

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]	Gratiot County [057]	Sumner [77300]	SEC 27-34 SUMNER TWP	43-18-24 = 43.306667	084-47-00 = - 84.783333
29200016000B020	Highway agency district 4	Owner County Highway Agency [02]	Maintenance responsibility	County Highway Agency [02]	
Route 2954		ST CHARLES ROAD	Toll On free road [3]	Features intersected PINE RIVER	
Design - main	Concrete [1]	Design - approach		Kilometerpoint 502.9 km = 311.8 mi	
1	Girder and floorbeam system [03]	0	Other [00]	Year built 1925	Year reconstructed N/A [0000]
				Skew angle 15	Structure Flared
				Historical significance	Bridge is not eligible for the NRHP. [5]
Total length	27.4 m = 89.9 ft	Length of maximum span	25.9 m = 85.0 ft	Deck width, out-to-out	7.8 m = 25.6 ft
Inventory Route, Total Horizontal Clearance	6 m = 19.7 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	13.6 metric ton = 15.0 tons
0.5 km = 0.3 mi	Method to determine operating rating	Allowable Stress(AS) [2]	Operating rating	32.7 metric ton = 36.0 tons
	Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18+Mod / HS 20+Mod [6]

Functional Details

Average Daily Traffic	610	Average daily truck traffi	0	%	Year	2003	Future average daily traffic	820	Year	2023
Road classification	Major Collector (Rural) [07]		Lanes on structure	2		Approach roadway width	7.9 m = 25.9 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]		
Replacement of bridge or other structure because of substandard load carrying capacity or substantial bridge roadway geometry. [31]	Bridge improvement cost	263000	Roadway improvement cost	40000
	Length of structure improvement	32 m = 105.0 ft	Total project cost	320000
	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	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - superstructure	Fair [5]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Fair [5]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of corrective action [3]
Condition ratings - deck	Poor [4]		
Scour	Bridge with "unknown" foundation that has not been evaluated for scour. [U]		
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	Better than present minimum criteria [7]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	39
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			
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends			
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	