

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]	Muskegon County [121]	North Shores [58820]	NORTON SHORES	43-11-03 = 43.184167	086-13-23 = - 86.223056
614487100056B01	Highway agency district: 3	Owner City or Municipal Highway Agency [04]	Maintenance responsibility City or Municipal Highway Agency [04]		
Route 2007	AIRLINE RD	Toll On free road [3]	Features intersected BLACK CREEK		
Design - main Steel continuous [4]	Design - approach	Kilometerpoint 1031.9 km = 639.8 mi	Year built 1931	Year reconstructed N/A [0000]	
3	Stringer/Multi-beam or girder [02]	0	Other [00]	Skew angle 0	Structure Flared
				Historical significance	Bridge is not eligible for the NRHP. [5]
Total length 18.2 m = 59.7 ft	Length of maximum span 6.1 m = 20.0 ft	Deck width, out-to-out 15.2 m = 49.9 ft	Bridge roadway width, curb-to-curb 12.2 m = 40.0 ft		
Inventory Route, Total Horizontal Clearance 14 m = 45.9 ft	Curb or sidewalk width - left 0.9 m = 3.0 ft	Curb or sidewalk width - right 0.9 m = 3.0 ft			
Deck structure type	Concrete Cast-in-Place [1]				
Type of wearing surface					
Deck protection					
Type of membrane/wearing surface					

**Weight Limits**

Bypass, detour length 0.3 km = 0.2 mi	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	24.7 metric ton = 27.2 tons
	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	40.5 metric ton = 44.6 tons
Bridge posting	Equal to or above legal loads [5]		Design Load	MS 18 / HS 20 [5]

### Functional Details

Average Daily Traffic  Average daily truck traffi  % Year  Future average daily traffic  Year

Road classification  Lanes on structure  Approach roadway width

Type of service on bridge  Direction of traffic  Bridge median

Parallel structure designation

Type of service under bridge  Lanes under structure  Navigation control

Navigation vertical clearanc  Navigation horizontal clearance

Minimum navigation vertical clearance, vertical lift bridge  Minimum vertical clearance over bridge roadway

Minimum lateral underclearance reference feature

Minimum lateral underclearance on right  Minimum lateral underclearance on left

Minimum Vertical Underclearance  Minimum vertical underclearance reference feature

Appraisal ratings - underclearances

### Repair and Replacement Plans

Type of work to be performed

Work done by

Bridge improvement cost  Roadway improvement cost

Length of structure improvement  Total project cost

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="Open, no restriction [A]"/>	Appraisal ratings - structural	<input type="text" value="Somewhat better than minimum adequacy to tolerate being left in place as is [5]"/>
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="Fair [5]"/>	Appraisal ratings - deck geometry	<input type="text" value="Somewhat better than minimum adequacy to tolerate being left in place as is [5]"/>
Condition ratings - deck	<input type="text" value="Fair [5]"/>		
Scour	<input type="text" value="Scour calculation/evaluation has not been made. [6]"/>		
Channel and channel protection	<input type="text" value="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	<input type="text" value="Equal to present desirable criteria [8]"/>	Status evaluation	<input type="text"/>
Pier or abutment protection	<input type="text"/>	Sufficiency rating	<input type="text" value="75.9"/>
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 2007 [0507]"/>	Designated inspection frequency	<input type="text" value="24"/> 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"/>