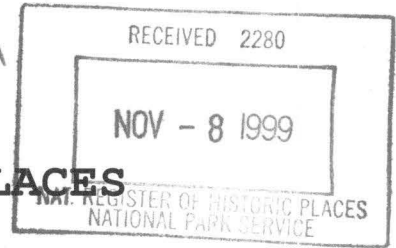


United States Department of the Interior
National Park Service

1509



NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Cheboygan Bascule Bridge
other names/site number _____

2. Location

street & number Highway US-23 over Cheboygan River
not for publication N/A
city or town Cheboygan vicinity N/A
state Michigan code MI county Cheboygan code 031
zip code 49721

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this x nomination _____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property x meets _____ does not meet the National Register Criteria. I recommend that this property be considered significant _____ nationally x statewide _____ locally. (_____ See continuation sheet for additional comments.)

[Signature] Signature of certifying official Date 9.29.99
Michigan State Preservation Office
State or Federal agency and bureau

In my opinion, the property _____ meets _____ does not meet the National Register criteria. (_____ See continuation sheet for additional comments.)

Signature of commenting or other official Date

State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:

entered in the National Register

See continuation sheet.

determined eligible for the
National Register

See continuation sheet.

determined not eligible for the
National Register

removed from the National Register

other (explain): _____

Edgar H. Beall 12/9/99

bar

Signature of Keeper Date
of Action

5. Classification

Ownership of Property (Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property (Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property

Contributing	Noncontributing
<u>0</u>	<u>0</u> buildings
<u>0</u>	<u>0</u> sites
<u>1</u>	<u>0</u> structures
<u>0</u>	<u>0</u> objects
<u>1</u>	<u>0</u> Total

Number of contributing resources previously listed in the National Register N/A

Name of related multiple property listing (Enter "N/A" if property is not part of a multiple property listing.)

Historic Highway Bridges of Michigan, 1875-1948

6. Function or Use

Historic Functions (Enter categories from instructions)

Cat: TRANSPORTATION Sub: road-related (vehicular)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Current Functions (Enter categories from instructions)

Cat: TRANSPORTATION Sub: road-related (vehicular)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

7. Description

Architectural Classification (Enter categories from instructions)

OTHER: Scherzer rolling lift bascule bridge

Materials (Enter categories from instructions)

foundation (Substructure) CONCRETE

roof _____

walls _____

other (Superstructure) STEEL

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 7 Page 1 Cheboygan Bascule Bridge
name of property
Cheboygan County, Michigan
county and state

Description

The Cheboygan Bascule Bridge, located in the county seat of Cheboygan, carries US-23 over the Cheboygan River. The structure is comprised of three steel deck girder spans: the center movable span, featuring double-leaf plate girders with variable depths, flanked by two uniform-depth fixed girders. The bascule spans employ Scherzer-type rolling lift mechanisms with underneath counterweights. The all-steel superstructure rests on concrete abutments founded on timber piles, as well as two concrete piers with angled cutwaters, supported by concrete footings on compact gravel 27 feet below the water surface. A cylindrical protection fender stands upstream from each pier. The bridge tender works from a single-story structure located over the downstream side of the north pier. The fixed spans are floored with asphalt-covered concrete; an open steel grid forms the deck for the moveable spans. Five-foot sidewalks line both sides of the bridge. This is made of concrete on the fixed spans and a light steel grid filled with concrete on the lift spans.

The bridge is bordered with Michigan State Highway Department standard moderne metal guardrails anchored by metal bulkheads. Six light standards, three along each side, illuminate the structure. Traffic gates fitted with electric lights stand at each end of the bridge, and standard three-color traffic lights hang from overhead wires. The structure extends 155 feet—the three spans are 42 feet, 70 feet, and 42 feet, respectively—with a 40-foot-wide roadway. When raised, the bridge provides a 60-foot-wide river channel for passing water craft.

8. Statement of Significance

Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D Property has yielded, or is likely to yield information important in prehistory or history.

Criteria Considerations (Mark "X" in all the boxes that apply.)

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or a grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance (Enter categories from instructions)

ENGINEERING

TRANSPORTATION

Period of Significance 1940

Significant Dates 1940

Significant Person (Complete if Criterion B is marked above)
N/A

Cultural Affiliation N/A

Architect/Builder Contractor/Builder: W.J. Storen Company
Designer: Michigan State Highway Department

Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS)
 preliminary determination of individual listing (36 CFR 67) has been requested.
 previously listed in the National Register
 previously determined eligible by the National Register
 designated a National Historic Landmark
 recorded by Historic American Buildings Survey # _____
 recorded by Historic American Engineering Record # _____

Primary Location of Additional Data
 State Historic Preservation Office
 Other State agency
 Federal agency
 Local government
 University
 Other

Name of repository: Michigan Department of Transportation

10. Geographical Data

Acreage of Property less than one acre

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing	Zone	Easting	Northing
1	<u>16</u>	<u>696940</u>	<u>5057580</u>	3	_____	_____
2	_____	_____	_____	4	_____	_____

_____ See continuation sheet.

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 8 Page 1 Cheboygan Bascule Bridge
name of property
Cheboygan County, Michigan
county and state

Summary of Significance

The Cheboygan Bascule Bridge is historically significant as a pivotal crossing of the Cheboygan River in the center of Cheboygan. The bridge is technologically significant as one of the few remaining bascule spans in Michigan and is eligible for the National Register under Criterion C.

Built in 1940, the Cheboygan Bascule Bridge is at least the second movable-span structure at this site. The current structure replaced a 70-year-old, iron swing-span bridge here, reportedly made hazardous by long use and heavy traffic. According to MSHD Commissioner G. Donald Kennedy, the old bridge vibrated noisily under traffic, and its unloaded end caused the "rusty old structure [to] bounce up and down on its seat." The new heavier, wider bridge must have come as a relief to the citizens of Cheboygan. The Michigan State Highway Department engineered the new structure early in 1940, with design assistance from consulting engineers Hazelet and Erdal for the bascule span. That spring the W.J. Storen Company of Detroit won the contract to erect the bridge with a low bid of \$187,511.98. The R.C. Mahon Company furnished steel and machinery for the project. Construction of the bridge and its approach grading was set to begin in May of 1940 and to finish by late fall.

The new bridge was completed slightly behind schedule by December 1940, just before wartime restrictions on critical materials went into effect. On December 7, 1940—a year to the day before the bombing of Pearl Harbor—MSHD officially opened the new bridge with a public ceremony. New State Highway Commissioner G. Donald Kennedy delivered the dedication speech, his first as State Highway Commissioner. The completion of the Cheboygan bridge, he said, opened the Huron Shore Road, a dream of "far-sighted citizens" from the early days of Michigan highway construction.

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 8 Page 2 Cheboygan Bascule Bridge
name of property
 Cheboygan County, Michigan
county and state

Kennedy called the bridge "one of the most important out-state projects" of his seven-year tenure with MSHD and "an achievement of state-wide significance." The Cheboygan Bridge was the last bascule bridge built in Michigan before World War II. Plans to build other moveable spans at Charlevoix, Houghton and St. Joseph were put on hold for the duration of the war.

The Cheboygan Bridge linked the entire length of Lake Huron from Port Huron to Mackinaw City and served as a connecting link between shoreline US-23 and midstate north-south route US-27. Kennedy predicted that the span would help progress in the northern section of the state and "add greatly to the popularity of this scenic highway among the thousands of tourists who annually visit northern Michigan." The new bridge was also notable for its safety, incorporating multiple safety devices such as safety barriers, traffic gates and traffic lights. The attention to safety was to prevent "needless accidents" and to make the bridge as "foolproof as humanly possible."

With an abundance of navigable rivers and river-level roads and railroads, Michigan provided a natural setting for movable bridge technology. As illustrated by the earlier Cheboygan Bridge, the counties, municipalities and even townships built movable-span bridges to separate overland traffic from river traffic, beginning in the mid-19th century. Most of the earliest movable bridges used swing spans, typically with pin-connected trusses that pivoted over center piers. Near the end of the century, engineers began designing bascule bridges in locations where swing spans were impractical (e.g., tightly fitted urban crossings).

Two principal types of bascules were employed, both with roots in Chicago: the rolling lift and the trunnion models. In 1920 the State Highway Department designed its first bascule bridge, over the Spring Lake Outlet in Ottawa County. Completed a year later,

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 8 Page 3 Cheboygan Bascule Bridge
name of property
 Cheboygan County, Michigan
county and state

its movable span was an 80-foot, single-leaf, trunnion-style, deck girder that allowed a 66-foot navigable lane on the river. MSHD engineer C.A. Melick called the Spring Lake Bridge MSHD's "first and only" bascule bridge in 1925. In the 1930s a handful of other bascule spans followed, among them the Manistee River Bridge (1933) in Manistee, the Bay City Bridge (1938), and the Cheboygan Bridge (1940). The latter two structures were designed by the state highway department with the assistance of the Chicago consulting firm of Hazelet and Erdal.

The two principals of the firm, Craig Hazelet and Ingolf Erdal, had both worked for the Scherzer Rolling Lift Bridge Company. Founded in 1893 by Albert Scherzer, the Scherzer Company designed and built rolling lift bascule bridges based upon a patent obtained by Albert's brother, William. (William Scherzer died in 1893, shortly after receiving his patent.) The company proved successful: by World War I, Scherzer had designed or built over 175 structures. Hazelet and Erdal worked for Scherzer in the early 1930s—Hazelet as general manager and president and Erdal as managing engineer—before starting their own consulting practice in 1936. Soon after, they began consulting for MSHD. It was an association that lasted at least through the 1950s, as MSHD adopted the Hazelet and Erdal model as its standard for bascule bridge design. The Saginaw and Cheboygan spans, the Pine River Bridge (1949) in Charlevoix County and the Blossomland Bridge (1949) in Berrian County all employed Scherzer configurations, differing only in substructure and approach spans.

The Cheboygan Bridge fit well within the mainstream of bascule bridge construction in Michigan. Its double-leaf, rolling lift configuration was employed on virtually every bascule bridge built by the state in late 1930s and 1940s. The Cheboygan Bridge's technological significance derives not from its unusual or innovative engineering, but from its representation of standard

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 8 Page 4 Cheboygan Bascule Bridge
name of property
 Cheboygan County, Michigan
county and state

MShD design. The last bascule bridge built on Michigan's highways before World War II, it is today one of about a dozen bascules left in the state from the historic period.

The bridge accrues additional significance as a pivotal link on the Huron Shoreline Road from Port Huron to Mackinac City, a major Michigan thoroughfare. Taken as a whole, it was "one of the finest examples of modern bridge design in the state..." Kennedy stated at its dedication, "fitted to meet the demands that will be made upon it through a long period of service." The Cheboygan Bridge, more than 45 years later, continues to serve in place without significant modification. A well-preserved transportation-related resource, it has been determined eligible for inclusion in the National Register.

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 9 Page 1 Cheboygan Bascule Bridge
name of property
Cheboygan County, Michigan
county and state

Bibliography

Published Sources

Michigan State Highway Department. *Ninth Biennial Report*. N.p., 1922.

Michigan State Highway Department. *Tenth Biennial Report*. N.p., 1924.

Unpublished Sources

Michigan Department of Transportation, Historic Bridge Inventory Form, 6 July 1981.

Archival Sources

Bridge Database. Michigan Department of Transportation, Lansing.

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 10 Page 1 Cheboygan Bascule Bridge
name of property
Cheboygan County, Michigan
county and state

Verbal Boundary Description

The general area of the nominated property is a rectangle 52 feet wide, whose long center axis parallels the centerline of the bridge. The property is bounded at each end by the outer edges of the abutments.

Boundary Justification

Based upon measurements provided by the Michigan Department of Transportation, the boundaries enclose the entire historic resource.

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 10 Page 2 Cheboygan Bascule Bridge
name of property
Cheboygan County, Michigan
county and state

Index to Photographs

Photographer: Jennifer Strand
Date: 9 October 1995
Negatives: Michigan Department of Transportation, Lansing

No. 1 East approach. View to west.
No. 2 South elevation. View to north.

11. Form Prepared By

name/title Clayton B. Fraser, Principal
organization Fraserdesign
street & number P.O. Box 6025
city or town Loveland state CO zip code 80537
telephone (970) 669-7969
date November 1998

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.

A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of the SHPO or FPO.)

name Michigan Department of Transportation
street & number 425 West Ottawa Street
telephone (517) 373-2114
city or town Lansing state MI zip code 48909

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.). Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Cheboygan Bascule Bridge
NAME:

MULTIPLE Highway Bridges of Michigan MPS
NAME:

STATE & COUNTY: MICHIGAN, Cheboygan

DATE RECEIVED: 11/08/99 DATE OF PENDING LIST: 11/23/99
DATE OF 16TH DAY: 12/09/99 DATE OF 45TH DAY: 12/23/99
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 99001509

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

ACCEPT RETURN REJECT 12/9/99 DATE

ABSTRACT/SUMMARY COMMENTS:

Entered in the
National Register

RECOM./CRITERIA _____

REVIEWER _____ DISCIPLINE _____

TELEPHONE _____ DATE _____

DOCUMENTATION see attached comments Y/N see attached SLR Y/N



Cheboygan Bascule Bridge
Highway US-23 Over cheboygan River

Cheboygan County, Michigan

Jenifer Strand

October 9, 1995

MISHPO

South elevation, view to north

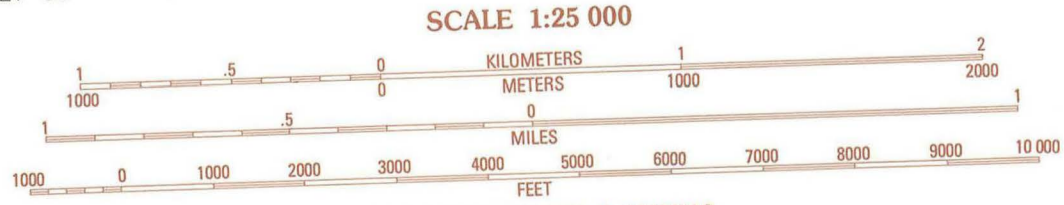
4487-36



CHEBOYGAN BASCOLE BEIDGE
CHEBOYGAN
CHEBOYGAN COUNTY MI
UTM: 16/696940/5057580

PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY CONTROL BY USGS AND NOS/NOAA COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1977-78 FIELD CHECKED 1980 MAP EDITED 1982 PROJECTION NATIONAL GEODETIC CONFORMAL CONIC ZONE 16 GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR 1982 MAGNETIC NORTH DECLINATION 5'30" WEST 1927 NORTH AMERICAN DATUM HORIZONTAL DATUM 1927 NORTH AMERICAN DATUM 1983 TO PLACE ON THE PREDICTED NORTH AMERICAN DATUM OF 1983 MOVE THE PROJECTION LINES AS SHOWN BY DASHED CORNER TICKS (3 METERS NORTH) THERE MAY BE PRIVATE INHOLDINGS WITHIN THE BOUNDARIES OF ANY FEDERAL AND STATE RESERVATIONS SHOWN ON THIS MAP GRAY TINT INDICATES AREAS IN WHICH SELECTED BUILDINGS ARE SHOWN

PROVISIONAL MAP
Produced from original manuscript drawings. Information shown as of date of field check.



SCALE 1:25 000
CONTOUR INTERVAL 3 METERS
SUPPLEMENTARY CONTOUR INTERVAL 1.5 METERS
CONTROL SHOWN TO THE NEAREST 0.1 METER
OTHER ELEVATIONS SHOWN TO THE NEAREST 0.5 METER
To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by .3048
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092 AND THE GEOLOGICAL SURVEY DIVISION MICHIGAN DEPARTMENT OF NATURAL RESOURCES, LANSING, MICHIGAN 48909



ADJOINING 7.5' QUADRANGLE NAMES
CONTOURS AND ELEVATIONS IN METERS

1	2	3	1 Round Island
2	3	2 McRae Bay	3
3	4	4 Point Nipigon	5
4	5	5 Cardwood Point	6
5	6	6 Mullet Lake	7
6	7	7 Aloha	8
7	8	8 Manning	

ROAD LEGEND
Improved Road
Unimproved Road
Trail
Interstate Route
U.S. Route
State Route

CHEBOYGAN, MICHIGAN
PROVISIONAL EDITION 1982

45084-F4-TM-025