HistoricBridges.org - National Bridge Inventory Data Sheet

2012 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]	Dickinson County [043]	Felch [27660]	2 MI N OF FELCH	46-01-39 = 46.027500	087-50-04 = -87.834444

2198	Highway agency district	1	Owner	County Highway Agency [02]	Maintenance responsibility	County Highway Agency [02]	
Route	2245		COUNTY HWY 581	Toll	On free road [3]	Features intersected	E BR STURGEON RIVER

Design - main	Concrete [1]	Design - approach		Kilometerpoint	156.9 km = 97.3 mi		
1	Girder and floorbeam system [03]	0	Other [00]	Year built	1927	Year reconstructed	
				Skew angle	0	Structure Flared	
				Historical significance	Bridge is not eligible for the NRHP. [5]		

Total length	10.6 m = 34.8 ft	Length of maximum span	9.7 m = 31.8 ft	Deck width, out-to-out	8.1 m = 26.6 ft	Bridge roadway width, curb-to-curb	6.7 m = 22.0 ft
Inventory Route, Total Horizontal Clearance	6.7 m = 22.0 ft	Curb or sidewalk width - left	0 m = 0.0 ft	Curb or sidewalk width - right	0 m = 0.0 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	Method to determine inventory rating	Allowable Stress(AS) [2]	Inventory rating	29.1 metric ton = 32.0 tons	
5.3 km = 3.3 mi	Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating	49.1 metric ton = 54.0 tons	
	Bridge posting	Equal to or above legal loads [5]	Design Load		

Functional Details

Average Daily Traffic	250	Average daily truck traffi	5 %	Year	1997	Future average daily traffic	450
Year	2017						
Road classification	Major Collector (Rural) [07]	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

Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	183000	Roadway improvement cost	19000
Length of structure improvement	13 m = 42.7 ft	Total project cost	253000
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	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - superstructur	Fair [5]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Satisfactory [6]		

Scour	Bridge is scour critical; bridge foundations determined to be unstable. [3]
Channel and channel protection	Bank and embankment protection is severely undermined. River control devices have severe damage. Large deposits of debris are in the channel. [4]

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	69

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	October 2010 [1010]	Designated inspection frequency	24	Months

Underwater inspection	Unknown [Y60]	Underwater inspection date	August 2009 [0809]
Fracture critical inspection	Not needed [N]	Fracture critical inspection date	
Other special inspection	Not needed [N]	Other special inspection date	