

Bridge Inspection							
Bridge File Number	72638 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1958/1958			Lot No.	1		
Bridge or Town Name	WILLINGDON			Inspector Name	Owen Salava		
Located Over	TRIBUTARY TO VERMILION RIVER, 6.5.30, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	29:04 C1 20.516			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	09-Nov-2012		
Legal Land Location	SE SEC 28 TWP 55 RGE 14 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-112:01:15, 53:46:25			Data Entry Date	20-Nov-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA14			Review Date	14-Nov-2012		
Clear Roadway/Skew	10.1 /			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	1,000 / 2011 (A)			Dept. Review Date	26-Nov-2012		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	5						
Allowable Load (t):	Single	CS1 28 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 62 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	Not required.							
Hazard Marker At Bridge (Y/N)	Yes							
Remarks	Some are leaning.							
Other Sign Types	80 kph around curve. Stop sign, Chevrons in East emb @ NE & SE corners for NB traffic.							

Utilities (Located at)			
Utility Attachments			
Telephone			Gas
Power	3 wire O/H 10m South crossing 60m West.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Bridge in curve. Bridge superelevated. No passing both directions. Field approaches at N & S, W of bridge.
Vertical Alignment		8	8	
Roadway Width (m)	9.700			Splice bolts missing at turned down ends. Short, not enough posts; not thrie beam. Terminal end section missing bolts, typical - photo.
Approach Bump		4	6	
Guardrail (Y/N)	Yes			
Guardrail		4	4	
Length (m)	19.300			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		8	8	
Approach Road General Rating		5	5	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : PG, 1 Spans, Lengths(m): 6.1, A-Ident Number:)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	80	0	0	0		
Now	20.0	0.0	0.0	0.0		
Wearing Surface			N	6	7 line long. crack between girders - photo. Mainly SB half. Girders not connected but keeper plates installed on caps at all corners.	
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Lateral Connection Problem (Y/N)		No				
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			N	N	Paved over.	
Bump (Y/N)		No				
Deck Drainage			N	N	Snow/ice covered. No evidence of drainage problem.	
Drains Clogged (Y/N)		No				
Curbs/Median			N	N	(Grout pockets not filled - photo. 12Aug2009). Snow/ice covered. Poor patch at post 3 on S curb.	
(Curb Type : Standard)						
Scaling (Percent Area)		0				
Bridge Rail			7	7	Double layer. Patch under 2nd post from SE not properly patched, suspect (photo).	
(Type : GALVANIZED STEEL FLEX BEAM)						
Bridge Rail Posts		4	5			
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating		7	7			
(Type : GALVANIZED)						
Sidewalk			X	X		
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Girders			4	4	Girder rating gets 1 point increase due to PG type. G11 wide longit. crack in AZ with cracking in other leg. Longit. crack in legs of G4,9,11. G4 spall in AZ with cracking in other leg - photo. Unable to confirm grouting.	
Last Complete Inspection Date		09-Nov-2012				
Cracking (Y/N)		Yes				
Spalling (Percent Area)		3				
Lift or Connector Pocket Grouted (Y/N)		No				
(Number Of Girders : 12)						
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							
(Extended Backwall Piles (Y/N) : Y)							
(Extended Backwall Piles Spacing(mm) : 1500)							
(Total Number of Caps/Corbels : 3:3)				Keeper plates installed on caps at all corners.			
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now	0	0	0	0			
Bearing Seats/Caps/Corbels				9	9		
(Type : TREATED TIMBER)							
(Depth(mm) : 305)							
(Width(mm) : 305)							
Backwalls/Breastwalls			5	5			
Greatest Height (m)		3.30		Bowling from backwall earth pressure. Breastwall sheeting installed & filled with gravel/rocks.			
Wingwalls			5	5			
(Total Number of Bearing Piles : 8:8)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	1			
Now	0	0	0	1			
Piles				3	3		
Paint/Coating				X	X		
Abutment Stability				5	5		
Scour/Erosion				N	N		
Iced over.							
Piers/Bents							
(Type :)							
(Total Number of Caps/Corbels :)							
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now							
Bearing Seats/Caps/Corbels				X	X		
(Type :)							
(Depth(mm) :)							
(Width(mm) :)							
(Total Number of Bearing Piles :)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last							
Now							
Pier Shaft/Piles				X	X		
Greatest Height (m)				Max deck to S/B 3.6m.			
Bracing/Struts/Sheathing			5	5			
Nose Plate			X	X			
Paint/Coating			X	X			
(Colour Description :)							
(Colour Code :)							

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		X	X	
Scour		X	X	(1.0m deep scour hole under bridge. 00/10/24) Under water/ice.
Debris (Y/N)	No			
Substructure General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : N)				
(D/S Direction : S)				
Alignment		7	7	
Bank Stability		7	7	Low grassy banks 5-7m wide.
HWM (m below Top of Curb)				No visible HWM.
Drift (Y/N)	Yes			
Slope Protection		5	5	
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		6	6	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Inspection Cycle (Default) (months)	21
Comment	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
SEAL CURBS							
PATCH DECK	2013	Seal longitudinal cracks.	When next on site				
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING	2013						
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION	2013	Install scabs for 5 struts.	When next on site				
OTHER ACTION	2013	Grout lift pockets, if not yet done.	When next on site (low priority curbs)				
OTHER ACTION	2013	Reset HMs.	To operations				
OTHER ACTION	2013	Band A1P6.	When next on site				
OTHER ACTION	2013	Add guardrail splice bolts; review guardrail warrants.	When next on site				
OTHER ACTION	2015	Replace bridge.	Programmed	2015			
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	57.2/57.2	Est. Repl. Yr	2015	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Per AT, caps/piles cored in 2009. Monitor A1P6 annually until repaired/replaced.		Department Comments	Replacement programmed for 2015			
Maintenance Reviewed By	Andrew Smikles		Date	17-Dec-2012	Estimated Total	0	

Proposed Long-Term Strategy	2004.06.10 With careful monitoring brdige caps should be ok until 2009. Consider replace 1 short cap off ice if needed. With repaired cap, bridge could be ok until 2014.		
On 3-Year Program (Y/N)			
Proposed Action			
Previous Inspector's Name	Dave Lam	Previous Assistant's Name	
Next Inspection Date	09-Aug-2014	Previous Inspection Date	08-Dec-2010
Inspection Cycle (Default) (months)	21		
Comment			