

# HistoricBridges.org - National Bridge Inventory Data Sheet

2012 Inventory

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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

New York [36]	Richmond County [085]	New York [51000]	ARTHUR KILL	40-31-29 = 40.524722	074-14-51 = - 74.247500
5523069	Highway agency district	#Num!	Owner	Local Toll Authority [32]	Maintenance responsibility
Local Toll Authority [32]					
Route	440		RTE 440	Toll	Toll bridge [1]
Features intersected	ARTHUR KILL				
Design - main	Steel [3]	Design - approach		Kilometerpoint	32.2 km = 20.0 mi
7	Truss - Thru [10]	0	Other [00]	Year built	1928
				Year reconstructed	1962
				Skew angle	0
				Structure Flared	
				Historical significance	Historical significance is not determinable at this time. [4]
Total length	640 m = 2099.8 ft	Length of maximum span	114.3 m = 375.0 ft	Deck width, out-to-out	13.6 m = 44.6 ft
Bridge roadway width, curb-to-curb	12.1 m = 39.7 ft	Inventory Route, Total Horizontal Clearance	6 m = 19.7 ft	Curb or sidewalk width - left	1.6 m = 5.2 ft
Curb or sidewalk width - right	1.6 m = 5.2 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	No rating analysis performed [5]	Inventory rating	29.3 metric ton = 32.2 tons
4.6 km = 2.9 mi	Method to determine operating rating	No rating analysis performed [5]	Operating rating	99.9 metric ton = 109.9 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18+Mod / HS 20+Mod [6]	

### Functional Details

Average Daily Traffic	81600	Average daily truck traffi	6	%	Year	2010	Future average daily traffic	114240	Year	2030
Road classification	Principal Arterial - Other Freeways or Exp		Lanes on structure	4		Approach roadway width	15.2 m = 49.9 ft			
Type of service on bridge	Highway [1]		Direction of traffic	2 - way traffic [2]		Bridge median	Closed median (no barriers) [2]			
Parallel structure designation	No parallel structure exists. [N]									
Type of service under bridge	Waterway [5]		Lanes under structure	0		Navigation control	Navigation control on waterway (bridge permit required). [1]			
Navigation vertical clearanc	41.1 m = 134.8 ft		Navigation horizontal clearance	205.7 m = 674.9 ft						
Minimum navigation vertical clearance, vertical lift bridge			Minimum vertical clearance over bridge roadway	5.91 m = 19.4 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]		
Widening of existing bridge with deck rehabilitation or replacement. [34]	Bridge improvement cost	59398000	Roadway improvement cost	34783000
	Length of structure improvement	640 m = 2099.8 ft	Total project cost	94181000
	Year of improvement cost estimate	2011		
	Border bridge - state	Unknown [342]	Border bridge - percent responsibility of other state	
	Border bridge - structure number	0		

## 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 - superstructure	Fair [5]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Satisfactory [6]		
Scour	Bridge foundations determined to be stable for assessed or calculated scour condition. [5]		
Channel and channel protection	Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift. [7]		
Appraisal ratings - water adequacy	Somewhat better than minimum adequacy to tolerate being left in place as is [5]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection	In place and functioning [2]	Sufficiency rating	47.2
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	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	September 2010 [0910]	Designated inspection frequency	24 Months
Underwater inspection	Unknown [Y60]	Underwater inspection date	September 1994 [0994]
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	September 2010 [0910]
Other special inspection	Not needed [N]	Other special inspection date	

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## Basic Information

New York [36]	Richmond County [085]	New York [51000]	ARTHUR KILL	40-31-30 = 40.525000	074-14-21 = - 74.239167
#Num!	Highway agency district	#Num!	Owner	Local Toll Authority [32]	Maintenance responsibility
Local Toll Authority [32]					Local Toll Authority [32]
Route	440		RTE 440	Toll	Toll bridge [1]
Features intersected	ARTHUR KILL ROAD				
Design - main	Steel [3]	Design - approach		Kilometerpoint	33.8 km = 21.0 mi
39	Girder and floorbeam system [03]	0	Other [00]	Year built	1928
				Year reconstructed	1962
				Skew angle	0
				Structure Flared	
				Historical significance	Historical significance is not determinable at this time. [4]
Total length	704 m = 2309.8 ft	Length of maximum span	35 m = 114.8 ft	Deck width, out-to-out	16.9 m = 55.4 ft
Bridge roadway width, curb-to-curb	14.6 m = 47.9 ft	Inventory Route, Total Horizontal Clearance	7.3 m = 24.0 ft	Curb or sidewalk width - left	0.6 m = 2.0 ft
Curb or sidewalk width - right	0.6 m = 2.0 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	No rating analysis performed [5]	Inventory rating	32.6 metric ton = 35.9 tons
0.9 km = 0.6 mi	Method to determine operating rating	No rating analysis performed [5]	Operating rating	76.9 metric ton = 84.6 tons
Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18+Mod / HS 20+Mod [6]	

## Functional Details

Average Daily Traffic	81600	Average daily truck traffi	6	%	Year	2010	Future average daily traffic	114240	Year	2030
Road classification	Principal Arterial - Other Freeways or Exp		Lanes on structure	4		Approach roadway width	38.4 m = 126.0 ft			
Type of service on bridge	Highway-pedestrian [5]		Direction of traffic	2 - way traffic [2]		Bridge median	Closed median (no barriers) [2]			
Parallel structure designation	No parallel structure exists. [N]									
Type of service under bridge	Highway, with or without ped		Lanes under structure	2		Navigation control	Not applicable, no waterway. [N]			
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	6.19 m = 20.3 ft			
Minimum lateral underclearance reference feature	Highway beneath structure [H]									
Minimum lateral underclearance on right	8.8 m = 28.9 ft					Minimum lateral underclearance on left	0 = N/A			
Minimum Vertical Underclearance	8.99 m = 29.5 ft		Minimum vertical underclearance reference feature	Highway beneath structure [H]						
Appraisal ratings - underclearances	Better than present minimum criteria [7]									

## Repair and Replacement Plans

Type of work to be performed	Work done by	Work to be done by contract [1]		
Bridge deck rehabilitation with only incidental widening. [36]	Bridge improvement cost	25252000	Roadway improvement cost	14788000
	Length of structure improvement	704 m = 2309.8 ft	Total project cost	40040000
	Year of improvement cost estimate	2011		
	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	Equal to present minimum criteria [6]
Condition ratings - superstructure	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Fair [5]		
Scour	Bridge not over waterway. [N]		
Channel and channel protection	Not applicable. [N]		
Appraisal ratings - water adequacy	N/A [N]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	64
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	August 2010 [0810]	Designated inspection frequency	24 Months
Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	August 2010 [0810]
Other special inspection	Not needed [N]	Other special inspection date	

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## Basic Information

New York [36]	Richmond County [085]	New York [51000]	ARTHUR KILL	40-31-27 = 40.524167	074-15-09 = - 74.252500
#Num!	Highway agency district	#Num!	Owner	Local Toll Authority [32]	Maintenance responsibility
Route	440	RTE 440	Toll	Toll bridge [1]	Features intersected
Design - main	Steel [3]	Design - approach		Kilometerpoint	0 km = 0.0 mi
66	Girder and floorbeam system [03]	0	Other [00]	Year built	1928
				Year reconstructed	1962
				Skew angle	0
				Structure Flared	
				Historical significance	Historical significance is not determinable at this time. [4]
Total length	1491.6 m = 4893.9 ft	Length of maximum span	31.6 m = 103.7 ft	Deck width, out-to-out	16.9 m = 55.4 ft
Inventory Route, Total Horizontal Clearance	7.3 m = 24.0 ft	Curb or sidewalk width - left	0.6 m = 2.0 ft	Curb or sidewalk width - right	0.6 m = 2.0 ft
Deck structure type	Not applicable [N]				
Type of wearing surface	Bituminous [6]				
Deck protection	Not applicable (applies only to structures with no deck) [N]				
Type of membrane/wearing surface					

## Weight Limits

Bypass, detour length	Method to determine inventory rating	No rating analysis performed [5]	Inventory rating	19.5 metric ton = 21.5 tons
0.9 km = 0.6 mi	Method to determine operating rating	No rating analysis performed [5]	Operating rating	73.8 metric ton = 81.2 tons
	Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18+Mod / HS 20+Mod [6]

### Functional Details

Average Daily Traffic	81600	Average daily truck traffi	6	%	Year	2010	Future average daily traffic	114240	Year	2030
Road classification	Principal Arterial - Other Freeways or Exp		Lanes on structure	4		Approach roadway width	18.2 m = 59.7 ft			
Type of service on bridge	Highway-pedestrian [5]		Direction of traffic	2 - way traffic [2]		Bridge median	Closed median (no barriers) [2]			
Parallel structure designation	No parallel structure exists. [N]									
Type of service under bridge	Highway-railroad [4]		Lanes under structure	4		Navigation control	Not applicable, no waterway. [N]			
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	Highway beneath structure [H]									
Minimum lateral underclearance on right	1 m = 3.3 ft					Minimum lateral underclearance on left	0 = N/A			
Minimum Vertical Underclearance	3.96 m = 13.0 ft		Minimum vertical underclearance reference feature	Highway beneath structure [H]						
Appraisal ratings - underclearances	Basically intolerable requiring high priority of corrective action [3]									

### Repair and Replacement Plans

Type of work to be performed	Work done by	Work to be done by contract [1]		
Widening of existing bridge with deck rehabilitation or replacement. [34]	Bridge improvement cost	96435000	Roadway improvement cost	56472000
	Length of structure improvement	1491.6 m = 4893.9 ft	Total project cost	152907000
	Year of improvement cost estimate	2011		
	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	Satisfactory [6]	Appraisal ratings - deck geometry	Basically intolerable requiring high priority of replacement [2]
Condition ratings - deck	Fair [5]		
Scour	Bridge not over waterway. [N]		
Channel and channel protection	Not applicable. [N]		
Appraisal ratings - water adequacy	N/A [N]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	33.9
Culverts	Not applicable. Used if structure is not a culvert. [N]		
Traffic safety features - railings			
Traffic safety features - transitions	Not applicable or a safety feature is not required. [N]		
Traffic safety features - approach guardrail			
Traffic safety features - approach guardrail ends			
Inspection date	September 2010 [0910]	Designated inspection frequency	24 Months
Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Every two years [Y24]	Fracture critical inspection date	September 2010 [0910]
Other special inspection	Not needed [N]	Other special inspection date	