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United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form

RECEIVED
MAR 07 1990

DIVISION OF
NATIONAL REGISTER PROGRAMS
NATIONAL PARK SERVICE

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Thornapple River Drive bridge

other names/site number Camelback bridge

2. Location

street & number Thornapple River Drive over Thornapple River N/A not for publication

city, town Cascade Township vicinity

state Michigan code MI county Kent code 081 zip code 49546

3. Classification

Ownership of Property

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

Category of Property

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

Number of Resources within Property

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

Name of related multiple property listing:

N/A

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this 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 meets does not meet the National Register criteria. See continuation sheet.

Anthony D. Roberts
Signature of certifying official
Director, Bureau of History
State or Federal agency and bureau

2-5-90
Date

In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

Signature of commenting or other official
State or Federal agency and bureau

Date

5. 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:)

Patrick Andrews

4/18/90

JAH Signature of the Keeper

Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)

Transportation/ road related

Current Functions (enter categories from instructions)

Transportation/ road related

7. Description

Architectural Classification

(enter categories from instructions)

Materials (enter categories from instructions)

foundation concrete (abutments)

walls N/A

roof N/A

other reinforced concrete
steel

Other: camelback bridge

Describe present and historic physical appearance.

The Thornapple River Drive bridge crosses the Thornapple River in Cascade Township east of Grand Rapids, between the villages of Cascade and Ada, just upstream of the Ada Hydroelectric plant. It is situated in a developing rural residential area at an historic river crossing, where a covered bridge had previously been erected. The bridge is a 150 foot long concrete camelback arch bridge composed of two 75 foot long and 22 foot wide spans resting on concrete piers and abutments. The bridge is constructed using massive concrete reinforced steel girders, providing the structure with its distinctive arches. The interior of each arch is pierced with five openings occurring above a series of paired recessed panels, which provide a geometrical counterpoint to the bridge's sweeping concrete arches.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

nationally statewide locally

Applicable National Register Criteria A B C D

Criteria Considerations (Exceptions) A B C D E F G

Areas of Significance (enter categories from instructions)

Period of Significance

Significant Dates

Engineering

1927

1927

Transportation

Politics/Government

Cultural Affiliation

N/A

Significant Person

N/A

Architect/Builder

Michigan State Highway Department/
Price Brothers

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

Built under the State Reward program by which the state provided financial assistance for roads and bridges built to minimum state standards, the bridge is a rare multi-span example of a camelback bridge built to a standard design prepared by the Michigan State Highway Department. The Thornapple River Drive bridge represents the role of the state government in developing Michigan's vehicular transportation network.

The Michigan State Highway Department was established in 1905 by the State Reward Law. The law provided financial aid to counties and townships for road construction to state standards. The 1919 State Reward Act required the Michigan State Highway Department to pay one-half the cost and to supervise the construction of bridges on all State Reward roads.

Partly in response to the resulting increase in Reward Road bridge building, the Highway Department developed standardized plans to be used in the trunk line system and supplied these designs as well to local governments building bridges not supported by state funds. Concrete girder designs were preferred because they could be built by local contractors using commonly available materials. In addition, the finished product required little maintenance and its bulk provided a wide margin of safety.

The Michigan State Highway Department was a nationally recognized trend setter in the development of standardized bridge plans. During the 1920s it published plans for distinctive camelback spans of 45, 60, 75, and 90 feet, ranging in width from 18 to 24 feet. The camelback masonry arch spans were named for the wide low girder arches which rose above the bridge deck, resembling the humps of a camel's back. Examples were built as early as 1916 in Michigan and continued to be built in the state as late as 1936, although most were constructed during the early 1920s. Approximately 66 were constructed throughout the state, with at least one appearing in over half of the state's 83 counties. The only other area where this distinctive bridge type was erected is Ontario.

See continuation sheet

9. Major Bibliographical References

Michigan Department of Transportation
Transportation Services Division
Historic Bridge Report. Ms. on file, Michigan Department of
Transportation, Lansing, Michigan.

Historic Bridge Inventory Form
Thornapple River Drive bridge. On file, Bureau of History,
Division of Archives and Historic Preservation, Lansing, Michigan.

See continuation sheet

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
- Specify repository: _____

10. Geographical Data

Acreage of property less than 1.0 acre

UTM References

A

16	6	23	1	00
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47	55	0	00
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Zone Easting Northing

B

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--	--	--	--	--

Zone Easting Northing

C

--	--	--	--	--

--	--	--	--	--

D

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See continuation sheet

Verbal Boundary Description

The structure carries Thornapple River Drive across the Thornapple River between Cascade Road and Grand River Drive. The span's dimensions are 150 feet by 22 feet. The nominated property forms a rectangle extending 10 ft. in all directions beyond the bridge itself. The centerline N-S is the line between sec. 3 & 4, T 6 N, R 10 W, and the N line is about 1000 ft. S of N section line.

See continuation sheet

Boundary Justification

The site boundaries are determined by the points where approach grades junction with the deck of the camelback spans.

See continuation sheet

11. Form Prepared By

name/title William Rutter, State Register Coordinator
organization Bureau of History date Jan., 1990
street & number 717 W. Allegan St. telephone 517/373-0510
city or town Lansing state MI zip code 48917

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section number 8 Page 3

The Thornapple River Drive bridge was built from the standardized plans of the Michigan State Highway Department under the supervision of its bridge engineer, C.A. Melick. Built in 1927, the present bridge replaced the Withey Bridge, a covered wooden Town lattice span erected at the site by Will Holmes in 1880. The bridge contractors, Price Brothers of Lansing, had also erected the oldest surviving camelback bridge in the state, the 1916 Grange Road bridge in Clinton County. The Thornapple River Drive camelback bridge is apparently one of the last dozen of this type built, and one of only a half dozen surviving multi-span camelbacks in the state. Of these, only the Thornapple span and the M-32 Spur bridge in Montmorency County are composed of two 75 foot spans, representing the fifth longest surviving camelback bridges in the state.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Thornapple River Drive Bridge

MULTIPLE NAME:

STATE & COUNTY: MICHIGAN, Kent

DATE RECEIVED: 3/07/90 DATE OF PENDING LIST: 3/20/90
DATE OF 16TH DAY: 4/05/90 DATE OF 45TH DAY: 4/21/90
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 90000570

NOMINATOR: STATE

REASONS FOR REVIEW:

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

COMMENT WAIVER: N

ACCEPT RETURN REJECT 4/18/90 DATE PWA

ABSTRACT/SUMMARY COMMENTS:

Historically & architecturally significant 19200 concrete
bridge associated with important early 20th century
State bridge-building program.

RECOM./CRITERIA accept AIC
REVIEWER Patricia Andrews
DISCIPLINE Historian
DATE 4/18/90

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

CLASSIFICATION

___count ___resource type

STATE/FEDERAL AGENCY CERTIFICATION

FUNCTION

___historic ___current

DESCRIPTION

___architectural classification
___materials
___descriptive text

SIGNIFICANCE

Period Areas of Significance--Check and justify below

Specific dates Builder/Architect
Statement of Significance (in one paragraph)

___summary paragraph
___completeness
___clarity
___applicable criteria
___justification of areas checked
___relating significance to the resource
___context
___relationship of integrity to significance
___justification of exception
___other

BIBLIOGRAPHY

GEOGRAPHICAL DATA

___acreage ___verbal boundary description
___UTMs ___boundary justification

ACCOMPANYING DOCUMENTATION/PRESENTATION

___sketch maps ___USGS maps ___photographs ___presentation

OTHER COMMENTS

Questions concerning this nomination may be directed to

_____ Phone _____

Signed _____ Date _____



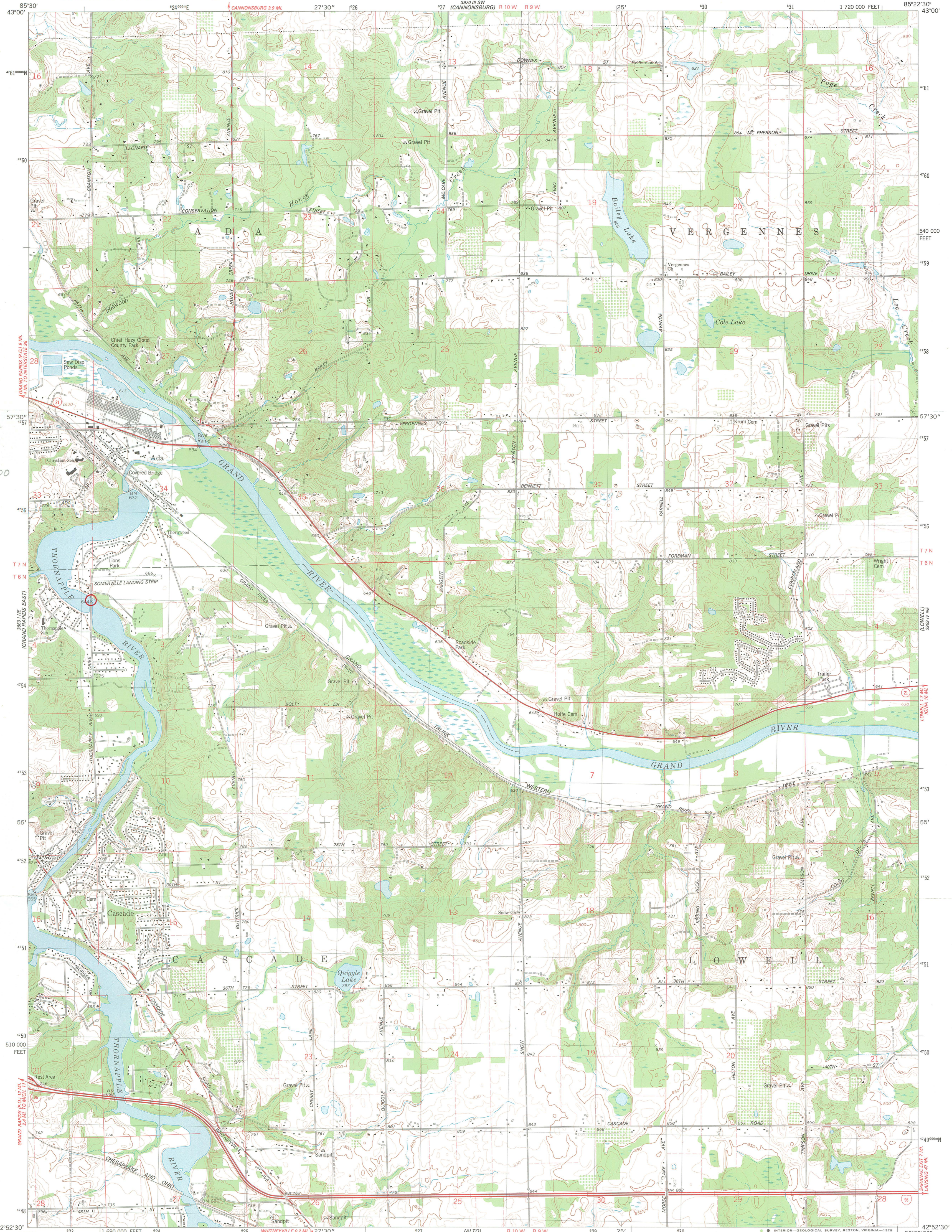
Thornapple River Dr. Bridge
Cascade Twp., Kent Co. MI
Amway Corp. Photo Dept. 12/89
Neg.: same, Ada, MI 49355
From E



Thornapple River Dr. Bridge
Cascade Twp, Kent Co., MI
Amway Corp. Photo Dept. 12/89
Neg: Same, Ada, MI 49355
From SW

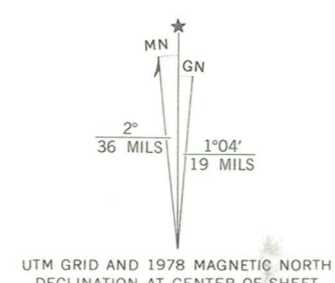
SW

THIS PAPER MANUFACTURED BY KODAK



Thorapple River
Dr. Bridge
Kent County
Michigan
16 623100 4755000

Mapped, edited, and published by the Geological Survey
Control by USGS and NOS/NOAA
Topography by photogrammetric methods from aerial photographs taken 1974. Field checked 1975. Map edited 1978
Projection and 10,000-foot grid ticks: Michigan coordinate system, south zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 16
1927 North American datum
Fine red dashed lines indicate selected fence and field lines where generally visible on aerial photographs. This information is unchecked



SCALE 1:24 000
1 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092 AND BY THE GEOLOGICAL SURVEY DIVISION MICHIGAN DEPARTMENT OF NATURAL RESOURCES, LANSING, MICHIGAN 48909 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



CASCADE, MICH.
NW4 LOWELL 15' QUADRANGLE
N4252.5-W8522.5/7.5

JAN 17 1990



**Board of County Road Commissioners
and Park Trustees of The County of Kent**

1500 Scribner Ave., N.W. Grand Rapids, MI 49504 (616) 242-6900

Director of Finance
David A. Bosch

Managing Director
James C. Porritt

Chairman
Ronald D. Sytsma
Vice-Chairman
Harry J. Bloem
Member
E. M. (Wes) Weston

January 9, 1990

Martha M. Bigelow
State Historic Preservation Officer
Bureau of History
MI Department of State
Lansing, MI 48918

Dear Ms. Bigelow:

This is in response to your letter dated December 20, 1989 concerning the Thornapple River Drive Camelback Bridge being considered by the Michigan Historic Preservation Review Board for nomination to the National Register of Historic Places. The Kent County Road Commission fully understands that by listing the structure in the National Register, we will retain the right to alter, manage, or dispose of said structure, however we feel our freedom of deciding when and how to replace this structure will be greatly restricted. We also feel that the process of acquiring Federal assistance for replacing this structure would be delayed considerably by Section 106 of the National Historic Preservation Act of 1966.

The Camelback Bridge was built 60 years ago and has become important to the community that it has served. While we support our history and understand efforts to preserve it for future generations, we are committed to the public to provide a road system that is safe and meets traffic demand. Due to the deteriorating condition of the bridge, current lane widths, and increasing traffic volumes, we plan to replace this structure in the near future.

Please acknowledge this as our formal objection to nomination of the Thornapple River Drive Camelback Bridge to the National Register of Historic Places.

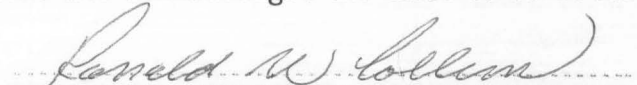
Sincerely,

WAH:pjz
c: Ada Township
Cascade Township


James C. Porritt
Managing Director

STATE OF MICHIGAN)
) SS:
COUNTY OF KENT)

On this 9th day of January, 1990, before me, the undersigned, a Notary Public in and for said County, personally appeared James C. Porritt to me known to be the person who executed the foregoing instrument and acknowledged the same to be of his own free act and deed.


Ronald W. Collins
Notary Public, Kent County, Michigan
My Commission Expires: June 29, 1992

MICHIGAN DEPARTMENT OF STATE

RICHARD H. AUSTIN • SECRETARY OF STATE

MUTUAL BUILDING
208 N. CAPITOL AVENUE



LANSING
MICHIGAN 48918

February 2, 1990

RECEIVED
MAR 07 1990

DIVISION OF
NATIONAL REGISTER PROGRAMS
NATIONAL PARK SERVICE

Ms. Carol D. Shull, Chief of Registration
National Register of Historic Places
National Park Service
U.S. Department of the Interior
P.O. Box 37127
Washington, D.C. 20013-7127

Dear Ms. Shull:

Enclosed are National Register of Historic Places nomination materials for the Thornapple River Drive Bridge in Cascade Township, Kent County, Michigan. I certify that the intent-to-nominate notification requirements have been fulfilled. This property, owned by the Kent County Road Commission, a public agency, is being submitted for listing in the National Register. All notarized statements of objection and written comments concerning this nomination submitted to us prior to the submission of this nomination to you are enclosed.

Please direct all questions concerning this nomination to Robert O. Christensen, National Register Coordinator 517/335-2719.

Sincerely,

A handwritten signature in cursive script, appearing to read "Martha M. Bigelow".

Martha M. Bigelow, Director
Bureau of History
and
State Historic Preservation Officer
Bureau of History

Enc: