

Bridge Inspection										
Bridge File Number	06581 -1 Bridge				Form Type	PSR				
Year Built/Year Supstr	1986/1986				Lot No.	2				
Bridge or Town Name	GRAINGER				Inspector Name	Owen Salava				
Located Over	KNEEHILLS CREEK, 3.46, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	575:02 C1 34.384				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	25-Jan-2011				
Legal Land Location	NW SEC 21 TWP 29 RGE 24 W4M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-113:19:53, 51:30:10				Data Entry Date	03-Mar-2011				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA20				Review Date	03-Feb-2011				
Clear Roadway/Skew	9 / 10 deg. (RHF)				Dept. Reviewer Name	Chris Black				
AADT/Year	1,090 / 2009 (A)				Dept. Review Date	04-Mar-2011				
Road Classification	RAU-209-110				Follow-Up By					
Detour Length (km)	12									
Allowable Load (t):	Single	CS1 28		Semi	CS2 49		Train	CS3 62		----> On Critical Spans ---->Critical Member
Design Loading:	MS300								----> Primary Span	

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

Utilities (Located at)									
Utility Attachments									
Telephone	20.0 m South.				Gas				
Power	Crosses road E of bridge 100m				Municipal				
Others	Fibre optics in North Row				Problem (Y/N)	No			
Remarks	Powerline also crosses West of bridge 1W OH 100m.								

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Curves @ both ends 200m away.				
Vertical Alignment			7	7					
Roadway Width (m)		10.000							
Approach Bump			7	7					
Guardrail (Y/N)		Yes			Posts @ transition rail are notched.				
Guardrail			4	4	Missing 9 splice bolts at SE and 6 at NE				
Length (m)		30.500							
Current Standard (Y/N)		No							
Termination Type		TURNED DOWN ENDS							
Drainage			7	7	(Parallel concrete drain troughs @ E abutment only. 15Feb2009).				
<b>Approach Road General Rating</b>			<b>6</b>	<b>6</b>					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : CBT, 3 Spans, Lengths(m): 14.2-15.9-14.2, A-Ident Number: )					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
<b>Wearing Surface/Deck Top Detail Ratings</b>					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	5.0	0.0	0.0	0.0	
Wearing Surface			5	5	Cracked extensively and sealed. Chip coat on top is rough. Peeling in thin patches. Long cracks @ underside of shear keys.
(Material Type : <b>ACP - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			6	6	
Deck Joints			7	7	Cover plates partially paved over.
Temperature (deg. C)		5			
(Expansion Type : <b>ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES)</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
95		East			
110		West			
Deck Drainage			5	5	No drains.
Drains Clogged (Y/N)					
Curbs/Median			6	6	Cracks every .60 m to .90 m along the curb - 0.5 mm wide. 20mm popouts. Fascia stains below each grout pad.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		0			
Bridge Rail			8	8	2 A/B @ NE with insufficient thread.
(Type : <b>TUBE BEAM TYPE 1</b> )					
Bridge Rail Posts		4	4		
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			7	7	
(Type : )					
Sidewalk			X	X	
<b>Girder Detail Ratings</b>					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0	0	0	0	
Girders			8	8	Minor cracks in CIP connections between girders & in some CIP diaphragm.
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
(Number Of Girders : <b>24</b> )					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CBT, 3 Spans, Lengths(m): 14.2-15.9-14.2, A-Ident Number: )				
Diaphragms/Cross Frame		8	8	
Bearings		8	8	Reinforced Neoprene Pads
Temperature (deg. C)	5			
(Expansion Type : )				
(Fixed Type : )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		8	8	
Stains (Percent Area)	0			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>8</b>	<b>8</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		7	7	Minor spall at south end Abut. 1
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		8	8	
Wingwalls		8	8	
Piles		N	N	
Paint/Coating		7	7	
Abutment Stability		8	8	
Scour/Erosion		5	5	(Scour below NE drain near top of slope protection. 15Feb2009).
<b>Piers/Bents</b>				
(Type : <b>PIER-COLUMN</b> )				
Bearing Seats/Caps		8	8	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>4:4</b> )				
Pier Shaft/Piles		9	9	
Bracing/Struts/Sheathing		9	9	
Nose Plate		X	X	
Paint/Coating		6	6	Peeling @ waterline, fading.
(Colour Description : <b>YELLOW</b> )				
(Colour Code : <b>13538</b> )				
Pier Stability		9	9	
Scour		6	6	Minor scour at P2
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>8</b>	<b>7</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>N</b> )				Turns E 100m U/S, D/S slough W bank 100m U/S.
(D/S Direction : <b>S</b> )				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)		No		
Slope Protection		6	6	(Minor scour with rock displaced below NE concrete drain. 15Feb2009).
(Type : <b>RIP RAP; RIP RAP</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	Partial beaver dam at D/S channel.
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK	2011	Chipcoat					
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP	2011	5m3, Class I, if not yet done.					
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2011	15 splice bolts, guardrail.					
OTHER ACTION	2011	Install NE & NW HMs.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/83.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>72.4/71.6</b>	Est. Repl. Yr	2044	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2009.11.03 Remove ACP and consider membrane and ACP vs concrete overlay. ACP installed in 1987. With normal maint. bridge OK until 2061.RS						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	25-Apr-2014		Previous Inspection Date	15-Feb-2009			
Inspection Cycle (Default) (months)	39						
Comment							