

INDIVIDUAL PROPERTY/DISTRICT  
MARYLAND HISTORICAL TRUST  
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Bridges 20016 and 20017 Survey Number: T-945

Project: MD 33 over Peachblossom and Trippe Creeks Agency: FHWA/SHA

Site visit by MHT Staff:  no  yes Name \_\_\_\_\_ Date \_\_\_\_\_

Eligibility recommended \_\_\_\_\_ Eligibility **not** recommended

Criteria:  A  B  C  D Considerations:  A  B  C  D  E  F  G  None

Justification for decision: (Use continuation sheet if necessary and attach map)

Based on the available information, the Bridges 20016 and 20017, MD 333 over Peachblossom and Trippe Creeks in the Easton vicinity, do not meet the National Register Criteria for individual listing. The c. 1920 concrete girder bridges represent a bridge type used in Maryland from the first decade of the 20th century for both long and short spans. From 1912 on, the concrete girder bridges constructed on state roads were designed according to standards. The ongoing bridge survey inventoried almost 90 concrete girder bridges dating from c. 1910 to 1942. Bridges 20016 and 20017 would probably be eligible if unaltered, for they are unusually long: Bridge 20016 @ 20 spans and Bridge 20017 @ 14 spans. However, they were substantially altered in 1950 when steel beams were used to double the roadway width. In 1976, the concrete balustrades were removed and replaced with steel railings. Lastly, the bridges may lack structural integrity. Despite repairs in 1990, the bridges are in deteriorated condition and are slated for removal. Therefore, it does not appear that these bridges meet Criterion C for engineering. In addition, they are not known to have any association with significant events or people, and thus are unlikely to be eligible under Criteria A or B. They are not located in any known historic district.

Documentation on the property/district is presented in: Project file, Maryland

Inventory Form T-945

Prepared by: Rita Suffness, SHA

Elizabeth Hannold  
Reviewer, Office of Preservation Services

February 15, 1996  
Date

NR program concurrence:  yes  no  not applicable

Orlando Roberts  
Reviewer, NR program

Feb. 20, 1996.  
Date

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

- Eastern Shore (all Eastern Shore counties, and Cecil)
- Western Shore (Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
- Piedmont (Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
- Western Maryland (Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

- Paleo-Indian 10000-7500 B.C.
- Early Archaic 7500-6000 B.C.
- Middle Archaic 6000-4000 B.C.
- Late Archaic 4000-2000 B.C.
- Early Woodland 2000-500 B.C.
- Middle Woodland 500 B.C. - A.D. 900
- Late Woodland/Archaic A.D. 900-1600
- Contact and Settlement A.D. 1570-1750
- Rural Agrarian Intensification A.D. 1680-1815
- Agricultural-Industrial Transition A.D. 1815-1870
- Industrial/Urban Dominance A.D. 1870-1930
- Modern Period A.D. 1930-Present
- Unknown Period (  prehistoric  historic)

III. Prehistoric Period Themes:

- Subsistence
- Settlement
- Political
- Demographic
- Religion
- Technology
- Environmental Adaption

IV. Historic Period Themes:

- Agriculture
- Architecture, Landscape Architecture, and Community Planning
- Economic (Commercial and Industrial)
- Government/Law
- Military
- Religion
- Social/Educational/Cultural
- Transportation

V. Resource Type:

Category: Structure

Historic Environment: Rural

Historic Function(s) and Use(s): Transportation/road related/bridge

Known Design Source: State Roads Commission

T-945

Bridges 20016 and 20017

Vicinity of Easton, Talbot County

**HISTORIC CONTEXT:**

**MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA**

**Geographic Organization:** Eastern Shore (Talbot County)

**Chronological/Developmental Period (s):** Industrial/Urban  
Dominance 1870-1930 A.D.

**Prehistoric/Historic Period Theme:** Transportation

**Resource Type:**

**Category:** Structure

**Historic Environment:** Rural

**Historic Function (s) and Use (s):**  
Transportation/Structures/Bridges

**Known Design Source:** State Roads Commission

**Maryland Historical Trust  
State Historic Sites Inventory Form**

MARYLAND INVENTORY OF  
HISTORIC PROPERTIES

Survey No. T-945

Magi No.

DOE  yes  no

**1. Name** (indicate preferred name)

historic

and/or common MD 333 over Peachblossom and Trippe Creeks

**2. Location**

street & number MD 333 over Peachblossom and Trippe Creeks N/A not for publication

city, town Easton  vicinity of congressional district

state MARYLAND county TALBOT

**3. Classification**

Category	Ownership	Status N/A	Present Use	
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture	<input type="checkbox"/> museum
<input type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> unoccupied	<input type="checkbox"/> commercial	<input type="checkbox"/> park
<input checked="" type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational	<input type="checkbox"/> private residence
<input type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment	<input type="checkbox"/> religious
<input type="checkbox"/> object	<input checked="" type="checkbox"/> in process	<input type="checkbox"/> yes: restricted	<input type="checkbox"/> government	<input type="checkbox"/> scientific
	<input type="checkbox"/> being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial	<input checked="" type="checkbox"/> transportation
	<input type="checkbox"/> not applicable	<input type="checkbox"/> no	<input type="checkbox"/> military	<input type="checkbox"/> other:

**4. Owner of Property** (give names and mailing addresses of all owners)

name Maryland State Highway Administration

street & number 707 N. Calvert Street telephone no.:

city, town Baltimore state and zip code Maryland 21202

**5. Location of Legal Description**

courthouse, registry of deeds, etc. County Courthouse liber

street & number folio

city, town Easton state Maryland

**6. Representation in Existing** Historical Surveys

title N/A

date  federal  state  county  local

depository for survey records

city, town state

# 7. Description

Survey No. T-945

**Condition**

excellent  
 good  
 fair

deteriorated  
 ruins  
 unexposed

**Check one**

unaltered  
 altered

**Check one**

original site  
 moved      date of move \_\_\_\_\_

Prepare both a summary paragraph and a general description of the resource and its various elements as it exists today.

SEE ATTACHED

# 8. Significance

Survey No. T-945

Period	Areas of Significance—Check and justify below			
<input type="checkbox"/> prehistoric	<input type="checkbox"/> archeology-prehistoric	<input type="checkbox"/> community planning	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 1400–1499	<input type="checkbox"/> archeology-historic	<input type="checkbox"/> conservation	<input type="checkbox"/> law	<input type="checkbox"/> science
<input type="checkbox"/> 1500–1599	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> literature	<input type="checkbox"/> sculpture
<input type="checkbox"/> 1600–1699	<input type="checkbox"/> architecture	<input type="checkbox"/> education	<input type="checkbox"/> military	<input type="checkbox"/> social/
<input type="checkbox"/> 1700–1799	<input type="checkbox"/> art	<input type="checkbox"/> engineering	<input type="checkbox"/> music	<input type="checkbox"/> humanitarian
<input type="checkbox"/> 1800–1899	<input type="checkbox"/> commerce	<input type="checkbox"/> exploration/settlement	<input type="checkbox"/> philosophy	<input type="checkbox"/> theater
<input checked="" type="checkbox"/> 1900–	<input type="checkbox"/> communications	<input type="checkbox"/> industry	<input type="checkbox"/> politics/government	<input checked="" type="checkbox"/> transportation
		<input type="checkbox"/> invention		<input type="checkbox"/> other (specify)

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<b>Specific dates</b>	ca. 1920	<b>Builder/Architect</b>	MD	SHA
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check: Applicable Criteria:  A  B  C  D  
and/or  
Applicable Exception:  A  B  C  D  E  F  G  
Level of Significance:  national  state  local

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Prepare both a summary paragraph of significance and a general statement of history and support.

SEE ATTACHED

# 9. Major Bibliographical References

Survey No. T-945

Spero, P.A.C. & Company and Louis Berger and Associates  
"Historic Bridges in Maryland: Historic Bridge Context", Sept., 1994

# 10. Geographical Data

Acreeage of nominated property 1 acre

Quadrangle name Trappe

Quadrangle scale 1:24,000

UTM References do NOT complete UTM references

A	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Zone	Easting	Northing

B	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Zone	Easting	Northing

C	<input type="text"/>	<input type="text"/>	<input type="text"/>
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D	<input type="text"/>	<input type="text"/>	<input type="text"/>
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E	<input type="text"/>	<input type="text"/>	<input type="text"/>
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F	<input type="text"/>	<input type="text"/>	<input type="text"/>
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G	<input type="text"/>	<input type="text"/>	<input type="text"/>
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H	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Verbal boundary description and justification

List all states and counties for properties overlapping state or county boundaries

state	code	county	code

# 11. Form Prepared By

name/title	Rita M. Suffness, Leader, Cultural Resources Group		
organization	Maryland State Hwy. Administration	date	February 2, 1996
street & number	707 N. Calvert Street	telephone	410-545-8561
city or town	Baltimore	state	Maryland

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust  
Shaw House  
21 State Circle  
Annapolis, Maryland 21401  
(301) 269-2438

MARYLAND HISTORICAL TRUST  
DHCP/DHCD  
100 COMMUNITY PLACE  
CROWNSVILLE, MD 21032-2023  
.514-7600

T-945

Bridges 20016 and 20017

Vicinity of Easton, Talbot County

7.1 Continuation Sheet

Description

Bridges 20016 and 20017 are probable ca. 1920 concrete girder (T-beam) structures located in the vicinity of Easton in Talbot County. Bridge 20016 on MD 333 over Peachblossom is 500'0" long with 20 spans @ 25'0" and Bridge 20017 on MD 333 over Trippe Creek is 350'0" long with 14 spans @ 25'0". All evidence examined by the bridge engineers points to an original construction date in the 1920's.

Bridges 20016 and 20017 were originally built using concrete T-beams and had a roadway clearance of 15'-6". Both bridges were widened in 1950 using steel beams, resulting in a 28'-0" clear roadway with 2'0" safety curbs on each side of the road. Portions of the existing wingwall footings were removed to accommodate the widening of the abutment footings. Gunite repairs were performed on deteriorated areas of the existing structure and a bituminous wearing surface was placed on the old and new slabs.

In 1976 the 2'0" safety curbs and the concrete balustrades were removed and 3-strand steel railings were installed. The result was a 24'0" clear roadway with a 5'-2" bikeway on each side of the bridges. The work under the 1976 contract was basically bikeway oriented and did not replace any of the supporting bents, the beams or the concrete deck.

In 1990 a contract calling for structural repairs to both bridges was issued. Work done under this contract included:

- Repairs to the pile bents
- Removal and replacement of the longitudinal deck joints
- Cleaning and painting of selected steel beams
- Repairs to the concrete beams
- Removal and replacement of the abutment backwalls
- Cleaning and painting of the steel bearing plates
- Application of epoxy coating to the bottom and exterior sides of the concrete beams

Both bridges are in deteriorated condition, especially the original concrete piers, beams and deck of the 1920's structures, as well as the analogous components of the 1950's additions. The current state of the bridges include: deteriorating bearing plates, spalling bents, deterioration of the exterior face of girders and bents, bearing pier cap deterioration, heavy section loss at the head ends of the piers and in the abutment joints, heavy spalling on the underside of the girders and bents, plus outside girder spalling.

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Bridges 20016 and 20017

Vicinity of Easton, Talbot County

### 8.1 Continuation Sheet

#### Statement of Significance

Bridges 20016 and 20017 were originally built using concrete T-beams and had a roadway clearance of 15'-6". Both bridges were widened in 1950 using steel beams, resulting in a 28'-0" clear roadway with 2'0" safety curbs on each side of the road. Portions of the existing wingwall footings were removed to accommodate the widening of the abutment footings. Gunite repairs were performed on deteriorated areas of the existing structure and a bituminous wearing surface was placed on the old and new slabs.

#### Context - Concrete Girder Bridges

In Maryland the first mention of the use of concrete occurs in the Maryland Geological Survey's Report on the Highways of Maryland, published in 1899. In his chapter, "The Present Condition of Maryland Highways", Arthur Newhall Johnson noted that "iron bridges...are fast replacing the longer wooden spans". Observing that comparatively few I-beam bridges, "one of the cheapest and best forms for spans less than 25 or 30 feet", had been constructed in Maryland, Johnson recommended a transitional form of reinforced concrete construction, a type never used in Maryland.

A composite design was utilized for the Lancaster Street Bridge over the Central Avenue Sewer in 1902. The city engineers converted the bridge into "the most important and novel" of structures by the use of "Ferro-Concrete, or Armored Concrete" construction techniques. This design, in which metal mesh was used to reinforce the concrete, was the first step in Maryland toward the development of true reinforced concrete construction.

Possibly the first Maryland concrete bridge to feature reinforcing bars was the bridge at Sherwood Station, built in 1903 by Baltimore County. The announcement of the bridge's completion in the Third Report on the Highways of Maryland, stated that it "shows the progressive character of the work...steel concrete form of construction was adopted, which uses reinforced concrete beams instead of simple steel or wooden beams". In addition, the methodology is described as "steel rods are imbedded in the concrete beams to enable them to withstand heavy loads."

The success of reinforced bridge designs led to the adoption by the Maryland Geological Survey of a plan for reinforced concrete bridge construction, as described by Walter Crosby, Chief Engineer. "The general plan has been to replace these (wood bridges) with...concrete bridges" (Second Report on the State Highway Construction from the Period from January 1, 1906 to January 1, 1908, Maryland Geological Survey, on page 379). A step in this plan appears to have been the replacement of the wooden

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Bridges 20016 and 20017  
Vicinity of Easton, Talbot County

8.2 Continuation Sheet  
Statement of Significance

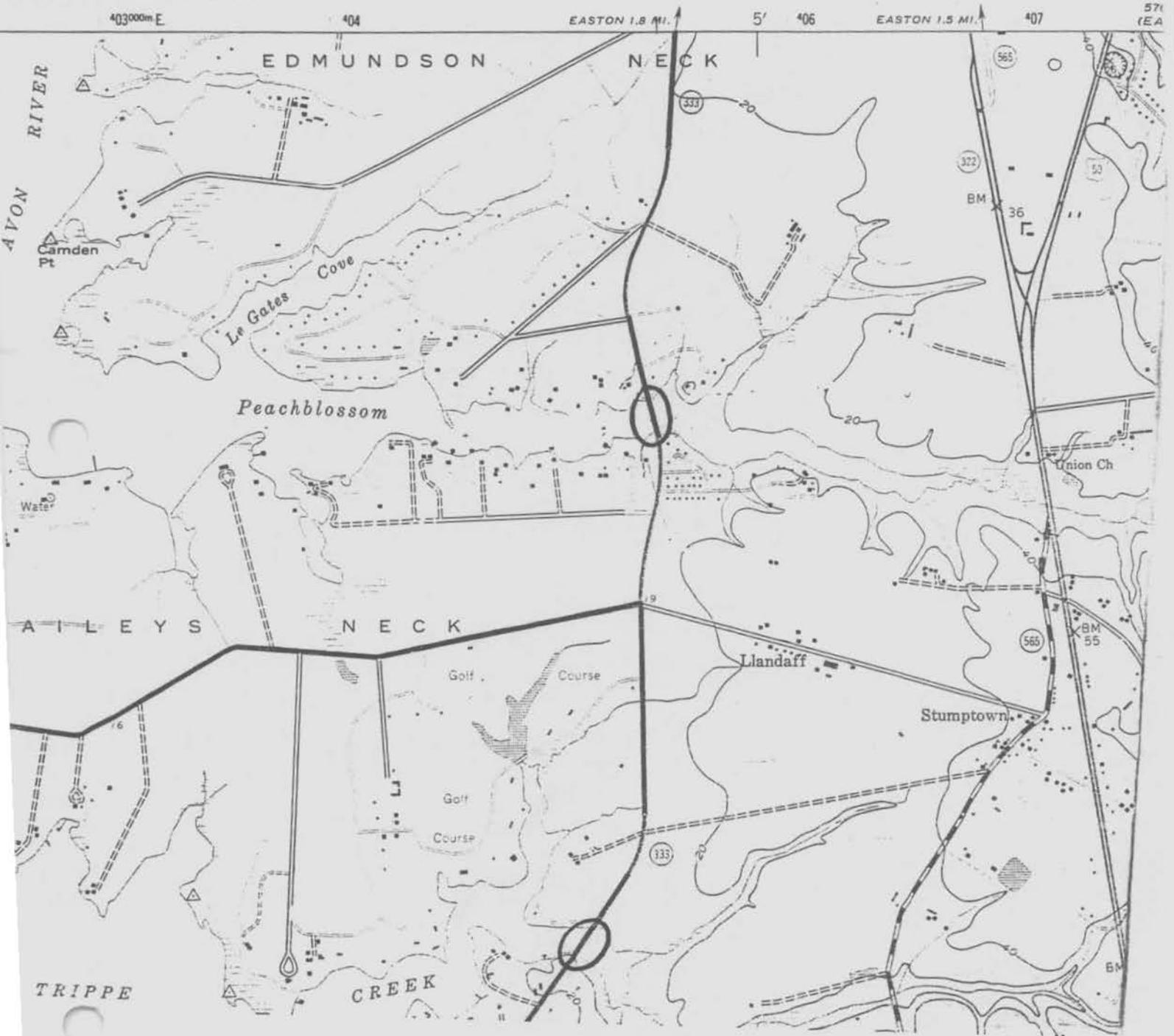
bridge over the Choptank in Greensboro by a 200-foot long, multiple span, reinforced concrete deck girder bridge, completed in 1908.

Reinforced concrete bridges were favored by the State Roads Commission. Road improvement entailed the replacement of large numbers of bridges that were inadequate to the vehicular needs of the State. Reinforced concrete construction had been successfully used to build safe bridges with reduced labor costs but the labor involved in individually designing all bridges would have been prohibitive. A method of reducing design time was critically needed.

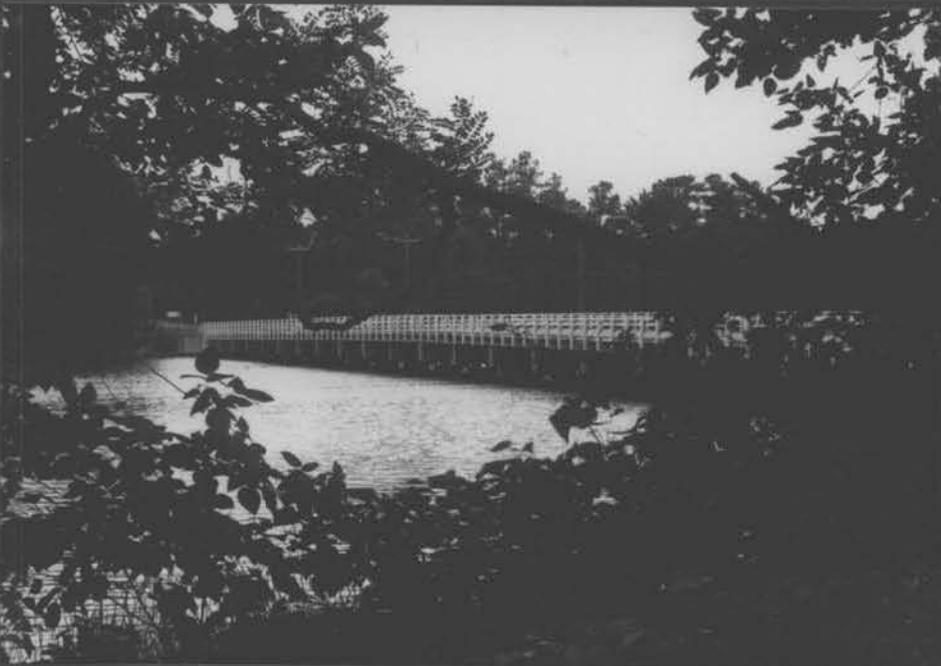
The introduction of standards, started in 1909, with the first product appearing in 1912, heralded a much needed design system for the State Roads Commission. Standards were a pre-set formulation governing the amount of concrete, reinforcing metal, etc., for spans up to 36-feet. In the period from 1911 to 1920 beam and slab concrete structures probably built to these standards, continuously revised, constituted a large percentage of the structures which are currently extant from the period.

T 945  
MD 333 Bridges  
Easton, Maryland  
Trappe Quadrangle

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY



ATTACHMENT 1, PAGE 1  
CURRENT PHOTOGRAPHS  
T-945 OF BRIDGES



BRIDGE 20016, PEACH BLOSSOM  
EAST ELEVATION



BRIDGE 20016  
SOUTH APPROACH



T-945  
ATTACHMENT 1, PAGE 2  
CURRENT PHOTOGRAPHS  
OF BRIDGES



BRIDGE 20016  
NORTH APPROACH



BRIDGE 20017 (TRIPPE)  
SOUTH APPROACH



BRIDGE 20017  
WEST ELEVATION

T-945  
ATTACHMENT 1, PAGE 3  
CURRENT PHOTOGRAPH  
OF BRIDGES



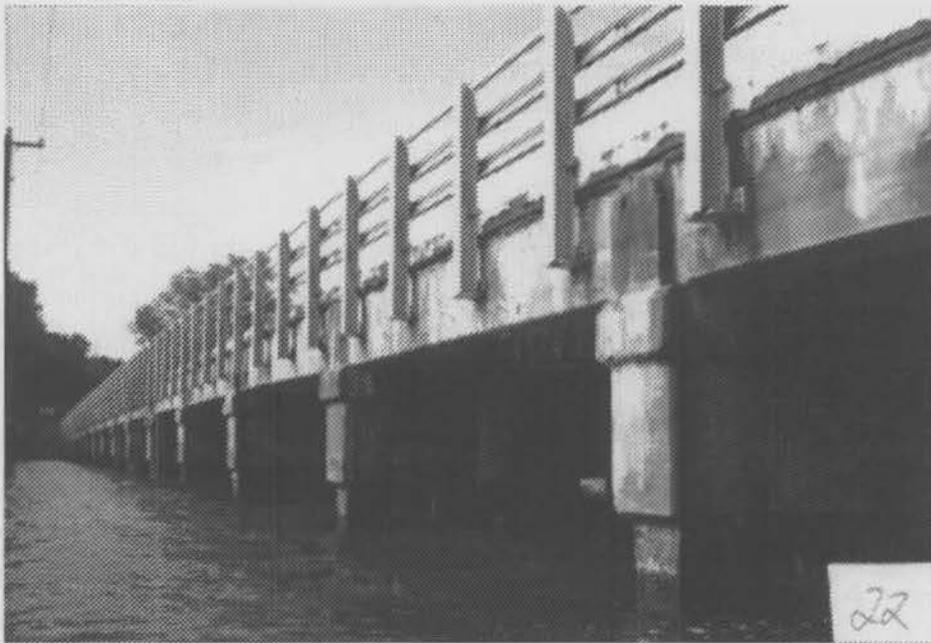
BR. 20017  
EAST ELEVATION



BR. 20017  
NORTH APPROACH



**Trippe Creek - Railing Before 1975 Improvements**



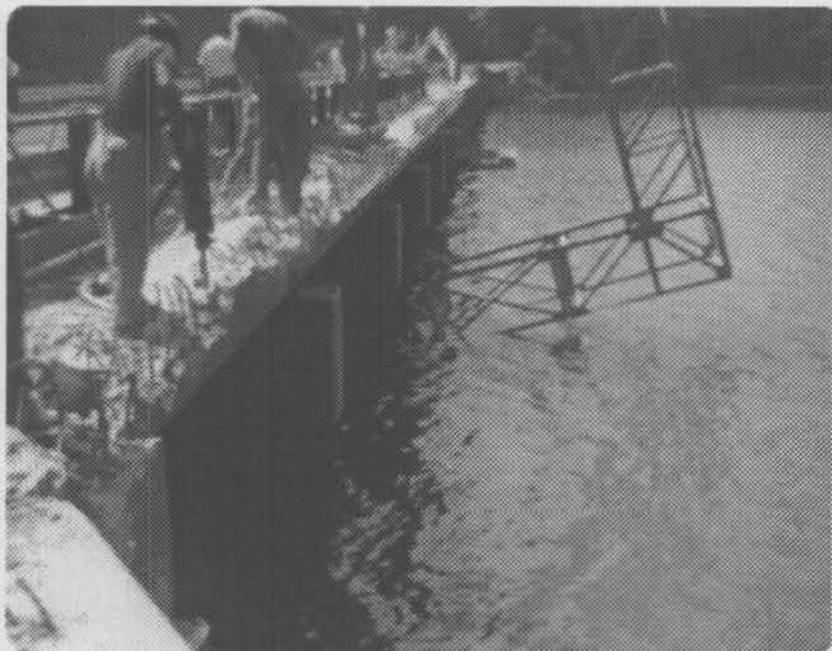
**Peachblossom - East Side of Bridge, April 1987**



**Peachblossom Creek - Bridge Railing Before 1975 Improvements**



**Peachblossom Creek - November 1994**



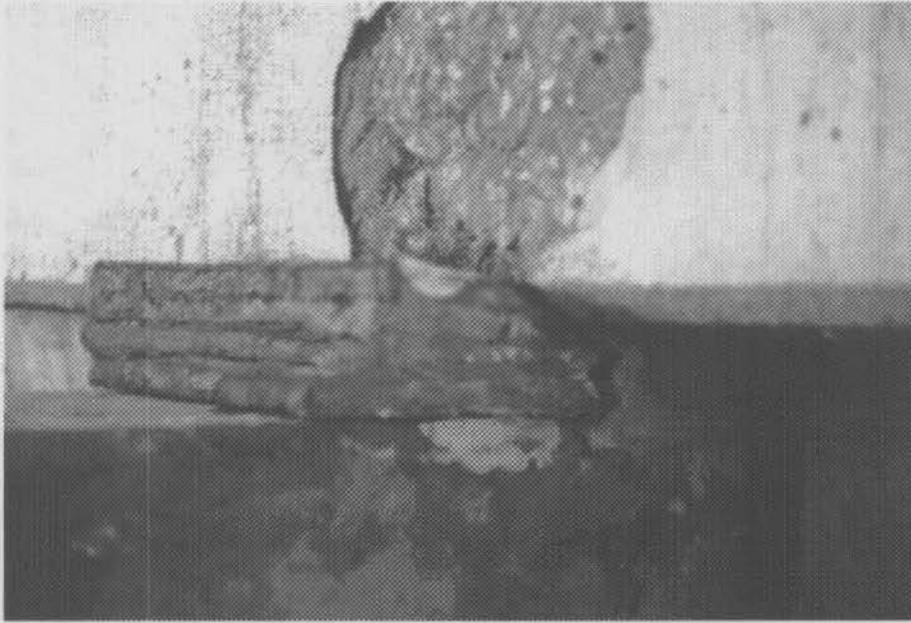
**Railing Removal, During Demolition 1975**

*Peach Blossom Creek*



**Railing Removal, After Demolition 1975**

*Peach Blossom Creek*



This picture  
is  
Upside down

**Peachblossom Creek - Deteriorating Bearing Plates and Spalling Bent,  
December 1992**

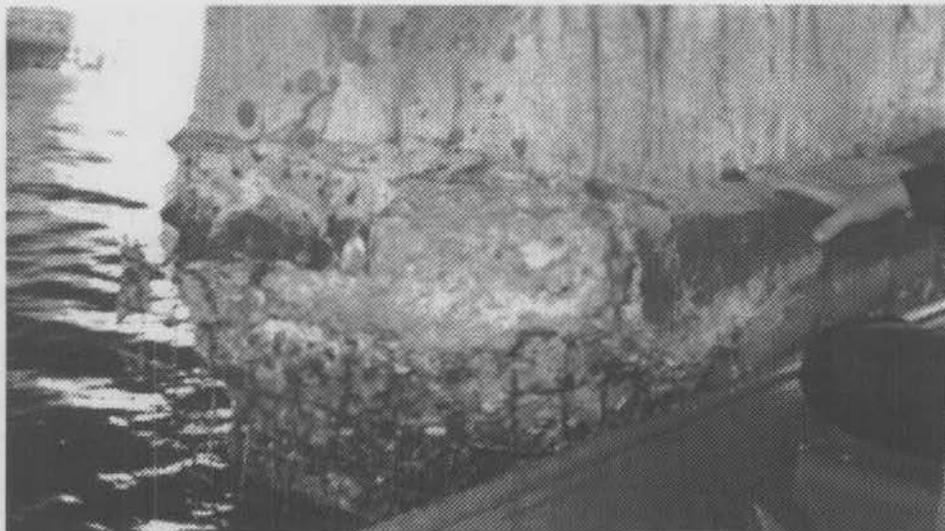


**Trippe Creek - Deterioration at Exterior Face of Girder and Bent, August 1984**

T-945



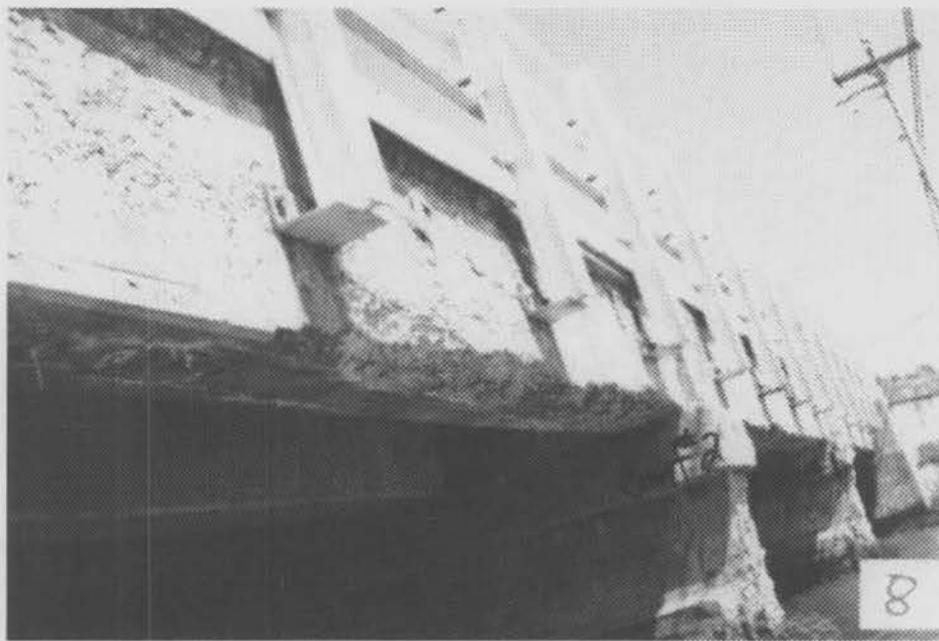
**Trippe Creek - Bearing and Pier Cap Deterioration, April 1987**



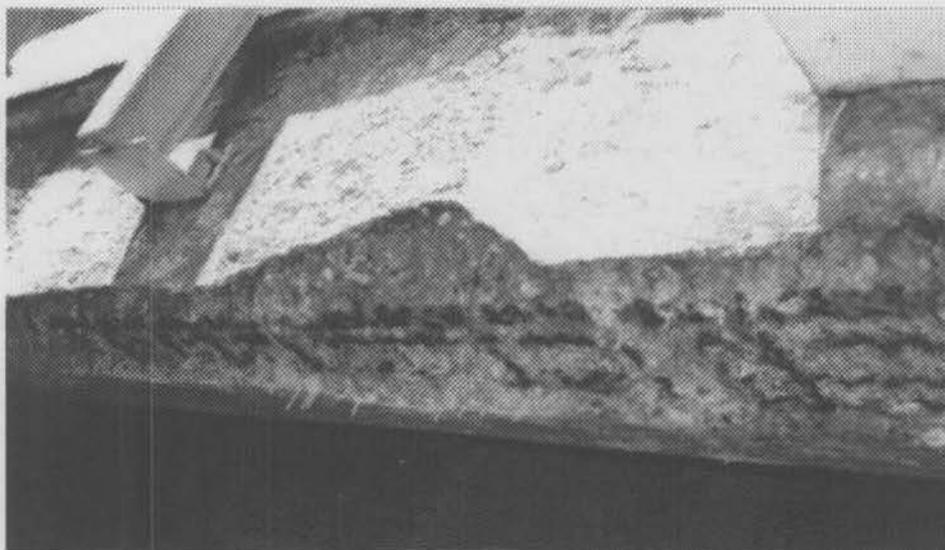
**Trippe Creek, Heavy Section Loss - Head end of Pier, March 1987**



**Peachblossom, Abutment Joint Between Old and New Section, March 1987**



**Trippe Creek - Heavy Girder & Bent Spalling, April 1987**

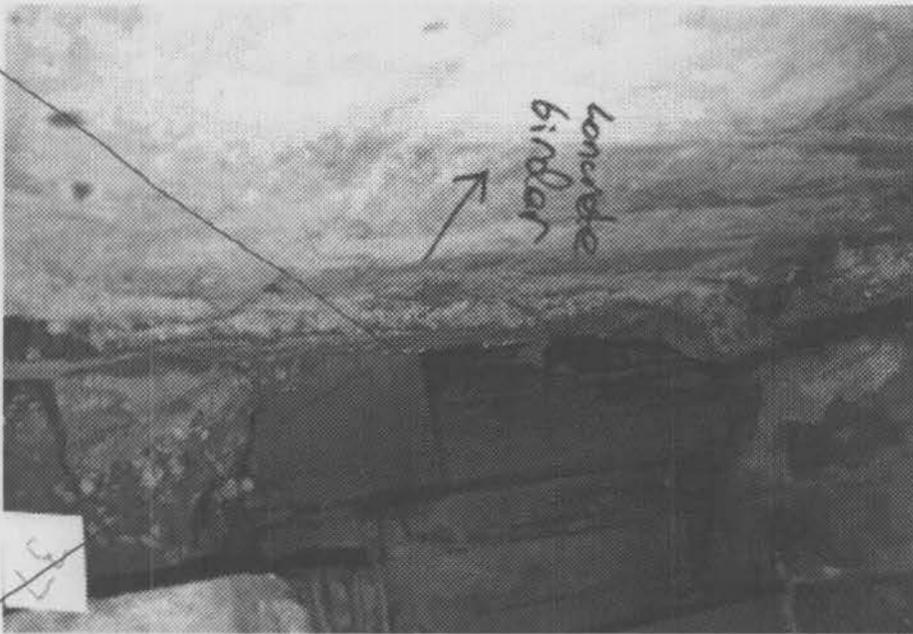


**Trippe Creek - Heavy Spalling on Underside of Exterior Girder, March 1987**

T-945



Peachblossom Creek - Outside Girder Spalling, July 1986



?



T 945

Bridges 20016 and 20015 over  
Peach Blossom / Trupper Creek

(This one 20016 over Peach Blossom)

Vicinity Easton, Talbot County

R Suffice 12/95

MD State Highway

Administration

East Elevator

1/5



T. 945

Bridges 20016 and 20017 one

(Pear Blossom & Trappe Creek  
(This one 20016 one  
Pear Blossom).

Vicinity Easton, Talbot County

R Suffern 12195

Mid State Highway

Admission 1.

North approach

2/5



T-945

Becky 20016 and 20017 one

Peach blossom & Trappe Creek

(There are in # 20017 one  
Trappe Creek).

Vicinity Easter, Talbot County

R. Saffers 12/95

Ind State Hwy Admin.

Source approach

3/5



T-945

Bridges 20016 and 20017 one  
P. H. Johnson - Trappe Creek

(Trappe one is 20017 one Trappe  
Creek)

Kastor vicinity, Talbot County

R. Saffner 12/95 Md State

Highway Administrator

West Elevation

4/5



T-941

Bridge 20016 and 20013 on  
Peachblow & Trappan  
creeks

(Thurston 20013 over Trappan  
Creek)

Easton vicinity, Tallot County

R. Grafton 11/95 Md state  
Harry Adams location

West Elevation

5/5