

Bridge Inspection							
Bridge File Number	76054 N-1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1966/1966			Lot No.	1		
Bridge or Town Name	MORINVILLE			Inspector Name	Shane Hall		
Located Over	CNR			Inspector Class	BR CLS A		
Located On	2:36 R1 9.364			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	22-Apr-2013		
Legal Land Location	NW SEC 33 TWP 55 RGE 25 W4M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-113:39:39, 53:47:47			Data Entry Date	30-Apr-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA09			Review Date	30-Apr-2013		
Clear Roadway/Skew	13.7 / -10 deg. (LHF)			Dept. Reviewer Name	Brent Herrick		
AADT/Year	11,540 / 2012 (A)			Dept. Review Date	01-May-2013		
Road Classification	RAD-412.4-120			Follow-Up By			
Detour Length (km)	1						
Allowable Load (t):	Single	CS1 38 GIRDER	Semi	CS2 61 GIRDER	Train	CS3 88 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20					----> Primary Span	

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)			No									
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)	No	Lane	WB	On Bridge (m)		In Advance (Y/N)	No
Remarks		Not required.										
Required Load Posting (t)			Single		Semi		Truck Train					
Posted Loading (t)			Single		Semi		Truck Train					
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Posted:	Lane	SB	At Junction (Y/N)		In Advance (Y/N)		At Bridge (Y/N)					
Remarks		Not required.										
Hazard Marker At Bridge (Y/N)			No									
Remarks		Not required.										
Other Sign Types			Information, Warning.									

Utilities (Located at)				
Utility Attachments				
Telephone	East r/w.		Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
Horizontal Alignment		7	7	Top of crest, typ G/S geometry.
Vertical Alignment		7	7	
Roadway Width (m)	13.800			Potholes @ NW corner.-photo
Approach Bump		5	4	
Guardrail (Y/N)	Yes			Not connected to bridge rail @ NE & SE. NE could be hazardous.-photo
Guardrail		4	3	
Length (m)	99.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		5	5	Drain trough is spalled at NW. Drain trough at SW is spalled and severely scaled, both functioning.

Approach Road				
		Last	Now	Explanation of Condition
<b>Approach Road General Rating</b>		<b>7</b>	<b>3</b>	
Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : <b>PE, 3 Spans, Lengths(m): 12.8-12.8-12.8, A-Ident Number: )</b>				
Special Features				
Special Feature			X	
(Type : )				
Special Feature			X	
(Type : )				
Wearing Surface/Deck Top Detail Ratings				
	N (%)	1 (%)	2 (%)	3 (%)
<b>Last</b>	0	0	0	5
<b>Now</b>				
Wearing Surface		3	4	Missing pieces along West curb. - photos - random cracks. Alligatored and rutted N end with pot holes @ N end West lane.
(Material Type : <b>ACP - CONVENTIONAL CHIP SEAL COAT</b> )				
(Thickness(mm) : <b>150</b> )				
Lateral Connection Problem (Y/N)		No		
Deck Top		N	N	
Deck Rideability		4	5	
Deck Joints		N	N	Paved over/sealed with asphalt. May be leaking locally due to staining on P2 cap.
Bump (Y/N)		No		
Deck Drainage		4	4	Local scour under SE deck drain, .7m deep x 1.2 m dia. Stains at piers from leaky joints.
Drains Clogged (Y/N)		No		
Curbs/Median		3	3	Several locations with on West curb & deep spalls on East curb. Leakage through wide crack under E curb on span 3 is causing spalling and cracking with heavy rust staining on outside face of girder-photo
(Curb Type : <b>Standard</b> )				
Scaling (Percent Area)		5		
Bridge Rail		7	7	12 bolts on East curb with insufficient thread, loose nut near SE. Base of posts have small dents along E curb.
(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		7	6	
(Type : <b>GALVANIZED</b> )				
Sidewalk		X	X	
Girder Detail Ratings				
	N (count)	1 (count)	2 (count)	3 (count)
<b>Last</b>	0	0	0	8
<b>Now</b>				8
Girders		3	3	50% of girders have wide longitudinal cracks in legs in anchorage zone. 50% of girders have delam cracks in bearing areas at piers. Approx. 8 girders have wide long cracks in AZ of 2 legs.  Rust staining on fascia @ SP3G16 from wide longitudinal cracks running 50% of girder length. photos.  Too high to confirm concrete soundness.  Most girders have narrow flexral cracks. End diaphragm spall at S end of SP1G15.
Last Complete Inspection Date		22-Apr-2013		
Cracking (Y/N)		Yes		
Spalling (Percent Area)		2		
Lift or Connector Pocket Grouted (Y/N)				
(Number Of Girders : <b>48</b> )				

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Primary Span : PE, 3 Spans, Lengths(m): 12.8-12.8-12.8, A-Ident Number: )						
<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>						
(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)		
<b>Last</b>					Stains & a couple vertical cracks. 2 spot corrosion @ South abutment.	
<b>Now</b>					N. few medium vertical cracks.	
Bearing Seats/Caps/Corbels				5	5	3 medium vertical cracks in N abut.
(Type : CONCRETE)						
(Depth(mm) : )						
(Width(mm) : )						
Backwalls/Breastwalls				5	5	Approx 7 girders have their legs bearing on top of concrete abut cap - either bearing pad deteriorated or improperly installed.-photo
Greatest Height (m)		1.50				
Wingwalls				6	6	
(Total Number of Bearing Piles : 0:0)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	7	0	0	0		
<b>Now</b>	100					
Piles				N	N	
Paint/Coating				X	X	
Abutment Stability				6	6	
Scour/Erosion				6	6	
<b>Piers/Bents</b>						
(Type : PIER-COLUMN)						
(Total Number of Caps/Corbels : : )						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>					Delam crack forming on North pier - photo. South pier both ends cracked with corrosion staining.	
<b>Now</b>						
Bearing Seats/Caps/Corbels				4	4	
(Type : CONCRETE)						
(Depth(mm) : )						
(Width(mm) : )						
(Total Number of Bearing Piles : 7:7)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>						
<b>Now</b>						
Pier Shaft/Piles				6	6	
Greatest Height (m)		8.00				

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(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		X	X	
Type	None			
Slope Protection		4	4	Scour hole from deck drain on South headslope. Small erosion gully @ NE corner.
(Type : <b>NONE; NONE</b> )				
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	2013	Connect approach rail to bridge rail.					
SEAL CURBS	2013	Repair curbs. (holes)					
PATCH DECK	2013	Patch ACP					
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
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	ASSESSMENT - REPAIR/REPLACE					
OTHER ACTION	2013	Replace neoprene bearing pads.					
OTHER ACTION	2013	Replace girders as required - complete Level 2 inspection and Assessment first.					
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>38.9/38.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>56.3/47.3</b>	Est. Repl. Yr	2015	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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	22-Jan-2015		Previous Inspection Date	06-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							