

Bridge Inspection													
Bridge File Number	85143 -1 Bridge					Form Type	SG						
Year Built/Year Supstr	2008/2008					Lot No.	3						
Bridge or Town Name	VOYAGEUR					Inspector Name	Wade Nanninga						
Located Over	63:12 R1 21.082;63:12 L1 21.056;RAMP 2245-3 C					Inspector Class	BR CLS A						
Located On	LOCAL ROAD					Assistant Name							
Water Body Cl./Year						Assistant Class							
Navigabil. Cl./Year						Inspection Date	15-Nov-2011						
Legal Land Location	NE SEC 11 TWP 92 RGE 10 W4M					Data Entry By	Lisa Fairhurst						
Longitude, Latitude	-111:29:16, 56:58:09					Data Entry Date	12-Dec-2011						
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux						
Contract Main. Area	CMA07					Review Date	23-Nov-2011						
Clear Roadway/Skew	19.6 / -14 deg. (LHF)					Dept. Reviewer Name	Brent Herrick						
AADT/Year	400 / 2011 (E)					Dept. Review Date	19-Dec-2011						
Road Classification						Follow-Up By							
Detour Length (km)	999												
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62			----> On Critical Spans ---->Critical Member
Design Loading:	CL800										----> Primary Span		
Posting Information													
Required Vert. Clearance Posting (m)													
Posted Vertical Clearance (Y/N)		Yes											
Posted:	Lane	NB	On Bridge (m)	5.6	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.6	In Advance (Y/N)	Yes	
Remarks		5.6m VC sign installed on bridge (NB) CD road.											
Required Load Posting (t)		Single				Semi				Truck Train			
Posted Loading (t)		Single				Semi				Truck Train			
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	At Bridge (Y/N)	No			
Posted:	Lane	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	At Bridge (Y/N)	No			
Remarks		Not required.											
Hazard Marker At Bridge (Y/N)		Yes											
Remarks		Installed at end of guardrail, typical all corners.											
Other Sign Types		Information, Speed.											
Utilities (Located at)													
Utility Attachments													
Telephone						Gas							
Power	Plowed in median for lights.					Municipal							
Others	Lights in median of Hwy 63 N/S & at both ends off bridge.					Problem (Y/N)	No						
Remarks													
Approach Road													
				Last	Now	Explanation of Condition							
Horizontal Alignment				7	7	Bridge services Suncor access over Hwy 63. Bridge on crest curve, typical G/S contig.							
Vertical Alignment				7	7								
Roadway Width (m)		15.000				20.0m West of bridge, 15m East of bridge.							
Approach Bump				9	9								
Guardrail (Y/N)		Yes				97.2m @ NE & SE; 63.0m @ NW & SW.							
Guardrail				9	9								
Length (m)		63.000											
Current Standard (Y/N)		Yes											
Termination Type		Terminal											
Drainage				9	9	(Top of fill is at bottom of concrete trough @ corners, susceptible to erosion/undermining - photo.) - 7 Nov 2009							

Approach Road					
			Last	Now	Explanation of Condition
<b>Approach Road General Rating</b>			7	7	
Superstructure					
Bridge Component			Last	Now	Explanation of Condition
(Primary Span : <b>WG, 2 Spans, Lengths(m): 41-55, A-Ident Number: )</b>					
Special Features					
Special Feature				9	MSE Wall. Abutment 2 (East).
(Type : )					
Special Feature				9	Chainlink Fence. On top of East MSE wall.
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
		N (%)	1 (%)	2 (%)	3 (%)
<b>Last</b>					
<b>Now</b>		10.0	0.0	0.0	0.0
Wearing Surface			9	9	
(Material Type : <b>MIX TYPE 1 ACP</b> )					
(Thickness(mm) : <b>80</b> )					
Deck Top			N	N	
Deck Rideability			9	9	
Deck Joints			9	9	
Temperature (deg. C)		-10			
(Expansion Type : <b>COMPRESSION SEAL (ACME SEALS)</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
85		East abutment - A2 - Exp.			
120		West abutment - A1 - Exp.			
Deck Drainage			4	4	Deck drainage slightly hampered by snow/ice windrow along gutters. Deck drains under ACP at 4 corners of abutments only.
Drains Clogged (Y/N)					
Curbs/Median			9	9	Rated what is visible, partially snow/ice covered.
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)					
Bridge Rail			7	7	Slight wave in S1 South rail, no major problem.
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )					
Bridge Rail Posts			9	9	
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			9	9	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
Girder/Beam					
Cover Plate			X	X	
Flange			9	9	
Web			9	9	
Stiffeners			9	9	
Splice			9	9	
Weld			9	9	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : <b>WG, 2 Spans, Lengths(m): 41-55, A-Ident Number: )</b>				
Diaphragms/Cross Frame		9	9	
Paint Condition		9	9	Weathering steel.
(Colour Description : )				
(Colour Code : )				
Touchup Required (Y/N)	No			
Bearings		9	9	A1 & A2 (multi-directional / unidirectional mix). Pier bearings #3, 4 & 5 are fixed only, #1, 2, 6 & 7 are uni-directional. Pier bearings not accessible & viewed with binoculars, appears in good condition.
Temperature (deg. C)	-10			
(Expansion Type : <b>POT BEARING</b> )				
(Fixed Type : <b>POT BEARING</b> )				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		8	8	
Stains (Percent Area)				
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>8</b>	<b>8</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats/Caps		9	9	
(Type : <b>CONCRETE</b> )				
Backwalls/Breastwalls		9	9	
Wingwalls		9	9	
Piles		N	N	Pile sleeves installed for A2 piles.
Paint/Coating		9	9	A50 cap seal at abutments.
Abutment Stability		9	9	
Scour/Erosion		9	9	
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				HP (inspected during construction). Pier shaft visible only.
Bearing Seats/Caps		9	9	
(Type : )				
(Total Number of Bearing Piles : <b>57</b> )				
Pier Shaft/Piles		9	9	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		9	9	
Scour		9	9	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Substructure General Rating</b>		<b>9</b>	<b>9</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		7	8	In long gradual horizontal curve, adequate. Sight distance both directions.
Traffic Safety Features		N	N	Mounted on pier, can't confirm if lights are working.
Type	Lights			
Slope Protection		7	7	MSE wall at East abutment; concrete slope protection West abutment. ( Top corners of West slope protection susceptible to erosion & undermining as the fill is lower than the top of the concrete & corners are also exposed - photo.) - 7 Nov 2009 Snow covered
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		9	9	
Drainage		9	9	
<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							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Add fill beside approach concrete down drains at top where low & trim to suit if not done					
OTHER ACTION	2012	Add fill & blend at top corners of concrete slope protection - if not done					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>94.4/94.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>74.3/74.3</b>	Est. Repl. Yr	2084	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Above recommended "other action" should be completed by contractor under warranty period as necessary.		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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	15-Aug-2013		Previous Inspection Date	07-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							