

Bridge Inspection										
Bridge File Number	77750 W-1 Bridge					Form Type	PSR			
Year Built/Year Supstr	1983/1983					Lot No.	2			
Bridge or Town Name	LAKE EDEN					Inspector Name	Wade Nanninga			
Located Over	16:14 R1 4.158					Inspector Class	BR CLS A			
Located On	RAMP 104-1 A					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	31-Jul-2012			
Legal Land Location	NE SEC 12 TWP 53 RGE 2 W5M					Data Entry By	Theresa Lacusta			
Longitude, Latitude	-114:09:31, 53:34:10					Data Entry Date	20-Aug-2012			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA11					Review Date	20-Aug-2012			
Clear Roadway/Skew	12.5 / -59 deg. (LHF)					Dept. Reviewer Name	Brent Herrick			
AADT/Year						Dept. Review Date	22-Aug-2012			
Road Classification	RAD-412.4-120					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:	MS300								----> Primary Span	

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 16 R1 5.4m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	EB	On Bridge (m)	5.5	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.3	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)			In Advance (Y/N)			At Bridge (Y/N)			
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			Information, Speed, Warning.									

Utilities (Located at)										
Utility Attachments										
Telephone	South r/w					Gas				
Power	7 wires North r/w.					Municipal				
Others						Problem (Y/N)	No			
Remarks										

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Insufficient posts. Minor creases but functioning. NW transition not bolted, but welded.
Vertical Alignment		7	7	
Roadway Width (m)	12.800			
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		5	5	
Length (m)	99.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		5	3	SW drain chipped & cracked. SW drain not connected to approach, water leaking under approach slab.-photo
Approach Road General Rating		7	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PB, 4 Spans, Lengths(m): 23.4-50-50-23.4, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now					
Wearing Surface			4	8	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			4	4	Fingers have been cut and rewelded flush. (50mm dia spalls in paving lip. Some repaired with epoxy.-07-Oct-2010 Drain troughs have heavy scaling. Chipseal jammed in joints.-photo Finger @ NE is loose and rattles under traffic.
Temperature (deg. C)		18			
(Expansion Type : FINGER PLATES)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
300		N. abut			
270		S. abut			
Deck Drainage			4	4	SE drain causing delam in surrounding concrete. Curb on concrete drain on South headslope is broken.
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	Plow scrapes. Typical transverse shrinkage vertical cracks along curb every 600mm. Verical cracks on outside of curb @ posts. Typical curb exterior cracking/staining under posts. Chipseal binder split along curbs.
(Curb Type : Standard)					
Scaling (Percent Area)		15			
Bridge Rail			7	7	Grout pads on a few posts are spalling. Base of posts at drain holes rusting.
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts			5	4	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			4	4	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Girders			4	4	Stains around drain @ SE. Cracks on SE corner, monitor .35mm. Cracks on NW corner, monitor .60mm. Minor high load scrapes above EB traffic. High load scrap & chip in WB travel lane.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : 1)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PB, 4 Spans, Lengths(m): 23.4-50-50-23.4, A-Ident Number:)				
Diaphragms/Cross Frame		X	X	
Bearings		4	4	SE stainless steel shim plate loose, skew pressures forcing plate to slide out. (NE seal appears to be broken - photo. 10/Dec/2008) Pier bearings not accessible for closeup inspection.
Temperature (deg. C)	18			
(Expansion Type : POT BEARING)				
(Fixed Type : POT BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		5	5	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			Typical skew pressure.
Horizontal (Y/N)	Yes			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		6	5	Medium vertical cracks along wingwalls. 200mm spall @ NW.
Piles		N	N	
Paint/Coating		4	4	Peeling along wingwalls.
Abutment Stability		8	8	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		X	X	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				Narrow map cracks, typical.
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		6	6	
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		6	6	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Traffic Safety Features		6	6	
Type	Guardrail			
Slope Protection		6	6	
(Type : NATURAL; NATURAL)				
Bank Stability		8	8	
Drainage		7	7	
Grade Separation General Rating		6	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Replace grout pads @ next rehab.					
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Remove chipseal and reweld loose finger @ NE.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Investigate to determine condition of NE & SW bearings and if repairs are required.					
OTHER ACTION	2012	Fill void @ SW drain trough/approach slab.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	63.5/63.5	Est. Repl. Yr	2053	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor cracks.		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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	30-Apr-2014		Previous Inspection Date	07-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							