

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

Inspection Report for B-16-038-0001

USH 2 over IH 35-MINNESOTA Oct 19,2015



Туре	Prior	Frequency (mos)	Performed
Routine	10-19-15	24	Х
Interim	09-27-05	0	
SI&A	08-19-13	48	

Latitude 46°44'35.57"N Longitude 92°09'17.45"W Owner STATE HIGHWAY DEPT Maintainer STATE HIGHWAY DEPT

	Time Log		Team membe	rs	
	Hours 1	Minutes 0			
Inconcetor	Name		Number	Signature	Date
	Bjorklund, Allan M		8003	Completed by HSI System Account(HSI)	
Reviewer					

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Identification & Location

Feature On: USH 2	Section Town Range: S08 T49N R14W	Structure Number:
Feature Under: IH 35-MINNESOTA	County: DOUGLAS(16)	B-16-038-0001
Location 1.1M W MINN STATE LINE	Municipality: CITY-SUPERIOR(16281)	Structure Name:

Geometry

Geometry				Traffic			
measurements in feet, except w	vhere noted			Lanes	ADT	ADT year	Traffic Pattern
Approach Roadway Width: 54	Bridge Roadway Width: 66.0	Total Length: 285.1	On	4	17500	2010	TWO WAY TRAFFIC
Approach Pavement Width: 38	Deck Width: 76.4	Deck Area (sq ft): 21781	Under	4	41500	2012	TWO WAY TRAFFIC

Capacity

Capacity	Load Rating					
Inventory rating: HS28	Overburden depth (in): 1.5	Last rating date: 10-16-03	Controlling:			
Operating rating: HS45	Deck surface material: CONCRETE	Re-rate for capacity (Y/N): Y	Control location:			
Posting:	Re-rate notes: Concrete overlay finished V	Re-rate notes: Concrete overlay finished WB in 2014, EB in 2015 Project 8060-04-71				

Hvdraulic

Hydraulic		Classification
Scour Critical Code(113): (N) NO WATERWAY	Q100 (ft3/sec): 0	
High water elevation (ft): 0.0	Velocity (ft/sec): 0.0	Sufficieny #: 92.6

Span(s)

 Span #	Material	Configuration	Depth (in)	Length (ft)	Main
1	CONT STEEL	DECK GIRDER		76.0	
2	CONT STEEL	DECK GIRDER		133.0	Y
3	CONT STEEL	DECK GIRDER		74.0	

Expansion joint(s)

Temperature: File:

New:

Vertical Clearance

	Measurement file (ft)	File Date	Measurement new (ft)
Highway Minimum Under Cardinal	16.72		
Highway Minimum Under Non-Cardinal	16.72		
Highway Minimum On			
Railroad Minimum Under			

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Structure No.: B-16-038-0001

Elen	nents						0		
Chk	Element	Defect	Description	UOM	Total	1	Quantity in C	Condition State	4
OTIK	Liement	Delect	Reinforced Concrete Deck	SF	21,781	21,781	0	0	0
х	12		Cloride content (LB/CY) is high enough to warrent a NBI 4. Border bridge agreement to place deck at NBI 5. Testing report in files at NWR/Superior. Deck overlay in progress, complete in 2015.						
			Concrete Overlay	SF	21,781	0	21,781	0	0
	8514		Concrete overlay completed on WB 2014, EB			-		-	-
			Crack (Wearing Surface)	SF		0	21,781	0	0
		3220	Map cracked through out.						
	8522		Coated Reinforcing Cloride content (LB/CY) is high enough to warrer Testing report in files at NWR/Superior.	│ SF ht a NBI 4	21,781 4. Border b	0 ridge agree	0 Perment to pl	0 ace deck a	0 t NBI 5.
			Steel Open Girder	LF	2,538	2,438	100	0	0
X	107		painted 2010 &11	•					
			Corrosion	LF		0	100	0	0
		1000	paint will need touch up in 2015 after second hal inspection.	f of deck	overlay be	low expans	sion joints.	Not done a	at time of
			Painted Steel	SF	27,563	27,563	0	0	0
	8516		painted 2010 &11	1		, , , , , , , , , , , , , , , , , , ,	1	I	1
			Effectiveness (Steel Protective Coatings)	SF		27,563	0	0	0
		3440	paint will need touch up in 2015 after second hal	f of deck	overlay be	low expans	sion joints		
			Reinforced Concrete Pier Wall	LF	228	219	9	0	0
X	210		Four vertical cracks on Pier #3 below bearings						
			Cracking (RC)	LF		0	9	0	0
		1130	Four vertical cracks on Pier #3 below bearings						
			Reinforced Concrete Abutment	LF	75	73	2	0	0
X	215								
			Cracking (RC)	LF		0	2	0	0
		1130	NE corner vertical crack.						
x	300		Strip Seal Expansion Joint New WB 2014, EB 2015.	LF	154	154	0	0	0
			Moveable Bearing	EA	27	27	0	0	0
X	311		painted 2010 &11						
			Fixed Bearing	EA	9	9	0	0	0
X	313		painted 2010 &11						
			Metal Bridge Rail	LF	380	380	0	0	0
X	330		SW corner top metal railing hit and twisted in rad		np. Repaire	ed 2015.			
			Distortion	LF		0	0	0	0
		1900	SW corner top metal railing hit and twisted in rad	lius of rar	np. Repair				
			Reinforced Concrete Bridge Rail	LF	380	380	0	0	0
X	331		SW corner top metal railing hit and twisted in rad	lius of rar	np. Repaire	ed 2015.			
L			Delamination - Spall - Patched Area	LF		0	0	0	0
		1080	SW corner top. Repaired 2015.						

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page	e 4					Structure	e No.: B-16-	038-0001
		Integral Wingwall	EA	2	2	0	0	0
X	8400	At Minnesota abutment.						

Assessments

						Quantity in Co	ondition State	
Element	Defect	Description	UOM	Total	1	2	3	4
		Drainage - Deck	EA	2	2	0	0	0
9004								
		Median	EA	190	190	0	0	0
9007		ends are being replaced with the joint replacement	nts and	curb repa	ired.			
		Slope Protection- Crushed Aggregate with Bit.	EA	2	2	0	0	0
X 9043		Resprayed 2015.						
		Steel Diaphragm	EA	104	104	0	0	0
9167								
		Lateral Bracing	EA	32	32	0	0	0
9169								
			EA	2	2	0	0	0
9322		New WB 2014, EB 2015.						
	9004 9007 9043 9167 9169	9004 9007 9043 9167 9169	9004 Drainage - Deck 9007 Median ends are being replaced with the joint replacemer 9043 Slope Protection- Crushed Aggregate with Bit. Resprayed 2015. 9167 Steel Diaphragm 9169 Lateral Bracing Approach Roadway - Concrete (non-structural)	9004 Drainage - Deck EA 9007 Median EA 9007 ends are being replaced with the joint replacements and 9043 Slope Protection- Crushed Aggregate with Bit. EA 9043 Slope Protection- Crushed Aggregate with Bit. EA 9043 Steel Diaphragm EA 9167 Eateral Bracing EA 9169 Approach Roadway - Concrete (non-structural) EA	9004Drainage - DeckEA29004MedianEA1909007ends are being replaced with the joint replacements and curb repa9043Slope Protection- Crushed Aggregate with Bit.EA29043Slope Protection- Crushed Aggregate with Bit.EA29043Steel DiaphragmEA1049167Lateral BracingEA329169Approach Roadway - Concrete (non-structural)EA2	9004Drainage - DeckEA229007Median ends are being replaced with the joint replacements and curb repaired.9007Slope Protection- Crushed Aggregate with Bit.EA229043Slope Protection- Crushed Aggregate with Bit.EA229043Steel DiaphragmEA1041049167Lateral BracingEA32329169Approach Roadway - Concrete (non-structural)EA22	ElementDefectDescriptionUOMTotal129004Image - DeckEA2209007Median ends are being replaced with the joint replacements and curb repaired.Image - DeckImage - Deck9007Slope Protection- Crushed Aggregate with Bit.EA19019009043Slope Protection- Crushed Aggregate with Bit.EA2209043Steel DiaphragmEA10410409167Lateral BracingEA323209169Approach Roadway - Concrete (non-structural)EA220	9004Drainage - DeckEA22009007Median ends are being replaced with the joint replacements and curb repaired.EA190190009043Slope Protection- Crushed Aggregate with Bit.EA22009043Slope Protection- Crushed Aggregate with Bit.EA22009043Lateral BracingEA104104009167Lateral BracingEA3232009169Approach Roadway - Concrete (non-structural)EA2200

NBI Ratings

	File	New
Deck	5	7
Superstructure	7	7
Substructure	7	7
Culvert	N	N
Channel	N	N
Waterway	N	N

Structure Specific Notes

Inspection Specific Notes

Put in program for painting. Delam survey. (03) Inspected by Minnesota DOT copy of inspection report on file in District 8 office. (2004) Traffic ADT data from Minnesota DOT 2003 counts. 2007 inspection took place from 8/17 to 8/30/2007. MNDOT inspected 2008 file in bridge office Superior NWR entered for date by DJH.

Inspected by DJH etal between 8-24-2009 and 9-4-2009.

Inspected 2010 by Mndot, Gary Elmquist et al. Signed copy of inspection in bridge file Superior office. Entered for date only by D. Harrington.

Inspected 2011 by DJH etal between 8/22/2011 and 8/31/2011during constuction project on IH 35 paint not yet completed on girders but scheduled 2011.

Inspected 2012 by DJH etal between 8/15/12 and 8/30/12.

Inspected 2012 by DJH etal between 8/12/13 and 8/29/13. Inspected 2014 by DJH etal between 8/19/14 and 8/28/14 Project 8680-04-71 in progress, complete in 2015.

Inspector Site-Specific Safety Considerations

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Structure Inspection Procedures

Special Requirements

	Chk	Comments
Traffic Control		
ReachAll Vehicle		
Access Equipment		
Other		

Construction History

Year	Work Performed	FOS id
9999	NOT BUILT	8680-04-71
1984	NEW DECK	8680-01-85
1984	NEW SUPERSTRUCTURE	8680-01-84
1983	NEW STRUCTURE	8680-01-81

Maintenance Items History

Recommended by	Status	Status change	Year completed
Harrington, Daniel J (8004)	REJECTED	03/02/15	
an 1			
Harrington, Daniel J (8004)	REJECTED	03/02/15	
s span #1			
Harrington, Daniel J (8004)	REJECTED	03/02/15	
Harrington, Daniel J (8004)	REJECTED	03/02/15	
			1
	Harrington, Daniel J (8004) an 1 Harrington, Daniel J (8004) s span #1 Harrington, Daniel J (8004)	Harrington, Daniel J (8004) REJECTED an 1 Harrington, Daniel J (8004) REJECTED s span #1 Harrington, Daniel J (8004) REJECTED	Harrington, Daniel J (8004) REJECTED 03/02/15 an 1 Harrington, Daniel J (8004) REJECTED 03/02/15 as span #1 Harrington, Daniel J (8004) REJECTED 03/02/15

Maintenance Items

Item

Priority Recommended by

Status Status change

Structure No.: B-16-038-0001

Routine Document Comment/Description



Routine Document Comment/Description



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Routine Document Comment/Description Repaired SW wing.



Routine Document Comment/Description Repaired curb on median.



Routine Document Comment/Description Looking west. Note new coverplates on median.

