# 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

| | | | | | |
|---|---|---|---|---|---|
| Michigan [26] | Chippewa County [033] | Rudyard [70220] | 2.0 MI N OF MACKINAC COL | 46-11-13 = 46.186944 | 084-33-39 = -84.560833 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 17117033000S010 | Highway agency district | 1 | Owner | State Highway Agency [01] | Maintenance responsibility | State Highway Agency [01] | |
| Route | 48 | | M-48 | Toll | On free road [3] | Features intersected | I-75,US-2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Design - main | Steel [3] | Design - approach | | Kilometerpoint | 266.8 km = 165.4 mi | | |
| 12 | Stringer/Multi-beam or girder [02] | 0 | Other [00] | Year built | 1962 | Year reconstructed | N/A [0000] |
| | | | | Skew angle | 0 | Structure Flared | |
| | | | | Historical significance | Bridge is not eligible for the NRHP. [5] | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Total length | 205.1 m = 672.9 ft | Length of maximum span | 21.9 m = 71.9 ft | Deck width, out-to-out | 10.7 m = 35.1 ft | Bridge roadway width, curb-to-curb | 8.5 m = 27.9 ft |
| Inventory Route, Total Horizontal Clearance | 10 m = 32.8 ft | Curb or sidewalk width - left | 0.7 m = 2.3 ft | Curb or sidewalk width - right | 0.7 m = 2.3 ft | | |

| | |
|---|---|
| Deck structure type | Concrete Cast-in-Place [1] |
| Type of wearing surface | Monolithic Concrete (concurrently placed with structural deck) [1] |
| Deck protection | |
| Type of membrane/wearing surface | |

## Weight Limits

| | | | | | |
|---|---|---|---|---|---|
| Bypass, detour length | Method to determine inventory rating | Allowable Stress(AS) [2] | Inventory rating | 44.5 metric ton = 49.0 tons | |
| 1.1 km = 0.7 mi | Method to determine operating rating | Allowable Stress(AS) [2] | Operating rating | 99.9 metric ton = 109.9 tons | |
| | Bridge posting | Equal to or above legal loads [5] | Design Load | MS 18 / HS 20 [5] | |

## Functional Details

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Average Daily Traffic | 605 | Average daily truck traffi | 27 % | Year | 2007 | Future average daily traffic | 476 |
| Year | 2018 | | | | | | |
| Road classification | Major Collector (Rural) [07] | Lanes on structure | 2 | Approach roadway width | 10 m = 32.8 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 | Highway, with or without ped | 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 | 3.4 m = 11.2 ft | Minimum lateral underclearance on left | 10.3 m = 33.8 ft | | | | |
| Minimum Vertical Underclearance | 4.88 m = 16.0 ft | Minimum vertical underclearance reference feature | Highway beneath structure [H] | | | | |
| Appraisal ratings - underclearances | Somewhat better than minimum adequacy to tolerate being left in place as is [5] | | | | | | |

## Repair and Replacement Plans

Type of work to be performed

Bridge deck replacement with only incidental widening. [37]

| | | | |
|---|---|---|---|
| Work done by | Work to be done by contract [1] | | |
| Bridge improvement cost | 448000 | 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 | Open, no restriction [A] | Appraisal ratings - structural | Somewhat better than minimum adequacy to tolerate being left in place as is [5] |
| Condition ratings - superstructur | Satisfactory [6] | Appraisal ratings - roadway alignment | Better than present minimum criteria [7] |
| Condition ratings - substructure | Fair [5] | Appraisal ratings - deck geometry | Somewhat better than minimum adequacy to tolerate being left in place as is [5] |
| 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 | |
| Pier or abutment protection | | Sufficiency rating | 80.6 |
| 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 | Inpected feature meets currently acceptable standards. [1] | | |
| Traffic safety features - approach guardrail ends | Inpected feature meets currently acceptable standards. [1] | | |
| Inspection date | June 2008 [0608] | 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 | |