REPORT INDEX

(S.N. 056-3006)

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BRIDGE INSPECTION DOCUMENTATION & MAINTENANCE

STRUCTURE NUMBER: 056-3006

INSPECTORS PRESENT: Mike Queckboerner TIME REQUIRED: (Approx. # of hours to complete the field inspection) 1:30 (Hours: Minutes) ACCESS EQUIPMENT: (List any equipment used to inspect the bridge) Chest/Hip Waders Tall Ladder Traffic Control Snooper Other: MAINTENANCE ITEMS: PHOTO REF. NO.	INSPECTION TYPE: Routine	
Mike Queckboerner TIME REQUIRED: (Approx. # of hours to complete the field inspection) 1:30 (Hours: Minutes) ACCESS EQUIPMENT: (List any equipment used to inspect the bridge) Chest/Hip Waders Tall Ladder Traffic Control Snooper Other: MAINTENANCE ITEMS: PHOTO REF. NO.	DATE : 10/15/2020	
TIME REQUIRED: (Approx. # of hours to complete the field inspection) 1:30 (Hours : Minutes) ACCESS EQUIPMENT: (List any equipment used to inspect the bridge) Chest/Hip Waders	INSPECTORS PRESENT:	
1:30 (Hours : Minutes) ACCESS EQUIPMENT: (List any equipment used to inspect the bridge) Chest/Hip Waders Tall Ladder Snooper Other: MAINTENANCE ITEMS: PHOTO REF. NO.	Mike Queckboerner	
ACCESS EQUIPMENT: (List any equipment used to inspect the bridge) Chest/Hip Waders Tall Ladder Snooper Other: MAINTENANCE ITEMS: PHOTO REF. NO.	TIME REQUIRED: (Approx. # of hours to complete the field in	nspection)
Chest/Hip Waders ☐ Tall Ladder ☐ Traffic Control ☐ Snooper ☐ Other:	1:30 (Hours : Minutes)	
□ Traffic Control □ Snooper □ Other: □ MAINTENANCE ITEMS: PHOTO REF. NO.	ACCESS EQUIPMENT: (List any equipment used to inspect the	ne bridge)
Other: MAINTENANCE ITEMS: PHOTO REF. NO.	Chest/Hip Waders	
MAINTENANCE ITEMS: PHOTO REF. NO.	☐ Traffic Control ☐ Snooper	
	Other:	1 8 C
REPAIR AGGREGATE SHOULDER	MAINTENANCE ITEMS:	PHOTO REF. NO
	REPAIR AGGREGATE SHOULDER	3 & 4





SN: 056-3006	Distri			pans:	1		Spans:	0	Skew:	: 14	ADT:	:	6650 1	ruck Pct:	10
ADT Un:	Maint. Co		HENR	Y 1	Гwsр	: GRE	ENWOC	D			Status	: OF	PEN - NO F	RESTRICT	-
Facility Carried: C		RD					Featur	e Cro	ssed:	Slough (Creek				
Location AT NELS	SON RD			N		cipality					m/Sub:			nsp/Rte:	
Bridge Name:	Bridge Name: Material & Type: PRESTRESS CONCRETE/BOX BEAM OR GIRDER-MULTI														
Insp. Intervals Routine: 24 Fracture Critical: 0 Underwater: 0 Special: N/A Element Level: 24															
90 - Inspection Dat	90 – Inspection Date: / / 90C – Temp. (°F) 90B1 – In-Depth														
Is Delinquent:	Reason:														
90A – Agency Prog	ram Manag	ger:					90 <i>F</i>	1 3 – C	onsultai	nt Progra	am Mana	ager:	:		
90A1 – Team Leader: 90A2 – Inspector:															
90B – Inspection Re	omarke:					÷									
·		s ove	rlav ma	av excee	ed all	owable	desian o	verlav	thickne	ss. #59)	2 spalls	with	exposed s	stirrup bars	at
inid span of	north beam	ı. Sev	veral ke	eyways	leakiı	ng.#60)	Large sp	all wit	n expos	ed rebar	at north	n end	of west ab	outment	
#58) +/-8" of mid span of stem Horiz exposed reb	ontal and v	ertica	al crack	s with le	eachi	ing at no	orth and	south a	abutmer	nt stems.	- All win	igwal	lls with spa	lling and	4
உ exposed reb	ar.#61) IVIO	uerat	e debri	s bulldu	ıp un		cture W Resource		t of agg	jregate a	ı nortnw	est s	snoulder ar	iu paveme	ill
Time to Inchest (IIII	M). 1.0		ITro	iffic Con	tralı				1	Madara	. \\/		Chacher		T
Time to Inspect (H:		- :		et Truck			Boa	at:		Waders	: W		Snooper:		
Ladder.	anlift:		Биске	HITUCK	-		Other:								
		Prev	New			Inspec	tor's Ap	praisa	Is		Comm	onte			
58 – Deck Condition	n:	5	INEW								Commi	CIIIS			
59 – Superstructure	e Cond:	5													
		_													
60 – Substructure C	Cond:	5													
62 Culvert Condit	ioni	l NI	1 1												
62 – Culvert Condit	IOI1.	N													
61 – Channel Cond	ition:	8													
or Granner Cond	idon.														
71 – Waterway Ade	equacy:	9													
72 – Approach Rdw	/ Align:	8													
111 – Pier Navig Pr	otection:	N	П												
					9	0B – In	spector	Rema	rks:						
					3	7D - III	pooloi	. toma							
-															

Routine Inspection Report

							Structure Numb	ber: 0563006	
			Additional In	spection D	ata				
		Prev New							_
36A – Bridge Railing Ad	dequacy:	2	Rail Types:			г	New	New	l
Approach Guardrai	I Adequacy:	: 36B – 7	Transitions: 2	36C – Gu	uardra		36D – End		
	<u> </u>	Prev New	N						ı
108A – Wearing Surfac		G	If "L-Other" Describe						
108B – Type of Membra		Α	If "E-Other" Describ						
108C – Deck Protection		J	If "I-Other" Describe	ə:					
108D – Total Deck Thic	kness (in):	24.0							
		Prev	v New						
59A – Paint Date (Mo/Y	r):		/						
59B – Paint Type:				Color:	Fasc	sia:	Inter:	Railing	
			<u> </u>			_		-	
59C – Utilities Attached	l:	NNN	If "B-Oth	er" Describ	e:				
					Prev	New			
	70A2 – Sin	-				Ton	_		
Weight Limit Posting:			on Type 3S-1 (3 or 4 axle			Ton	_		
			on Type 3S-2 (5 or more	axles):		Ton			
	70D2 – On	e Truck a	at a Time:		0				
Joint Openings (In.)									
					_				_
			90B – Inspector Re	emarks Co	ntinu	red:			
-									
				Signatu	re			Date	
Inspection Team Lead	ler:		Mile Ou	uckloers	ha-	,		1 1	
Consultant Program N	/lanager:							/	
Agency Program Man	ager:							/ /	

Illinois Department of Transportation Structures Information Management System Master Structure Report (S-107)

Date: 12/31/2020

Page 1

Structure Number:	: 056-3006 Distr	rict: 1				
			Inventory Da	ta		
Facility Carried:	CHARLES RD	Bridge Name:		Sufficiency Rating:	63.1 Structure Length:	31.0
Feature Crossed:	Slough Creek	Location:	AT NELSON RD	HBP Eligible:	Yes AASHTO Bridge Leng	gth: 28.5
Bridge Remarks:		·		Replaced By:	Length of Long Span	n: 31.0
Bridge Status:	1 OPEN - NO RESTRICT	StatusDate:	4/1/1988	Replaces:	Bridge Roadway Wid	th: 40.0
Status Remarks:				Last Update Date: 0	1/15/2013 Appr Roadway Width	32.0
Maint County:	056 MCHENRY Ma	int Township: 09 GR	EENWOOD	Parallel Structure:	None Deck Width:	40.0
Maint Responsibility:	03 COUNTY			Multi-Level Structure Nbr:	Sidewalk Width Righ	t: 0.0
Service On/Under:	1 HIGHWAY	/ 5 W	ATERWAY	Skew Direction:	Right Sidewalk Width Left:	0.0
Reporting Agency:	3 COUNTY			Skew Angle: 14 D	Navigation Control:	0 No
Main Span Matl/Type:	5 PRESTRESS CONCRET	E / 05 BOX B	EAM OR GIRDER-MULTIP	LE Structure Flared:	No Navigation Horiz Cl	lear: 0
Nbr Of Main Spans:	1 Nbr Of Approach Spar	ns: 0		Historical Significance:	No Navigation Vert Cle	ar: 0
Approaches				Border Bridge State:	Culvert Fill Depth	0.0
Near #1 Matl/Type:		/		Bdr State SN:	Number Culvert C	Cells: C
Near #2 Matl/Type:		/		Bdr State % Responsi	oility: 0 Culvert Opening	Area: 0.0
Far #1 Matl/Type:		/		Structural Steel Wt:	0 Culvert Cell Heigl	ht: 0.00
Far #2 Matl/Type:		/		Substructure Material:		
Median Width/Type:	0 Ft. / 0 None			Rated By: 3 Consultant	Rate Method: 6 LOAD FAC	CTOR (LF) REP
Guardrail Type L/R:	0 None / 0	None	Inventory Rating: 1	050 (37) Load Rating Date: 03/20/2	018 ***Railroad Crossing	Info***
Toll Facility Indicator:	0 No Toll		Operating Rating: 1	.750 (63)	Crossing 1 Nbr:	
Latitude: 42.36493		36019	Design Load: 02 HS20		Crossing 1 Nbr:	
Deck Structure Type:	E PCAST PRES CN D	K BM Deck Stru	cture Thickness:	17.0 SD : Y FO : N	RR Lateral Underclear:	0.0
Sidewalks Under Struc					RR Vertical Underclear:	0 Ft 0 In
	Key Route			Key Rou	ite Under Data	
Key Route Nbr: FEDER		0026 Station : 10.09	000		Station:	
Appurtenances Main F		Segment:			Segment:	
, , _	MCHENRY	Linked:	Υ		Linked:	
Township/Road Dist 0		Natl. Hwy System:			Natl. Hwy System:	
Municipality 0000		Inventory Direction			Inventory Direction:	
Urban Area: None		Curr AADT Yr/Cou			Curr AADT Yr/Count:	/
	MAJOR COLLECTOR	Est Truck Percenta	•		Est Truck Percentage:	%
	uth/East North/West	Number Of Lanes:		South/East North/West	Number Of Lanes:	
•	40.0	One Or Two Way:	2 Two-Way		One Or Two Way:	
	40.0	Bypass Length:	4		Bypass Length:	
	Ft 11 In 00 Ft 00 In	Future AADT Yr/Cr		Ft In Ft In	Future AADT Yr/Cnt:	/
	Ft 11 In 00 Ft 00 In	Designated Truck		Ft In Ft In	Designated Truck Rte:	
Lateral:		Special Systems:	No	Ft Ft	Special Systems:	
	*** Marked Rou				oute Under Data ***	
Route #1: 1 Mainli	Designation	Kind 4 FAS, CH, or TR's Unr	Number	Designation	Kind	Number
Route #1:		TAS, CII, ULIKS UNI	IIIINGU			
Route #2.						

Illinois Department of Transportation Structures Information Management System Master Structure Report (S-107)

Date: 12/31/2020

Page 2

Structure Number: 056-3006 District: 1							
Data Related to Ins	pection Information						
***Inspection Intervals *** *** Maximum Allow	vable Posting Limits *** Bridge Posting Level:						
Routine NBIS: 24 MOS Underwater: 0 MOS One Truck At A Time: 0	Combination Type 3S-1: Tons 5 No Posting Required						
Fracture Critical: 0 MOS Special: N Single Unit Vehicles: Tons	Combination Type 3S-2: Tons						
Inspection/Appra	aisal Information						
Inspection Date: 10/15/2020 Inspection Temperature: 50 Deg. F	Insp by (Name): Queckboerner, Mike ** Actual Posted Limits **						
Deck: 4 POOR CONDITION - ADVANCED DETERIORATION	Insp by (Name): Queckboerner, Mike Single Unit Vehicles: Tons						
Superstructure: 4 POOR CONDITION - ADVANCED DETERIORATION	Utilities Attached: N N/A Combination Type 3S-1: Tons						
Substructure: 5 FAIR CONDITION - MINOR SECTION LOSS, CRACKS	N N/A Combination Type 3S-2: Tons						
Culvert: N NOT APPLICABLE	N N/A One Truck At A Time: 0						
Channel and Protection: 8 VERY GOOD CONDITION - NO PROBLEMS NOTED	Deck Wearing Surf: G BITUMINOUS OVERLAY Last Paint Type:						
Structural Evaluation: 4 MINIMUM ADEQUACY TO BE LEFT IN PLACE	Deck Membrane: A WATERPROOF MEM SYST						
Deck Geometry: 5 BETTER THAN ADEQUATE TO BE LEFT IN PLACE	Deck Protection: J NONE						
Underclearance-Vert/Lat.: N NOT APPLICABLE	Total Deck Thick: 24.0						
Waterway Adequacy: 9 SUPERIOR TO PRESENT DESIRABLE CRITERIA	Last Paint Date:						
Approach Roadway Align: 8 EQUAL TO PRESENT DESIRABLE CRITERIA	Inspection Remarks:						
Bridge Railing Appraisal: 2 Doesn't Meet Standards	Item #58 & #59 - Longitudinal crack at 3rd beam in from south at east end of be am 2 spalls						
Approach Guardrail: Not Acceptable Not Acceptable Not Acceptable	with exposed stirrup bars at mid span of north beam ± 8" of b ituminous overlay may exceed allowable design overlay thickness Severe colli						
Pier Navig Protection: N N/A	allowable design overlay anothess. Govern som						
Underwater Inspection	n/Appraisal Information						
Inspection Date:							
Temperature: Inspection Method:							
Inspected By: Inspected By: Appraisal Rating:							
Inspection Remarks:							
Scour Critical Information	Miscellaneous						
Rating: 8 CALCULATED SCOUR ABOVE FOOTING Evaluation Method: A							
	RED J.STONE,JR Microfilm Data Recorded: No						
Construction Information							
Year: 1947 Original 1984 Reconstructed							
Route: FAS 26 Sta: 415+58.1 FAS 26 Sta: 415+58.1							
Section Nbr: 82-00106-00-BR 82-00106-00-BR							
Contract Nbr:							
Fed Aid Pr #: BR-S26 0102000 BR-S26 0102000							
Built By: 3 COUNTY AGENCY 0 UNKNOWN							
Proposed In	•						
Cost Estimate Year: Length:	*** Costs in Dollars ***						
Type of Work:	Bridge Cost:						
Done By:	Roadway Cost:						
Remarks:	Total Project Cost:						



CHECKED BY __ ____ DATE ___ SCALE 056-3006 ENGINEERING ARCHITECTURE LAND SURVEYING NORTH BEAM FASCIA (2020 SAME) WEST SPAN EXPOSED SONOTUBES 23 E 4 SPALL REBAR EXA - REBAR EXP. STIRRUP EXP. STRAND EXP STRAND EXP E. PER/ABUT ELEVATION VIEW 23 Bm. Wion L" GEC. LOCA L' SEC. Loc 2 SEVERED RESAR EAST SAAN CENTER SPAN WEST SPAN ELEVATION

REPORT SUMMARY

STRUCTURE NUMBER:	056-3006
ROAD NAME:	Charles Road
FEATURE CROSSED:	Slough Creek
TOWNSHIP:	Greenwood
COMMENTS:	 Longitudinal crack at 3rd beam in from south at east end of beam. 2 spalls with exposed stirrup bars at mid span of north beam. ± 8" of bit. overlay may exceed allowable design overlay thickness. Severe collision damage to north beam in west approach span causing large areas of concrete section loss at 3 bridge post locations. Large spall and heavy scaling with exposed rebar at north end of west abutment stem. Map cracking with leaching at north and south abutment stems, all wingwalls with spalling and exposed rebar.

PHOTOS



STRUCTURE NUMBER:

056-3006

Photo 2



Viewing temporary concrete barrier wall.



Viewing large washout in aggregate shoulder.



STRUCTURE NUMBER:

056-3006

Photo 4

Viewing large washout in aggregate shoulder.



Photo 5

Viewing collision damage to outer beams.



STRUCTURE NUMBER:

056-3006

Photo 6



Viewing keyways leaking.

Photo 7

Viewing keyways leaking.



STRUCTURE NUMBER:

056-3006

Photo 8

Viewing 2' longitudinal crack.



Photo 9

Viewing spalling with stirrup bars exposed.



STRUCTURE NUMBER:

056-3006

Photo 10

Viewing cracks and heavy scaling in abutment stem.



Photo 11

Viewing cracks in abutment stem.



STRUCTURE NUMBER:

056-3006

Photo 12

Viewing wingwall deterioration.



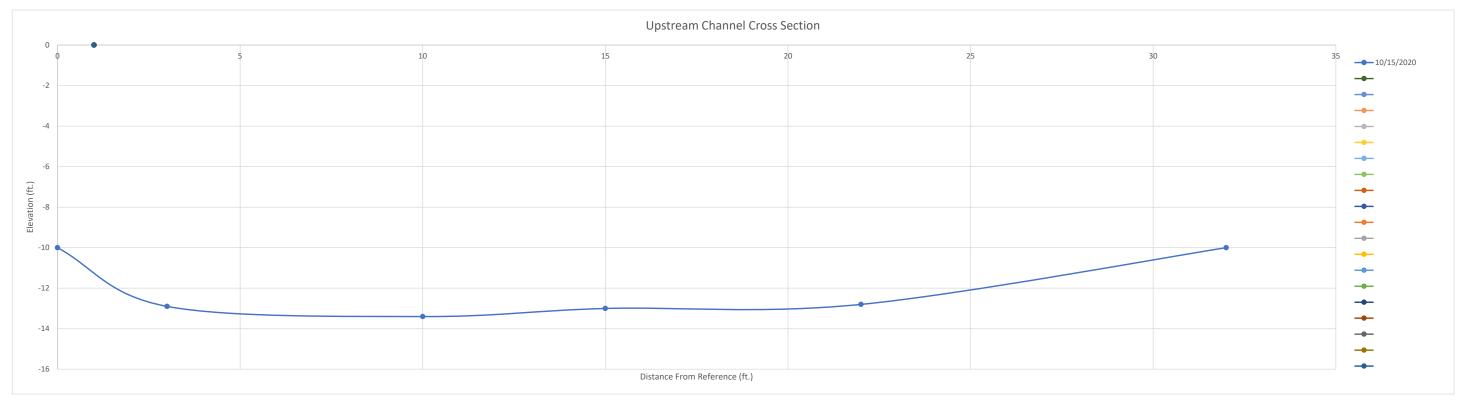
Photo 13

Viewing wingwall deterioration.





County: McHenry
S.N. 056-3006
Roadway: Charles Road
Stream: Slough Creek







	Upstream Chann	el Cross Sections	South Side	
	Distance From:	Elevation of	Distance From	Streambed
Description	East Abutment	Refrence Line	Refrence to	Elevation
East Abutment	0	0	Stroambod 10	-10
Edge of Water	3	0	12.9	-12.9
S.B.	10	0	13.4	-13.4
S.B.	15	0	13.4	-13.4
Edge of Water	22	0	12.8	-12.8
West Abutment	32	0	10	-12.6
west Abutment	32	0	10	-10

Downstream Channel Cross Sections	on
Description East Abutment Refrence Line Refrence to Stepsymbol Elevating Flag East Abutment 0 0 9.11 -9.11 Top of Bank 5 0 10.4 -10.4 Edge of Water 11 0 11 -11 S.B. 21 0 11.1 -11.1 Edge of Water 25 0 11 -11	on
East Abutment 0 0 9.11 -9.11 Top of Bank 5 0 10.4 -10.4 Edge of Water 11 0 11 -11 S.B. 21 0 11.1 -11.1 Edge of Water 25 0 11 -11	:
Top of Bank 5 0 10.4 -10.4 Edge of Water 11 0 11 -11 S.B. 21 0 11.1 -11.1 Edge of Water 25 0 11 -11	:
Edge of Water 11 0 11 -11 S.B. 21 0 11.1 -11.1 Edge of Water 25 0 11 -11	
S.B. 21 0 11.1 -11.1 Edge of Water 25 0 11 -11	
Edge of Water 25 0 11 -11	
	—

	County:	McHenry
	S.N.	056-3006
Legend:	Roadway:	Charles Road
User Input	Stream:	Slough Creek
Dron-DownManu		

Date:	10/15/2020	Inspector	: Mike Queckboerner		
		Reference Line:	~		
	1		Guardrail (056-3006)		
		•			
		Elevation	of Upstream Reference Line	e: 0	
				0	
		Elevation of I	Downstream Reference Line	2: 0	
			Overlay Thickness (ft) =		(Only need if parapet and rail is not available and a top of slab is
		Upstream P	Pier Information:		only need in puraper and run is not available and a top of side is
Pier #	Station		Top of Footing/Bottom Pie	Bottom of Footing	
D: #	0		Pier Information:	D (
Pier #	Station	Top of Pier Elevatio	Top of Footing/Bottom Pie	Bottom of Footing	
		ı			
Box C	Culvert Botto	m Slab Elevation			
Station	Eleva	tion (Upstream)			
			<u> </u>		
			4		
			1		
			1		
			ш		
			_		
	1	m Slab Elevation	_		
Station	Elevation	on (Downstream)	4		
			4		
			A contract of the contract of		