           |            |        |            |        |            |        |            |        |

| 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)  | 82        | 0          | 0%     | 82         | 100%   | 0          | 0%     | 0          | 0%     |
| Both curbs and parapet walls have minor spalling. popouts from chemical contamination (de-icing). |           |            |        |            |        |            |        |            |        |

## Inspection Report with SI&A Data

| STRUCTURE NOTES |
|-----------------|
|                 |

| INSPECTION NOTES |
|------------------|
|                  |

| WORK   |
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| <b>Action:</b> -1 - Converted Work Candidates                                      |
| Small drift in front of barrel 1 needs removed. Generated by sherald on 12/13/2012 |