

MICHIGAN DEPARTMENT OF TRANSPORTATION

STR 6937

BRIDGE SAFETY INSPECTION REPORT

Facility	Latitude / Longitude	MDOT Structure ID	Structure Condition
N SAGINAW ROAD	43.6782 / -84.3947	56200028000B010	Good Condition(7)
Feature	Length / Width	Owner	
BIG SALT RIVER	162.4 / 37.73	County: Midland(56)	
Location	Built / Recon. / Paint / Ovly.	TSC	Operational Status
.2 MI NW OF WEST RIVER RD	2001 / / /	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	09/28/2015 / 8M3H	5 Stable w/in footing



NBI INSPECTION

8M3H

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Eric Rickert	Great Lakes Engineering Group	24	09/28/2015

GENERAL NOTES

Good.

DECK

	09/11	09/13	09/15	
1. Surface (SIA-58A)	7	7	6	Healer/sealer, estimate 90% worn off in drive lanes, intact in shoulders. Hairline map cracks in east 15 ft. (09/15) New healer/sealer, no visible cracks. Healer/sealer wearing off in wheel lines. Spall at west joint filled with healer/sealer. (09/13) Hairline map cracks at piers outside of tining. 0.5 sft spall at west joint, EBD lane. Noted hairline map cracking throughout east and center spans. Transverse crack in center span at east pier EBD lane. (09/11)
2. Expansion Joints	N	7	6	Joint material intact. HMA patch at east reference line. (09/15) Joint material intact (09/13) (09/11)
3. Other Joints	7	N	N	(09/15) (09/13) Joint material intact (09/11)
4. Railings	7	7	7	Shrinkage/ASR cracking on outside of railing, surface sealer on inside of railing. (09/15) Shrinkage/ASR cracking on outside of railing, surface sealer on inside of railing. (09/13) Shrinkage/ASR cracking on outside of railing, surface sealer on inside of railing (09/11)
5. Sidewalks or Curbs	N	N	N	(09/15) (09/13) (09/11)
6. Deck Bottom Surface (SIA-58B)	N	N	N	Side by side box beams (09/15) Side by side box beams (09/13) Side by side box beams (09/11)
7. Deck (SIA-58)	7	7	7	Healer/sealer wearing off with hairline map cracks visible. South fascia spalled over both piers. (09/15) New healer/sealer on deck. South fascia spalled over both piers. (09/13) Map cracks in east and center spans, spall in south shoulder (09/11)
8. Drainage				(09/15) Gravel along edges impedes drainage (09/13) Chip seal stone along south edge impedes drainage (09/11)

SUPERSTRUCTURE

	09/11	09/13	09/15	
9. Stringer (SIA-59)	8	8	8	Side by side box beams. Bolts placed in fascia jack inserts are rusting (09/15) Side by side box beams. Bolts placed in fascia jack inserts are rusting (09/13) Side by side box beams. Bolts placed in fascia jack inserts are rusting (09/11)
10. Paint (SIA-59A)	N	N	N	(09/15) (09/13) (09/11)

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11. Section Loss	N	N	N	(09/15) (09/13) (09/11)
12. Bearings	8	8	8	Elastomeric pads in place (09/15) Elastomeric pads in place (09/13) Elastomeric pads in place (09/11)

SUBSTRUCTURE

	09/11	09/13	09/15	
13. Abutments (SIA-60)	8	7	7	Hairline shrinkage/ASR cracks in slope walls, leaching crack in NW slopewall (09/15) Hairline shrinkage/ASR cracks in slope walls (09/13) Hairline shrinkage/ASR cracks in slope walls (09/11)
14. Piers (SIA-60)	7	7	7	Piers have hairline shrinkage cracks at outer 3'-4' on both north and south faces and on top of piers outside of fascias. (09/15) Piers have hairline shrinkage cracks at outer 3'-4' on both north and south faces and on top of piers outside of fascias. (09/13) Piers have hairline shrinkage cracks at outer 3'-4' on both north and south faces and on top of piers outside of fascias. (09/11)
15. Slope Protection	8	8	8	Riprap in place (09/15) Riprap in place (09/13) Riprap in place (09/11)
16. Channel (SIA-61)	8	8	8	No flow in channel, standing water, tall vegetated banks. (09/15) No flow in channel, tall vegetated banks. (09/13) No flow in channel, tall vegetated banks. (09/11)
17. Scour Inspection			7	(09/15) (09/13) (09/11)

APPROACH

	09/11	09/13	09/15	
18. Approach Pavement	6	4	5	East approach: 30% covered with HMA, north and south 2ft has been patched with HMA, longitudinal crack in EBD lane. West approach, 100% patched with HMA. (09/15) East approach: north and south 2ft has turned to gravel, longitudinal crack in EBD lane. West approach, outer 2ft has turned to gravel, HMA patches at reference lines and at west end. (09/13) East approach: the north, south, and east 1ft is spalled/patched/cracked, 4'x'4 delamination in SW corner, longitudinal crack in EBD lane. West approach: outer 1ft at all 4 edges is cracked/patched/spalled. (09/11)
19. Approach Shoulders Sidewalks	7	7	7	HMA shoulders with approach curb and gutter. (09/15) HMA shoulders with approach curb and gutter. (09/13) HMA shoulders with approach curb and gutter. (09/11)
20. Approach Slopes				Tall vegetated slopes (09/15) Tall vegetated slopes (09/13) Tall vegetated slopes (09/11)
21. Utilities				Box outs in wingwalls with no utilities (09/15) Box outs in wingwalls with no utilities (09/13) Box outs in wingwalls with no utilities (09/11)
22. Drainage Culverts				(09/15) (09/13) (09/11)

MISCELLANEOUS

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Guard Rail

<u>Item</u>	<u>Rating</u>
36A. Bridge Railings	1
36B. Transitions	1
36C. Approach Guardrail	1
36D. Approach Guardrail Ends	1

Other Items

<u>Item</u>	<u>Rating</u>
71. Water Adequacy	8
72. Approach Alignment	8
Temporary Support	0 No Temporary Supports
High Load Hit (M)	No
Special Insp. Equipment	2
Underwater Insp. Method	1

False Decking (Timber) Removed to Complete Inspection

N/A - No False Decking

Critical Feature Inspections (SIA-92)

	<u>Freq</u>	<u>Date</u>
92A. Fracture Critical		
92B. Underwater		
92C. Other Special		
92D. Fatigue Sensitive		

STRUCTURE INVENTORY AND APPRAISAL

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WORK RECOMMENDATIONS

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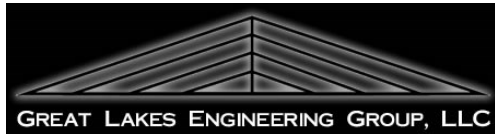
WORK RECOMMENDATIONS

8M3H

Inspector Name	Agency / Company Name	Insp. Freq.	Insp. Date
Eric Rickert	Great Lakes Engineering Group	24	09/28/2015

RECOMMENDATIONS & ACTION ITEMS

Recommendation Type	Priority	Description
Appr. Pavement	H	Replace both approaches
Overlay	M	Healer/sealer in 4 years
Super Repair	L	Patch south deck fascia
Substr Repair	H	Apply horizontal surface sealer on top of piers and seal cracks in sloped walls.



Midland County 2015 Bridge Inspections
North Saginaw Rd over Big Salt River
SN 6937
GLEG Project No. 1015-2-336
September 28, 2015

*Road and
bridge section
facing west*



*Healer/sealer
surface*





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End joint



*Hairline cracks
in surface*





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*Upstream
channel section*



*Downstream
channel section*





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*Spalling/HMA
patch in
approach*



*New HMA
pavement*





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*New HMA
pavement*



*North elevation
of bridge*



*Leaching
cracks in slope
wall*



West pier





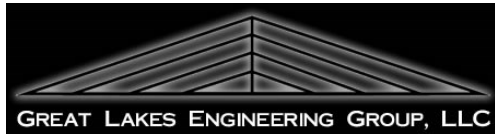
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West abutment



*Bottom of box
beams*





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*Bottom of box
beams*



*Hairline map
cracks at end
of pier*





Midland County 2015 Bridge Inspections
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*South elevation
of bridge*



*Spall in south
deck fascia
over west pier*



*Open crack in
slope wall*



East pier

