

Bridge Inspection									
Bridge File Number	08779 -1 Bridge				Form Type	SG			
Year Built/Year Supstr	1988/1988				Lot No.	2			
Bridge or Town Name	GRAND CENTRE				Inspector Name	Wade Nanninga			
Located Over	BEAVER RIVER, 7, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	28:20 C1 18.025				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	09-Apr-2012			
Legal Land Location	SE SEC 15 TWP 62 RGE 2 W4M				Data Entry By	Lisa Fairhurst			
Longitude, Latitude	-110:12:58, 54:21:19				Data Entry Date	24-Apr-2012			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA08				Review Date	17-Apr-2012			
Clear Roadway/Skew	15.5 /				Dept. Reviewer Name	Brent Herrick			
AADT/Year	4,750 / 2011 (A)				Dept. Review Date	04-May-2012			
Road Classification	RAU-211.8-110				Follow-Up By				
Detour Length (km)	25								
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	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane	SB	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	All located on first approach flexbeam posts. Not in line with rail.								
Other Sign Types	"Trucks use lower gear", "Slower traffic use right lane", "Beaver River". "slippery deck"								

Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	West r/w.				Gas				
Power	3 wires 100 m West of c/l.				Municipal				
Others	WSC flow gauge on West side.				Problem (Y/N)		No		
Remarks	Fibre optics cable (Northern Cable Vision) East.								

Approach Road									
			<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>				
Horizontal Alignment			6	6	Curves in both directions. Limited sight distance to South. In bottom of long sag curve. Passing lane SB.				
Vertical Alignment			6	6					
Roadway Width (m)	15.000				"Bump" markers @ NW & SE corners.				
Approach Bump			5	5					
Guardrail (Y/N)	Yes				29.2m radius @ SW; 38.0m radius @ SE to accommodate resident approach & local road. 99.0m @ NE & NW. Not thrie beam transition.				
Guardrail			7	7					
Length (m)	29.200								
Current Standard (Y/N)	No								
Termination Type	Turned Down								
Drainage			5	4	Windrows under rails - photo				
<b>Approach Road General Rating</b>			<b>6</b>	<b>6</b>					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : <b>WG, 3 Spans, Lengths(m): 24.3-30.5-24.3, A-Ident Number: A1091-01</b> )						
<b>Special Features</b>						
Special Feature			X			
(Type : )						
Special Feature			X			
(Type : )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
<b>Last</b>						
<b>Now</b>	0.0	0.0	0.0	0.0		
Wearing Surface			6	6	Random cracking.	
(Material Type : <b>ACP</b> )						
(Thickness(mm) : <b>90</b> )						
Deck Top			N	N		
Deck Rideability			5	5		
Deck Joints			4	3	Slapping under traffic North abutment.(Water at South abutment seat, joint leaks. - 14Jul10) 1 missing bolt @ N cover plate-photo.	
Temperature (deg. C)		5				
(Expansion Type : <b>ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES)</b> )						
(Fixed Type : )						
Gap Size (mm)		Gap Location				
73		North abutment				
60		South abutment				
Deck Drainage			6	6		
Drains Clogged (Y/N)		No				
Curbs/Median			4	4	Curbs have flexural cracks about every metre cracking at posts & coating peeling 30%. Post grout pads stained & delaminating 30%. Small delam spalls @ curb/ACP interface - Spall outside face at one bridge post on East curb.-photo	
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		5				
Bridge Rail			7	7	10% anchor bolts with insufficient thread. 10% grout pad spalling.-photo	
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )						
Bridge Rail Posts			4	4		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating			7	7		
(Type : <b>GALVANIZED</b> )						
Sidewalk			X	X		
<b>Girder/Beam</b>						
Cover Plate			X	X	9 girder / span. 5 original, 4 widening. Span 2 not accessible. Viewed from banks	
Flange			8	8		
Web			8	8		
Stiffeners			8	8		
Splice			8	8		
Weld			8	8		
Diaphragms/Cross Frame			8	8		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
<b>(Primary Span : WG, 3 Spans, Lengths(m): 24.3-30.5-24.3, A-Ident Number: A1091-01)</b>				
Paint Condition		7	7	Exterior girder painted - brown. Weathering steel.
(Colour Description : )				
(Colour Code : )				
Touchup Required (Y/N)	No			
Bearings		5	8	South abutment bearing under widening seat is out of plumb East-West, no problem.  Anchor bolt @ G9S1 bent indicating over extended  Rocker @ P2 only, P1 is Neoprene.
Temperature (deg. C)	5			
<b>(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)</b>				
<b>(Fixed Type : ROCKER BEARING)</b>				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Narrow transverse crack West effl. @ NE. Cracks extend from curb cracking into underside
Stains (Percent Area)	1			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>5</b>	<b>5</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		4	4	Wide crack @ NW corner-photo.
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		6	6	
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		4	5	
Abutment Stability		8	8	
Scour/Erosion		5	5	
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				Seat widening at different height than original - typical.
Bearing Seats/Caps		8	8	
(Type : <b>CONCRETE</b> )				narrow map cracking on Pier 1
<b>(Total Number of Bearing Piles : 0:0)</b>				
Pier Shaft/Piles		8	5	
Bracing/Struts/Sheathing		8	8	
Nose Plate		8	7	Rust on nose plate.
Paint/Coating		5	5	biede
(Colour Description : )				
(Colour Code : )				
Pier Stability		8	8	
Scour		8	N	
Debris (Y/N)	Yes			Debris built up at P1-photo.

Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Substructure General Rating</b>		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )				
(D/S Direction : <b>E</b> )				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	Yes			
Slope Protection		8	8	Class II only @ lower half
(Type : <b>NATURAL; RIP RAP</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		8	8	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Extend anchor bolts where insufficient thread - major rehab; rehab post grout pads.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Check, tighten loose coverplate bolts, shim as necessary to stop slapping. Flood joints and check for leakage					
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2012	From P1					
OTHER ACTION	2012	Install hazard markers at correct locations.					
OTHER ACTION	2012	Patch cracked NW abutment seat.					
OTHER ACTION	2012	Remove windrows					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/50.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>57.7/57.7</b>	Est. Repl. Yr	2043	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection				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	Shane Hall	Previous Assistant's Name	
Next Inspection Date	09-Jan-2014	Previous Inspection Date	14-Jul-2010
Inspection Cycle (Default) (months)	21		
Comment			