Maryland Historical Trust

Maryland Inventory of Historic Properties number: HO-664

Name: Dewey Rd over Cattail Crk. (Bridge HO-41)

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ___X____ Eligibility Not Recommended _____

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G ___None

Comments:_____

Reviewer, OPS: Anne E. Bruder Date: 3 April 2001

Reviewer, NR Program: Peter E. Kurtze Date: 3 April 2001

Maryland Inventory of Historic Properties MHT Number HO-664
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

Name and SHA No. Daisy Road over Cattail Creek/HO41

Location:
Street/Road Name and Number: Daisy Road

City/Town: Lisbon Vicinity __

County: Howard

Ownership: __State x County__Municipal__Other

This bridge projects over: __Road__Railway x Water__Land

Is the bridge located within a designated district:__yes__no

__NR listed district__NR determined eligible district
__locally designated__other
Name of District_____

Bridge Type:

__Timber Bridge
__Beam Bridge__Truss-Covered__Trestle
__Timber-and-Concrete

__Stone Arch

__Metal Truss

__Movable Bridge
__Swing __Bascule Single Leaf__Bascule Multiple Leaf
__Vertical Lift __Retractile__Pontoon

x Metal Girder
x Rolled Girder __Rolled Girder Concrete Encased
__Plate Girder __Plate Girder Concrete Encased

__Metal Suspension

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__Metal Arch

__Metal Cantilever

__Concrete
__Concrete Arch __Concrete Slab__Concrete Beam
__Rigid Frame
__Other Type Name_____

Description:

Describe Setting: Bridge HO41 carries Daisy Road over Cattail Creek in Howard County, Maryland. Daisy Road runs in a north-south direction at this location; Cattail Creek runs generally east-west. The bridge is located in a rural area with one 19th century domestic structure and a 19th century church visible from the bridge. Cattail Creek has a wooded channel bank at this location, and there are open fields surrounding the bridge on both sides.

Describe Superstructure and Substructure: The superstructure of HO41 is a single span steel beam bridge with a concrete deck and bituminous concrete wearing surface. There are steel W beam guard rails on both sides of the bridge deck and along the east approach. The span length is 42', with a total bridge length of 46'.

Discuss Major Alterations: The Howard County bridge inspection reports do not mention any major alterations occurring on this bridge.

History:
When Built:estimated 1940
Why Built:local transportation needs
Who Built:
Why Altered:
Was this bridge built as part of an organized bridge building campaign:yes

Surveyor Analysis:

This bridge may have NR significance for association with:
__A Events __B Person
__C Engineering/Architectural

Was this bridge constructed in response to significant events in Maryland or local history: No, it is not likely that HO41 was constructed in response to specific events in Maryland of local history other than the need for a more stable structure at the crossing due to the increased traffic volume of the early 20th century.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area: It is not likely that construction of or alterations to HO41 had a significant impact on the growth and development of the area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district: No, this area is not eligible for historic designation.

Is the bridge a significant example of its type: Bridge HO41, while in fairly good condition, is merely a typical example of an early 1940's steel beam bridge, and is not considered significant.

Does the bridge retain integrity of the important elements described in the Context Addendum: Rolled wide flange beams are considered a primary character defining element. There is no record in the county bridge inspection files of these beams ever having been replaced. The floor system and deck are considered secondary character defining elements. There is no record of any substantial repairs to these elements either. The most recent inspection report lists the superstructure condition as fair, but in need of repairs. The report recommends cleaning and repainting of beams and guard rails, and repairing several rusty areas. As indicated by the inspection reports, the only alterations made to the superstructure of HO41 is that the guard rails were replaced in the late 1980's and that the roadway has been resurfaced several times in the past fifteen years.

Concrete abutments are considered primary character defining elements. There is nothing in the county inspection records to indicate that any repair work has been done to the abutments in the past. The most recent inspection report lists the substructure as being in fair condition and recommends repairing cracks and spalling in the masonry.

HO41, while in fair condition, is in need of repairs. These needed alterations place the integrity of the structure in jeopardy.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why: No, this bridge is not a significant example of the manufacturer, designer, and/or engineer.

Should this bridge be given further study before significance analysis is made and why: No, HO41 should not be given further study before significance analysis is completed. While it is in fair condition, it is not a noteworthy example of a steel beam bridge.

HO-664

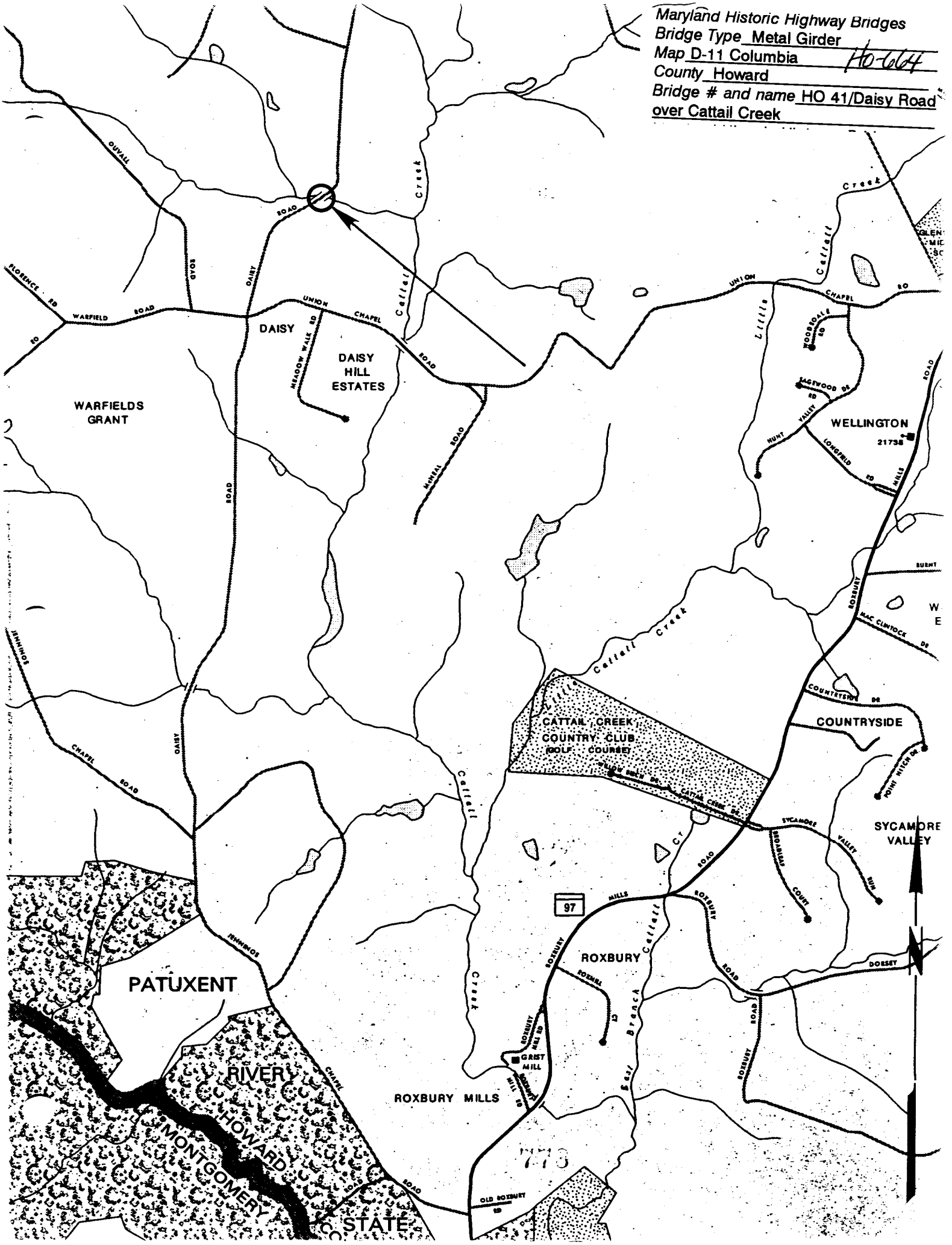
Bibliography:

Howard County
v.d Bridge Inspection Files.
Greiner, Inc.
1995 Historic Bridge Inventory Form.
Spero, P.A.C. & Company, and Louis Berger & Associates
1994 Historic Bridges in Maryland: Historic Bridge Context.
United States Geological Survey
1945 7.5' Woodbine Quadrangle, photorevised 1979.

Surveyor:

Name: Stephanie L. Bandy **Date:** August 1995
Organization: State Highway Admin. **Telephone:** (410) 321-2213
Address: 2323 West Joppa Road Brooklandville, MD 21022

Maryland Historic Highway Bridges
Bridge Type Metal Girder
Map D-11 Columbia HO-664
County Howard
Bridge # and name HO 41/Daisy Road over Cattail Creek



Inventory # HO-664

Name HO-41 - Daisy Rd. over Cattail Creek
County/State Howard / MD
Name of Photographer David Diehl, ~~II~~ II
Date 2-8-95

Location of Negative SHA

Description West Approach Looking EAST

Number ~~3~~ 1 of ~~31~~ 4

WARNING

Inventory # HO-667

Name HO41-Daisy Rd over Cattail Creek.
County/State Howard / MD
Name of Photographer David Diehl, ~~SHA~~ II
Date 2-8-95

Location of Negative SHA

Description East Approach Looking West

Number ~~4~~ 2 of ~~31~~ 4

Inventory # HO-664

Name HOH1- DAISY RD OVER CATTAIL CREEK
County/State HOWARD / MD
Name of Photographer DAVID DIEHL, ~~SHA~~ II
Date 2-8-95

Location of Negative SHA

Description SOUTH ELEVATION LOOKING NORTH

Number ~~5~~ 3 of ~~31~~ 4

Inventory # HO-664

Name HO41 - DAISY RD OVER CATTAIL CREEK
County/State HOWARD / MO
Name of Photographer DAVID DIEHL, ~~III~~ II
Date 2-8-95

Location of Negative SHA

Description NORTH ELEVATION LOOKING SOUTH

Number ~~16~~ 4 of ~~31~~ 4

Property Address Daisy Road over Cattail Creek, Howard County
Owner Name/Address Howard County Department of Public Works, 3430 Courthouse Drive, Ellicott City, MD 21043
Year Built 1940

Description:

Bridge HO-41, Daisy Road over Cattail Creek, is a single-span, 2-lane metal girder bridge with a 30.7 degree skew. The bridge was constructed in 1940. The structure is 14 meters (46 feet) long and has a clear roadway width of 7.1 meters (23.4 feet); there are no sidewalks. The out-to-out width is 7.5 meters (24.5 feet). The superstructure consists of nine rolled metal girders that support a concrete deck and metal guardrails. The girders are spaced approximately .9 meters (3 feet) apart. The concrete deck is 25.4 centimeters (10 inches) thick and has a bituminous wearing surface. The substructure consists of two concrete abutments. There are four flared concrete wingwalls. The bridge is posted for 20.9 tonnes (23 tons) and 35 miles per hour, and has a sufficiency rating of 40.8.

According to the 1997 inspection report, the superstructure is in poor condition and the substructure is in fair condition. The asphalt wearing surface is settling and cracking at the approaches. The concrete deck is in serious condition, with a large spall that reveals the bottom mat of reinforcing steel. There has been a steel plate installed on top of the spall. Both edges of the slab exhibit spalls and moist concrete. Several of the girders exhibit moderate rust with delaminations forming at the bearings. The inside faces of both fascia beams exhibit heavy rust. There is cracking and spalling of the wingwalls, and all the wingwalls have been patched.

National Register Evaluation:

A preliminary determination of NR eligibility was made for Bridge HO-41, Daisy Road over Cattail Creek, by the Interagency Review Committee in 1996. However, in the October 2, 1997 meeting of the Interagency Review Committee, it was determined that Metal Girder/Beam, Concrete Beam, and Concrete Slab bridges could be re-assessed using the procedures from May 1997. P.A.C. Spero & Company requests that the National Register eligibility of this structure be reconsidered. A significant example of a metal girder bridge should possess all the character defining elements (CDEs) of its type, and be readily recognizable as an historic structure from the perspective of the traveler. The integrity of distinctive features visible from the roadway approach, including railings, is important in structures such as bridge HO-41, which are common examples of their type. The railing of this structure has been replaced. The new railing is a steel guardrail which extends across the bridge and along the roadway approaches. Since metal girder bridges are an extremely common type, they must also possess a high degree of integrity of their primary elements, which include metal girders and stone, timber, or concrete abutments, as well as all secondary elements, which include railings, the floor system, and the deck, in order to be considered as a significant example. This structure lacks the integrity of its character-defining elements.

The revised 1995 Historic Highway Bridges in Maryland 1631-1960 describes the history and structural components of each type of bridge within Maryland. The components or members needed for assessing historic integrity are known as character defining elements. The alteration, elimination, and present condition of CDEs should be taken into account when determining a structure's integrity. Bridge HO-41 is a rolled metal girder bridge and according to Appendix C in the Historic Highway Bridges in Maryland: 1631-1960 a rolled metal girder bridge has three primary CDEs; rolled longitudinal I-beams, abutments of stone, concrete, or timber, and a pier, if applicable. Bridge HO-41 possesses two character-defining elements, including the rolled metal girders and concrete abutments, however, these elements are in deteriorated condition. Bridge HO-41 is an undistinguished example of a metal girder bridge; it lacks integrity of workmanship and design due to the replacement of the railings with guardrails and the poor condition of the deck and floor system. The integrity of materials is compromised by the deterioration of the girders and the patching of the wingwalls and deck. The bridge lacks integrity of feeling due to its overall poor condition. Bridge HO-41 does not retain sufficient integrity of its CDEs and secondary elements to be considered a significant example of a metal girder bridge. The structure is not eligible under Criterion A, as research conducted indicates no association with any historic events or trends significant in the development of national, state or local history. Historic research indicates that the structure has no association with persons who have made specific contributions

MARYLAND HISTORICAL TRUST ADDENDUM SHEET
DAISY ROAD BRIDGE PROJECT

Property Name: Bridge HO-41; Daisy Road over Cattail Creek
Survey No.: HO-664

Property Address Daisy Road over Cattail Creek, Howard County
Owner Name/Address Howard County Department of Public Works, 3430 Courthouse Drive, Ellicott City, MD 21043
Year Built 1940

National Register Evaluation (continued):

to history, and therefore, it does not meet Criterion B. It is not eligible under Criterion C, as it is in poor condition and is not a significant example of a metal girder bridge. Finally, the structure has no known potential to yield important information, and therefore, is not eligible under Criterion D.

MHT CONCURRENCE:
Eligibility ____ **Recommended** X **Not recommended**
Criteria ___A ___B X C ___D **Considerations** ___A ___B ___C ___D ___E ___F ___G ___None
Comments: TOO UNSIGNIFICANT A RESOURCE & POOR INTEGRITY.

[signature] 11/13/98 [signature] 11/17/98
Reviewer, Office of Preservation Services **Date** **Reviewer, NR program** **Date**

Maryland Inventory of Historic Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

MHT Number HO-664

Name and SHA No. HO 41

Location:
Street/Road Name and Number: Daisy Road

City/Town: Lisbon Vicinity __

County: Howard

Ownership: __State x County__Municipal__Other

This bridge projects over: __Road__Railway x Water__Land

Is the bridge located within a designated district:__yes__no

__NR listed district__NR determined eligible district
__locally designated__other
Name of District_____

Bridge Type:

__Timber Bridge
__Beam Bridge__Truss-Covered__Trestle
__Timber-and-Concrete

__Stone Arch

__Metal Truss

__Movable Bridge
__Swing __Bascule Single Leaf__Bascule Multiple Leaf
__Vertical Lift __Retractile__Pontoon

x Metal Girder
x Rolled Girder __Rolled Girder Concrete Encased
__Plate Girder __Plate Girder Concrete Encased

__Metal Suspension

HO-664

__Metal Arch

__Metal Cantilever

__Concrete
__Concrete Arch __Concrete Slab__Concrete Beam
__Rigid Frame
__Other Type Name_____

Description:

Describe Setting: Bridge HO 41 carries Daisy Road over Cattail Creek in Howard County, Maryland. Daisy Road runs in a north-south direction at this location; Cattail Creek runs generally east-west. The bridge is located in a rural area with one 19th century domestic structure and a 19th century church visible from the bridge. Cattail Creek has a wooded channel bank at this location, and there are open fields surrounding the bridge on both sides.

Describe Superstructure and Substructure: The superstructure of HO 41 is a single span steel beam bridge with a concrete deck and bituminous concrete wearing surface. There are steel W beam guard rails on both sides of the bridge deck and along the east approach. The span length is 42', with a total bridge length of 46'.

Discuss Major Alterations: The Howard County bridge inspection reports do not mention any major alterations occuring on this bridge.

History:
When Built:estimated 1940
Why Built:HO 41 was constructued to meet local transportation needs.
Who Built:
Why Altered:HO 41 was likely altered to meet structural and safety needs.
Was this bridge built as part of an organized bridge building campaign:yes

Surveyor Analysis:

This bridge may have NR significance for association with:
__A Events __Person
__C Engineering/Architectural

Was this bridge constructed in response to significant events in Maryland or local history: No, it is not likely that HO 41 was constructed in response to specific events in Maryland of local history other than the need for a more stable structure at the crossing due to the increased traffic volume of the early 20th century.

HO-664

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area: It is not likely that construction of or alterations to HO 41 had a significant impact on the growth and development of the area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from historic and visual character of the possible district: No, this area is not eligible for historic designation.

Is the bridge a significant example of its type: Bridge HO 41, while in fairly good cndition, is merely a typical example of an early 1940's steel beam bridge, and is not considered significant.

Does the bridge retain integrity of the important elements described in the Context Addendum: Rolled wide flange beams are considered a primary character defining element. There is no record in the county bridge inspection files of these beams ever having been replaced. The floor system and deck are considered secondary character defining elements. There is no record of any substantial repairs to these elements either. The most recent inspection report lists the superstructure condition as fair, but in need of repairs. The report recommends cleaning and repainting of beams and guard rails, and repairing several rusty areas. As indicated by the inspection reports, the only alterations made to the superstructure of HO 41 is that the guard rails were replaced in the late 1980's and that the roadway has been resurfaced several times in the past fifteen years.

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HO 41, while in fair condition, is in need of repairs. These needed slterations place the integrity of the structure in jeapordy.

Is the bridge a significant example of the work of the manufacturer, designer, and/or engineer and why: No, this bridge is not a significant example of the manufacturer, designer, and/or engineer.

Should this bridge be given further study before significance analysis is made and why: No, HO 41 should not be given further study before significance analysis is completed. While it is in fair condition, it is not a noteworthy example of a steel beam bridge.

Bibliography:

Howard County Bridge Inspection Files
Spero, P.A.C. & Company, and Louis Berger & Associates **Historic Bridges in Maryland: Historic Bridge Context**, September 1994.

HO-664

Surveyor:
Name: Stephanie L. Bandy **Date:** August 1995
Organization: State Highway Admin. **Telephone:** (410) 321-2213
Address: 2323 West Joppa Road Brooklandville, MD 21022

1 [illegible]

2 BRIDGE NO. 4 [illegible] ROAD OVER CATTAIL CREEK

3 HOWARD CO. MD

4 SUSAN TAYLOR

NO MEER [illegible]

5 MD SHPO

6 SOUTH ROADWAY APPROACH, LOOK [illegible] NORTH

7 [illegible]

WEIGHT
46.
SPEED
35 M

1. HO-864

2. BRIDGE HO-41 DAISY ROAD OVER [illegible] CULVERT

3. HOWARD CO., MD

4. SUSAN TAYLOR

5. NOVEMBER 199[illegible]

6. M[illegible] [illegible]

7. NORTH [illegible] APPROACH LOOKING SOUTH

8. 2 OF 6

[illegible]

[illegible] DAISY ROAD OVER LATTAIL CREEK

HOWARD CO MD

SUSAN TAYLOR

[illegible]

[illegible]

[illegible]

BOM 6

1 MD 694

2 BRIDGE 40-41 [illegible] OVER CATTAIL CREEK

3 [illegible] CO MD

4 SUSAN TAYLOR

5 NOVEMBER 1997

MD SHPO

[illegible] ELEVATION

6 4 OF 6

1. HO-664
2. BRIDGE HO-41, DAKY ROAD OVER CANAL CREEK
3. HOWARD CO, MD
4. SUSAN TAYLOR
5. NOVEMBER 1997
6. MD SHPO
7. SOUTH ABUTMENT GIRDERS
8. 6 OF 6

1 - 0.664

2 BRIDGE - 0.4 DAISY ROAD OVER FATAL CREE

3 HOWARD CO, MD

4 SUSAN TAYLOR

5 NOVEMBER 1997

6 MD SHPO

7 NORTH ABUTMENT GIRDERS

8. 5 OF 6