Bridge Inspection

Bridge File Number	82018 SE-1 Bridge	Form Type	PSR
Year Built/Year Supstr	2007/2007	Lot No.	2
		Inspector Name	Garry Roberts
Bridge or Town Name		Inspector Class	BR CLS A
Located Over	1:09 R1 4.197;1:09 L1 4.199	Assistant Name	
Located On	201:08 L1 0.966	Assistant Class	
Water Body Cl./Year		Inspection Date	14-Aug-2011
Navigabil. Cl./Year		Data Entry By	Alyssa Boynton
Legal Land Location	NW SEC 33 TWP 24 RGE 2 W5M	Data Entry Date	06-Sep-2011
Longitude, Latitude	-114:13:56, 51:05:20	Reviewer Name	Tom Carey
Road Authority	Alberta Transportation (AIT)	Review Date	24-Aug-2011
Contract Main. Area	DEERFOOT/STONEY	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	12.5 / -22 deg. (LHF)	Dept. Review Date	08-Sep-2011
AADT/Year	35,490 / 2010 (A)	Follow-Up By	
Road Classification	RFD-412.4-130		
Detour Length (km)	1		

Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	---> On Critical Spans --->Critical Member	
Design Loading:		CL800					---> Primary Span	

Posting Information

Required Vert. Clearance Posting (m)				UNDER: 1 L1 6.5m, 1 R1 7.0m							
Posted Vertical Clearance (Y/N)				Yes							
Posted:	Lane	EB	On Bridge (m)	5.4	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.4	In Advance (Y/N)	Yes
Remarks											

Required Load Posting (t)		Single		Semi		Truck Train		
Posted Loading (t)		Single		Semi		Truck Train		
Posted:	Lane SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane NB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)		
Remarks	Not Reqd							

Hazard Marker At Bridge (Y/N)	No
Remarks	
Other Sign Types	

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	Conduit under bridge for Lighting	Municipal	Light Standard
Others		Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	In curve
Vertical Alignment		6	6	On crest & curve
Roadway Width (m)	13.400			Current bridge is 12.9 with temporary barriers to transition traffic. Slight settlement both ends.
Approach Bump		7	6	
Guardrail (Y/N)	Yes			Thrie beam transition installed at North West approach only. Conc barrier - typical @ NE & NW corners. No conc barrier @ SE, not req'd
Guardrail		8	8	
Length (m)	27.000			
Current Standard (Y/N)	Yes			
Termination Type	Terminal			
Drainage		7	7	
Approach Road General Rating		**6**	**6**	

Superstructure

Bridge Component		Last	Now	Explanation of Condition
(Primary Span : **NU, 2 Spans, Lengths(m): 50-52, A-Ident Number:**)				
Special Features				
Special Feature			X	Temporary conc barriers installed opn bridge to direct traffic until ultimate alignment is constructed in the future
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%) / 1 (%) / 2 (%) / 3 (%)			
Last	0 / 0 / 0 / 0			
Now	0.0 / 0.0 / 0.0 / 0.0			
Wearing Surface		8	8	
(Material Type : **ACP**)				
(Thickness(mm) : **80**)				
Lateral Connection Problem (Y/N)	No			
Deck Top		N	N	Paved over.
Deck Rideability		8	8	
Deck Joints		7	4	1 plow deflector missing at right hand lane of A1 and 2 missing at A2.
Temperature (deg. C)	18			
(Expansion Type : **GLAND (WABO-MAUER, TRANSFLEX, ETC)**)				
(Fixed Type :)				
Gap Size (mm)	Gap Location			
65	N Abut			
70	S Abut			
Deck Drainage		8	8	
Drains Clogged (Y/N)	No			
Curbs/Median		9	8	Concrete barriers Parapets.
(Curb Type :)				
Scaling (Percent Area)	0			
Bridge Rail		X	X	Pigmented sealer on conc. Light scaling of coating at West barrier.
(Type :)				
Bridge Rail Posts		X	X	
(Type :)				
Bridge Rail/Posts Coating		8	6	
(Type :)				
Sidewalk		X	X	
Girder Detail Ratings				
	N (count) / 1 (count) / 2 (count) / 3 (count)			
Last	0 / 0 / 0 / 0			
Now	0 / 0 / 0 / 0			
Girders		4	4	Typ. hairline NU Cracks in web trasnition and top flange. All cracks marked at abuts. and piles from 2008 level 2 inspection. 5 lines of continuous girders.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
(Number Of Girders : **10**)				
Diaphragms/Cross Frame		9	8	Galv steel.

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **NU, 2 Spans, Lengths(m): 50-52, A-Ident Number:**)				
Bearings		9	9	A1 & A2. Integral at pier.
Temperature (deg. C)	18			
(Expansion Type : **POT BEARING**)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		8	8	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		**4**	**4**	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Abutments				
Bearing Seats/Caps		8	8	
(Type : **CONCRETE**)				
Backwalls/Breastwalls		7	7	Vertical cracks at abut.1 with efforescence.
Wingwalls		8	8	
Piles		N	N	Buried.
Paint/Coating		8	8	
Abutment Stability		9	9	
Scour/Erosion		X	X	
Piers/Bents				
(Type : **PIER-COLUMN**)				
Bearing Seats/Caps		8	8	
(Type : **CONCRETE**)				
(Total Number of Bearing Piles : **0**)				
Pier Shaft/Piles		9	9	
Bracing/Struts/Sheathing		8	8	Concrete base at pier shaft
Nose Plate		X	X	
Paint/Coating		7	7	Pigmented sealer
(Colour Description :)				
(Colour Code :)				
Pier Stability		9	9	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		6	6	In curve with good sight distance, both directions

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Traffic Safety Features		8	8	
Type	Concrete Barriers			
Slope Protection		7	8	
(Type : **CONCRETE; CONCRETE**)				
Bank Stability		8	8	
Drainage		8	8	
Grade Separation General Rating		**6**	**6**	

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						
REPAIR/REPLACE DECK JOINTS	2011	Install missing plow gaurds.				
RESET/ PAINT BEARINGS						
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**57.9/52.5**	Est. Repl. Yr	2082	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Revise girder rating after NU girder rating guide is available. G Roberts.	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	Garry Roberts	Previous Assistant's Name			
Next Inspection Date	14-May-2013	Previous Inspection Date	18-Nov-2009		
Inspection Cycle (Default) (months)	21				
Comment					