

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

Pennsylvania [42]	Allegheny County [003]	Elizabeth [22992]	ELIZABETH BORO,MON.RIVER	40-16-22 = 40.272778	079-53-07 = - 79.885278
020051011000000	Highway agency district 11	Owner State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route 51	North [1]	ELIZ. BR SR51	Toll On free road [3]	Features intersected SR837 2001 CSX NS MON RI	
Design - main	Steel continuous [4]	Design - approach	Steel [3]	Kilometerpoint	866.6 km = 537.3 mi
3	Truss - Thru [10]	13	Stringer/Multi-beam or girder [02]	Year built	1951
				Year reconstructed	1985
				Skew angle	99
				Structure Flared	
				Historical significance	Bridge is not eligible for the NRHP. [5]
Total length	457.8 m = 1502.0 ft	Length of maximum span	137.2 m = 450.2 ft	Deck width, out-to-out	17.1 m = 56.1 ft
Inventory Route, Total Horizontal Clearance	7.9 m = 25.9 ft	Curb or sidewalk width - left	2.7 m = 8.9 ft	Curb or sidewalk width - right	0.2 m = 0.7 ft
Deck structure type	Closed Grating [4]				
Type of wearing surface	Bituminous [6]				
Deck protection					
Type of membrane/wearing surface					

Weight Limits

Bypass, detour length	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	26.3 metric ton = 28.9 tons
1.8 km = 1.1 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	44.5 metric ton = 49.0 tons
	Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]

Functional Details

Average Daily Traffic	16798	Average daily truck traffi	8	%	Year	2010	Future average daily traffic	45700	Year	2022
Road classification	Other Principal Arterial (Urban) [14]		Lanes on structure	4		Approach roadway width	16.2 m = 53.2 ft			
Type of service on bridge	Highway-pedestrian [5]		Direction of traffic	2 - way traffic [2]		Bridge median	Closed median with non-mountable bar			
Parallel structure designation	No parallel structure exists. [N]									
Type of service under bridge	Highway-waterway-railroad [Lanes under structure	22		Navigation control	Navigation control on waterway (bridge permit required). [1]			
Navigation vertical clearanc	50 m = 164.1 ft		Navigation horizontal clearance	450 m = 1476.5 ft						
Minimum navigation vertical clearance, vertical lift bridge						Minimum vertical clearance over bridge roadway	6 m = 19.7 ft			
Minimum lateral underclearance reference feature	Highway beneath structure [H]									
Minimum lateral underclearance on right	2.9 m = 9.5 ft					Minimum lateral underclearance on left	0 = N/A			
Minimum Vertical Underclearance	5 m = 16.4 ft		Minimum vertical underclearance reference feature	Highway beneath structure [H]						
Appraisal ratings - underclearances	Meets minimum tolerable limits to be left in place as is [4]									

Repair and Replacement Plans

Type of work to be performed	Work done by	Work to be done by owner's forces [2]		
Bridge rehabilitation because of general structure deterioration or inadequate strength. [35]	Bridge improvement cost	1000	Roadway improvement cost	2000
	Length of structure improvement	690 m = 2263.9 ft	Total project cost	10000
	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	Poor [4]	Appraisal ratings - roadway alignment	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - substructure	Fair [5]	Appraisal ratings - deck geometry	Meets minimum tolerable limits to be left in place as is [4]
Condition ratings - deck	Fair [5]		
Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]		
Channel and channel protection	Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and rush restrict the channel. [5]		
Appraisal ratings - water adequacy	Superior to present desirable criteria [9]	Status evaluation	Structurally deficient [1]
Pier or abutment protection		Sufficiency rating	32.1
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions	Inspected feature meets currently acceptable standards. [1]		
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends	Inspected feature meets currently acceptable standards. [1]		
Inspection date	April 2009 [0409]	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	