

Bridge Inspection										
Bridge File Number	76845 -1 Bridge					Form Type	SG			
Year Built/Year Supstr	1978/1978					Lot No.	2			
Bridge or Town Name	NISKU					Inspector Name	Wade Nanninga			
Located Over	2:32 L1 8.395;2:32 R1 8.414					Inspector Class	BR CLS A			
Located On	19:10 R1 12.168;19:10 L1 12.168					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	10-Jan-2013			
Legal Land Location	SW SEC 26 TWP 50 RGE 25 W4M					Data Entry By	Theresa Lacusta			
Longitude, Latitude	-113:33:01, 53:20:16					Data Entry Date	05-Feb-2013			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA11					Review Date	17-Jan-2013			
Clear Roadway/Skew	18.9 /					Dept. Reviewer Name	Brent Herrick			
AADT/Year	10,930 / 2011 (A)					Dept. Review Date	14-Feb-2013			
Road Classification	RAU-213.4-120					Follow-Up By				
Detour Length (km)	5									
Allowable Load (t):	Single	CS1 28			Semi	CS2 49		Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	MS23									----> Primary Span

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 2 L1 5.5m, 2 R1 5.5m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)	5.5	In Advance (Y/N)	Yes	Lane	SB	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	At Bridge (Y/N)	No		
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	At Bridge (Y/N)	No		
Remarks												
Hazard Marker At Bridge (Y/N)		No										
Remarks												
Other Sign Types		Information, Warning, Speed.										

Utilities (Located at)										
Utility Attachments										
Telephone	West end of bridge.					Gas				
Power	Street lighting.					Municipal				
Others	Pipeline approximately 40m North.					Problem (Y/N)	No			
Remarks										

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Typical entrance & exit lanes.
Vertical Alignment		6	6	Typical GS crest curve.
Roadway Width (m)	17.400			8.7 EBL 8.7 WBL.
Approach Bump		4	4	Pot hole @ SW approach slab causes vehicles to bounce onto bridge.
Guardrail (Y/N)	Yes			Insufficient posts @ transitions. Bulb end @ SW.
Guardrail		6	6	98m SW, 49.4 NW, 34.2 SE, 121m NE.
Length (m)	34.200			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		7	7	
Approach Road General Rating		6	6	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : WG, 4 Spans, Lengths(m): 45.3-45-45-45.3, A-Ident Number: A0820-01;A0820-06;A0820-02)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	0	0	0	60		
Now	30.0					
Wearing Surface			3	4	Chipseal on HDC. Chipseal 80% peeled off WBL, 30% peeled off EBL. Medium transverse cracks every 0.5m both lanes. Have been sealed.	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			3	3	Fingers @ A2 on abutment side 8mm higher than road side. Fingers @ A1 5mm higher on abut side.-photo Joint leaking onto SE & SW curtain walls creating wide cracks-photo Water leaking @ NW abutment. Rattle @ SE under traffic.	
Temperature (deg. C)		-15				
(Expansion Type : FINGER PLATES;GLAND (WABO-MAUER, TRANSFLEX, ETC))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
75		West abutment - Finger Plate				
65		West pier - Gland				
70		East pier - Gland				
85		East abutment - Finger Plate				
Deck Drainage			4	4	Abutment joints leaking onto substructure.	
Drains Clogged (Y/N)		No				
Curbs/Median			6	N	Vertical cracking at posts exterior.	
(Curb Type : Standard)						
Scaling (Percent Area)		0				
Bridge Rail			7	7		
(Type : GALVANIZED STEEL TUBE BEAM TYPE 1;TUBE BEAM TYPE 1)						
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			X	X		
Flange			7	7		
Web			7	7		
Stiffeners			7	7		
Splice			7	7		
Weld			7	7		
Diaphragms/Cross Frame			7	7		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 4 Spans, Lengths(m): 45.3-45-45-45.3, A-Ident Number: A0820-01;A0820-06;A0820-02)				
Paint Condition		7	7	Discoloration of steel @girder underside due to traffic spray from Hwy 2. Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		6	6	Look ok from headslope. Viewed with binoculars.
Temperature (deg. C)	-15			
(Expansion Type : POT BEARING)				
(Fixed Type : POT BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		5	5	Transverse cracking with stains & efflorescence & some with rust staining between Pier 2/3.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		5	5	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		4	4	Wide vertical/horiz. cracks @ both abutments.
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	
Wingwalls		4	4	SE & SW wingwall medium to wide vertical & horizontal cracks with staining - photo.
Piles		N	N	
Paint/Coating		4	4	15% peeling.
Abutment Stability		8	8	
Scour/Erosion		7	7	
Piers/Bents				
(Type : PIER-SOLID)				Wide cracks at ends of cap at pier 3. Underside of SW corner P3 has wide crack. Wide cracks South end of P1.
Bearing Seats/Caps		4	4	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				Piles not visible - 2 shafts/pier. Wide crack in shaft @ P3.
Pier Shaft/Piles		4	4	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	Pigmented sealer. Grey.
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		9	9	
Traffic Safety Features		3	7	
Type	Guardrail			
Slope Protection		4	6	1.2m x 0.4m spall on South side of West headslope - photo.-15-Jul-2011
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		4	6	Water ponding @ E and W headslope.-photo-15-Jul-2011
Grade Separation General Rating		3	6	

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							
REPAIR/REPLACE DECK JOINTS	2013	Inspect finger joint plumbing to verify if leaking onto abut seats and curtain wall when replacing.					
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION	2013	Repair pothole @ SW approach					
OTHER ACTION	2013	Repair hole in concrete slope protection, if not done.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/50.0	Sufficiency Rating (Last/Now) (%)	46.8/51.3	Est. Repl. Yr	2037	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Ladder required to inspect bearings. Repair cracked/spalling concrete @ abut., pier, headslope at next major rehab.		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	10-Oct-2014		Previous Inspection Date	15-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							