

Bridge Inspection													
Bridge File Number	75339 N-1 Bridge					Form Type	SG						
Year Built/Year Supstr	1962/1962					Lot No.	1						
Bridge or Town Name	LACOMBE					Inspector Name	Randy Bredo						
Located Over	CPR					Inspector Class	BR CLS A						
Located On	2:26 R1 14.892					Assistant Name							
Water Body Cl./Year						Assistant Class							
Navigabil. Cl./Year						Inspection Date	18-Oct-2012						
Legal Land Location	NE SEC 15 TWP 40 RGE 27 W4M					Data Entry By	Marcia Chavez						
Longitude, Latitude	-113:48:17, 52:26:36					Data Entry Date	20-Nov-2012						
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien						
Contract Main. Area	CMA19					Review Date	01-Nov-2012						
Clear Roadway/Skew	12.2 / 32 deg. (RHF)					Dept. Reviewer Name	Andrew Smikles						
AADT/Year	30,370 / 2011 (A)					Dept. Review Date	26-Nov-2012						
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)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No	
Remarks		Not required.											
Required Load Posting (t)		Single						Semi					
Posted Loading (t)		Single						Semi					
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	At Bridge (Y/N)	No			
Posted:	Lane	SB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)		At Bridge (Y/N)				
Remarks		Not required.											
Hazard Marker At Bridge (Y/N)		No											
Remarks													
Other Sign Types													
Utilities (Located at)													
Utility Attachments													
Telephone	Yes - no marker.					Gas							
Power						Municipal							
Others						Problem (Y/N)	No						
Remarks													
Approach Road													
				Last	Now	Explanation of Condition							
Horizontal Alignment				8	8	On crest curve.							
Vertical Alignment				7	7								
Roadway Width (m)		11.500											
Approach Bump				7	7								
Guardrail (Y/N)		Yes											
Guardrail				4	7								
Length (m)		85.000											
Current Standard (Y/N)		No				Not as per PL2 standards.							
Termination Type		Turn Down											
Drainage				6	6								
Approach Road General Rating				7	7								

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Primary Span : RB, 3 Spans, Lengths(m): 14.9-18.9-14.9, A-Ident Number: A0384-01)						
Special Features						
Special Feature					X	
(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	3.0		
Wearing Surface				6	3	Chip sealed on ACP. NB near A1 fast lane has 3x5m (15 sq. m) of squeezed out asphalt; shallow rutting elsewhere.
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Deck Top				N	N	
Deck Rideability				7	6	
Deck Joints				4	4	Missing numerous plow deflectors. (Not required ?). A1 has small chips along female plate putting anchorage in question.
Temperature (deg. C)		14				
(Expansion Type : SLIDING PLATES)						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
57		S. abut				
86		N. abut				
Deck Drainage				4	4	No drains. (Water ponds in gutters just before abut jnts. 01/10/16). Abut jnts leak causing damage at deck underside.
Drains Clogged (Y/N)						
Curbs/Median				5	5	Concrete cracking up along SW curb coverplate, but still in place.
(Curb Type : Standard)						
Scaling (Percent Area)		0				
Bridge Rail				5	5	Retrofit rail installed. Minor damage to slats, 5 panels - 4 on W side & 1 on E.
(Type : GALVANIZED STEEL VERTICAL BAR)						
Bridge Rail Posts				7	7	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating				7	7	
(Type : GALVANIZED)						
Sidewalk				X	X	
Girder/Beam						
Cover Plate				7	7	
Flange				5	6	
Web				6	6	
Stiffeners				X	X	
Splice				7	7	
Weld				7	7	
Diaphragms/Cross Frame				7	7	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RB, 3 Spans, Lengths(m): 14.9-18.9-14.9, A-Ident Number: A0384-01)				
Paint Condition		7	5	2% peeling btwn topcoat & primer.
(Colour Description : BROWN)				
(Colour Code : 504-106)				
Touchup Required (Y/N)	No			
Bearings		4	4	35mm movement remaining @ S end. All S abut bearings on TT blocks -photo. Corrosion stains and spalls under gutters at abut jnts - photo. Corner bearings are rust jacked up to 5mm.
Temperature (deg. C)	10			
(Expansion Type : ROCKER BEARING)				
(Fixed Type : REINFORCED PAD BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Deck U/S delam/spall @ both abut jnts - photos. Deck U/S shallow delam G6,7 over P1. Haunch spall @ G4 over P2 - photo. Isolated efflorescence @ cracks. Retro drain trough installed @ N abut only. Many flexural cracks on deck underside from girders deflecting.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			G4 over P2 has water gaining access btwn girder & deck, and squirting out under traffic. Skew pressures have moved bridge slightly.
Horizontal (Y/N)	Yes			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		6	6	
Abutment Stability		7	7	
Scour/Erosion		X	4	Water is gaining access to gap at top of slope protection & eroding fill underneath.
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				Two columns each pier.
(Total Number of Bearing Piles : 0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		6	6	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	No			
Substructure General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
Traffic Safety Features		X	X	
Type				
Slope Protection		4	4	Top of N concrete slope settled & slopes towards abut. Few random cracks, up to 6mm wide. 70mm gap at jnt btwn abut & concrete slope protection S, 20mm gap N. Gap in S abut continuing to crack under G2.
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		7	7	
Grade Separation General Rating		7	7	

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						
PATCH DECK						
SEAL DECK						
OVERLAY DECK	2013	Replace asphalt with concrete overlay.				
REPAIR/REPLACE DECK JOINTS	2013	Replace with waterproof deck joints & full depth deck repair along jnts.				
RESET/ PAINT BEARINGS	2013	Determine reason for blocking South abutment bearings and repair during major rehab. Replace rocker bearings with neoprene pads.				
REPAINT SUPERSTRUCTURE						
STRAIGHTEN/REPLACE MEMBERS						
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) (%)	61.1/61.1	Sufficiency Rating (Last/Now) (%)	59.0/57.7	Est. Repl. Yr	2037	Maint. Req'd. (Y/N)	Yes
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Special Comments for Next Inspection	No action for slope protection. Inspect at regular intervals.	Department Comments	
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Maintenance Reviewed By		Date	Estimated Total	0
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Proposed Long-Term Strategy 2008.01.29 Adandonment might not take place until 2015 or later. Chip seal deck in 2008/09 as part of Hwy program.

On 3-Year Program (Y/N)

Proposed Action

Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	18-Jul-2014	Previous Inspection Date	14-Sep-2011
Inspection Cycle (Default) (months)	21		
Comment			

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							
PATCH DECK							
SEAL DECK							
OVERLAY DECK	2013	Replace asphalt with concrete overlay.	next rehab	2017			
REPAIR/REPLACE DECK JOINTS	2013	Replace with waterproof deck joints & full depth deck repair along jnts.	next rehab	2017			
RESET/ PAINT BEARINGS	2013	Determine reason for blocking South abutment bearings and repair during major rehab. Replace rocker bearings with neoprene pads.	next rehab	2017			
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
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) (%)	61.1/61.1	Sufficiency Rating (Last/Now) (%)	59.0/57.7	Est. Repl. Yr	2037	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	No action for slope protection. Inspect at regular intervals.		Department Comments	Bridge-deck rehab currently scheduled for 2017. DA			
Maintenance Reviewed By	Darron Ahlstedt		Date	18-Apr-2013	Estimated Total	0	
Proposed Long-Term Strategy	2008.01.29 Adandonment might not take place until 2015 or later. Chip seal deck in 2008/09 as part of Hwy program.						
On 3-Year Program (Y/N)							

Proposed Action			
Previous Inspector's Name	Owen Salava	Previous Assistant's Name	
Next Inspection Date	18-Jul-2014	Previous Inspection Date	14-Sep-2011
Inspection Cycle (Default) (months)	21		
Comment			