2015 ROUTINE
BRIDGE INSPECTION REPORT

BRIDGE # 62537
CSAH 22(KELLER PY) over KOHLMAN CREEK

DISTRICT: Metro **COUNTY: Ramsey** **CITY/TOWNSHIP: Maplewood**

Date(s) of Inspection: 11/02/2015
Equipment Used:

Owner: County Highway Agency

Inspected By: Bodelson, Dan

Report Written By: Dan Bodelson
Report Reviewed By: Nicklaus Fischer
Final Report Date: 01/05/2016

MnDOT Bridge Office
3485 Hadley Avenue North
Oakdale, MN 55128

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MnDOT Structure Inventory Report

Bridge ID: 62537 CSAH 22(KELLER PY) **over** KOHLMAN CREEK **Date:** 01/05/2016

GENERAL

Agency Br. No.
District Metro
Maint. Area **Crew**
County 062 - Ramsey
City Maplewood
Township
Desc. Loc. 0.2 MI NE OF JCT CSAH 23
Sect., Twp., Range 4 - 029N - 22W
Latitude **Deg** 45 **Min** 1 **Sec** 21.82
Longitude **Deg** 93 **Min** 3 **Sec** 50.54
Custodian 02 - County Highway Agency
Owner 02 - County Highway Agency
BMU Agreement
Year Built 1982
MN Year Reconstructed
FHWA Year Reconstructed
MN Temporary Status
Bridge Plan Location 3 - COUNTY
Date Opened to Traffic
On-Off System 1 - ON
Legislative District 55A

STRUCTURE

Service On 5 - Highway-pedestrian
Service Under 5 - Waterway
Main Span Type
2 - Concrete Continuous 09 - Slab Span
Main Span Detail
Appr. Span Type
Appr. Span Detail
Skew 0
Culvert Type
Barrel Length ft.
Cantilever ID

NUMBER OF SPANS

MAIN: 3 **APPR:** 0 **TOTAL:** 3
Main Span Length 26.0 ft.
Structure Length 75.3 ft.
Deck Width (Out-to-Out) 46.4 ft.
Deck Material 1 - Concrete Cast-in-Place
Wear Surf Type 4 - Low Slump Concrete
Wear Surf Install Year 1982
Wear Course/Fill Depth 0.17 ft.
Deck Membrane 0 - None
Deck Rebars 1 - Epoxy Coated Reinforcing
Deck Rebars Install Year 1982
Structure Area (Out-to-Out) 3494 sq. ft.
Roadway Area (Curb-to-Curb) 2713 sq. ft.
Sidewalk Width **Lt** 0.70 ft. **Rt** 6.00 ft.
Curb Height **Lt** 0.50 ft. **Rt** 0.50 ft.
Rail Type **Lt** 17 **Rt** 17

ROADWAY

Bridge Match ID (TIS) 0
Roadway O/U Key Route On Structure
Route Sys 04 - CSAH **Number** 22
Roadway Name or Description
CSAH 22
Level of Service 1 - MAINLINE
Roadway Type 2 - 2-way traffic
Control Section (TH Only)
Reference Point 001+00.070
Detour Length 3.0 mi
Lanes **On** 2 **Under** 0
ADT 2689 **Year** 2008
HCADT 0 **ADTT** 0 **%**
Functional Class 16 - Urban - Minor Arterial

RDWY DIMENSIONS

If Divided	NB-EB	SB-WB
Roadway Width	36.00 ft.	ft.
Vertical Clearance	ft.	ft.
Max. Vert. Clear.	ft.	ft.
Horizontal Clear.	35.9 ft.	ft.
Lateral Clearance	ft.	ft.

Appr. Surface Width 36.0 ft.
Bridge Roadway Width 36.0 ft.
Median Width On Bridge ft.

MISC. BRIDGE DATA

Structure Flared 0 - No flare
Parallel Structure N - No parallel structure
Field Conn. ID
Abutment Foundation 1 - CONC
(Material/Type) 3 - FTG PILE
Pier Foundation 8 - CIP
(Material/Type) 4 - PILE BENT
Historic Status 5 - Not eligible

PAINT

Year Painted 1982
Unsound Paint %
Painted Area 250 sq. ft.
Primer Type 2 - Lead, Iron Oxide - non
Finish Type G - Chorinated Rubber Alum

BRIDGE SIGNS

Posted Load 0 - Not Required
Traffic 0 - Not Required
Horizontal 0 - Not Required
Vertical N - Not Applicable

INSPECTION

Userkey 102
Unofficial Structurally Deficient N
Unofficial Functionally Obsolete N
Unofficial Sufficiency Rating 97.4
Routine Inspection Date 11/02/2015
Routine Inspection Frequency 24
Inspector Name County, Ramsey
Status A - Open

NBI CONDITION RATINGS

Deck 5 - Fair Condition
Unsound Deck %
Superstructure 6 - Satisfactory Condition
Substructure 7 - Good Condition
Channel 6 - Bank slump; minor damage
Culvert N - Not Applicable

NBI APPRAISAL RATINGS

Structure Evaluation 6
Deck Geometry 5
Underclearances N
Water Adequacy 8 - Bridge Above Approache
Approach Alignment 6 - Equal to present minimu

SAFETY FEATURES

Bridge Railing 1 - MEETS STANDARDS
GR Transition 1 - MEETS STANDARDS
Appr. Guardrail 1 - MEETS STANDARDS
GR Termini 1 - MEETS STANDARDS

IN DEPTH INSP.

	Y/N	Freq	Date
Frac. Critical			
Underwater			
Pinned Asbly.			
Spec. Feat.			

WATERWAY

Drainage Area (sq. mi.)
Waterway Opening 500 sq. ft.
Navigation Control 0 - No nav. control on waterw
Pier Protection
Nav. Clr. (ft.) **Vert.** ft. **Horiz.** ft.
Nav. Vert. Lift Bridge Clear. (ft.)
MN Scour Code M - STBL - ABV W **Year** 1990

CAPACITY RATINGS

Design Load 5 - HS 20
Operating Rating 1 - LF (LF) HS 37.6
Inventory Rating 1 - LF (LF) HS 22.8
Posting VEH: **SEMI:** **DBL:**
Rating Date 05/14/2012

MnDOT Permit Codes

A: N - N/A
B: N - N/A
C: N - N/A

MnDOT Structure Inventory Report

Additional Roadways

Bridge ID: 62537 CSAH 22(KELLER PY) over KOHLMAN CREEK **Date:** 01/05/2016

01/05/2016

Inspector: County, Ramsey

BRIDGE 62537 CSAH 22(KELLER PY) OVER KOHLMAN CREEK **ROUTINE INSP. DATE: 11/02/2015**

County: Ramsey
City: Maplewood
Township:
Section: 4 Township: 029N Range: 22W
Span Type: 2 - Concrete Continuous 01 - Slab
List:
NBI Deck: 5 Super: 6 Sub: 7 Chan: 6

Location: 0.2 MI NE OF JCT CSAH 23
Route: 04 - CSAH 22 Ref. Pt.: 001+00.070
Control Section:
Maint. Area:
Local Agency Bridge Nbr.:
Culv: N
Open, Posted, Closed: A - Open
MN Scour Code: M - STBL - ABV WATER

Length: 75.3 ft.
Deck Width: 46.4 ft.
Rdwy. Area/ Pct. Unsnd: 2713 sq. ft. / %
Paint Area/ Pct. Unsnd: 250 sq. ft. / %
Culvert: N/A
Postings:

Appraisal Ratings - Approach: 6 Waterway: 8
Required Bridge Signs - Load Posting: 0 - Not Required Traffic: 0 - Not Required
Horizntal: 0 - Not Required Vertical: N - Not Applicable

Unofficial Structurally Deficient N
Unofficial Functionally Obsolete N
Unofficial Sufficiency Rating 97.4

Structure Unit:

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
215	Reinforced Concrete Abutment	2	Routine	11/02/2015	92 LF	0	92	0	0	N/A
			Routine	11/12/2013	92 LF	0	92	0	0	N/A

☐Requires Monitoring ☐Monitored

Notes: There is minor vertical cracking at south end abutment. There is some evidence of corrosion at the east side of the north abutment 2007-2015.
Minor cracks present but no exposed rebar. Vertical cracking w/efflorescence on the north abutment 2001-2015.
Leakage from strip seal is causing deterioration 2005-2015.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
234	Reinforced Concrete Pier Cap	2	Routine	11/02/2015	92 LF	0	92	0	0	N/A
			Routine	11/12/2013	92 LF	0	92	0	0	N/A

☐Requires Monitoring ☐Monitored

Notes: There is 1' vertical crack in the south cap 2007-2015.
Minor cracks and spalls are present 2001-2015.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
300	Strip Seal Deck Joint	2	Routine	11/02/2015	92 LF	0	92	0	N/A	N/A
			Routine	11/12/2013	92 LF	0	92	0	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: There is failure at both ends 2003-2015.
Minor leakage both ends 2001-2015.
Strip seal expansion joints need to be cleaned and flushed for further inspection 2001-2015.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
301	Poured Deck Joint	2	Routine	11/02/2015	92 LF	0	92	0	N/A	N/A
			Routine	11/12/2013	92 LF	0	92	0	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: Minor deterioration and adhesion failures are present 2001-2015.

Structure Unit:

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
320	Concrete Approach Slab-Bituminous Wearing Surface	2	Routine	11/02/2015	2 EA	0	2	0	0	N/A
			Routine	11/12/2013	2 EA	0	2	0	0	N/A

☐Requires Monitoring ☐Monitored

Notes: The bituminous has been patched by Ramsey County 2015.
There is some deterioration of the bituminous 2013-2015.
The south approach slab has moderate cracking and moderate settlement 2009-2015.
The north approach slab has moderate cracking and settlement 2015.

333	Masonry, Other or Combination Material Railing	2	Routine	11/02/2015	154 LF	0	154	0	N/A	N/A
			Routine	11/12/2013	154 LF	0	154	0	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: [2013-2015] minor damage on rail supports #2, #3, #4, #5 on east side - traffic damage (snow plow)
Both sides have minor vertical cracking and spalls present 2009-2015.
There is a 6" spall on the west side at mid span 2007-2015.
There is a 4" spall at west side expansion joint 2013-2015.
Minor damage to 4 eastside rail supports - caused by traffic. (snow plow) 2003-2015.
Railing is a combination concrete parapet & metal railing. Paint system has failed. Needs paint 2003-2015.

358	Concrete Deck Cracking Smart Flag	2	Routine	11/02/2015	1 EA	0	1	0	0	N/A
			Routine	11/12/2013	1 EA	0	1	0	0	N/A

☐Requires Monitoring ☐Monitored

Notes: Minor to moderate cracks w/ spalls in deck 2015
Minor but numerous cracks are present 2001-2013.

359	Underside of Concrete Deck Smart Flag	2	Routine	11/02/2015	1 EA	0	0	1	0	0
			Routine	11/12/2013	1 EA	0	0	1	0	0

☐Requires Monitoring ☐Monitored

Notes: [2013-2015] paint is failing on east facia
[2013-2015] modereate spall (1' x 0.5') w/ delamination on east side facia between piling.
There is cracking with corrosion the entire length east fascia. Cracking underneath and side 10" down from top 2007-2015.
There is a 1.5' X 1.0' area with exposed re-bar @ NE corner near north abutment 2007-2015.
Between south abutment and the C-I-P piling:
Paint failure on the SE facia 2015.
2 cracks w/ delamination.
There is a diagonal crack with efflorescence @ SW corner near abutment 2007-2013.
There are 3 longitudinal cracks w/efflorescence & corrosion 2005-2013.
Between the C-I-P piling:
There are 2 longitudinal crack w/efflorescence & corrosion 2005-2013.
Delamination with exposed rebar & corrosion present @ east fascia between piling 2009-2013.
Between the C-I-P piling and north abutment:
3' x 1' delamination@ CL., moderate crack 15' long - 20' from west end.There are 2 longitudinal cracks w/efflorescence & moderate corrosion and 1 moderate logitudinal crack w/efflorescence & corrosion 2005-2015.
There is delamination present under railing at the NE corner. Distressed area >2% and <10% 2003-2015.

Structure Unit:

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
361	Scour Smart Flag	2	Routine	11/02/2015	1 EA	1	0	0	N/A	N/A
			Routine	11/12/2013	1 EA	1	0	0	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: Scour is OK 2003-2015.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
362	Traffic Impact Smart Flag	1	Routine	11/02/2015	1 EA	1	0	0	N/A	N/A
			Routine	11/12/2013	1 EA	1	0	0	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: Minor damage to bridge rail supports #2, #3, #4, #5 on the east side doesn't affect the strength of the bridge 2003-2015.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
378	Low Slump O/L (Concrete Slab with Epoxy Rebar)	2	Routine	11/02/2015	3498 SF	0	0	3498	0	0
			Routine	11/12/2013	3498 SF	0	0	3498	0	0

☐Requires Monitoring ☐Monitored

Notes: [2015] CL crack has 10 moderate spalls 1 w/ rust on north end.
[2013-2015]There are 3 longitudinal cracks on entire length of deck - NB, CL, SB (w/ moderate spall in CL crack)
[2013-2015] minor 10' diagonal crack in NW corner
Some moderate spalling exists on deck 2011 - 2015.
There is 15' diagonal cracking @ SW corner 2007-2015.
There are 2 longitudinal cracks the entire length of deck 2001-2015.
There is a total of 181 LF of longitudinal cracking 2009-2013.
Minor transverse cracking in deck 2001-2015.
There is a total of 36 LF of transverse cracking 2009-2015.
Distressed is >2% and <10% 2005-2015.
Deterioration of the east 1/2 of wearing surface due to vandalism after low slump overlay placement.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
382	Cast-In-Place (CIP) Piling	2	Routine	11/02/2015	16 EA	0	16	0	0	N/A
			Routine	11/12/2013	16 EA	0	16	0	0	N/A

☐Requires Monitoring ☐Monitored

Notes: Paint is cracking & peeling. Some minor corrosion is present @ waterline of all piling 2003-2015.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
387	Reinforced Concrete Wingwall	2	Routine	11/02/2015	4 EA	0	4	0	0	N/A
			Routine	11/12/2013	4 EA	0	4	0	0	N/A

☐Requires Monitoring ☐Monitored

Notes: [2015] minor paint failure on NE, SE, & SW wing walls.
There is a 6" spall @ NW wing wall 2007-2015.
Minor cracks & spalls are present on all 4 wingwalls 2001-2015

Structure Unit:

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
964	Critical Finding Smart Flag	2	Routine	11/02/2015	1 EA	1	0	N/A	N/A	N/A
			Routine	11/12/2013	1 EA	1	0	N/A	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: DO NOT DELETE THIS CRITICAL FINDING SMART FLAG.

981	Signing	2	Routine	11/02/2015	1 EA	1	0	0	0	0
			Routine	11/12/2013	1 EA	1	0	0	0	0

☐Requires Monitoring ☐Monitored

Notes: Horizontal clearance signs are in place 2003-2015.

982	Approach Guardrail	2	Routine	11/02/2015	1 EA	0	1	0	N/A	N/A
			Routine	11/12/2013	1 EA	0	1	0	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: There is a broken post @ eighth post north of NE corner 2007-2015.
Guardrail system is in place 2003-2015.
There are no crash attenuators on guardrail system 2009-2015.
Not required as per MNDOT 2011.

984	Deck & Approach Drainage	2	Routine	11/02/2015	1 EA	1	0	0	N/A	N/A
			Routine	11/12/2013	1 EA	1	0	0	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: Drainage system is functioning 2003-2015.

985	Slopes & Slope Protection	2	Routine	11/02/2015	1 EA	0	1	0	N/A	N/A
			Routine	11/12/2013	1 EA	0	1	0	N/A	N/A

☐Requires Monitoring ☐Monitored

Notes: There is moderate cracking & moderate settlement. There is severe settlement @ SE corner -3' X 3' void 2009-2015.
There is moderate deterioration of grouted riprap slope protection 2007-2015.
The SW corner has moderate deterioration of grouted riprap slope protection 2007-2015.
There is settlement of riprap @ wingwalls 2007-2015.
Settlement @ NW, SE and SW corners 1999-2015.

Structure Unit:

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
986	Curb & Sidewalk	2	Routine	11/02/2015	1 EA	0	1	0	N/A	N/A
			Routine	11/12/2013	1 EA	0	1	0	N/A	N/A

☐ Requires Monitoring ☐ Monitored

Notes: [2013] bituminous walk on east side has been repaired
There is a 7" major settlement @ NE corner and a 5" major settlement @ SE corner. 2009-2011.
There is a 6" major settlement @ NE corner and a 4" major settlement @ SE corner 2007.
The sidewalk on the east side has numerous transverse cracking 2009-2015.
Sidewalk on the east side has settled 2005.
Minor cracks & spalls are present 2003-2005.

General Notes: 2015 Bridge safety inspection was conducted by Dan Bodelson on 11/02/2015.
2013 Bridge safety inspection was conducted by Dan Bodelson & Brian Essler on 11/12/2013.
2011 Bridge safety inspection was conducted by B. Wieman & D. Bodelson on 11/2/2011.
2009 Bridge safety inspection was completed by B. Wieman 10/07/2009.
2007 Bridge safety inspection was conducted by B. Wieman & B. Essler 8/09/2007.
2005 Bridge safety inspection was conducted by Bret Wieman 9/8/2005.
Tomaseal is flaking off and could be reapplied.
There is settlement of bituminous bike path matching the bridge concrete sidewalk at the SW & NE corners. 2001-2009. Will talk to Ramsey County Public Works Maintenance Dept.

58. Deck NBI: Concrete deck has moderate cracking, spalls & leaching.

36A. Brdg Railings NBI: Vehicular railings meet current standards.

36B. Transitions NBI: Guardrail transitions meet current standards.

36C. Appr Guardrail NBI: Approach guardrail meets current standards.

36D. Appr Guardrail Terminal NBI: Guardrail terminations meet current standards.

59. Superstructure NBI: Concrete deck has moderate cracking, spalling & delamination.

60. Substructure NBI: Abutments & piers have minor cracking, leaching & scale.

61. Channel NBI: Channel banks have minor to moderate erosion & slumping.

62. Culvert NBI: Structure is not a culvert.

71. Waterway Adeq NBI: Greater than 3' of freeboard.

72. Appr Roadway Alignment NBI: very minor speed reduction required.

Inventory Notes:

Dan Bodelson
Inspector's Signature

Nicklaus Fischer
Reviewer's Signature

Pictures

Photo 1 -

Photo 2 -

Pictures

Photo 3 -

Photo 4 -

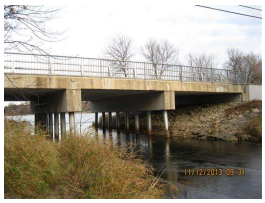
Pictures

Photo 5 -

Photo 6 -

Pictures

Photo 7 -



1. east side.JPG

2. erosion on SE corner.JPG

3. looking north.JPG

4. looking south.JPG

5. spall on deck.JPG

6. spall under deck east side near north pier.JPG

7. west side.JPG

Culvert

Bridge No.: 62537

Culvert

Item	*Description*	*Condition*	*Comments*
Culvert Overall:	**NBI Item 62**	N	Structure is not a culvert.

MnDOT Scour Code: M - STBL - ABV WATER

Waterway Inspection

Item No.	Yes, No, NA or Not Visible	Description
1.		Is there a significant build-up of debris?
2.		Is there erosion of the embankment around the headwalls?
3.		Is there any indication of cracking or settlement of the culvert barrel or headwalls?
4.		Is there shifting of the channel alignment or erosion of the stream banks? Also are there cracks in the soil of the banks parallel to the stream?
5.		Do scour measurements indicate that the streambed is below the bottom of the cutoff walls at the ends of the culvert?
6.		Is there evidence of distress in the roadway or approaches such as cracks in the pavement and sags in the guardrail or roadway? Also, is there cracking, erosion, or failure of the side slopes at or adjacent to the culvert?
7.		Is there an indication of "piping" of water along the outside of the culvert such as cavities adjacent to the barrel?
8.		Is the culvert without a bottom and scour measurements indicate that the streambed is below the plan streambed elevations?
9.		Has the riprap or other scour protection been damaged or otherwise made ineffective?
10.		If the culvert was designed to be buried (fill inside the culvert), is the material still in the barrel?

Notes:

- Streambed sounding data is to be documented.

- Soundings of the streambed should be done at each end of the culvert. If Items #5 or #8 are "Yes", then a streambed profile of the scoured area should be done.

- If "Yes" is the answer to any items on the checklist, notify the Program Administrator for further instructions.

Comments:

Completed On _____ By _____

Channel

Bridge No.: 62537

Channel

Item	*Description*	*Condition*	*Comments*
Channel Overall:	**NBI Item 61**	6	Channel banks have minor to moderate erosion & slumping.

Bank Protection/Revetment

Item	*Description*	*Condition*	*Comments*
Upstream Bank Protection:			
Downstream Bank Protection:			
Bridge Revetment:			

MnDOT Scour Code: M - STBL - ABV WATER

Underwater Inspection

Underwater Inspection By Divers:

No. of Piers To Be Inspected:

Waterway Characteristics

Reference Point:		**High Water Elev.:**		**Current Water Elev.:**	
Pile Tip Elev.:		**Low Water Elev.:**		**Current Streambed Elev.:**	
		Scour Hole Elev.:		**Current Scour Hole Elev.:**	

Waterway Inspection: (Not applicable for culverts)

Item No.	Yes, No, NA or Not Visible	Description
1.		Is there a significant build-up of debris?
2.		Is there a change in the horizontal alignment of the handrail or structure members such as beams?
3.		Is there any indication of vertical movement of the superstructure?
4.		Is there shifting of the channel alignment or erosion of the stream banks? Also are there cracks in the soil of the banks parallel to the stream?
5.		Is there a significant change in the alignment of hte exterior bearings?
6.		Are there cracks or other signs of distress in the approach pavement?
7.		Is the water currently on the superstructure?
8.		Are the slopes unstable?
9.		Do scour measurements indicate: (place a check by all that apply.)

- ☐ A. that the streamed is two or more feet below the bottom of pier footings which are supported on piles?
- ☐ B. scour below the bottom of spread footings?
- ☐ C. scour below the bottom of high abutment footings?
- ☐ D. that the streambed has scoured five feet or more below the original streambed elevation at pier bents?

10. _____ Have the scour countermeasures been damaged or otherwise made ineffective?

Notes:

- Streambed sounding data is to be documented.

- Per MnDOT Bridge Inspection Manual Section 2.2.5, at bridges that require x-sections, take channel x-sections, along the upstream and/or downstream face of the bridge.

- If "Yes" is the answer to any items on the checklist, notify the Program Administrator for further instructions.

Comments:

Completed On _____ By _____

Scour POA

Bridge No.: 62537

Scour POA

1. Is POA on File? _____
2. Date of most recent POA: _____
3. Here is a link to MnDOT's Bridge Scour website for other resources:
   - *http://www.dot.state.mn.us/bridge/hydraulics/scour.html*
   - The Scour POA should be kept in the bridge file and/or uploaded to SIMS using the "Inspection Files" tab.

Implementation

Scour POAs are required to be implemented by FHWA.

1. Is this POA being implemented? _____

Channel Section

Upstream

Custom Label	Location	Elevation

Downstream

Custom Label	Location	Elevation

Distance Measured From:

Elev. of Ref. Pt:

Depth to Water Surface:

WS Elev:

Vertical Datum:

Comments:

Distance Measured From:

Elev. of Ref. Pt:

Depth to Water Surface:

WS Elev:

Vertical Datum:

Maintenance

Element	Source Code	Work Code	Description	P/R	Priority	Work Order #	Year Due	Last Viewed	Entered	Start Date	Completed

BRIDGE STRUCTURAL ASSESSMENT REPORT

PURPOSE:

This report is a structural assessment of the structure and its ability to carry loads based on conditions identified in the attached bridge inspection report. The assessment is only a cursory review intended to provide guidance as to the relative hazards for structural conditions and deficiencies identified. This report is mandatory for all fracture critical bridges and is completed by the MnDOT Bridge Office upon receipt of the 7 Day FC Report; however, it is an OPTIONAL tool for agencies to utilize at their discretion for all other inspection types.

BRIDGE NO.: 62537

BRIDGE OWNER: County Highway Agency

DATE INSPECTED: 11/02/2015

STRUCTURE TYPE: Concrete Continuous Slab

FACILITY CARRIED: CSAH 22(KELLER PY)

FEATURES INTERSECTED: KOHLMAN CREEK

TYPE OF INSPECTION: ☑ ROUTINE
☐ FRACTURE CRITICAL
☐ PINNED ASSEMBLY:
☐ SPECIAL:
☐ DAMAGE:
☐ OTHER:

Check all that apply:

Redundancy: ☐ Load Path ☐ Structural ☐ Internal

Connection Type: ☐ Riveted ☐ Bolted ☐ Welded ☐ Other:

1. Was a critical finding identified during this inspection or upon structural review? ☐ Yes ☐ No

   a) If selected "**Yes**" above, state briefly the finding(s):

2. If a critical finding was identified, what is the current status? ☐ Pending ☐ Resolved ☐ N/A

   a) Briefly state actions taken:

3. Does the condition of any bridge component indicate impaired function? Examples of bridge components with impaired function include elements that are: frozen or immoveable, out-of-plumb or misaligned, distorted or structurally deformed, excessively deteriorated, cracked, broken, eroded or scoured. ☐ Yes ☐ No

a) If selected "**Yes**" above, state briefly the component(s) and condition(s):

4. Does the overall condition of the bridge, or any of its components mentioned in Question 3, suggest the need for detailed structural analysis and/or a revised load rating? ☐ Yes ☐ No

   a) If selected "**Yes**", state the reason for this recommendation and indicate a proposed timeframe in accordance with State of Minnesota Rule 8810.9500 (Subpart 2):

5. Based on the structural assessment of these findings, recommendations include:

   ☐ Repair/Maintenance ☐ Monitoring Plan
   ☐ Other ☐ Increased Inspection Frequency

   Explain recommended actions:

6. Other comments:

Bridge Office Reviewer