

Bridge Inspection											
Bridge File Number	77563 E-1 Bridge				Form Type	PSR					
Year Built/Year Supstr	1975/1975				Lot No.	1					
Bridge or Town Name	LANGDON				Inspector Name	Jason Rusu					
Located Over	CPR				Inspector Class	BR CLS A					
Located On	1:12 R1 2.444				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	03-Mar-2012					
Legal Land Location	NW SEC 12 TWP 24 RGE 27 W4M				Data Entry By	Anne Roberts					
Longitude, Latitude	-113:38:40, 51:02:15				Data Entry Date	28-Mar-2012					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Garry Roberts					
Contract Main. Area	CMA30				Review Date	12-Mar-2012					
Clear Roadway/Skew	12.2 /				Dept. Reviewer Name	Tim Davies					
AADT/Year	14,810 / 2011 (A)				Dept. Review Date	29-Mar-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)											
Posted Vertical Clearance (Y/N)		No									
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)	In Advance (Y/N)	
Remarks	Not required- tracks are abandoned										
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)		In Advance (Y/N)		At Bridge (Y/N)				
Remarks	Not required										
Hazard Marker At Bridge (Y/N)		No									
Remarks											
Other Sign Types		BRIDGE ICES									

Utilities (Located at)										
Utility Attachments										
Telephone	NORTH R/W				Gas					
Power	30m S OF CENTRELINE. 4 WIRE.				Municipal					
Others					Problem (Y/N)	No				
Remarks										

Approach Road										
				Last	Now	Explanation of Condition				
Horizontal Alignment				9	9	On crest curve				
Vertical Alignment				7	7					
Roadway Width (m)		12.200								
Approach Bump				7	7					
Guardrail (Y/N)		Yes								
Guardrail				7	7	Not thriebeam				
Length (m)		99.000								
Current Standard (Y/N)		No								
Termination Type		TURNED DOWN ENDS								
Drainage				7	7					
<b>Approach Road General Rating</b>				<b>7</b>	<b>7</b>					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RD, 3 Spans, Lengths(m): 10.7-12.2-10.7, A-Ident Number: )					
<b>Special Features</b>					
Special Feature					
(Type : )					
Special Feature					
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0.0	0.0	0.0	0.0	
Wearing Surface			4	4	CHIP COAT on ACP-total 65mm CRACKED @ deck joints
(Material Type : <b>ACP - CONVENTIONAL CHIP SEAL COAT</b> )					
(Thickness(mm) : <b>50</b> )					Stains between Girders
Lateral Connection Problem (Y/N)		Yes			
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			7	7	Tar filled open joint
Temperature (deg. C)					Cracked @ piers & abuts
(Expansion Type : )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
Deck Drainage			3	3	NO DECK DRAINS. Leakage @ piers, abuts and between girders
Drains Clogged (Y/N)					
Curbs/Median			3	4	Spall @ north curb exterior repaired @ A2 with exposed rebar - minor.
(Curb Type : <b>Standard;None</b> )					
Scaling (Percent Area)		0			
Bridge Rail			7	7	4 A/B nuts with less then full thread engaged
(Type : <b>STEEL BRIDGE TUBE</b> )					
Bridge Rail Posts			4	4	Minor corrosion @ base plates
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			5	5	
(Type : )					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	6	
<b>Now</b>	0	0	0	9	
					Corrosion cracks at G6 -abut, Sp 1- G1, G2 G11. Sp 2- G1 and Sp 3- G1, G2
					Sp 2- G2 has 300mm long corrosion spall Sp 3 - G2 has 300 mm long wide crack
Girders			3	3	LONGITUDINAL CRACKING OF UNDERSIDE OF GIRDERS. CRACKS EXTEND FULL LENGTH AT SEVERAL UNITS AND ARE AT 300-400 mm FROM GIRDER EDGE.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		2			
(Number Of Girders : <b>33</b> )					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RD, 3 Spans, Lengths(m): 10.7-12.2-10.7, A-Ident Number: )				
Diaphragms/Cross Frame		X	X	
Bearings		7	7	Exp @ abut Fix @ piers
Temperature (deg. C)	5			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	
Stains (Percent Area)	5			
<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		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	7	
Piles		N	N	Buried
Paint/Coating		5	5	
Abutment Stability		8	8	
Scour/Erosion		X	X	
<b>Piers/Bents</b>				
(Type : PIER-COLUMN)				
Spalls at both ends of P2				
Bearing Seats/Caps		4	4	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 7:7)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	Corrosion at bases
(Colour Description : YELLOW)				
(Colour Code : 13538)				
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		X	X	Railway is abandoned
Traffic Safety Features		X	X	
Type	Concrete			
Slope Protection		5	5	Cracked at piles
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		7	7	
Drainage		7	7	
<b>Grade Separation General Rating</b>		<b>7</b>	<b>7</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							
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							
OTHER ACTION	2012	Repair girder spall 0.3 x 1 and wide crack @ P2					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>50.6/50.3</b>	Est. Repl. Yr	2023	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	03-Dec-2013		Previous Inspection Date	17-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							