

**2016 ROUTINE
BRIDGE INSPECTION REPORT**



**BRIDGE # 62529
BNSF RR (ABAN) over CSAH 19(BEAM AVE)**

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

Date of Inspection: 08/03/2016
Equipment Used: Ladder, Confined Space Entry

Owner: County Highway Agency

Inspected By: Bodelson, Dan

Report Written By: Dan Bodelson
Report Reviewed By: Nicklaus Fischer
Final Report Date: 10/04/2016

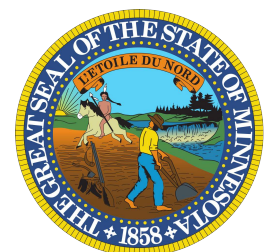


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Minnesota Structure Inventory Report

Bridge ID: 62529

BNSF RR (ABAN)

over CSAH 19(BEAM AVE)

Date: 10/04/2016

GENERAL			
Agency Br. No.			
District Metro			
Maint. Area		Crew	
County 062 - Ramsey			
City Maplewood			
Township			
Desc. Loc. 0.1 MI W OF JCT MSAS 112			
Sect., Twp., Range		3 - 029N - 22W	
Latitude Deg	45	Min	1
Sec			41.28
Longitude Deg	93	Min	2
Sec			18.24
Custodian 02 - County Highway Agency			
Owner 02 - County Highway Agency			
BMU Agreement			
Year Built		1973	
MN Year Reconstructed			
FHWA Year Reconstructed			
MN Temporary Status			
Bridge Plan Location 3 - COUNTY			
Date Opened to Traffic			
On-Off System 0 - OFF			
Legislative District 55A			
ABC Suitable			

STRUCTURE			
Service On 2 - Railroad			
Service Under 1 - Highway, w/ or w/out ped.			
Main Span Type			
3 - Steel		07 - Box Girder	
Main Span Detail			
Appr. Span Type			
1 - Concrete		09 - Slab Span	
Appr. Span Detail			
Skew	10	R	
Culvert Type			
Barrel Length		ft.	
Cantilever ID			

NUMBER OF SPANS			
MAIN:	2	APPR:	2
TOTAL:	4		
Main Span Length	94.7	ft.	
Structure Length	265.5	ft.	
Deck Width (Out-to-Out)	20.0	ft.	
Deck Material	N - Not Applicable		
Wear Surf Type	N - Not Applicable (applies onl		
Wear Surf Install Year			
Wear Course/Fill Depth	0.00	ft.	
Deck Membrane	0 - None		
Deck Rebars	N - Not Applicable (no deck)		
Deck Rebars Install Year			
Structure Area (Out-to-Out)	5310	sq. ft.	
Roadway Area (Curb-to-Curb)	sq. ft.		
Sidewalk Width	Lt 0.00	ft.	Rt 0.00
Curb Height	Lt 0.00	ft.	Rt 0.00
Rail Type	Lt NN	Rt NN	

ROADWAY			
Bridge Match ID (TIS)			
Roadway O/U Key none			
Route Sys		Number	
Roadway Name or Description			
Level of Service			
Roadway Type			
Control Section (TH Only)			
Reference Point			
Detour Length mi			
Lanes	On	Under 4	
	ADT	Year	
HCACT	0	ADTT	0 %
Functional Class			

RDWY DIMENSIONS			
If Divided	NB-EB	SB-WB	
Roadway Width	ft.	ft.	
Vertical Clearance	ft.	ft.	
Max. Vert. Clear.	ft.	ft.	
Horizontal Clear.	ft.	ft.	
Lateral Clearance	ft.	ft.	
Appr. Surface Width	ft.		
Bridge Roadway Width	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)	0 - UNKNOWN
Pier Foundation	1 - CONC
(Material/Type)	0 - UNKNOWN
Historic Status	5 - Not eligible

PAINT	
Year Painted	1973
Unsound Paint %	
Painted Area	sq. ft.
Primer Type	
Finish Type	

BRIDGE SIGNS	
Posted Load	0 - Not Required
Traffic	0 - Not Required
Horizontal	0 - Not Required
Vertical	0 - Not Required

INSPECTION	
Userkey	102
Unofficial Structurally Deficient	N
Unofficial Functionally Obsolete	N
Unofficial Sufficiency Rating	-2
Routine Inspection Date	08/03/2016
Routine Inspection Frequency	12
Inspector Name	CO Bridge
Status	A - Open

NBI CONDITION RATINGS	
Deck	N - Not Applicable
Unsound Deck %	
Superstructure	6 - Satisfactory Condition
Substructure	7 - Good Condition
Channel	N - Not Applicable
Culvert	N - Not Applicable

NBI APPRAISAL RATINGS	
Structure Evaluation N	
Deck Geometry	N
Underclearances	6
Water Adequacy	N - Not Applicable
Approach Alignment	N - Not Applicable

SAFETY FEATURES	
Bridge Railing	N - NOT REQUIRED
GR Transition	N - NOT REQUIRED
Appr. Guardrail	N - NOT REQUIRED
GR Termini	N - NOT REQUIRED

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

WATERWAY			
Drainage Area (sq. mi.)			
Waterway Opening	sq. ft.		
Navigation Control	N - Not applicable, no waterw		
Pier Protection			
Nav. Clr. (ft.)	Vert.	ft.	Horiz. ft.
Nav. Vert. Lift Bridge Clear. (ft.)			
MN Scour Code	A - NON WATER'		Year

CAPACITY RATINGS		
Design Load	8 - RAILROAD	
Operating Rating	2 - AS	HS 80.0
Inventory Rating	2 - AS	HS 80.0
Posting VEH:	SEMI:	DBL:
Rating Date		
Minnesota Permit Codes		
A: N - N/A		
B: N - N/A		
C: N - N/A		

Minnesota Structure Inventory Report

Bridge ID: 62529

BNSF RR (ABAN) over CSAH 19(BEAM AVE)

Date: 09/20/2016

+ GENERAL +	+ ROADWAY +	+ INSPECTION +																				
Agency Br. No. Crew District 05 Maint. Area County 062 - Ramsey City Maplewood Township Desc. Loc. 0.1 MI W OF JCT MSAS 112 Sect., Twp., Range 3 - 029N - 22W Latitude 45 ° 1' 41.28 " Longitude 93 ° 2' 18.24 " Custodian 02 - County Highway Agency Owner 02 - County Highway Agency BMU Agreement Year Built 1973 MN Year Reconstructed FHWA Year Reconstructed MN Temporary Status Bridge Plan Location 3 - COUNTY Date Opened to Traffic On - Off System 0 - OFF Legislative District 55A Potential ABC 2 - N/A	Bridge Match ID (TIS) Roadway O/U Key Route Sys Number Roadway Name or Description Level of Service Roadway Type Control Section (TH Only) Reference Point Detour Length mi. Lanes ON UNDER 4 ADT YEAR HCA DT ADTT % Functional Class	Userkey 102 Structurally Deficient N Functionally Obsolete N Sufficiency Rating -2 Routine Inspection Date 08/03/2016 Routine Inspection Frequency 12 Inspector Name Bodelson, Dan Status A - Open																				
	+ RDWY DIMENSIONS +	+ NBI CONDITION RATINGS +																				
	If Divided NB-EB SB-WB Roadway Width ft. ft. Vertical Clearance ft. ft. Max. Vert. Clear. ft. ft. Horizontal Clear. ft. ft. Lateral Clearance ft. ft. Appr. Surface Width ft. Bridge Roadway Width ft. Median Width On Bridge ft.	Deck N Unsound Deck % Superstructure 6 Substructure 7 Channel N Culvert N																				
+ STRUCTURE +	+ MISC. BRIDGE DATA +	+ NBI APPRAISAL RATINGS +																				
Service On 2 - Railroad Service Under 1 - Highway, w/ or w/out ped. Main Span Type 3 - Steel Main Span Design 07 - Box Girder Main Span Detail Appr. Span Type 1 - Concrete Appr. Span Design 09 - Slab Span Appr. Span Detail Skew 10 RIGHT Culvert Type Barrel Length Cantilever ID Number of Spans MAIN: 2 APPR: 2 TOTAL: Main Span Length 94.7 ft. Structure Length 265.5 ft. Deck Width (Out-to-Out) 20.0 ft. Deck Material N - Not Applicable Wear Surf Type N - Not Applicable (applies) Wear Surf Install Year Wear Course/Fill Depth 0.00 ft. Deck Membrane 0 - None Deck Rebars N - Not Applicable (no deck) Deck Rebars Install Year Structure Area (Out-to-Out) 5310 sq. ft. Roadway Area (Curb-to-Curb) sq. ft. Sidewalk Width 50A. Lt 0.00 ft. 50B. Rt 0.00 ft. Curb Height Lt 0.00 ft. Rt 0.00 ft. Rail Type Lt NN Rt NN	Structure Flared 0 - No flare Parallel Structure N - No parallel structure Field Conn. ID Abutment Foundation (Material/Type) 0 - UNKNOWN Pier Foundation (Material/Type) 0 - UNKNOWN Historic Status 5 - Not eligible	Structure Evaluation N Deck Geometry N Underclearances 6 Waterway Adequacy N Approach Alignment N																				
	+ PAINT +	+ SAFETY FEATURES +																				
	Year Painted 1973 Unsound Paint % Painted Area sq. ft. Primer Type Finish Type	Bridge Railing N - NOT REQUIRED GR Transition N - NOT REQUIRED Appr. Guardrail N - NOT REQUIRED GR Termini N - NOT REQUIRED																				
	+ BRIDGE SIGNS +	+ IN DEPTH INSP. +																				
	Posted Load 0 - Not Required Traffic 0 - Not Required Horizontal 0 - Not Required Vertical 0 - Not Required	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Y/N</th> <th style="text-align: center;">Freq</th> <th style="text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td>Frac. Critical</td> <td style="text-align: center;">N</td> <td></td> <td></td> </tr> <tr> <td>Underwater</td> <td style="text-align: center;">N</td> <td></td> <td></td> </tr> <tr> <td>Pinned Asbly.</td> <td style="text-align: center;">N</td> <td></td> <td></td> </tr> <tr> <td>Spec. Feat.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Y/N	Freq	Date	Frac. Critical	N			Underwater	N			Pinned Asbly.	N			Spec. Feat.			
	Y/N	Freq	Date																			
Frac. Critical	N																					
Underwater	N																					
Pinned Asbly.	N																					
Spec. Feat.																						
		+ WATERWAY +																				
		Drainage Area (sq. mi.) Waterway Opening (sf.) Navigation Control N - Not applicable, no Pier Protection - Nav. Clr. (ft.) Vert. 0.0 Horiz. 0.0 Nav. Vert. Lift Bridge Clear. (ft.) MN Scour Code A - NON Year																				
		+ CAPACITY RATINGS +																				
		Design Load 8 - RAILROAD Operating Rating 7 - RAILROAD 80.0 Inventory Rating 7 - RAILROAD 80.0 Posting VEH: SEMI: DBL: Rating Date Overweight Permit Codes A N - N/A B N - N/A C N - N/A																				

MINNESOTA BRIDGE INSPECTION REPORT

10/04/2016

BRIDGE 62529 BNSF RR (ABAN) OVER CSAH 19(BEAM AVE)

ROUTINE INSP. DATE: 08/03/2016

County: Ramsey	Location: 0.1 MI W OF JCT MSAS 112	Length: 265.5 ft.
City: Maplewood	Route: Ref. Pt.:	Deck Width: 20.0 ft.
Township:	Control Section:	Rdwy. Area/ Pct. Unsnd: sq. ft. / %
Section: 3 Township: 029N Range: 22W Maint. Area:		Paint Area/ Pct. Unsnd: sq. ft. / %
Span Type: 3 - Steel 5 - Box Beam or Girders - Local Agency Bridge Nbr.:		Culvert: N/A
List: Multiple		Postings:
NBI Deck: N Super: 6 Sub: 7 Chan: N Culv: N		
	Open, Posted, Closed: A - Open	
	MN Scour Code: A - NON WATERWAY	
Appraisal Ratings - Approach: N Waterway: N		Unofficial Structurally Deficient N
Required Bridge Signs - Load Posting: 0 - Not Required	Traffic: 0 - Not Required	Unofficial Functionally Obsolete N
Horizontal: 0 - Not Required	Vertical: 0 - Not Required	Unofficial Sufficiency Rating N

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
101	Weathering Steel Box Girder	2	Routine	08/03/2016	194 LF	0	194	0	0	N/A
			Routine	08/05/2015	194 LF	0	194	0	0	N/A

Notes: [2013-2015] There is moderate corrosion of the weathered steel box girder, with no section loss found
 [2007-2012] There is moderate corrosion of the weathering steel box girder. Appears to have stabilized.
 [2007-2012] No section loss found.
 [1985-2006] Protective Cortem rusting of structural box girder is continuing at a rapid rate and may be covering damaging corrosive areas.
 [2006] Inside inspection completed by St. Paul Bridge Department. Pigeons were nesting and inside holes that should be covered.

210	Reinforced Concrete Pier Wall	1	Routine	08/03/2016	13 LF	0	13	0	0	N/A
			Routine	08/05/2015	13 LF	0	13	0	0	N/A

Notes: [2013-2015] Numerous moderate cracks both horizontal & vertical. Bearing seats are in good condition. Delamination on west side of pier wall (6" dia.- 13' up from ground, 4" dia. - 9" up from ground). Paint is peeling on south side of pier
 [2007-2012] There is a moderate scrape on the south side.
 [2008-2012] Numerous moderate horizontal and vertical cracks are present but no evidence of corrosion.
 [2007-2012] Bearing seats are in good condition.
 [2012] Delamination is starting on the west side of the pier wall.

215	Reinforced Concrete Abutment	2	Routine	08/03/2016	30 LF	0	30	0	0	N/A
			Routine	08/05/2015	30 LF	0	30	0	0	N/A

Notes: [2014-2015] 1' vertical crack w/rust 4' from NW corner. Minor paint failure in NE corner.
 [2013] There are numerous minor vertical cracks on both north & south abutments, numerous minor horizontal cracks on north abutment.
 [2008-2012] There are numerous minor vertical cracks on the front face of south abutment. [2008-2012] There are minor vertical & horizontal cracks on the front face of north abutment.
 [2002-2012] Minor horizontal hairline cracks across backwall face of both abutments about 1' below bottom of deck stringers. Bridge has full height abutment 15 LF in length for each abutment.

311	Expansion Bearing	2	Routine	08/03/2016	4 EA	0	4	0	N/A	N/A
			Routine	08/05/2015	4 EA	0	4	0	N/A	N/A

Notes: [2013-2015] Bearing assemblies have minor to moderate corrosion
 [2002-2012] Bearing assemblies have minor- moderate corrosion. Pictures taken @ SE bearing 2007.
 There are four expansion bearings at the abutments.

313	Fixed Bearing	2	Routine	08/03/2016	4 EA	0	4	0	N/A	N/A
			Routine	08/05/2015	4 EA	0	4	0	N/A	N/A

Notes: [2013-2015] Bearing assemblies have minor to moderate corrosion
 [2012] Bearing assemblies have minor- moderate corrosion. The four fixed bearings are located at the pier wall.

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
334	Metal Bridge Railing (Coated or Painted)	2	Routine	08/03/2016	387 LF	0	387	0	0	0
			Routine	08/05/2015	387 LF	0	387	0	0	0
Notes: [2013-2015] There are minor areas of corrosion on the galvanized metal, the anchorages are sound and intact. [2002-2012] Minor areas of corrosion of galvanized metal railing. [2011-2012] Anchorages are sound and intact. [2006] New 6' black vinyl coated chain link fence installed inside metal railing.										
387	Reinforced Concrete Wingwall	2	Routine	08/03/2016	4 EA	0	4	0	0	N/A
			Routine	08/05/2015	4 EA	0	4	0	0	N/A
Notes: [2014-2015] Minor horizontal cracks in NE wingwall [2013] graffiti on NW wingwall [2008-2013] There are moderate spalls on the NW wingwall. There is minor spalling on the SW, SE & NE wingwalls.										
964	Critical Finding Smart Flag	2	Routine	08/03/2016	1 EA	1	0	N/A	N/A	N/A
			Routine	08/05/2015	1 EA	1	0	N/A	N/A	N/A
Notes: DO NOT DELETE THIS CRITICAL FINDING SMART FLAG.										
981	Signing	1	Routine	08/03/2016	1 EA	0	0	1	0	0
			Routine	08/05/2015	1 EA	0	0	1	0	0
Notes: [2014-2015] Horizontal clearance signs are needed for westbound Beam Avenue. [2002-2013] Horizontal clearance signs are needed for westbound Beam Avenue.										
982	Approach Guardrail	2	Routine	08/03/2016	1 EA	1	0	0	N/A	N/A
			Routine	08/05/2015	1 EA	1	0	0	N/A	N/A
Notes: [2010-2015] Crash attenuators are in place. Guardrail system has no deficiencies. [2008] New guardrail system has been installed in median area. Twisted ends were added to guardrail in 2004.										
985	Slopes & Slope Protection	2	Routine	08/03/2016	1 EA	0	1	0	N/A	N/A
			Routine	08/05/2015	1 EA	0	1	0	N/A	N/A
Notes: [2013-2015] South & north slopes have minor to moderate cracking w/ no settlement or movement. [2008-2012] There is diagonal crack at NW corner of south slope pavement. [2009-2012] South slope pavement contains minor-moderate cracking. [2012] Need to seal joint at abutment and slope pavement both sides. [2006-2012] There are numerous moderate cracks on the north side. Also some movement of slope pavement on the north side.										

General Notes: [2016] Bridge safety inspection was conducted by Brian Essler & Dan Bodelson on 8/4/16.
[2015] Bridge safety inspection was conducted by Brian Essler & Dan Bodelson on 8/5/15.
[2014] bridge safety inspection was conducted by Dan Bodelson & Brian Essler on 8/26/14
[2013] bridge safety inspection was conducted by Dan Bodelson & Randy Bussiere on 8/13/13
2012 bridge safety inspection was conducted by B. Wieman, D. Bodelson and B. Essler on 9/15/2012.
[2012] There are four catch basins on the east side of the bridge deck.
2011 bridge safety inspection was conducted by Bret Wieman on 9/14/2011.
Deck is steel box girder with concrete decking to hold ballast. Was changed to 24 month frequency due to no more train traffic. Pedestrian traffic only.
[1989] Roadway under the bridge was overlayed. [2004] Fence across both ends have been opened up. [2010] Inspection was completed by B. Wieman on 10/21/2010.
[2009] Inspection was completed by B. Wieman on 10/9/2009.
[2008] Inspection was completed by B. Paine & B. Wieman on 9/29/2008.
[2007] Inspection was completed by B. Wieman and B. Essler on 8/8/2007.
[2006] Inspection was completed by Bret Wieman on 10/20/2006.
[2006] There was a bituminous path paved on top of the bridge.
Deck is steel box girder with concrete decking to hold ballast. Was changed to 24 month frequency due to no more train traffic. Pedestrian traffic only.
[1989] Roadway under the bridge was overlayed. [2004] Fence across both ends have been opened up.

58. Deck NBI: Deck is steel box girder with concrete decking to hold ballast.

36A. Brdg Railings NBI: Pedestrian bridge

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
36B.	Transitions NBI:		Pedestrian bridge							
36C.	Appr Guardrail NBI:		Pedestrian bridge							
36D.	Appr Guardrail Terminal NBI:		Pedestrian bridge							
59.	Superstructure NBI:		Moderate corrosion of box girder. Bearings have minor to moderate corrosion.							
60.	Substructure NBI:		Abutments and pier have minor cracking.							
61.	Channel NBI:		Bridge not over waterway							
62.	Culvert NBI:		Bridge							
71.	Waterway Adeq NBI:		Bridge not over waterway							
72.	Appr Roadway Alignment NBI:		Pedestrian bridge							
	Inventory Notes:									

Dan Bodelson
Inspector's Signature

Nicklaus Fischer
Reviewer's Signature

MINNESOTA BRIDGE INSPECTION REPORT

10/04/2016

Inspector: CO Bridge

BRIDGE 62529 BNSF RR (ABAN) OVER CSAH 19(BEAM AVE)

County: Ramsey	Location: 0.1 MI W OF JCT MSAS 112	Length: 265.5 ft.
City: Maplewood	Route: Ref. Pt.:	Deck Width: 20.0 ft.
Township:	Control Section:	Rdwy. Area/ Pct. Unsnd: sq. ft. / %
Section: 3 Township: 029N Range: 22W Maint. Area:		Paint Area/ Pct. Unsnd: sq. ft. / %
Span Type: 3 - Steel 5 - Box Beam or Girders - Local Agency Bridge Nbr.:		Culvert: N/A
List: Multiple		Postings:
NBI Deck: N Super: 6 Sub: 7 Chan: N Culv: N		
	Open, Posted, Closed: A - Open	
	MN Scour Code: A - NON WATERWAY	
Appraisal Ratings - Approach: N Waterway: N		Unofficial Structurally Deficient N
Required Bridge Signs - Load Posting: 0 - Not Required	Traffic: 0 - Not Required	Unofficial Functionally Obsolete N
Horizontal: 0 - Not Required	Vertical: 0 - Not Required	Unofficial Sufficiency Rating N

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
102	Steel Closed Web/Box Girder	Routine	08/03/2016	194 LF	0	194	0	0
		Migrated Values		194 LF	0	194	0	0
	Notes: [2015] Inside inspection completed by Bret Wieman & Dan Bodelson. Moderate corrosion with no section loss found. Pigeons are still in there through the holes in the cages @ the ends of beams above the pier. [2013-2016] There is moderate corrosion of the weathered steel box girder, with no section loss found [2007-2012] There is moderate corrosion of the weathering steel box girder. Appears to have stabilized. [2007-2012] No section loss found. [1985-2006] Protective Cortem rusting of structural box girder is continuing at a rapid rate and may be covering damaging corrosive areas. [2006] Inside inspection completed by St. Paul Bridge Department. Pigeons were nesting and inside holes that should be covered.							
515	Steel Protective Coating	Routine	08/03/2016	4462 SF	0	0	4462	0
		Migrated Values		4462 SF	0	0	4462	0
	Notes: [2016] Migrator assumed quantity of 999 SF and estimated the condition states. Box Girders have 2 sides 8' x 194' x 2 = 3104 SF and 7' x 194' = 1358 SF on the bottom for a total of 4462 SF [2016] There is moderate corrosion of the weathered steel box girder coating, with no section loss found.							
210	Reinforced Concrete Pier Wall	Routine	08/03/2016	13 LF	0	13	0	0
		Migrated Values		13 LF	0	13	0	0
	Notes: [2013-2016] Numerous moderate cracks both horizontal & vertical. Bearing seats are in good condition. Delamination on west side of pier wall (6" dia.- 13' up from ground, 4" dia. - 9' up from ground). [2016] Paint is peeling on south side of pier [2007-2016] There is a moderate scrape on the south side. [2008-2016] Numerous moderate horizontal and vertical cracks are present but no evidence of corrosion. [2007-2016] Bearing seats are in good condition. [2012] Delamination is starting on the west side of the pier wall.							
215	Reinforced Concrete Abutment	Routine	08/03/2016	70 LF	0	70	0	0
		Migrated Values		70 LF	0	70	0	0
	Notes: [2016] Graffiti on south Abutment [2016] Minor paint failure on NW corner. [2016] Migrator added 40 LF to abutment quantity to account for wingwalls (CS1:0 CS2:40 CS3:0 CS4:0). [2014-2016] 1' vertical crack w/rust 4' from NW corner. Minor paint failure in NE corner. [2013] There are numerous minor vertical cracks on both north & south abutments, numerous minor horizontal cracks on north abutment. [2008-2016] There are numerous minor vertical cracks on the front face of south abutment. [2008-2012] There are minor vertical & horizontal cracks on the front face of north abutment. [2002-2016] Minor horizontal hairline cracks across backwall face of both abutments about 1' below bottom of deck stringers. Bridge has full height abutment 15 LF in length for each abutment.							
	Wingwall notes: [2016] Minor paint failure on NE corner [2016] Minor cracks in top of NW wingwall [2014-2016] Minor horizontal cracks in NE wingwall [2013-2016] graffiti on NW & SW wingwall [2008-2013] There are moderate spalls on the NW wingwall. There is minor spalling on the SW, SE & NE wingwalls.							

BRIDGE 62529 BNSF RR (ABAN) OVER CSAH 19(BEAM AVE)

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
311	Movable Bearing	Routine	08/03/2016	4 EA	0	4	0	0
		Migrated Values		4 EA	0	4	0	0
Notes: [2013-2016] Bearing assemblies have minor to moderate corrosion [2002-2016] Bearing assemblies have minor- moderate corrosion. Pictures taken @ SE bearing 2007. There are four expansion bearings at the abutments.								
313	Fixed Bearing	Routine	08/03/2016	4 EA	0	4	0	0
		Migrated Values		4 EA	0	4	0	0
Notes: [2013-2016] Bearing assemblies have minor to moderate corrosion [2012] Bearing assemblies have minor- moderate corrosion. The four fixed bearings are located at the pier wall.								
330	Metal Bridge Railing	Routine	08/03/2016	387 LF	0	387	0	0
		Migrated Values		387 LF	0	387	0	0
Notes: [2013-2016] There are minor areas of corrosion on the galvanized metal, the anchorages are sound and intact. [2002-2012] Minor areas of corrosion of galvanized metal railing. [2011-2012] Anchorages are sound and intact. [2006] New 6' black vinyl coated chain link fence installed inside metal railing.								
515 - Steel Protective Coating		Routine	08/03/2016	1316 SF	0	1316	0	0
		Migrated Values		1316 SF	0	1316	0	0
Notes: [2016] Migrator assumed CS1 and a quantity of 999 SF. Bridge railing is 387' x 3.4' = 1315.8 SF total [2016] There are minor areas of corrosion on the galvanized metal, the anchorages are sound and intact.								
800	Critical Deficiencies or Safety Hazards	Routine	08/03/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION.								
891	Other Bridge Signing	Routine	08/03/2016	1 EA	0	0	1	0
		Migrated Values		1 EA	0	0	1	0
Notes: [2014-2016]Horizontal clearance signs are needed for westbound Beam Avenue. [2002-2013] Horizontal clearance signs are needed for westbound Beam Avenue.								
892	Slopes & Slope Protection	Routine	08/03/2016	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0
Notes: [2016] Minor paint failure on north slope paving. [2013-2016] South & north slopes have minor to moderate cracking w/ no settlement or movement. [2008-2016] There is diagonal crack at NW corner of south slope pavement. [2009-2012] South slope pavement contains minor- moderate cracking. [2012] Need to seal joint at abutment and slope pavement both sides. [2006-2016] There are numerous moderate cracks on the north side. Also some movement of slope pavement on the north side.								
893	Guardrail	Routine	08/03/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
Notes: [2010-2016] Crash attenuators are in place. Guardrail system has no deficiencies. [2008] New guardrail system has been installed in median area. Twisted ends were added to guardrail in 2004.								
894	Deck & Approach Drainage	Routine	08/03/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
Notes: Use this element to rate the condition, function, and adequacy of the drainage system.								
900	Protected Species	Routine	08/03/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
Notes: Use this element to track the presence of protected species living on this structure.								

General Notes: [2016] Bridge safety inspection was conducted by Brian Essler & Dan Bodelson on 8/4/16.
[2015] Bridge safety inspection was conducted by Brian Essler & Dan Bodelson on 8/5/15.
[2014] bridge safety inspection was conducted by Dan Bodelson & Brian Essler on 8/26/14

BRIDGE 62529 BNSF RR (ABAN) OVER CSAH 19(BEAM AVE)

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
	[2013] bridge safety inspection was conducted by Dan Bodelson & Randy Bussiere on 8/13/13 2012 bridge safety inspection was conducted by B. Wieman, D. Bodelson and B. Essler on 9/15/2012. [2012] There are four catch basins on the east side of the bridge deck. 2011 bridge safety inspection was conducted by Bret Wieman on 9/14/2011. Deck is steel box girder with concrete decking to hold ballast. Was changed to 24 month frequency due to no more train traffic. Pedestrian traffic only. [1989] Roadway under the bridge was overlayed. [2004] Fence across both ends have been opened up. [2010] Inspection was completed by B. Wieman on 10/21/2010. [2009] Inspection was completed by B. Wieman on 10/9/2009. [2008] Inspection was completed by B. Paine & B. Wieman on 9/29/2008. [2007] Inspection was completed by B. Wieman and B. Essler on 8/8/2007. [2006] Inspection was completed by Bret Wieman on 10/20/2006. [2006] There was a bituminous path paved on top of the bridge. Deck is steel box girder with concrete decking to hold ballast. Was changed to 24 month frequency due to no more train traffic. Pedestrian traffic only. [1989] Roadway under the bridge was overlayed. [2004] Fence across both ends have been opened up.							
	58. Deck NBI:	Deck is steel box girder with concrete decking to hold ballast.						
	36A. Brdg Railings NBI:	Pedestrian bridge						
	36B. Transitions NBI:	Pedestrian bridge						
	36C. Appr Guardrail NBI:	Pedestrian bridge						
	36D. Appr Guardrail Terminal NBI:	Pedestrian bridge						
	59. Superstructure NBI:	Moderate corrosion of box girder. Bearings have minor to moderate corrosion.						
	60. Substructure NBI:	Abutments and pier have minor cracking.						
	61. Channel NBI:	Bridge not over waterway						
	62. Culvert NBI:	Bridge						
	71. Waterway Adeq NBI:	Bridge not over waterway						
	72. Appr Roadway Alignment NBI:	Pedestrian bridge						
	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 -



Photo 8 -

Pictures



Photo 9 -



Photo 10 -

Pictures



Photo 11 -



Photo 12 -



1. 62529 So Abut.JPG



2. 62529 So Side.JPG



3. CrackInSouthAbut..JPG



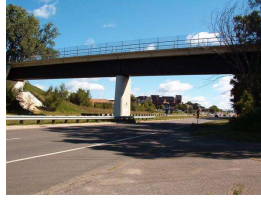
4. NorthboundTrail.JPG



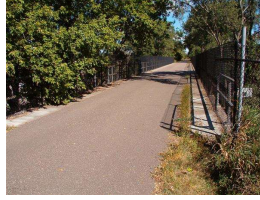
5. PierLookingSouth.JPG



6. WestboundBeamAve..JPG



7. Bridges Sept 22 006.jpg



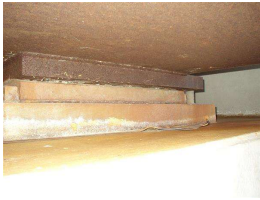
8. Bridges Sept 22 007.jpg



9. Bridges Sept 22 008.jpg



10. Bridges Sept 22 009.jpg



11. SE Bear2.JPG



12. SE Bear3.JPG

Maintenance

Element	Source Code	Work Code	Description	P/R	Priority	Work Order #	Year Due	Last Viewed	Entered	Start Date	Completed
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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 Minnesota 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.: 62529	BRIDGE OWNER: County Highway Agency
DATE INSPECTED: 08/03/2016	STRUCTURE TYPE: Steel
FACILITY CARRIED: BNSF RR (ABAN)	ox Beam or Girders - Multiple
	FEATURES INTERSECTED: CSAH 19(BEAM AVE)
TYPE OF INSPECTION: <input checked="" type="checkbox"/> ROUTINE	
<input type="checkbox"/> FRACTURE CRITICAL	
<input type="checkbox"/> PINNED ASSEMBLY:	
<input type="checkbox"/> SPECIAL:	
<input type="checkbox"/> DAMAGE:	
<input type="checkbox"/> COMPLEX:	
<u>Check all that apply:</u>	
Redundancy: <input type="checkbox"/> Load Path	Connection <input type="checkbox"/> Riveted
<input type="checkbox"/> Structural	Type: <input type="checkbox"/> Bolted
<input type="checkbox"/> Internal	<input type="checkbox"/> Welded
	<input type="checkbox"/> 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 immovable, 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:

- | | |
|---|---|
| <input type="checkbox"/> Repair/Maintenance | <input type="checkbox"/> Monitoring Plan |
| <input type="checkbox"/> Complex | <input type="checkbox"/> Increased Inspection Frequency |

Explain recommended actions:

6. Other comments:

Bridge Office Reviewer