

Bridge Inspection											
Bridge File Number	74678 -1 Bridge				Form Type	CON					
Year Built/Year Supstr	1958/1958				Lot No.	2					
Bridge or Town Name	CARNWOOD				Inspector Name	Kris Bosters					
Located Over	MODESTE CREEK, 6.132.11, WATERCRS-ST				Inspector Class	BR CLS A					
Located On	39:06 C1 13.942				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	14-Dec-2012					
Legal Land Location	NW SEC 3 TWP 49 RGE 5 W5M				Data Entry By	Theresa Lacusta					
Longitude, Latitude	-114:39:05, 53:12:01				Data Entry Date	07-Jan-2013					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux					
Contract Main. Area	CMA11				Review Date	03-Jan-2013					
Clear Roadway/Skew	11 / 16 deg. (RHF)				Dept. Reviewer Name	Paul Catt					
AADT/Year	3,650 / 2011 (A)				Dept. Review Date	18-Jan-2013					
Road Classification	RAU-211.8-110				Follow-Up By						
Detour Length (km)	3										
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 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									
Other Sign Types	Curve ahead, Passing lane. Modeste Creek sign EB								

Utilities (Located at)										
Utility Attachments										
Telephone	North and south r/w.				Gas					
Power	3 wires 60 m east of bridge. Cable on South curb.				Municipal					
Others					Problem (Y/N)	Yes				
Remarks	Strung along S rail.									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Limited sight distance. Horizontal curves both ends. Vertical sag with crest. EBL has passing lane on East side of bridge.				
Vertical Alignment			6	6					
Roadway Width (m)		11.500			Pothole at West & East approaches and ACP is ravelling.-photo				
Approach Bump			4	4					
Guardrail (Y/N)		Yes			Post 10 @ NE blackout missing. Insufficient posts, not thrie beam.-photo				
Guardrail			N	4					
Length (m)		35.000			30% of spacer blocks rotated 45 deg.				
Current Standard (Y/N)		No							
Termination Type		Turned Down							
Drainage			4	4	500 wide x 300 deep x 2m long gully on West & East headslopes.				
Approach Road General Rating			6	6					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : CT, 3 Spans, Lengths(m): 19.5-24.4-19.5, A-Ident Number:)					
Special Features					
Special Feature		4	4	Minor superficial rust on 30% of rods. 1 broken rod S3, G3.-photo	
(SType : EXT SHEAR STIRRUP)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Snow covered along gutters.
Last	20	0	0	0	
Now					
Wearing Surface		4	4	Chipseal over epoxy w/s on concrete. Less than 1m2 unravelling/grader damage.	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Deck Top		N	N		
Deck Rideability		7	7		
Deck Joints		6	5	Paving lips have wide longitudinal cracks. East joint covered in ACP could not measure.	
Temperature (deg. C)		-5			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
Gap Size (mm)		Gap Location			
42	West abutment				
20	East abutment				
Deck Drainage		4	4	Gullies on West headslope.	
Drains Clogged (Y/N)		No			
Curbs/Median		4	N	5 spalls on South curb top. Spalling around drain at S3G4, 1m long, upto 400mm wide and at curb top 600 long, 200 wide.-25-Jan-2011 Snow covered	
(Curb Type : Standard)					
Scaling (Percent Area)		15			
Bridge Rail		N	4	Double layer. 1 damaged, bent section, North side mid span 2. Delam cracking at base of posts. Partially snow covered.	
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts		N	4		
(Type : CONCRETE;CONCRETE)					
Bridge Rail/Posts Coating		6	6		
(Type : GALVANIZED)					
Sidewalk		X	X		
Girders		5	5	Salt stains, patched in several places of underside. Medium shear cracks @ NE & NW, (uprated for repair). Narrow flexural cracks in all girders. Shear cracks measured on East span G4, 0.5mm (est). Edges of girders along abutments have medium scalling.	
Diaphragms/Cross Frame		5	5	Medium vertical cracks in 50% of diaphragms.	
Bearings		5	5	40% corrosion with scaling @ exterior abutment bearings. Interior bearings 25% corroded. Fixed @ P1.	
Temperature (deg. C)		-5			
(Expansion Type : ROCKER BEARING)					
(Fixed Type : PINNED BEARING)					
Coating Adequate (Y/N)		Yes			
Functioning (Y/N)		Yes			
Deck Underside		4	4	Medium transverse cracks on deck undersideS1, S3, G1/2. S2 efflorescence stain from trans. crack. Spalls at stirrups under curbs.	
Stains (Percent Area)		1			

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CT, 3 Spans, Lengths(m): 19.5-24.4-19.5, A-Ident Number:)				
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats		7	7	
Backwalls/Breastwalls		5	5	Medium scaling on backwalls.
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		4	4	100mm x 100mm wide erosion around edges of NE all 4 wingwalls. Gully on West & East headslope.
Piers/Bents				
(Type : PIER-SOLID)				Wide vertical crack E & W side P1.
Bearing Seats/Caps		7	5	
(Type : CONCRETE)				
Pier Shaft/Piles		5	4	3 wide horizontal cracks on nose P1 & P2. 1.5 mm wide vertical cracks at P2, West side. Wide vertical crack East & West side P1.-full height.
Nose Plate		7	7	
Paint/Coating		4	4	Pitting rust on nose plates.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	5	
Scour		N	N	
Debris (Y/N)	No			
Substructure General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				
(D/S Direction : N)				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		4	4	Concrete sacks. Gap in concrete bags at West headslope (discontinuous). Riprap on E headslope. Gullies on both headslopes.
(Type : RIP RAP; RIP RAP)				
Guidebank/Spurs		X	X	

Structure Usage				
		Last	Now	Explanation of Condition
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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	2013	Patch curbs, if not already done.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Replace guardrail post blockout,reset rotated spacers.					
OTHER ACTION	2013	Repair shear stirrup S3, G3.					
OTHER ACTION	2013	Contact Telus to attach conduit and place line inside.					
OTHER ACTION	2013	Patch ACP at approaches.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/44.4	Sufficiency Rating (Last/Now) (%)	53.4/50.8	Est. Repl. Yr	2030	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	Arnold Assenheimer		Previous Assistant's Name	Wade Nanninga			
Next Inspection Date	14-Sep-2014		Previous Inspection Date	25-Jan-2011			
Inspection Cycle (Default) (months)	21						
Comment							