HistoricBridges.org - National Bridge Inventory Data Sheet

2010 Inventory

The National Bridge Inventory contains data submitted by state transportion departments to the Federal Highway Administration in coded format.
Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

Basic Information

Michigan [26]	Eaton County [045]	Chester [15260]	9.5 MI NW OF CHARLOTTE	42-40-10 = 42.669444	084-55-33 = -84.925833

23123052000B020	Highway agency district: 6	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		
Route: 50		M-50	Toll: On free road [3]	Features intersected: THORNAPPLE RIVER	
Design - main: Steel [3]		Design - approach:		Kilometerpoint: 1601.5 km = 992.9 mi	
1	Stringer/Multi-beam or girder [02]	0	Other [00]	Year built: 1931	Year reconstructed: 1967
				Skew angle: 0	Structure Flared:
				Historical significance: Bridge is not eligible for the NRHP. [5]	

Total length: 16.7 m = 54.8 ft	Length of maximum span: 16.7 m = 54.8 ft	Deck width, out-to-out: 14.1 m = 46.3 ft	Bridge roadway width, curb-to-curb: 12.2 m = 40.0 ft				
Inventory Route, Total Horizontal Clearance: 13.1 m = 43.0 ft	Curb or sidewalk width - left: 0.4 m = 1.3 ft	Curb or sidewalk width - right: 0.4 m = 1.3 ft					
Deck structure type: Concrete Cast-in-Place [1]							
Type of wearing surface: Bituminous [6]							
Deck protection:							
Type of membrane/wearing surface: Preformed Fabric [2]							

Weight Limits

Bypass, detour length	Method to determine inventory rating: Allowable Stress(AS) [2]		Inventory rating: 31.5 metric ton = 34.7 tons		
0.6 km = 0.4 mi	Method to determine operating rating: Load Factor(LF) [1]		Operating rating: 52.6 metric ton = 57.9 tons		
	Bridge posting: Equal to or above legal loads [5]		Design Load: M 13.5 / H 15 [2]		

Functional Details

Average Daily Traffic	2443	Average daily truck traffi	16 %	Year	2007	Future average daily traffic	3460
Year	2018						
Road classification	Minor Arterial (Rural) [06]	Lanes on structure	2	Approach roadway width	13.1 m = 43.0 ft		
Type of service on bridge	Highway [1]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designation	No parallel structure exists. [N]						
Type of service under bridge	Waterway [5]	Lanes under structure	0	Navigation control			
Navigation vertical clearanc	0 = N/A	Navigation horizontal clearance	0 = N/A				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	99.99 m = 328.1 ft				
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]						
Minimum lateral underclearance on right	99.9 = Unlimited	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	0 = N/A	Minimum vertical underclearance reference feature	Feature not a highway or railroad [N]				
Appraisal ratings - underclearances	N/A [N]						

Repair and Replacement Plans

Type of work to be performed

Bridge deck replacement with only incidental widening. [37]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	26000	Roadway improvement cost	3000
Length of structure improvement	16.8 m = 55.1 ft	Total project cost	31000
Year of improvement cost estimate			
Border bridge - state		Border bridge - percent responsibility of other state	
Border bridge - structure number			

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Equal to present minimum criteria [6]
Condition ratings - superstructur	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Equal to present minimum criteria [6]
Condition ratings - deck	Fair [5]		

Scour	Bridge is scour critical; bridge foundations determined to be unstable. [3]
Channel and channel protection	Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly. [6]

Appraisal ratings - water adequacy	Somewhat better than minimum adequacy to tolerate being left in place as is [5]	Status evaluation	
Pier or abutment protection		Sufficiency rating	92

Culverts	Not applicable. Used if structure is not a culvert. [N]

Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - transitions	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]

Inspection date	June 2009 [0609]	Designated inspection frequency	24	Months

Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Not needed [N]	Fracture critical inspection date	
Other special inspection	Not needed [N]	Other special inspection date	