

Bridge Inspection											
Bridge File Number	75340 N-1 Bridge					Form Type	PSR				
Year Built/Year Supstr	1962/1962					Lot No.	2				
Bridge or Town Name	LACOMBE					Inspector Name	Jason Saly				
Located Over	12:10 L1 0.000;12:10 R1 0.000					Inspector Class	BR CLS A				
Located On	2:26 R1 17.464					Assistant Name					
Water Body Cl./Year						Assistant Class					
Navigabil. Cl./Year						Inspection Date	20-Mar-2013				
Legal Land Location	NW SEC 23 TWP 40 RGE 27 W4M					Data Entry By	Marcia Chavez				
Longitude, Latitude	-113:47:06, 52:27:46					Data Entry Date	01-Apr-2013				
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien				
Contract Main. Area	CMA19					Review Date	26-Mar-2013				
Clear Roadway/Skew	15.9 / 31 deg. (RHF)					Dept. Reviewer Name	Chris Black				
AADT/Year	30,370 / 2011 (A)					Dept. Review Date	09-Apr-2013				
Road Classification	RFD-412.4-130					Follow-Up By					
Detour Length (km)	1										
Allowable Load (t):	Single	CS1 45 GIRDER			Semi	CS2 53 GIRDER		Train	CS3 66 GIRDER		----> On Critical Spans ---->Critical Member
Design Loading:	HS20					----> Primary Span					

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 12 L1 5.5m, 12 R1 5.5m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.5	In Advance (Y/N)	Yes
Remarks												
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)		No										
Remarks			Not required.									
Other Sign Types		Route										

Utilities (Located at)										
Utility Attachments										
Telephone	Yes - no marker.					Gas				
Power						Municipal				
Others	Street lighting along Hwy 12.					Problem (Y/N)	No			
Remarks			Power for lights on piers.							

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	On/off ramps removed; no longer clover leaf shape, now diamond shape.
Vertical Alignment		7	7	
Roadway Width (m)	15.300			
Approach Bump		7	7	
Guardrail (Y/N)	Yes			
Guardrail		6	6	
Length (m)	55.000			
Current Standard (Y/N)	Yes			
Termination Type	Turn Down			
Drainage		4	4	
<b>Approach Road General Rating</b>		<b>7</b>	<b>7</b>	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 15.2-29-15.2, 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 (%)	Snow covered.
<b>Last</b>	0	0	0	0	
<b>Now</b>	20.0	0.0	0.0	0.0	
Wearing Surface			5	5	(1 longit. crack center lane S2, 0.3mm wide. Map cracking in accel/decel lane S1 & 2 - photo. 2 core holes in deck East shoulder not filled to top - photo. 03/07/09). Chip sealed - minor loss of chips along deck jnts. SF concrete o/l placed 1995; chip seal placed in 2007. 417m of crack noted before chip seal placed. Previously 4m2 debond o/l, 9m lost seal coat.
(Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			8	7	Missing 1 plow guard @ A1, 5 @ A2, 1 @ P2 & 3 @ P1. (Not required.) Jnts flood tested in 2009; no leakage was observed.
Temperature (deg. C)		0			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
74		S. abut			
75		S. pier			
76		N. pier			
75		N. abut			
Deck Drainage			4	4	NW corner has erosion from water coming around the corner. No drains.
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	E curb spalled @ SE abut. (Map cracking @ W curb S3. 15Sep2011). Some efflorescence on underside of curb at pier jnts and at cracks, typically spaced about half the railing post spacing. Corrosion stains and 0.5mm wide cracks U/S @ NE. U/S curb spall at NW & NE wingwall.
(Curb Type : <b>Standard</b> )		Scaling (Percent Area)		0	
Bridge Rail			5	5	Retrofit rail installed. 4 panels have minor bends to vertical bars, ok.  15 posts have poor grout, falling apart - old posts.
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )					
Bridge Rail Posts			5	5	
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			5	5	
(Type : <b>GALVANIZED</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	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 15.2-29-15.2, A-Ident Number: )					
Girders		4	4	(Post tensioning anchor exposed with light corrosion at North end of S2. 15Sep2011). Spall with exposed rebar, N end of S2G3.	
Cracking (Y/N)	Yes				
Spalling (Percent Area)	1				
(Number Of Girders : 26)					
Diaphragms/Cross Frame		6	6	Diaphragms have 35% paint failure.	
Bearings		4	4	Missing nut on 2 bearings @ North abutment, 3 other bearings only have 1 nut on A/B.  Corrosion pitting on exterior bearings all locations, 50%-75% on remainder.	
Temperature (deg. C)	0				
(Expansion Type : <b>SLIDING PLATE</b> )					
(Fixed Type : <b>PINNED BEARING</b> )					
Coating Adequate (Y/N)	No				
Functioning (Y/N)	Yes				
Deck Underside		5	5	Narrow to medium wide transverse cracking; some cracks had efflorescent staining. There is wet looking stains along S2G9; some rust stains also visible.	
Stains (Percent Area)	1				
<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		6	5	Cracking at W end of the S abut. Spall at NE corner at curb interface.	
(Type : <b>CONCRETE</b> )					
Backwalls/Breastwalls		7	7		
Wingwalls		7	7		
Piles		N	N	Buried.	
Paint/Coating		X	X		
Abutment Stability		7	7		
Scour/Erosion		4	4	Surface erosion @ NW.	
<b>Piers/Bents</b>					
(Type : <b>PIER-COLUMN</b> )				Water staining from old leaking joints. E end of P1 has a delam crack on end. Rebar spall underneath P1 E end. Delam crack on bottom corner P2 under outside lane.	
Bearing Seats/Caps		5	5		
(Type : <b>CONCRETE</b> )					
(Total Number of Bearing Piles : <b>0:0</b> )				3 columns each pier.	
Pier Shaft/Piles		7	7		
Bracing/Struts/Sheathing		X	X		
Nose Plate		X	X		
Paint/Coating		X	X		
(Colour Description : )					
(Colour Code : )					
Pier Stability		8	8		
Scour		X	X		
Debris (Y/N)		No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Substructure General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		9	9	
Traffic Safety Features		9	8	Concrete retaining wall at toe of both slopes. Concrete median. Guardrail attached to retaining wall.
Type	Retaining Wall / Median			
Slope Protection (Type : <b>CONCRETE; CONCRETE</b> )		4	5	50mm gap, 225 settlement @ South. 75mm gap, 300 settlement @ North. Wide crack in South headslope - photo. Top of SE slope protection is settled.
Bank Stability		7	7	
Drainage		7	7	
<b>Grade Separation 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	2013	Remove loose concrete at SE and patch with AT approved material.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS	2013	Install missing nuts; paint bearings.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Fill eroded slope @ NW, 3m3 pitrun; add concrete drain trough.					
OTHER ACTION	2013	Epoxy pier 2 crack on East end.					
OTHER ACTION	2013	Paint end braces.					
OTHER ACTION	2013	Seal girder ends, ensure jnts remain water tight.					
OTHER ACTION	2013	Seal crack in slope protection.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/50.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>55.1/54.9</b>	Est. Repl. Yr	2021	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	20-Dec-2014		Previous Inspection Date	15-Sep-2011			
Inspection Cycle (Default) (months)	21						
Comment							