



**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

**Inspection Report for
C-13-2023**

**STH 89 over BR OF MUD CREEK
May 23, 2019**



Type	Prior	Team Leader	Frequency (mos)	Performed
Routine - Culvert	11-28-18	Doocy, Steve (9028)	12	X

Latitude	43°14'10.00"N	Owner	STATE HIGHWAY DEPT
Longitude	89°00'57.00"W	Maintainer	STATE HIGHWAY DEPT

Time Log		Team members
Hours	Minutes	Shannon Lipe Jack Martzke Travis McDaniel
0	30	

Name	Number	Signature	Signature Date
Inspector	Coset, Madison	9025	06-03-19
		E-signed by Travis McDaniel(dotwtm)	

BRIDGE INSPECTION REPORT
Wisconsin Department of Transportation
DT2007 2003 s.84.17 Wis. Stats.

page 2

Identification & Location

Feature On: STH 89	Section Town Range: S24 T09N R12E	Structure Number: C-13-2023
Feature Under: BR OF MUD CREEK	County: DANE	
Location 2.5M S CTH V	Municipality: YORK	Structure Name:

Geometry

measurements in feet, except where noted

Approach Roadway Width: 0	Bridge Roadway Width:	Total Length: 11.5
Approach Pavement Width: 0	Deck Width:	Deck Area (sq ft):

Traffic

	Lanes	ADT	ADT year	Traffic Pattern
On	2	1100	2000	TWO WAY TRAFFIC

Capacity

Load Rating

Inventory rating:	Overburden depth (in): 2.0	Last rating date:	Controlling:
Operating rating:	Deck surface material: BITUMINOUS	Re-rate for capacity (Y/N):	Control location:
Posting:	Re-rate notes:		

Hydraulic

Classification

Scour Critical Code(113): (8) STABLE-ABOVE TOP FOOTING	Q100 (ft3/sec):	
High water elevation (ft):	Velocity (ft/sec):	Sufficiency #:

Span(s)

Span #	Material	Configuration	Depth (in)	Length (ft)	Main
1	CONCRETE	RIGID FRAME		11.0	Y

Expansion joint(s)

Temperature:

File:	New:
-------	------

Clearance

Item	File Measurement (ft)	File Date	New Measurement (ft)
Highway Min Vertical On Cardinal			
Horizontal On Cardinal			

Construction History

Year	Work Performed	FOS id
2014	NEW STRUCTURE	0000-00-00

Maintenance Items

Item	Priority	Recommended by	Status	Status change
IMP-Structure Replacement	HIGH	Doocy, Steve (9028)	IDENTIFIED	12/11/18
Recommend replacement.				

BRIDGE INSPECTION REPORT
Wisconsin Department of Transportation
DT2007 2003 s.84.17 Wis. Stats.

page 3

Structure No.: **C-13-2023**

Elements

Chk	Element	Defect	Description	UOM	Total	Quantity in Condition State			
						1	2	3	4
X	38		Reinforced Concrete Slab	SF	340	314	6	20	0
			No plans exist, but it appears to be a rigid frame structure resting on spread footings. It has been widened on both ends onto the old wings.						
		1080	Delamination - Spall - Patched Area	SF		0	6	0	0
			spall at construction joint for widening (both sides). Edge of slab (both sides) also has delams.						
		1130	Cracking (RC)	SF		0	0	20	0
			Wide cracks along edge of slab.						
	8511		AC Overlay	SF	340	0	340	0	0
		3220	Crack (Wearing Surface)	SF		0	340	0	0
			transverse cracking over slab area.						
X	215		Reinforced Concrete Abutment	LF	68	0	4	64	0
		1130	Cracking (RC)	LF		0	4	64	0
			Vertical cracks near wingwalls and NW Corner.						
		1190	Abrasion-Wear (PSC-RC)	LF		0	0	64	0
			South Footing along waterline has heavy abrasion, with aggregate missing, exposed rebar and heavy SL of the rebar. Joint between footing and abutment (both north and south) is abraded.						
			Scour	LF		0	0	48	20
		6000	South abutment undermined up to 1'0" under footing for 2/3 of width of structure. Cannot tell, but there does not appear to be piling, so the assumption is this is a spread footing. North abutment has footing exposed						
			Slight undermining of North Abutment, about 3-6 in						
X	330		Metal Bridge Rail	LF	22	22	0	0	0
			Continuous Beamguard over bridge (Not connected to structure). One block broken on NW side (off bridge). Some deformations (pack rust) of beamguard, but is performing its intended function.						
X	8400		Integral Wingwall	EA	4	0	2	2	0
			Erosion behind upstream wingwall						
			Wall Deterioration	EA		0	2	2	0
		8903	Spalls at wing to abutment connections typical throughout. Large spalls in NE and SE Wings (see photos). Spall at end of NW wing near construction joint.						

BRIDGE INSPECTION REPORT
Wisconsin Department of Transportation
DT2007 2003 s.84.17 Wis. Stats.

page 4

Structure No.: **C-13-2023**

Assessments

Chk	Element	Defect	Description	UOM	Total	Quantity in Condition State			
						1	2	3	4
X	9001		Drainage - Ends of Structure NW corner has some erosion behind wing.	EA	4	3	1	0	0
X	9030		Signs - Object Markers All but one marker needs re-adjustment; leaning away from roadway.	EA	4	1	0	3	0
X	9323		Approach Roadway - Asphalt Settled on North End.	EA	2	1	1	0	0

NBI Ratings

	File	New
Deck	7	7
Superstructure	7	7
Substructure	3	3
Culvert	N	N
Channel	8	8
Waterway	8	8

Structure Specific Notes

Scour hole forming under south abutment.

Inspection Specific Notes

Inspector Site-Specific Safety Considerations

Structure Inspection Procedures

Special Requirements

	Chk	Hours	Cost	Comments
Other Access Equipment	X			Hip Waders

**Underwater Probe Form
C-13-2023**

General Site Conditions - Scour

Scour evident under south abutment.

General Site Conditions - Embankment Erosion/Conditions

Stable.

Substructure Notes

Chk	Unit	Max Water Depth(ft)	Mode	Notes
X	Cardinal	2.5	Wade	
X	Non Cardinal	2.5	Wade	

Culvert
Document Comment/Description
Roadway over Structure



Culvert

Document Comment/Description

West end of Structure.



Culvert

Document Comment/Description

NW Wing Extension construction joint.



Culvert

Document Comment/Description

North Footing to NW wing interface with abrasions and spalls.



Culvert

Document Comment/Description

North Footing.



Culvert

Document Comment/Description

South Footing (undermined).



Culvert

Document Comment/Description

Typical cracks, abrasions, and deterioration of footing to abutment wall interface.



Culvert

Document Comment/Description

Spalls and delaminations of widened portion of slab



Culvert

Document Comment/Description

Typical footing



Culvert

Document Comment/Description

Typical Footing.



Culvert

Document Comment/Description

NE Corner of bridge.



Culvert

Document Comment/Description

NE Wing to abutment interface



Culvert

Document Comment/Description

SE Wing to abutment interface.



Culvert

Document Comment/Description

NE Wing to abutment interface.



Culvert

Document Comment/Description

East side slab widening.



Culvert

Document Comment/Description

East end of bridge.



Culvert

Document Comment/Description

NW Wing erosion



Culvert

Document Comment/Description

NW Wing erosion.



This page intentionally left blank