

Bridge Inspection										
Bridge File Number	85014 W-2 Bridge				Form Type	SG				
Year Built/Year Supstr	2005/2005				Lot No.	3				
Bridge or Town Name	ANOTHONY HENDAY DRIVE OVER NORTH SASKATCHEWAN RIVER				Inspector Name	Wade Nanninga				
					Inspector Class	BR CLS A				
Located Over	NORTH SASKATCHEWAN RIVER, 6, WATERCRS-ST				Assistant Name					
					Assistant Class					
Located On	216:06 R1 10.307				Inspection Date	26-Jan-2013				
Water Body Cl./Year					Data Entry By	Theresa Lacusta				
Navigabil. Cl./Year					Data Entry Date	10-Feb-2013				
Legal Land Location	SW SEC 3 TWP 52 RGE 25 W4M				Reviewer Name	Eric Carcoux				
Longitude, Latitude	-113:36:54, 53:27:36				Review Date	27-Jan-2013				
Road Authority	Alberta Transportation (AIT)				Dept. Reviewer Name	Brent Herrick				
Contract Main. Area	ANTHONY HENDAY DRIVE				Dept. Review Date	14-Feb-2013				
Clear Roadway/Skew	12.9 /				Follow-Up By					
AADT/Year	40,710 / 2011 (A)									
Road Classification	RFD-412.4-110									
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member			
Design Loading:							----> Primary Span			

Posting Information									
Required Load Posting (t)	Single		Semi		Truck Train				
Posted Loading (t)	Single		Semi		Truck Train				
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane	EB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)		
Remarks	Not required.								
Hazard Marker At Bridge (Y/N)	Yes								
Remarks									
Other Sign Types									

Utilities (Located at)										
Utility Attachments										
Telephone					Gas					
Power	Street lights.				Municipal	Sewer line to North east				
Others					Problem (Y/N)	No				
Remarks	Light posts at downstream edge outside the traffic barrier.									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			8	8					
Vertical Alignment			8	8					
Roadway Width (m)	12.900								
Approach Bump			7	6					
Guardrail (Y/N)	Yes								
Guardrail			8	7					
Length (m)	99.000								
Current Standard (Y/N)	Yes								
Termination Type	Turn Down.								
Drainage			8	4	Leaking onto SW wingwall through approach slab.				
<b>Approach Road General Rating</b>			<b>8</b>	<b>8</b>					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : <b>WG, 4 Spans, Lengths(m): 80-100-100-80, A-Ident Number: A1465-01;A1465-02;A1465-03;A1465-04</b> )						
<b>Special Features</b>						
Special Feature		N	N			
(SType : <b>DK DEICING SYS</b> )						
Special Feature			X			
(Type : )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>						
<b>Now</b>	10.0	0.0	0.0	0.0		
Wearing Surface		6	4	Longitudinal crack down c/l & transverse cracks every 5m about 1/2 sealed.		
(Material Type : <b>ACP</b> )						
(Thickness(mm) : <b>90</b> )						
Deck Top		N	N			
Deck Rideability		7	7			
Deck Joints		6	3	Paving lip @ West end chipped exposing 2 small bolt heads in wheelpath.		
Temperature (deg. C)		-10				
(Expansion Type : <b>FINGER PLATES</b> )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
350		West, abutment 1				
310		East, abutment 2				
Deck Drainage		9	4	(1.7% grade and 2% superelevation weep drains under barriers only. Erosion @ SW drain trough.		
Drains Clogged (Y/N)		No				
Curbs/Median		4	4	Typically 1 to 3 medium cracks per section of barrier with rust staining on 50% of cracks - photos.		
(Curb Type : <b>JERSEY/F SHAPE</b> )						
Scaling (Percent Area)		0				
Bridge Rail		X	X			
(Type : )						
Bridge Rail Posts		X	X			
(Type : )						
Bridge Rail/Posts Coating		X	X			
(Type : )						
Sidewalk		X	X			
<b>Girder/Beam</b>						
Cover Plate		X	X	Difficult to view center spans due to height of bridge.		
Flange		9	9			
Web		9	9			
Stiffeners		9	9			
Splice		9	9			
Weld		9	9			
Diaphragms/Cross Frame		9	9			

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : <b>WG, 4 Spans, Lengths(m): 80-100-100-80, A-Ident Number: A1465-01;A1465-02;A1465-03;A1465-04</b> )				
Paint Condition		8	8	Weathering steel. 3 coat wasser "dark brown" at girder ends.
(Colour Description : )				
(Colour Code : )				
Touchup Required (Y/N)	No			
Bearings		8	8	
Temperature (deg. C)	-10			
(Expansion Type : <b>POT BEARING</b> )				
(Fixed Type : <b>REINFORCED PAD BEARING</b> )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	Narrow transverse cracks with efflorescence where girders spliced and under curb joints.
Stains (Percent Area)	1			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>7</b>	<b>7</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		9	9	Grade beam on two additional caps and pile bents behind main abutments.
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		9	9	
Wingwalls		7	7	Narrow map cracking on SE, stained @ SW from joint leakage.
Piles		N	N	
Paint/Coating		9	9	
Abutment Stability		9	8	
Scour/Erosion		9	4	Erosion @ SW drain trough.2mx0.5mx20m
<b>Piers/Bents</b>				
(Type : <b>PIER-COLUMN</b> )				Hairline map cracking.
Bearing Seats/Caps		8	8	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>2:2:2</b> )				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		9	9	Pier 2 only.
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		9	8	
Scour		N	N	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>8</b>	<b>8</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>S</b> )				
(D/S Direction : <b>N</b> )				
Alignment		8	8	
Bank Stability		7	4	Cut bank downstream. Sloughing bank at pier 1, not affecting pier stability.-photo
HWM (m below Top of Curb)	26.1			(HWM @ 624.0 (2005) during construction. 07/Nov/2005)
Drift (Y/N)	No			
Slope Protection		7	4	Round cobbles on headslope above H.W. Riprap at South bank. Sloughing bank @ pier 1.
(Type : <b>RIP RAP</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		9	9	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>4</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013	Seal cracks on inside & tops of curbs with epoxy.					
PATCH DECK	2013	Patch ACP and seal cracks. Patch W paving lip.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2013	Repair @ SW drain trough-extned trough or place riprap, add clay fill.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>83.3/83.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>73.1/68.2</b>	Est. Repl. Yr	2080	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor bank @ pier 1.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	26-Oct-2014		Previous Inspection Date	29-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							