

Bridge Inspection											
Bridge File Number	01517 -1 Bridge				Form Type	PSR					
Year Built/Year Supstr	1959/1959				Lot No.	1					
Bridge or Town Name	ATHABASCA				Inspector Name	Wade Nanninga					
Located Over	TAWATINAW RIVER, 8.11.68, WATERCRS-ST				Inspector Class	BR CLS A					
Located On	55:10 C1 0.515				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	29-Jan-2013					
Legal Land Location	SW SEC 21 TWP 66 RGE 22 W4M				Data Entry By	Theresa Lacusta					
Longitude, Latitude	-113:16:40, 54:43:17				Data Entry Date	08-Feb-2013					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux					
Contract Main. Area	CMA10				Review Date	30-Jan-2013					
Clear Roadway/Skew	9.1 /				Dept. Reviewer Name	Brent Herrick					
AADT/Year	9,100 / 2011 (A)				Dept. Review Date	14-Feb-2013					
Road Classification	RAU-211.8-110				Follow-Up By						
Detour Length (km)	22										
Allowable Load (t):	Single	CS1 46 GIRDER			Semi	CS2 60 GIRDER			Train	CS3 73 GIRDER	----> 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											
Hazard Marker At Bridge (Y/N)	No										
Remarks	Not required.										
Other Sign Types	Information, warning. Construction										
Utilities (Located at)											
Utility Attachments											
Telephone	South about 15 m overhead.				Gas						
Power	4 wires 25m North.				Municipal	Street lighting @ each end.					
Others	Pipeline 60 m north.				Problem (Y/N)	No					
Remarks											
Approach Road											
			Last	Now	Explanation of Condition						
Horizontal Alignment			6	6	50 km/hr urban section, intersections. Grade rising to east.						
Vertical Alignment			6	6							
Roadway Width (m)	10.000				Large pothole @ East approach - 150mm deep-photo						
Approach Bump			6	3							
Guardrail (Y/N)	Yes				Not attached, @ West end post spacing @ bridge inadequate. No approach rail SE corner. Guardrail damage at SW. Broken post SW minor dents & bends. West approach rails too low.						
Guardrail			4	4							
Length (m)	87.000										
Current Standard (Y/N)	No										
Termination Type	Turned Down										
Drainage			3	N	Erosion @ SW, NW bridge wingwalls. Erosion undermining SE concrete trough - photos.-01-Jun-2010						
Approach Road General Rating			6	6							

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 20.7-23.8-20.7, A-Ident Number:)					
Special Features					
Special Feature		3	3	Some stirrups superficial rust. Severe salt corrosion. Some on connection rods, losing section - photo. Installed on West pier only. Appears to have movement from last inspection.	
(SType : EXT SHEAR STIRRUP)					
Special Feature		5	4		
(Type : PIER TILT LIMIT)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now	20.0	0.0	0.0	0.0	
Wearing Surface		4	4	Wide random cracks. Ravelling near joints. (According to 1989 deck testing report Aug, ACP depth was 83mm. 28/Nov/2006)	
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		6	4	Bump at all joints.	
Deck Joints		2	3	Joints leak. P1 WB cover plate deflects under traffic & appears to have some welds broken. West abutment joint gland failed - photo. Concrete blockouts @ abutments & piers spalled, exposing corroding rebars - photo. Abutment - gland joints. Pier - sliding plate joints.	
Temperature (deg. C)		-30			
(Expansion Type : SLIDING PLATES)					
(Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
Gap Size (mm)		Gap Location			
80	West abutment-A1				
25	West pier-P1				
25	East pier-P2				
20	East abutment-A2				
Deck Drainage		4	4	Joints leak causing problem at deck underside and some caps. SW deck drain on S2 has caused a 3m diam x 1.5m deep eroded basin on bank. Deck drains too short with deck spalls at underside.	
Drains Clogged (Y/N)		No			
Curbs/Median		3	3	North curb only, 125 mm high scaling. Medium along inside curb face (north side).-014-Jun-2010 South curb spalled exposing corroded rebars, cracking in underside - photo. Exterior visible only-snow.	
(Curb Type : Standard)					
Scaling (Percent Area)		50			
Bridge Rail		2	3	2 panel, 1 post damaged South side - photo. Steel dummy post in place of proposed light standard corroded/fallen off, gap cordened off with chain - photo. Numerous bridgerail post A/B's & nuts corroded off. Some A/B's missing nuts - photos. Impact resistance is compromised.-01-Jun-2010 70% rust, scaling - photo.	
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		3	N		
(Type : POST STEEL;POST STEEL)					
Bridge Rail/Posts Coating		3	3		
(Type : PAINT)					
Sidewalk		4	N	South side only. ACP capped on top of concrete sidewalk. Concrete has heavy scaling-photo-01-Jun-2010	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now			6		
Girders		5	2	Rust spots are starting to show near ends of girders on the sides. Cracks extending from bearing shoe plate in most girders. Wide cracking G1,G2 SP1,2,3 top flange with corrosion stains.-photo Crack length 200mm.	
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : 16)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 3 Spans, Lengths(m): 20.7-23.8-20.7, A-Ident Number:)				
Diaphragms/Cross Frame		4	4	Very rusty under joints. Scaling.-photo
Bearings		3	3	Concrete blocks cast behind ends of girders on W.A. Girders are jammed into backwall, anchors are bent,bearings are rusty and pitted losing section. Bearings on P1 are overextended by estimated 65m.-photo
Temperature (deg. C)	20			
(Expansion Type : SLIDING PLATE)				
(Fixed Type :)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	No			
Deck Underside		3	3	Stained near joints. Staining 30% - West span, 70% - center span, 20% - East span. Spalling at pier. Spalling with exposed rebar between G3G4 & G4G5 @ span 1. Heavy scaling with spot corrosion. Damage at deck drains as well.
Stains (Percent Area)	50			
Span Alignment Problems				
Vertical (Y/N)	No			Shiften 100mm over West pier.
Horizontal (Y/N)	Yes			
Superstructure General Rating		3	2	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		4	4	Delam cracking and efflrescence @ SE corner.
(Type : CONCRETE)				
Backwalls/Breastwalls		5	4	Cracking/staining
Wingwalls		4	4	Heavy scaling @ all wingwalls -photo
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		5	4	E. headslope settled 300m. W. headslope settled 200m
Scour/Erosion		3	4	Erosion gully (5mlong, 0.75m deep, 0.5m wide @ NE -photo 0.5deep gully @ NW wingwall. West headslope erosion.
Piers/Bents				
(Type : PIER-SOLID)				Delam cracks. Worst under S1G5 bearing.
Bearing Seats/Caps		4	4	Delamination at South end of East pier. Both piers are stained.
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0)				Spall W side West pier.
Pier Shaft/Piles		5	4	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	Lots of graffiti.
(Colour Description :)				
(Colour Code :)				
Pier Stability		4	4	West pier leaning East, East pier looks like it is leaning too but not as much as West pier. Uneven earth pressure.
Scour		6	6	
Debris (Y/N)	Yes			Construction equipment.
Substructure General Rating		4	4	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				
(D/S Direction : N)				
Alignment		6	6	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		4	4	Erosion gullies both headslope up to 3/4m deep.
(Type : NONE; NONE)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Proposed Action			
Previous Inspector's Name	Eric Caroux	Previous Assistant's Name	
Next Inspection Date	29-Oct-2014	Previous Inspection Date	01-Jun-2010
Inspection Cycle (Default) (months)	21		
Comment			