

Bridge Inspection							
Bridge File Number	75931 -1 Bridge			Form Type	SG		
Year Built/Year Supstr	1966/1966			Lot No.	1		
Bridge or Town Name	CALGARY			Inspector Name	Garry Roberts		
Located Over	1:08 R1 8.183;1:08 L1 8.183			Inspector Class	BR CLS A		
Located On	25122:02 L1 0.089;25122:02 R1 0.088			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	14-Feb-2012		
Legal Land Location	SW SEC 34 TWP 24 RGE 3 W5M			Data Entry By	Lauren Korte		
Longitude, Latitude	-114:21:02, 51:05:17			Data Entry Date	13-Mar-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Tom Carey		
Contract Main. Area	CMA28			Review Date	21-Feb-2012		
Clear Roadway/Skew	9.1 /			Dept. Reviewer Name	Tim Davies		
AADT/Year	1,500 / 2010 (E)			Dept. Review Date	22-Mar-2012		
Road Classification	RAD-412.4-120			Follow-Up By			
Detour Length (km)	9						
Allowable Load (t):	Single	CS1 47 GIRDER	Semi	CS2 56 GIRDER	Train	CS3 67 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20				----> Primary Span		

Posting Information												
Required Vert. Clearance Posting (m)		UNDER: 1 L1 5.0m, 1 R1 5.2m										
Posted Vertical Clearance (Y/N)		Yes										
Posted:	Lane	EB	On Bridge (m)	5.2	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.0	In Advance (Y/N)	Yes
Remarks		Confirmed V.C is accurate at time of inspection										
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)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No				
Remarks		Not required										
Hazard Marker At Bridge (Y/N)		No										
Remarks												
Other Sign Types		ROUTE, 40 KM/HR EXIT SPEED, info										

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	Lines located all through area	Gas	
Power	2 Wire overhead on East ROW	Municipal	
Others	Fiber optics North ROW.	Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Typical grade separation alignments, limited sight distances. CRESTS AT BRIDGE.
Vertical Alignment		5	5	
Roadway Width (m)	9.100			ACP uneven at South.
Approach Bump		5	5	
Guardrail (Y/N)	Yes			Several posts leaning and 1 split post at NE. Wrong lap at SW Not Thriebeam. Not connected to bridge.
Guardrail		4	4	
Length (m)	34.000			
Current Standard (Y/N)	No			
Termination Type	TURN DOWN ENDS			
Drainage		4	4	(Ponding at NE)- could not confirm.
<b>Approach Road General Rating</b>		<b>5</b>	<b>5</b>	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : <b>RB, 4 Spans, Lengths(m): 12.2-23.2-31.1-12.2, A-Ident Number: A0483-01</b> )					
<b>Special Features</b>					
Special Feature			4	Level 2 insp revealed 2 pins are subset deck leakage thru curb is beginning to rust pin @ G1 and end G5.	
(Type : )					
Special Feature			X	Plate under pin is spread 20mm on outside and 10 mm on inside. Inside abut side bottom flange is 10mm lower.	
(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		5	5	map crking throughout- TRANSVERSE MEDIUM WIDTH CRACKS @ PIERS. Wearing surface has surface spalls @ cracks Epoxy sealed.	
(Material Type : <b>CONCRETE</b> )					
(Thickness(mm) : <b>50</b> )					
Deck Top		N	N		
Deck Rideability		7	6		
Deck Joints		5	5		
Temperature (deg. C)		0			
(Expansion Type : <b>FINGER PLATES</b> )					
(Fixed Type : )					
Gap Size (mm)		Gap Location			
3		North			
45		South			
Deck Drainage		7	4	Retro drain @ East gutter. South drain deflector plate is corroded through causing bearings to corrode. Backwall trough drains gravel filled.	
Drains Clogged (Y/N)		Yes			
Curbs/Median		5	5	Rust stain starting @ trans. cracks on curb face top. Medium scaling on curbs underside.	
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		10			
Bridge Rail		7	7	Isolated corrosion - 5%	
(Type : <b>STEEL VERTICAL BAR</b> )					
Bridge Rail Posts		7	7		
(Type : <b>POST STEEL;POST STEEL</b> )					
Bridge Rail/Posts Coating		4	4		
(Type : <b>PAINT</b> )					
Sidewalk		X	X		
<b>Girder/Beam</b>					
Cover Plate		6	6	20 mm MAXIMUM SAG AT Sp.3 SCRAPES @ COVER PLATE IN W-BOUND LANE FROM HIGH LOAD DAMAGE (MINOR).	
Flange		6	6		
Web		7	7		
Stiffeners		7	7		
Splice		7	7		
Weld		7	7		
Diaphragms/Cross Frame		7	7		

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : <b>RB, 4 Spans, Lengths(m): 12.2-23.2-31.1-12.2, A-Ident Number: A0483-01</b> )					
Paint Condition		4	4	Peeling at bottom flange at abutments.	
(Colour Description : <b>RED</b> )					
(Colour Code : <b>21310</b> )					
Touchup Required (Y/N)	Yes				
Bearings		4	4	Missing A/B @ A1-G3, G4, G5 and A2-G4. Grout pad is broken at A2-G5.  Bearings @ Maximum @ North	
Temperature (deg. C)	0				
(Expansion Type : <b>POT BEARING;ROLLER BEARING</b> )					
(Fixed Type : <b>ROCKER BEARING</b> )					
Coating Adequate (Y/N)	Yes				
Functioning (Y/N)	No				
Deck Underside		4	4	Rust stains and scaling. ISOLATED @ EXTERIOR & @ HINGES. on S3 & S4. Random transverse cracks and efflorescence	
Stains (Percent Area)	10				
<b>Span Alignment Problems</b>					
Vertical (Y/N)	No				
Horizontal (Y/N)	No				
<b>Superstructure General Rating</b>		<b>4</b>	<b>4</b>		
Substructure					
Bridge Component		Last	Now	Explanation of Condition	
<b>Abutments</b>					
Bearing Seats/Caps		6	6		
(Type : <b>CONCRETE</b> )					
Backwalls/Breastwalls		5	5		
Wingwalls		7	6		
Piles		N	N	Buried	
Paint/Coating		X	X		
Abutment Stability		5	6		
Scour/Erosion		7	6		
<b>Piers/Bents</b>					
(Type : <b>PIER-COLUMN</b> )				Medium scaling @ underside @ South pier.	
Bearing Seats/Caps		5	5		
(Type : <b>CONCRETE</b> )					
(Total Number of Bearing Piles : <b>2:2:2</b> )					
Pier Shaft/Piles		5	5		
Bracing/Struts/Sheathing		X	X		
Nose Plate		X	X		
Paint/Coating		X	X		
(Colour Description : )					
(Colour Code : )					
Pier Stability		8	7		
Scour		X	X		
Debris (Y/N)	No				
<b>Substructure General Rating</b>		<b>5</b>	<b>5</b>		

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		5	8	
Traffic Safety Features		5	3	Wrong lap at SE and NW. 1 broken post at W/B median, 1 split post at E/B shoulder.
Type	GUARDRAIL			
Slope Protection		4	4	North slope buckling at bottom est 100 mm
(Type : <b>CONCRETE; CONCRETE</b> )				
Bank Stability		6	5	
Drainage		5	5	
<b>Grade Separation General Rating</b>		<b>5</b>	<b>3</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Replace 1 post - NE approach and 1 at W/B median.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2014	Install W/P joints including over hinge pins.					
RESET/ PAINT BEARINGS	2014	Reset North & South bearings and Install 3 bolts or consider new about bearings. Replace 1 grout pad.					
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING	2012	Clean backwall trough drains- patch Al deflector plate.					
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Place cold mix at NE approach to prevent ponding.					
OTHER ACTION	2014	Upgrade guardrail to current standard					
OTHER ACTION	2012	Seal Hinge Pin Joint- blast clean pack rust.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>50.0/50.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>45.8/43.3</b>	Est. Repl. Yr	2038	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Review long range plans for this overpass and Hwy 1 before scheduling major maint. or rehab. (G. Roberts Feb 14/12)		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	Randy Bredo	Previous Assistant's Name	Bryce Clayton
Next Inspection Date	14-Nov-2013	Previous Inspection Date	27-Jul-2010
Inspection Cycle (Default) (months)	21		
Comment			