

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]	Chester County [029]	Newlin [53784]	NEAR KINGS RANCH 38F01	39-56-12 = 39.936667	075-46-30 = -75.775000
153049006017910	Highway agency district 6	Owner State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route 0		BRANDYWINE CK.ROAD	Toll On free road [3]	Features intersected BUCK RUN & DOE RUN	
Design - main	Masonry [8]	Design - approach		Kilometerpoint 441.6 km = 273.8 mi	
3	Arch - Deck [11]	0	Other [00]	Year built 1915	Year reconstructed N/A [0000]
				Skew angle 0	Structure Flared
				Historical significance Bridge is not eligible for the NRHP. [5]	
Total length 20.7 m = 67.9 ft	Length of maximum span 7.3 m = 24.0 ft	Deck width, out-to-out 5.7 m = 18.7 ft	Bridge roadway width, curb-to-curb 5.4 m = 17.7 ft		
Inventory Route, Total Horizontal Clearance 5.4 m = 17.7 ft	Curb or sidewalk width - left 0 m = 0.0 ft	Curb or sidewalk width - right 0 m = 0.0 ft			
Deck structure type	Not applicable [N]				
Type of wearing surface	Not applicable (applies only to structures with no deck) [N]				
Deck protection	Not applicable (applies only to structures with no deck) [N]				
Type of membrane/wearing surface	Not applicable (applies only to structures with no deck) [N]				

Weight Limits

Bypass, detour length 1.8 km = 1.1 mi	Method to determine inventory rating	No rating analysis performed [5]	Inventory rating	24.5 metric ton = 27.0 tons
	Method to determine operating rating	No rating analysis performed [5]	Operating rating	41.7 metric ton = 45.9 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	M 13.5 / H 15 [2]	

Functional Details

Average Daily Traffic	251	Average daily truck traffi	9	%	Year	2009	Future average daily traffic	150	Year	1985
Road classification	Minor Collector (Rural) [08]		Lanes on structure	2		Approach roadway width	5.8 m = 19.0 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	10 m = 32.8 ft			
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]									
Minimum lateral underclearance on right	0 = N/A					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]			
Other structural work, including hydraulic replacements. [38]	Bridge improvement cost	0	Roadway improvement cost	0	
	Length of structure improvement	21 m = 68.9 ft		Total project cost	1000
	Year of improvement cost estimate				
	Border bridge - state		Border bridge - percent responsibility of other state		
	Border bridge - structure number				

Inspection and Sufficiency

Structure status	<input type="text" value="Posted for load [P]"/>	Appraisal ratings - structural	<input type="text" value="Meets minimum tolerable limits to be left in place as is [4]"/>
Condition ratings - superstructure	<input type="text" value="Fair [5]"/>	Appraisal ratings - roadway alignment	<input type="text" value="Equal to present desirable criteria [8]"/>
Condition ratings - substructure	<input type="text" value="Poor [4]"/>	Appraisal ratings - deck geometry	<input type="text" value="Basically intolerable requiring high priority of replacement [2]"/>
Condition ratings - deck	<input type="text" value="Not Applicable [N]"/>		
Scour	<input type="text" value="Bridge is scour critical; bridge foundations determined to be unstable. [3]"/>		
Channel and channel protection	<input type="text" value="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	<input type="text" value="Superior to present desirable criteria [9]"/>	Status evaluation	<input type="text" value="Structurally deficient [1]"/>
Pier or abutment protection	<input type="text"/>	Sufficiency rating	<input type="text" value="46.2"/>
Culverts	<input type="text" value="Not applicable. Used if structure is not a culvert. [N]"/>		
Traffic safety features - railings	<input type="text"/>		
Traffic safety features - transitions	<input type="text"/>		
Traffic safety features - approach guardrail	<input type="text"/>		
Traffic safety features - approach guardrail ends	<input type="text"/>		
Inspection date	<input type="text" value="May 2009 [0509]"/>	Designated inspection frequency	<input type="text" value="12"/> Months
Underwater inspection	<input type="text" value="Not needed [N]"/>	Underwater inspection date	<input type="text"/>
Fracture critical inspection	<input type="text" value="Not needed [N]"/>	Fracture critical inspection date	<input type="text"/>
Other special inspection	<input type="text" value="Not needed [N]"/>	Other special inspection date	<input type="text"/>

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Basic Information

Pennsylvania [42]	Chester County [029]	Newlin [53784]	NEAR KINGS RANCH 38F01	39-56-10 = 39.936111	075-46-29 = - 75.774722
153049007000000	Highway agency district 6	Owner State Highway Agency [01]	Maintenance responsibility	State Highway Agency [01]	
Route 0		BRANDYWINE CK.ROAD	Toll On free road [3]	Features intersected BUCK & DOE RUN	
Design - main	Steel [3]	Design - approach		Kilometerpoint 498.7 km = 309.2 mi	
2	Stringer/Multi-beam or girder [02]	0	Other [00]	Year built 1937	Year reconstructed N/A [0000]
				Skew angle 0	Structure Flared
				Historical significance Bridge is not eligible for the NRHP. [5]	
Total length 21.3 m = 69.9 ft	Length of maximum span 10.4 m = 34.1 ft	Deck width, out-to-out 6.4 m = 21.0 ft	Bridge roadway width, curb-to-curb 5.8 m = 19.0 ft		
Inventory Route, Total Horizontal Clearance 5.8 m = 19.0 ft	Curb or sidewalk width - left 0 m = 0.0 ft	Curb or sidewalk width - right 0 m = 0.0 ft			
Deck structure type	Open Grating [3]				
Type of wearing surface					
Deck protection					
Type of membrane/wearing surface					

Weight Limits

Bypass, detour length 1.8 km = 1.1 mi	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating 21.8 metric ton = 24.0 tons
	Method to determine operating rating	Load Factor(LF) [1]	Operating rating 36.3 metric ton = 39.9 tons
Bridge posting 10.0 - 19.9 % below [3]	Design Load	M 13.5 / H 15 [2]	

Functional Details

Average Daily Traffic	251	Average daily truck traffi	9	%	Year	2009	Future average daily traffic	100	Year	1983
Road classification	Minor Collector (Rural) [08]		Lanes on structure	2		Approach roadway width	6.7 m = 22.0 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	10 m = 32.8 ft						
Minimum lateral underclearance reference feature	Feature not a highway or railroad [N]									
Minimum lateral underclearance on right	0 = N/A					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]		
Other structural work, including hydraulic replacements. [38]	Bridge improvement cost	0	Roadway improvement cost	0
	Length of structure improvement	21 m = 68.9 ft	Total project cost	0
	Year of improvement cost estimate			
	Border bridge - state		Border bridge - percent responsibility of other state	
	Border bridge - structure number			

Inspection and Sufficiency

Structure status

Posted for load [P]

Appraisal ratings -
structural

Meets minimum tolerable limits to be left in place as is [4]

Condition ratings - superstructure

Fair [5]

Appraisal ratings -
roadway alignment

Somewhat better than minimum adequacy to tolerate being left in place as is [5]

Condition ratings - substructure

Poor [4]

Appraisal ratings -
deck geometry

Basically intolerable requiring high priority of corrective action [3]

Condition ratings - deck

Good [7]

Scour

Bridge is scour critical; bridge foundations determined to be unstable. [3]

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

Better than present minimum criteria [7]

Status evaluation

Structurally deficient [1]

Pier or abutment protection

Sufficiency rating

41.1

Culverts

Not applicable. Used if structure is not a culvert. [N]

Traffic safety features - railings

Traffic safety features - transitions

Traffic safety features - approach guardrail

Traffic safety features - approach guardrail ends

Inspection date

May 2008 [0508]

Designated inspection frequency

12

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