STR 6959	BRIDGE SAFETY IN			
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition	1
SMITHS CROSSING RD	43.487 / -84.1903	56200071000B010	Fair Condition(6)	
Feature	Length / Width	Owner		
WEEKS DRAIN	49.9 / 37.07	County: Midland(56)		
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status	
0.6 MI S OF LAPORTE RD	1994 / / / 1994	Mt. Pleasant(4A)	A Open, no restriction(A)	
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation	
Bay(4) / Midland(56)	5 Prestressed Concrete / 05 Multiple Box Beam	08/26/2015 / W03J	8 Stable Above Footing	

NBI INSPECTION			W03J
Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Eric Rickert	Great Lakes Engineering Group	24	08/26/2015
GENERAL NOTES			

Good

DECK				
	08/11	08/13	08/15	
1. Surface (SIA-58A)	8	8	8	Chip seal in drive lanes, HMA in shoulders. No visible cracks in surface. (08/15) Chip seal in drive lanes, HMA in shoulders. No visible cracks in surface. (08/13) Chip seal in drive lanes, HMA in shoulders. No visible cracks in surface. (08/11)
2. Expansion Joints	N	N	N	(08/15) (08/13) (08/11)
3. Other Joints	N	N	6	Joint between HMA approaches and chip seal surface unsealed. (08/15) (08/13) (08/11)
4. Railings	8	8	8	Ohio tube, no rust (08/15) Ohio tube, no rust (08/13) Ohio tube, no rust (08/11)
5. Sidewalks or Curbs	N	N	N	(08/15) (08/13) (08/11)
6. Deck Bottom Surface (SIA-58B)	N	N	N	Side by side box beams (08/15) Side by side box beams (08/13) Side by side box beams (08/11)
7. Deck (SIA-58)	8	8	8	No cracks in chip seal (08/15) No cracks in chip seal (08/13) No cracks in chip seal (08/11)
8. Drainage				(08/15) (08/13) (08/11)

SUPERSTRUCTURE

	08/11	08/13	08/15	
9. Stringer (SIA-59)	8	8	8	Side by side box beams, no visible cracks (08/15) Side by side box beams, no visible cracks (08/13) Side by side box beams, no visible cracks (08/11)
10. Paint (SIA-59A)	N	N	N	(08/15) (08/13) (08/11)
11. Section Loss	N	N	N	(08/15) (08/13) (08/11)

			IV	MICHIGAN DEPARTMENT	OF TRANSPORTATION	
STR 6959				BRIDGE SAFETY INS	SPECTION REPORT	
Facility SMITHS CROSSING F Feature WEEKS DRAIN Location 0.6 MI S OF LAPORTE			43.48 Leng 49.9	nde / Longitude 7 / -84.1903 th / Width / 37.07 / Recon. / Paint / Ovly. / / /1994	MDOT Structure ID 56200071000B010 Owner County: Midland(56) TSC Mt. Pleasant(4A)	Structure Condition Fair Condition(6) Operational Status A Open, no restriction(A)
Region / County			Mate	rial / Design	Last NBI Inspection	Scour Evaluation
Bay(4) / Midland(56)				stressed Concrete / 05 ble Box Beam	08/26/2015 / W03J	8 Stable Above Footing
12. Bearings	8	8	8	Elastomeric pads look go Elastomeric pads look go Elastomeric pads look go	od. (08/13)	
SUBSTRUCTURE						
	08/11	08/13	08/15			
13. Abutments (SIA-60)	6	6	6	beams, noted several hai 10"). N abut has a 1/16" v Heavy ASR cracking in bo beams, noted several hai 10"). N abut has a 1/16" v Noted heavy ASR crackin several hairline vertical ar	rline vertical and horiztonal ert crack under beam 5W a oth abutments outside of be rline vertical and horiztonal ert crack under beam 5W a ng in both abutments outside	earing area and in all 4 slopewalls. Under cracks in each abut (spacing approx 3'-
14. Piers (SIA-60)	N	N	N	(08/15) (08/13) (08/11)		
15. Slope Protection	8	8	8	Riprap in place (08/15) Riprap in place (08/13) Riprap in place (08/11)		
APPROACH						
	08/11	08/13	08/15			
16. Approach Pavement	7	6	6	1/4". (08/15) Open transverse cracks a reference lines, approxim	at reference lines and in nor ately 1/2". (08/13)	t at both reference lines, approximately th approach. Settlement at both th approach. Settlement noted at N ref
17. Approach Shoulders Sidewalks	8	8	7	HMA/gravel shoulders, tra HMA/gravel shoulders (08 HMA/gravel shoulders (08		ulders. (08/15)
18. Approach Slopes				Vegetated slopes. Wash Vegetated slopes (08/13) Vegetated slopes (08/11)	out in NE approach slope pa	artially filled with cold patch. (08/15)
19. Utilities				Overhead east of bridge (Overhead east of bridge (None noted on bridge (08	(08/13)	
20. Channel (SIA-61)	7	7	7	County drain, straight as a County drain, straight as County drain, straight as	an arrow. (08/13)	
21. Drainage Culverts				(08/15) (08/13) (08/11)		
MISCELLANEOUS						
Guard Rail			_		Other Items	
<u>Item</u>			Ratir		<u>Item</u>	Rating
36A. Bridge Railings			1	•	71. Water Adequacy	8

1

36B. Transitions

72. Approach Alignment 8

STR 6959	BRIDGE SAFETY IN	NSPECTION REPORT	
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
SMITHS CROSSING RD	43.487 / -84.1903	56200071000B010	Fair Condition(6)
Feature	Length / Width	Owner	
WEEKS DRAIN	49.9 / 37.07	County: Midland(56)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
0.6 MI S OF LAPORTE RD	1994 / / / 1994	Mt. Pleasant(4A)	A Open, no restriction(A)
Region / County	Material / Design	Last NBI Inspection	Scour Evaluation
Bay(4) / Midland(56)	5 Prestressed Concrete / 05 Multiple Box Beam	08/26/2015 / W03J	8 Stable Above Footing
36C. Approach Guardrail	1	Temporary Support	0 No Temporary Supports
36D. Approach Guardrail Ends	1	High Load Hit (M)	No
		Special Insp. Equipment	
		Underwater Insp. Method	0
False Decking (Timber) Removed	I to Complete Inspection	N/A - No False Decking	
Critical Feature Inspections (SIA-92)		
•	Freq Date		
92A. Fracture Critical 92B. Underwater			

92C. Other Special92D. Fatigue Sensitive

STR 6959	S	TRUCTURE INVENTOR	Y AND APPRAISA	L	
Facility	Latitu	de / Longitude	MDOT Structure ID	Structure Condition	v@r
SMITHS CROSSING RD		7 / -84.1903	56200071000B010	Fair Condition(6)	
Feature		h / Width	Owner	r an containon(c)	
	_				
WEEKS DRAIN		37.07	County: Midland(56)		
Location	Built /	Recon. / Paint / Ovly.	TSC	Operational Status	
0.6 MI S OF LAPORTE RD	1994	/ / / 1994	Mt. Pleasant(4A)	A Open, no restriction(A	4)
Region / County	Mater	ial / Design	Last NBI Inspection	Scour Evaluation	
Bay(4) / Midland(56)		stressed Concrete / 05	08/26/2015 / W03J	8 Stable Above Footing	I
	Multip	le Box Beam			
Bridge History, Type,	Materials	Route Carried By Struc	cture(ON Record)	Route Under Structure (UN	IDER Record)
27 - Year Built	1994	5A - Record Type	1	5A - Record Type	
106 - Year Reconstructed		5B - Route Signing	4	5B - Route Signing	
202 - Year Painted		5C - Level of Service	0	5C - Level of Service	
203 - Year Overlay	1994	5D - Route Number	00000	5D - Route Number	
43 - Main Span Bridge Type	5 05	5E - Direction Suffix	0	5E - Direction Suffix	
44 - Appr Span Bridge Type77 - Steel Type	0	10L - Best 3m Unclr-Lt 10R - Best 3m Unclr-Rt	0 0	10L - Best 3m Unclr-Lt 10R - Best 3m Unclr-Rt	
78 - Paint Type	0	PR Number	99 99	PR Number	
79 - Rail Type	1	Control Section		Control Section	
80 - Post Type	1	11 - Mile Point	0	11 - Mile Point	
107 - Deck Type	2	12 - Base Highway Network	0	12 - Base Highway Network	
108A - Wearing Surface	6	13 - LRS Route-Subroute	0000008935 01	13 - LRS Route-Subroute	
108B - Membrane	9	19 - Detour Length	1	19 - Detour Length	
108C - Deck Protection	0	20 - Toll Facility	3	20 - Toll Facility	
Structure Dimens	ions	26 - Functional Class 28A - Lanes On	2	26 - Functional Class 28B - Lanes Under	
34 - Skew	0	29 - ADT	1793	29 - ADT	
35 - Struct Flared	0	30 - Year of ADT	1999	30 - Year of ADT	
45 - Num Main Spans	1	32 - Appr Roadway Width	29.86	42B - Service Type Under	5
46 - Num Apprs Spans 48 - Max Span Length	45.9	32A/B - Ap Pvt Type/Width	4 29.99	47L - Left Horizontal Clear	
49 - Structure Length	49.9	42A - Service Type On	1	47R - Right Horizontal Clear	
50A - Width Left Curb/SW	0	47L - Left Horizontal Clear	0.0	54A - Left Feature	
50B - Width Right Curb/SW	0	47R - Right Horizontal Clear 53 - Min Vert Clr Ov Deck	r <u>35.8</u> 99 99	54B - Left Underclearance 54C - Right Feature	99 99
33 - Median	0	100 - STRAHNET	0	54D - Right Clearance	99 99
51 - Width Curb to Curb	36.09	102 - Traffic Direct	2	Under Clearance Year	
52 - Width Out to Out	37.07 Y	109 - Truck %	5	55A - Reference Feature	N
112 - NBIS Length		110 - Truck Network	0	55B - Right Horiz Clearance	327.8
Inspection Dat		114 - Future ADT	2664	56 - Left Horiz Clearance	0
90 - Inspection Date	08/26/2015	115 - Year Future ADT	0	100 - STRAHNET 102 - Traffic Direct	
91 - Inspection Freq 92A - Frac Crit Reg/Freq	N 24	Freeway		102 - Traffic Direct	
93A - Frac Crit Insp Date	IN I	Structure Ap	praisal	110 - Truck Network	
92B - Und Water Reg/Freg	N	36A - Bridge Railing	1	114 - Future ADT	
93B - Und Water Insp Date		36B - Rail Transition 36C - Approach Rail	1	115 - Year Future ADT	
92C - Oth Spec Insp Req/Freq	N	36D - Rail Termination	1	Freeway	
93C - Oth Spec Insp Date	N. 1	67 - Structure Evaluation	6	Proposed Improve	ments
92D - Fatigue Req/Freq 93D - Fatigue Insp Date	N	68 - Deck Geometry	6	75 - Type of Work	
176A - Und Water Insp Method	0	69 - Underclearance	N	76 - Length of Improvement	
58 - Deck Rating	8	71 - Waterway Adequacy	8	94 - Bridge Cost	
58A/B - Deck Surface/Bottom	8 N	72 - Approach Alignment 103 - Temporary Structure	8	95 - Roadway Cost 96 - Total Cost	
59 - Superstructure Rating	8	113 - Scour Criticality	8	97 - Year of Cost Estimate	
59A - Paint Rating	N	•	•		
60 - Substructure Rating	7	Miscellane		Load Rating and Po	
61 - Channel Rating62 - Culvert Rating	N	37 - Historical Significance98A - Border Bridge State	5	31 - Design Load41 - Open, Posted, Closed	5 A
· ·		98B - Border Bridge %		63 - Fed Oper Rtg Method	1
Navigation Dat		101 - Parallel Structure	N	64F - Fed Oper Rtg Load	53.4
38 - Navigation Control	0	EPA ID		64MA - Mich Oper Rtg Method	
39 - Vertical Clearance40 - Horizontal Clearance	0	Stay in Place Forms		64MB - Mich Oper Rtg	79
111 - Pier Protection		143 - Pin & Hanger Code		64MC - Mich Oper Truck	<u> </u>
116 - Lift Brdg Vert Clear		148 - No. of Pin & Hangers		65 - Inv Rtg Method	1
Č				66 - Inventory Load 70 - Posting	31.4 5
				141 - Posted Loading	
				193 - Overload Class	

STR 6959	WORK RECOM		
Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
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WORK RECOMMENDATIONS			W03J
Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Eric Rickert	Great Lakes Engineering Group	24	08/26/2015
RECOMMENDATIONS & ACTION	ITEMS		
Recommendation Type	Priority	Description	
Detailed Insp.	M	Investigate cause of abut cracking	g and fix accordingly



Midland County 2015 Bridge Inspections Smiths Crossing Rd over Weeks Drain SN 6959 GLEG Project No. 1015-2-336 August 26, 2015

Road and bridge section facing south



HMA surface





Midland County 2015 Bridge Inspections Smiths Crossing Rd over Weeks Drain SN 6959 GLEG Project No. 1015-2-336 August 26, 2015

Bridge railing



East elevation of bridge





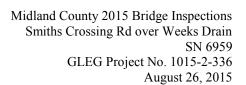
Midland County 2015 Bridge Inspections Smiths Crossing Rd over Weeks Drain SN 6959 GLEG Project No. 1015-2-336 August 26, 2015

Upstream channel section



Downstream channel section





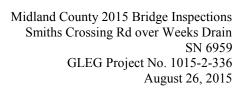


Map cracks throughout north abutment



North abutment





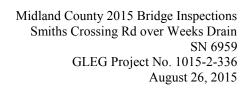


South abutment



Bottom of box beams







Cracks in abutment outside of bearing



West elevation of bridge

