

Bridge Inspection										
Bridge File Number	75933 -1 Bridge					Form Type	SG			
Year Built/Year Supstr	1965/1965					Lot No.	1			
Bridge or Town Name	CALGARY					Inspector Name	Garry Roberts			
Located Over	1:08 R1 11.443;1:08 L1 11.442					Inspector Class	BR CLS A			
Located On	563:02 R1 0.189;563:02 L1 0.224					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	14-Feb-2012			
Legal Land Location	SW SEC 36 TWP 24 RGE 3 W5M					Data Entry By	Lauren Korte			
Longitude, Latitude	-114:18:14, 51:05:19					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	1,880 / 2010 (A)					Dept. Review Date	22-Mar-2012			
Road Classification	RLU-209-110					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: 1 L1 5.4m, 1 R1 5.4m											
Posted Vertical Clearance (Y/N)		Yes											
Posted:	Lane	EB	On Bridge (m)	5.4	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.4	In Advance (Y/N)	Yes	
Remarks													
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													
Other Sign Types	40 KM/HR EXIT ON APPROACH RAMPS, ROUTE												

Utilities (Located at)										
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE									
Telephone	All through the area.				Gas					
Power	Located East OF STRUCTURE.				Municipal					
Others					Problem (Y/N)	No				
Remarks										

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Typical grade separation alignments.
Vertical Alignment		5	5	
Roadway Width (m)	9.800			3 damaged box beam posts at South median rail, and 2 at North. Not Thriebeam
Approach Bump		7	5	
Guardrail (Y/N)	Yes			
Guardrail		3	3	
Length (m)	38.000			
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN ENDS.			
Drainage		7	7	
Approach Road General Rating		5	5	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : RB, 4 Spans, Lengths(m): 12.5-22.9-22.9-12.5, A-Ident Number: A0474-01)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	0	0	0	0		
Now	0.0	0.0	0.0	0.0		
Wearing Surface			6	6	EAST LANE IS PYRAMID CONCRETE. WEST LANE IS PLASTISIZED CONCRETE. MODERATE MED WIDTH LONGIT & TRANS CRACKS	
(Material Type : CONCRETE)						
(Thickness(mm) : 50)						
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			3	4	Deck side of joints 10 mm higher than abutment sides. Al tipped 15mm. Concrete block out is spalling at South abutment trough under deck drainage.	
Temperature (deg. C)		0				
(Expansion Type : FINGER PLATES)						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
10		North				
15		South				
Deck Drainage			3	3	Plumbing corroded out @ both abuts/otherwise good Trough drains are full.	
Drains Clogged (Y/N)		Yes				
Curbs/Median			6	6	LIGHT SCALING. CRACKS IN CURB FACE HAVE BEEN SEALED WITH SIKA-FLEX. Underside cracked and stained.	
(Curb Type : Standard)						
Scaling (Percent Area)		2				
Bridge Rail			6	6	2 bent posts @ median-minor 1 bent rail section at SW	
(Type : STEEL VERTICAL BAR)						
Bridge Rail Posts			6	6	Tube Rail and I beam posts @ median. Two grout pads with minor spalls.	
(Type : POST STEEL;POST STEEL)						
Bridge Rail/Posts Coating			4	4	5% SURFACE CORROSION	
(Type : PAINT)						
Sidewalk			X	X		
Girder/Beam						
Cover Plate			3	3	High load damage @ span 3 over WB Hwy lanes - About 25mm sweep @ East fascia has been repaired since 1st impact from 2001 Smoke stained area @ S-2 Sp.3-G5 has visible sag est. 20 mm.	
Flange			5	5		
Web			5	5		
Stiffeners			7	7		
Splice			7	7		
Weld			3	3	S1-G3 plate 1 at South end has 15mm crack at end of plate. S2-G1 plate 1 at North end has 18mm crack at end of plate - Could not confirm at level 1 inspection.	
Diaphragms/Cross Frame			7	7		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RB, 4 Spans, Lengths(m): 12.5-22.9-22.9-12.5, A-Ident Number: A0474-01)				
Paint Condition		5	5	
(Colour Description : RED)				
(Colour Code : 21310)				
Touchup Required (Y/N)	No			
Bearings		5	5	25% corrosion @ South abut bearings.
Temperature (deg. C)	18			Pinned at P2
(Expansion Type : ROLLER BEARING)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		3	3	Spalling with exposed rebar on spans 2 and 3 with worst on span 3. Spalls are over highway traffic. 9 visible rebar covers Sp.3 Span 3 has corroded areas chipped out.
Stains (Percent Area)	25			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	7	
Piles		N	N	Buried
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		5	4	Erosion gully developing at SW and SE. Drain trough steel extensions eroding headslope at South abutment.
Piers/Bents				
(Type : PIER-COLUMN)				Delamination cracking on West cantilever of piers 1 and 3 and East cantilever of pier 2. Map cracks.
Bearing Seats/Caps		5	5	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 2:2:2)				
Pier Shaft/Piles		5	5	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		5	5	Pigmented sealer
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		5	5	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	7	
Traffic Safety Features		4	4	Wrong lap at few locations. Turn down section of guardrail is damaged in median.
Type	GUARDRAIL			
Slope Protection		5	5	Gaps up to 50mm wide at top panels- are sealed with liquid asphalt.
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	6	
Drainage		7	6	
Grade Separation General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Replace 5 box beam rail posts and repair median guardrail.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK	2012	Check/remove loose concrete over highway					
SEAL DECK							
OVERLAY DECK	2012	Full deck patches or replacement					
REPAIR/REPLACE DECK JOINTS	2012	Install W/P joints and remove trough drains.					
RESET/ PAINT BEARINGS	2012						
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING	2012	Both abuts seats and trough drains					
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2012	SW and SE erosion 5m3 - Cl. 1m @ SE and 10m3 at SW.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Repair 2 cover plate cracks.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	51.9/51.9	Est. Repl. Yr	2018	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Bridge is currently scheduled for full deck replacement. Review long term plans for overpass and highway prior to scheduling major maint. or rehab. (G.Roberts Feb 14,2012)		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							