Structure Inventory and Appraisal Sheet (English Units)

Bridge Key: 11549 Agency ID: 097B00027N SR: 44.2 SD/FO: SD

IDENTIFICATION

State 1: 21 Kentucky
Struc Num 8: 097B00027N
Facility Carried 7: KY-2021
Location 9: 2.4 MI S.W. OF JCT KY 451
Rte.(On/Under)5A: Route On Structure
Rte. Signing Prefix 5B: 3 State Hwy
Level of Service 5C: 1 Mainline
Rte. Number 5D: 02021
Directional Suffix 5E: 0 N/A (NBI)
% Responsibility : Unknown
SHD District 2: District 10
County Code 3: Perry (097)
Place Code 4: FIPS 0000
Mile Post 11: 1.095 mi
Feature Intersected 6: WILLARD CREEK
Latitude 16: 37d 15' 03"
Longitude 17: 083d 18' 31"
Border Bridge Code 98: Unknown (P)
Border Bridge Number 99:

INSPECTION

Frequency 91: 24 months
Inspection Date 90: 3/6/2012
Next Inspection: 03/06/2014
FC Frequency 92A: NA
FC Inspection Date 93A: NA
Next FC Inspection: NA
UW Frequency 92B: NA
UW Inspection Date 93B: NA
Next UW Inspection: NA
SI Frequency 92C: NA
SI Date 93C: NA
Next SI: NA
Element Frequency: 24 months
Element Inspection Date: 03/06/2012
Next Elem. Insp. Due: 03/06/2014

CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy
Parallel Structure 101: No || bridge exists
Direction of Traffic 102: 2 2-way traffic
Temporary Structure 103: Not Applicable (P)
Highway System 104: 0 Not on NHS
NBIS Length 112: Long Enough
Toll Facility 20: 3 On free road
Functional Class 26: 09 Rural Local
Defense Hwy 110: 0 Not a STRAHNET hwy
Historical Significance 37: 5 Not eligible for NRHP
Owner 22: 01 State Highway Agency
Custodian 21: 01 State Highway Agency

STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 0
Number of Spans Main Unit 45: 2
Main Span Material/Design 43A/B:
5 Prestressed Concrete
05 Multiple Box Beam
Deck Type 107: 2 Concrete Precast Panel
Wearing Surface 108A: 1 Monolithic Concrete
Membrane 108B: 0 None
Deck Protection 108C: None

CONDITION

Deck 58: 4 Poor
Super 59: 6 Satisfactory
Sub 60: 5 Fair
Culvert 62: N N/A (NBI)
Channel/Channel Protection 61: 7 Minor Damage

LOAD RATING AND POSTING

Inventory Rating Method 65: 2 AS Allowable Stress
Operating Rating Method 63: 2 AS Allowable Stress
Inventory Rating 66: HS17.8
Operating Rating 64: HS29.5
Design Load 31: 2 M 13.5 (H 15)
Posting 70: 5 At/Above Legal Loads
Posting status 41: A Open, no restriction

AGE AND SERVICE

Year Built 27: 1975
Year Reconstructed 106: 0
Type of Service on 42A: 1 Highway
Type of Service under 42B: 5 Waterway
Lanes on 28A: 2
Lanes Under 28B: 0
Detour Length 19: 98.8 mi
ADT 29: 636
Truck ADT 109: %
Year of ADT 30: 2011

APPRAISAL

Bridge Rail 36A: 0 Substandard
Approach Rail 36C: 0 Substandard
Transition 36B: 0 Substandard
Approach Rail Ends 36D: 0 Substandard
Str. Evaluation 67: 5
Deck Geometry 68: 2 Intolerable - Replace
Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)
Waterway Adequacy 71: 8 Equal Desirable
Approach Alignment 72: 2 Intolerable - Replace
Scour Critical 113: 8 Stable Above Footing

GEOMETRIC DATA

Length Max Span 48: 21.0 ft
Structure Length 49: 42.0 ft
Curb/Sdwlk Width L 50A: 0.0 ft
Curb/Sidewalk Width R 50B: 0.0 ft
Width Curb to Curb 51: 16.7 ft
Width Out to Out 52: 18.0 ft
Approach Roadway Width 32: (w/ shoulders) 18.0 ft
Median 33: 0 No median
Deck Area: 757.8 sq. ft
Skew 34: 35.00 °
Structure Flared 35: 0 No flare
Vertical Clearance 10: 99.99 ft
Horiz. Clearance 47: 16.40 ft
Minimum Vertical Clearance Over Bridge 53: 328.1 ft
Minimum Vertical Underclearance Reference 54A: N Feature not hwy or RR
Minimum Vertical Underclearance 54B: 0.0 ft
Minimum Lateral Underclearance Reference R 55A: N Feature not hwy or RR
Minimum Lateral Underclearance R 55: 0.0 ft
Minimum Lateral Underclearance L 56: 0.0 ft

PROPOSED IMPROVEMENTS

Bridge Cost 94: $ 96,000
Type of Work 75: 34 Widen w/ Deck Reha
Roadway Cost 95: $ 0
Length of Improvement 76: 4.3 ft
Total Cost 96: $ 95,000
Future ADT 114: 775
Year of Cost Estimate 97: 1994
Year of Future ADT 115: 2031

NAVIGATION DATA

Navigation Control 38: 0 Permit Not Required
Vertical Clearance 39: 0.0 ft
Horizontal Clearance 40: 0.0 ft
Pier Protection 111: Not Applicable (P)
Lift Bridge Vertical Clearance 116:

ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
1	12/1	Bare Concrete Deck	(SF)	677	0 %	0	0 %	0	0 %	0	100 %	677	0 %	0
1	104/1	P/S Conc Box Girder	(LF)	246	0 %	0	100 %	246	0 %	0	0 %	0	0 %	0
1	211/1	Other Mtl Pier Wall	(LF)	24	0 %	0	100 %	24	0 %	0	0 %	0	0 %	0
1	217/1	Other Mtl Abutment	(LF)	48	0 %	0	100 %	48	0 %	0	0 %	0	0 %	0
1	234/1	R/Conc Cap	(LF)	28	100 %	28	0 %	0	0 %	0	0 %	0	0 %	0
1	334/1	Metal Rail Coated	(LF)	82	76 %	62	24 %	20	0 %	0	0 %	0	0 %	0

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1	361/1	Scour Smart Flag	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	503/1	Curbs	(LF)	82	0 %	0	100 %	82	0 %	0	0 %	0	0 %	0
1	606/1	Drains	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0
1	608/1	Long. Shear Keys	(EA)	1	0 %	0	0 %	0	0 %	0	100 %	1	0 %	0
1	612/1	Chan Algn	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
1	613/1	Vegetation	(EA)	1	100 %	1	0 %	0	0 %	0	0 %	0	0 %	0

Str Unit	Elm/Env	Description	Element Notes
1	12/1	Concrete Deck - Bare	Deck surface is in poor condition with failed and failing grout, spalled longitudinal joint keyways, joints leaky, moderate curb damage, potholes, spalls, NEEDS REFLECTIVE OVERLAY. Recent maintenance.
1	104/1	P/S Conc Closed Web/Box Girder	< none >
1	211/1	Other Material Pier Wall	< none >
1	217/1	Other Material Abutment	< none >
1	234/1	Reinforced Conc Cap	< none >
1	334/1	Metal Bridge Railing - Coated	< none >
1	361/1	Scour	< none >
1	503/1	Reinforced Concrete Curbs and Tir	Concrete curbs have several small spalls from traffic impact breaking out the guardrail anchorage and spalling the curb.
1	606/1	Drains	< none >
1	608/1	Longitudinal Shear Keys	Longitudinal joints are leaking heavily. Bottom of the beams have moderate to heavy efflorescence with 4" 'icicles'. Tops of the grouted joints have, and are failing. Several resulting potholes. Deck surface is rough, poor riding surface.
1	612/1	Channel Alignment	< none >
1	613/1	Vegetation	< none >

BRIDGE NOTES

NEED OVERLAY

PAST INSPECTION

Inspection Date: 03/06/2012 Type: 2 Standard (24 months)

Inspector: DWATTS Pontis User Key: DWATTS - Doug W

Scope:

NBI: ☒ Other: ☐ Element: ☒

Underwater: ☐ Fracture Critical: ☐

INSPECTION NOTES

NEEDS REFLECTIVE OVERLAY, see PONTIS. Recent maintenance. sub/superstructure with light to moderate det. throughout.