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

Pennsylvania [42]	Fayette County [051]	German [28856]	MASONTOWN BRIDGE	39-51-14 = 39.853889	079-55-42 = -79.928333

260021001000000	Highway agency district	12	Owner	State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route	21		SR 0021	Toll	On free road [3]	Features intersected	PVT RD, NS R/R, MON RIV

Design - main	Steel [3]	Design - approach	Steel [3]	Kilometerpoint	0 km = 0.0 mi		
5	Truss - Thru [10]	6	Girder and floorbeam system [03]	Year built	1925	Year reconstructed	1993
				Skew angle	0	Structure Flared	
				Historical significance	Bridge is not eligible for the NRHP. [5]		

Total length	444.1 m = 1457.1 ft	Length of maximum span	122.5 m = 401.9 ft	Deck width, out-to-out	7.6 m = 24.9 ft	Bridge roadway width, curb-to-curb	7.3 m = 24.0 ft
Inventory Route, Total Horizontal Clearance	7.3 m = 24.0 ft	Curb or sidewalk width - left	0 m = 0.0 ft	Curb or sidewalk width - right	1.8 m = 5.9 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	Load Factor(LF) [1]	Inventory rating	23.6 metric ton = 26.0 tons	
3.1 km = 1.9 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	39 metric ton = 42.9 tons	
	Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]	

Functional Details

Average Daily Traffic	7390	Average daily truck traffi	5 %	Year	2008	Future average daily traffic	11461
Year	2027						
Road classification	Principal Arterial - Other (Rural) [02]	Lanes on structure	2	Approach roadway width	7.3 m = 24.0 ft		
Type of service on bridge	Highway-pedestrian [5]	Direction of traffic	2 - way traffic [2]	Bridge median			
Parallel structure designation	No parallel structure exists. [N]						
Type of service under bridge	Highway-waterway-railroad [	Lanes under structure	4	Navigation control	Navigation control on waterway (bridge permit required). [1]		
Navigation vertical clearanc	753.4 m = 2471.9 ft	Navigation horizontal clearance	5101.9 m = 16739.3 ft				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	5 m = 16.4 ft				
Minimum lateral underclearance reference feature	Highway beneath structure [H]						
Minimum lateral underclearance on right	99.9 = Unlimited	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	6 m = 19.7 ft	Minimum vertical underclearance reference feature	Highway beneath structure [H]				
Appraisal ratings - underclearances	Superior to present desirable criteria [9]						

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	2000	Roadway improvement cost	6000
Length of structure improvement	457 m = 1499.4 ft	Total project cost	29000
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 - superstructur	Poor [4]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Fair [5]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Fair [5]		

Scour	Bridge foundations determined to be stable for assessed or calculated scour conditions; field review indicates action is required. [4]
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	29.5

Culverts	Not applicable. Used if structure is not a culvert. [N]
Traffic safety features - railings	
Traffic safety features - transitions	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail	
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]

Inspection date	October 2008 [1008]	Designated inspection frequency	24	Months

Underwater inspection	Every two years [Y24]	Underwater inspection date	October 2009 [1009]
Fracture critical inspection	Not needed [N]	Fracture critical inspection date	
Other special inspection	Every year [Y12]	Other special inspection date	