

HistoricBridges.org - National Bridge Inventory Data Sheet

2010 Inventory

The National Bridge Inventory contains data submitted by state transportation 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]	Ionia County [067]	Ionia [40880]	2.6 MI E OF M-66	42-59-29 = 42.991389	085-01-42 = - 85.028333
34134062000B010	Highway agency district 3	Owner State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route 21	M-21	Toll On free road [3]	Features intersected PRAIRIE CREEK		
Design - main 1	Steel [3] Stringer/Multi-beam or girder [02]	Design - approach 0	Other [00]	Kilometerpoint 1317.1 km = 816.6 mi	Year built 1929
				Year reconstructed N/A [0000]	Skew angle 10
				Structure Flared	Historical significance Bridge is not eligible for the NRHP. [5]
Total length 15.2 m = 49.9 ft	Length of maximum span 15.2 m = 49.9 ft	Deck width, out-to-out 13.8 m = 45.3 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					

Weight Limits

Bypass, detour length 0.6 km = 0.4 mi	Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating	26.4 metric ton = 29.0 tons
	Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating	67.3 metric ton = 74.0 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]	

Functional Details

Average Daily Traffic	8456	Average daily truck traffi	5	%	Year	2007	Future average daily traffic	8986	Year	2018
Road classification	Minor Arterial (Urban) [16]		Lanes on structure	2		Approach roadway width	12.2 m = 40.0 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	Work done by	Work to be done by contract [1]		
Bridge deck replacement with only incidental widening. [37]	Bridge improvement cost	45000	Roadway improvement cost	2000
	Length of structure improvement	15.2 m = 49.9 ft	Total project cost	27000
	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 - superstructure	Satisfactory [6]	Appraisal ratings - roadway alignment	Better than present minimum criteria [7]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - deck	Fair [5]		
Scour	Bridge is scour critical; bridge foundations determined to be unstable. [3]		
Channel and channel protection	Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift. [7]		
Appraisal ratings - water adequacy	Equal to present desirable criteria [8]	Status evaluation	
Pier or abutment protection		Sufficiency rating	90.6
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings	Inspected feature meets currently acceptable standards. [1]		
Traffic safety features - transitions	Inspected feature meets currently acceptable standards. [1]		
Traffic safety features - approach guardrail	Inspected feature meets currently acceptable standards. [1]		
Traffic safety features - approach guardrail ends	Inspected feature meets currently acceptable standards. [1]		
Inspection date	March 2009 [0309]	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	