

Bridge Inspection										
Bridge File Number	75957 E-1 Bridge				Form Type	PSR PCS				
Year Built/Year Supstr	1964/1964				Lot No.	1				
Bridge or Town Name	FALLIS				Inspector Name	Wade Nanninga				
Located Over	31:02 C1 3.756				Inspector Class	BR CLS A				
Located On	16:12 R1 17.001				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	09-Aug-2012				
Legal Land Location	NW SEC 18 TWP 53 RGE 5 W5M				Data Entry By	Lisa Fairhurst				
Longitude, Latitude	-114:44:16, 53:35:04				Data Entry Date	23-Aug-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux				
Contract Main. Area	CMA12				Review Date	21-Aug-2012				
Clear Roadway/Skew	13.7 / -9 deg. (LHF)				Dept. Reviewer Name	Brent Herrick				
AADT/Year	8,640 / 2011 (A)				Dept. Review Date	30-Aug-2012				
Road Classification	RAD-412.4-120				Follow-Up By					
Detour Length (km)	1									
Allowable Load (t):	Single		Semi		Train		----> On Critical Spans ---->Critical Member			
Design Loading:	HS20				----> Primary Span					

Posting Information												
Required Vert. Clearance Posting (m)		UNDER: 31 C1 5.2m										
Posted Vertical Clearance (Y/N)		Yes										
Posted:	Lane	NB	On Bridge (m)	5.2	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.2	In Advance (Y/N)	Yes
Remarks		SB vertical clearance sign is mounted on 75957W.										
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		Not required.										
Other Sign Types		Merge.										

Utilities (Located at)										
Utility Attachments										
Telephone	North r/w, in median.				Gas					
Power	6 wires 40m west.				Municipal					
Others					Problem (Y/N)	No				
Remarks										

Approach Road					
		Last	Now	Explanation of Condition	
Horizontal Alignment		7	7	Crest curve.	
Vertical Alignment		6	6		
Roadway Width (m)	12.800			ACP is cracked at E abutments - photo.	
Approach Bump		4	4		
Guardrail (Y/N)		Yes		12.0m @ East end with terminal end. Not thrie beam transition.	
Guardrail		7	7		
Length (m)	76.000				
Current Standard (Y/N)	No				
Termination Type	Turned Down				
Drainage		7	7		
<b>Approach Road General Rating</b>		<b>6</b>	<b>6</b>		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PM, 3 Spans, Lengths(m): 10.7-16.8-10.7, A-Ident Number: )					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>					
<b>Now</b>	0.0	0.0	0.0	0.0	
Wearing Surface				7	7
(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	7
Deck Joints				7	7
Temperature (deg. C)		27			
(Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
70		East pier			
85		West pier			
Deck Drainage				4	4
Drains Clogged (Y/N)		No			Leakage between curbs and 1st interiors.
Curbs/Median				5	5
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		1			Narrow transverse cracks at lift hook pocket locations.
Bridge Rail				7	5
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )					
Bridge Rail Posts				4	4
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating				4	4
(Type : <b>GALVANIZED</b> )					
Sidewalk				X	X
<b>Girder Detail Ratings</b>					
	N (count)	1 (count)	2 (count)	3 (count)	G2 crack > 0.5m
<b>Last</b>				9	
<b>Now</b>	0	0	0	9	
Girders				3	3
Cracking (Y/N)		Yes			G1, G2, G3, G5, G6, G8, G9, G10 & G12 have cracks on underside with rust staining. G12 has wide cracks & heavy staining - photo. Water leaking between G1/G2 and G15/G16. Minor HLD chips on exterior girder edge.
Spalling (Percent Area)		1			
(Number Of Girders : <b>16</b> )					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PM, 3 Spans, Lengths(m): 10.7-16.8-10.7, A-Ident Number: )					
Diaphragms/Cross Frame		X	X		
Bearings		6	6	Viewed with binoculars, no problem evident.	
Temperature (deg. C)	27				
(Expansion Type : <b>NEOPRENE STRIP BEARING</b> )					
(Fixed Type : <b>NEOPRENE STRIP BEARING</b> )					
Coating Adequate (Y/N)	Yes				
Functioning (Y/N)	Yes				
Deck Underside		N	X		
Stains (Percent Area)	0				
<b>Span Alignment Problems</b>					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
<b>Superstructure General Rating</b>		<b>3</b>	<b>3</b>		
Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Secondary Span : PE)					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>					
<b>Now</b>	0.0	0.0	0.0	0.0	
Wearing Surface		7	X		
(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	7		
Deck Joints		N	N	Paved over. Asphaltic fibre board A1 & A2.	
Bump (Y/N)	No				
Deck Drainage		4	4	Water leaking onto caps from abutment joints.	
Drains Clogged (Y/N)	No				
Curbs/Median		6	5		
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)	1				
Bridge Rail		7	5	Minor dents to vertical slats Several bolts with insufficient threads.	
(Type : <b>GALVANIZED STEEL VERTICAL BAR</b> )					
Bridge Rail Posts		4	4	Base of plates are rusting.	
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating		4	4		
(Type : <b>GALVANIZED</b> )					
Sidewalk		X	X		

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Secondary Span : PE)						
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last				1		
Now	0	0	0	0		
Girders				3	4	G15 on S3 wide cracks both legs of AZ. Sound concrete. Span 1 & 3, 50% of girders have wide longitudinal cracks within AZ, some with rust stains. S3/G3, 9, 10 have wide cracks at mid span. Crack @ end G1/S1. East narrow shear cracks S1/G7, G13, S3/G14, G6. Flexural cracking. Spall midspan G9/S3. G16/S3 rated '4' because it is curb girder. G9SP3 cracking with staining in girder underside. G10SP3 cracking in AZ 2 legs SC
Last Complete Inspection Date		09-Aug-2012				
Cracking (Y/N)		Yes				
Spalling (Percent Area)		1				
Lift or Connector Pocket Grouted (Y/N)						
(Number Of Girders : 32)						
Span Alignment Problems						
Vertical (Y/N)		No				
Horizontal (Y/N)		No				
Superstructure General Rating				3	4	
Substructure						
Bridge Component				Last	Now	Explanation of Condition
Abutments						
(Extended Backwall Piles (Y/N) : N)						
(Extended Backwall Piles Spacing(mm) : )						
(Total Number of Caps/Corbels : 1:1)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		Stained from leaking abutment A1 FB.
Last						
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				7	6	
(Type : CONCRETE)						
(Depth(mm) : )						
(Width(mm) : )						
Backwalls/Breastwalls				6	6	Breastwall visible only. Medium vertical cracks at 1m o/c.
Greatest Height (m)		0.70				
Wingwalls				6	6	
(Total Number of Bearing Piles : 0:0)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	100					
Now	100	0	0	0		
Piles				N	N	
Paint/Coating				X	X	
Abutment Stability				8	8	
Scour/Erosion				8	5	Settled headslope protection

Substructure						
Bridge Component				Last	Now	Explanation of Condition
<b>Piers/Bents</b>						
(Type : <b>PIER-COLUMN</b> )						
(Total Number of Caps/Corbels : <b>1:1</b> )						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		Cracking and delam @ columns.
<b>Last</b>						
<b>Now</b>	0	0	0	0		
Bearing Seats/Caps/Corbels				4	4	
(Type : <b>CONCRETE</b> )						
(Total Number of Bearing Piles : <b>10:10</b> )						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>						
<b>Now</b>	0	0	0	0		
Pier Shaft/Piles				7	7	
Greatest Height (m)		5.40				
Bracing/Struts/Sheathing				X	X	
Nose Plate				X	X	
Paint/Coating				7	7	Brown/red.
(Colour Description : )						
(Colour Code : )						
Pier Stability				8	8	
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
<b>Grade Separation</b>						
Road Alignment				8	8	
Traffic Safety Features				4	4	Missing 2 bolts at terminal end on West rail. Rail stops at piers, should extend under bridge - photo.
Type		Guardrail				
Slope Protection				5	5	Top of concrete slope protection separated from breastwall and settled 50mm.
(Type : <b>CONCRETE; CONCRETE</b> )						
Bank Stability				8	8	
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							
PATCH DECK							
SEAL DECK	2012	Seal cracks at joints in approach ACP.					
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	2012	Repair guardrail & extend under bridge.					
OTHER ACTION							
OTHER ACTION	2012	Assess girder rehab options. If not done.					
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>51.8/51.7</b>	Est. Repl. Yr	2023	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder cracking.		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							