

Bridge Inspection											
Bridge File Number	75051 N-1 Bridge				Form Type	PSR					
Year Built/Year Supstr	1960/1960				Lot No.	2					
Bridge or Town Name	CAYLEY				Inspector Name	Garry Roberts					
Located Over	CPR				Inspector Class	BR CLS A					
Located On	2:10 R1 31.644				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	26-Jan-2010					
Legal Land Location	NE SEC 6 TWP 17 RGE 28 W4M				Data Entry By	Kelsey Roberts					
Longitude, Latitude	-113:49:49, 50:24:21				Data Entry Date	27-Feb-2010					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Tom Carey					
Contract Main. Area	CMA27				Review Date	01-Feb-2010					
Clear Roadway/Skew	11.6 / -45 deg. (LHF)				Dept. Reviewer Name	Lorenz Bohnert					
AADT/Year	10,500 / 2008 (A)				Dept. Review Date	02-Mar-2010					
Road Classification	RFD-412.4-130				Follow-Up By						
Detour Length (km)	1										
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	HS20									----> Primary Span	

Posting Information										
Required Vert. Clearance Posting (m)										
Posted Vertical Clearance (Y/N)										No
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)	In Advance (Y/N)
Remarks	Not req.- Over abandoned RxR									
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)		In Advance (Y/N)		At Bridge (Y/N)			
Remarks	Not req.									

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

Utilities (Located at)										
Utility Attachments										
Telephone	West Row				Gas					
Power					Municipal					
Others	Fiber optics West Row				Problem (Y/N)	No				
Remarks										

Approach Road										
				Last	Now	Explanation of Condition				
Horizontal Alignment				5	5	Curves both ends & at crest of vertical curve.				
Vertical Alignment				5	5					
Roadway Width (m)		11.600								
Approach Bump				5	5					
Guardrail (Y/N)		Yes			Wrong lap at SE. Missing 4 splice bolts at SE and 2 at NE. Collision damage at SE.					
Guardrail				5	4					
Length (m)		76.000			Not thriebeam.					
Current Standard (Y/N)		No								
Termination Type		TURNED DOWN ENDS								
Drainage				7	6					
<b>Approach Road General Rating</b>				<b>5</b>	<b>5</b>					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 18.6-23.2-18.6, A-Ident Number: )					
<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>	0	0	0	0	
<b>Now</b>	0.0	0.0	0.0	0.0	
Wearing Surface			6	6	CHIP SEAL OVER EPOXY.
(Material Type : <b>CONCRETE - UNKNOWN POLYMER OVERLAY - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness (mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			5	5	
Deck Joints			3	3	Leaking actively S pier & N abut joints. All joints partially filled with chipcoat.
Temperature (deg. C)		-16			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
55		N. abut			
65		N. pier			
60		S. pier			
55		S. abut			
Deck Drainage			4	4	NE Drain detached- appears all joints leak.
Drains Clogged (Y/N)		No	SOME DITCH EROSION 200 mm DP @ NE DECK DRAIN.		
Curbs/Median			4	4	Spalling at post base anchors. Random wide cracks.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		10			
Bridge Rail			5	5	bent rails but functional.
(Type : <b>BRIDGE TUBE;STEEL BRIDGE TUBE</b> )					
Bridge Rail Posts			N	4	2 A/B nuts not fully engaged. Spalling at several post anchors.
(Type : <b>POST STEEL</b> )					
Bridge Rail/Posts Coating			4	4	5% CORROSION
(Type : <b>PAINT</b> )					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0	0	0	0	
Girders			5	5	RANDOM CRACKS @ WEST EXTERIOR CENTRE SPAN @ PREVIOUSLY PATCHED AREA.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : <b>21</b> )					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 3 Spans, Lengths(m): 18.6-23.2-18.6, A-Ident Number: )				
Diaphragms/Cross Frame		7	7	5% rusted - superficial.
Bearings		6	6	Exterior bearing are tied with steel straps over piers. Corrosion at exterior bearings.
Temperature (deg. C)	-16			
(Expansion Type : <b>ROCKER BEARING</b> )				
(Fixed Type : <b>ROCKER BEARING</b> )				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Long. Cracks between girders-med width Spalled @ south pier @ west under curb
Stains (Percent Area)	2			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>4</b>	<b>4</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		4	5	
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		6	6	
Wingwalls		7	6	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		8	7	
Scour/Erosion		X	X	
<b>Piers/Bents</b>				
(Type : <b>PIER-COLUMN</b> )				Wide cracks @ east end of south pier
Bearing Seats/Caps		4	4	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles : <b>5:5</b> )				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		3	4	Peeled @ pier ends
(Colour Description : )				
(Colour Code : )				
Pier Stability		8	7	
Scour		X	X	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>4</b>	<b>4</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		X	X	Railway is abandoned
Traffic Safety Features		X	X	
Type				
Slope Protection		5	6	
(Type : )				
Bank Stability		8	7	
Drainage		5	5	Some minor erosion @ NE
<b>Grade Separation General Rating</b>		<b>5</b>	<b>6</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
REPAIR/SEAL CURBS	2014	Approx. 5m2					
PATCH DECK							
SEAL DECK							
OVERLAY DECK	2014	HP concrete overlay (if bridge not replaced)					
REPAIR/REPLACE DECK JOINTS	2010	repair leakage - Repair approx. 2m2 joint spalls.					
RESET/ PAINT BEARINGS	2012	Blast and paint bearings.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2010	Repair NE Drain					
OTHER ACTION	2010	Patch deck underside @ W @ S pier-0.1m3OH					
OTHER ACTION	2014	Replace all deck joints (if bridge not replaced)					
OTHER ACTION	2014	Seal abut & pier cracks and paint 20L.					
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>50.5/51.6</b>	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Determine highway realignment plans as bridge could be eliminated. Do only necessary maint. until replaced. Rehab will be necessary if not replaced. (G Roberts Jan. 26/10)		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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	26-Oct-2011		Previous Inspection Date	14-Dec-2007			
Inspection Cycle (Default) (months)	21						
Comment							