

Bridge Inspection										
Bridge File Number	74978 W-2 Bridge					Form Type	PSR			
Year Built/Year Supstr	1975/1975					Lot No.	2			
Bridge or Town Name	WABAMUN					Inspector Name	Wade Nanninga			
Located Over	MUNICIPAL					Inspector Class	BR CLS A			
Located On	16:12 L1 33.814					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	09-Aug-2012			
Legal Land Location	NW SEC 11 TWP 53 RGE 4 W5M					Data Entry By	Theresa Lacusta			
Longitude, Latitude	-114:29:21, 53:34:13					Data Entry Date	21-Aug-2012			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA11					Review Date	21-Aug-2012			
Clear Roadway/Skew	12.2 / 20 deg. (RHF)					Dept. Reviewer Name	Brent Herrick			
AADT/Year	9,920 / 2011 (A)					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:	HS25					----> Primary Span				

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: MUNICIPAL 5.9m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)	6.9	In Advance (Y/N)	No
Remarks		VC sign mounted on pier column. Change to 6.5m max per 74978E.										
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												

Utilities (Located at)									
Utility Attachments									
Telephone	North r/w.					Gas			
Power	Along haul road, both sides & under spans.					Municipal			
Others						Problem (Y/N)	No		
Remarks									

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	On approx 5% grade, horizontal curve to the west. On crest curve.
Vertical Alignment		6	6	
Roadway Width (m)	12.300			200mm dia pothole & wide cracks at East abutment approach slab - photo.
Approach Bump		4	4	
Guardrail (Y/N)	Yes			None at west end. Insufficient posts, not thrie beam transition. NE transition minor crease but functioning.
Guardrail		5	5	
Length (m)	65.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		4	4	SE concrete down drain has broken curbs. Delam cracks both East drain throughs.
<b>Approach Road General Rating</b>		<b>6</b>	<b>6</b>	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : VF, 3 Spans, Lengths(m): 32-21.3-19.8, A-Ident Number: )					
<b>Special Features</b>					
Special Feature			X	Dwyidag Lateral Stressing Deterioration of epoxy coating.	
(Type : )					
Special Feature			6		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>					
<b>Now</b>				2.0	
Wearing Surface		4	3	Flushing along driving lane wheelpaths. Numerous spalls in deck along curbs - photos. 500mm x 250mm section of concrete cracked and settled, several spalled areas - photo.	
(Material Type : <b>ACP - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					
Lateral Connection Problem (Y/N)	No				
Deck Top		N	N		
Deck Rideability		7	5		
Deck Joints		4	4	East abutment & pier joint concrete paving lips spalling. Joint blockout at P2 spalling. Perforations in A1 deck joint plumbing - deflector plate. Drain trough @ NW perforated.  Gland repair at piers failed. Fingerplate at A1. Stripseals at P1 & P2.	
Temperature (deg. C)		26			
(Expansion Type : <b>FINGER PLATES;GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : <b>ASPHALTIC FIBRE BOARD</b> )					
Gap Size (mm)		Gap Location			
90		W. abut			
72		W. pier			
70		E. pier			
Deck Drainage		4	4	P2 joint leakage, SW abutment joint leakage with stained abutment and delam cracks at piers.	
Drains Clogged (Y/N)		No			
Curbs/Median		3	3	Small spalls north curb in several spots. Delamination @ NE approach, spall @ posts on outside face affecting post anchor (20).	
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		2			
Bridge Rail		7	7	Rail connector welded instead of bolted. Grout deteriorating on outside face - photos. Few A/B with insufficient thread. Missing top cap @ SW corner. Spalls under posts at outer face.  Dirty.	
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )					
Bridge Rail Posts		4	4		
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating		7	7		
(Type : <b>GALVANIZED</b> )					
Sidewalk		X	X		
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>				1	
<b>Now</b>				3	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : VF, 3 Spans, Lengths(m): 32-21.3-19.8, A-Ident Number: )				
Girders		3	3	Wide crack G1S1 corner near abutment. Crack is 1350mm long on both legs outside girder. Vertical crack @ East end G1S1. Few girders with rust spots from weep tubes. Typical chamfer cracks. Spot rust staining & vertical crack in girder G8S2. G8S2 has been recast from high load damage. Outside face of G1S1 @ P1 & G8S2 & G1S2 @ P2 spalling, exposed bars.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
(Number Of Girders : 24)				
Diaphragms/Cross Frame		5	5	Light scaling & narrow cracks at East abutment.
Bearings		4	4	Bearings are rusted from deck drainage. Fixed at East abutment.
Temperature (deg. C)	26			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : REINFORCED PAD BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Staining & spall around drip tubes. S3G8 worst
Stains (Percent Area)	2			
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>3</b>	<b>3</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		5	5	Parging on East seat has deteriorated. Stained from leaking joint at West.
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	West backwall has been sealed.
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		8	8	
Scour/Erosion		4	4	Top of concrete slope protection separated, water migrating. 1m wide x 1m deep erosion gully SW abutment.
<b>Piers/Bents</b>				
(Type : PIER-COLUMN)				Delam cracks on faces of both pier caps - photo.
Bearing Seats/Caps		4	4	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 4:4)				
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		7	7	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		X	X	
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>4</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	Crash pipes protecting East pier.
Traffic Safety Features		7	7	Hazard boards on piers slope wrong way.
Type	Delineation			
Slope Protection (Type : <b>CONCRETE; CONCRETE</b> )		4	4	Settlement & cracking at top of East abutment.
Bank Stability		7	7	
Drainage		5	5	
<b>Grade Separation General Rating</b>		<b>4</b>	<b>4</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2012	Patch spalled curb exterior at posts & rehab bridgerail post grout pads where delam & seal curb.					
PATCH DECK	2012	Patch potholes.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Patch A2P2 concrete; replace corroded troughs A1. Patch G1 end @ A1; place curb cover plate. Seal substructure concrete.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2012	Repair erosion gully @ SW lower portion.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION	2012	Replace West abutment joint plumbing.					
OTHER ACTION	2012	Patch spalls on girders and piers.					
OTHER ACTION	2012	Replace VC sign with 6.5m max per required VC at 74978E.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>48.0/47.9</b>	Est. Repl. Yr	2035	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	(Proposed long term strategy: Replace membrane with HPCF o/l: seal off weep tubes.-23-Jan-2007)  All items can be completed programmed 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	Kris Bosters		Previous Assistant's Name				

Next Inspection Date	09-May-2014	Previous Inspection Date	06-Oct-2010
Inspection Cycle (Default) (months)	21		
Comment			