

Bridge Inspection							
Bridge File Number	76609 -1 Bridge			Form Type	SG		
Year Built/Year Supstr	1970/1970			Lot No.	2		
Bridge or Town Name	COCHRANE			Inspector Name	Garry Roberts		
Located Over	BOW RIVER, 2.13, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	22:16 C1 11.047			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	13-Jun-2012		
Legal Land Location	NW SEC 34 TWP 25 RGE 4 W5M			Data Entry By	Lauren Korte		
Longitude, Latitude	-114:29:13, 51:10:57			Data Entry Date	27-Jun-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Ash Morjaria		
Contract Main. Area	CMA28			Review Date	19-Jun-2012		
Clear Roadway/Skew	9.1 / -25 deg. (LHF)			Dept. Reviewer Name	Tim Davies		
AADT/Year	11,590 / 2011 (A)			Dept. Review Date	29-Jun-2012		
Road Classification	RAU-211.8-110			Follow-Up By			
Detour Length (km)	3						
Allowable Load (t):	Single	CS1 42 GIRDER	Semi	CS2 48 GIRDER	Train	CS3 55 GIRDER	----> On Critical Spans ---->Critical Member
Design Loading:	HS20					----> Primary Span	

Posting Information								
Required Load Posting (t)	Single		Semi		49	Truck Train	56	
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	Should post @ C52, 48 and CS55 if allowable load is correct.							
Hazard Marker At Bridge (Y/N)	No							
Remarks	@ NE only.							
Other Sign Types	Route info, curve, 60 km/hr. Watch for vehicles on bridge.							

Utilities (Located at)				
Utility Attachments	TELEPHONE UTILITIES			
Telephone	Fibre optics @ East r/w.		Gas	50m South.
Power	3 wire over abutment #2 and East side.		Municipal	
Others	Conduit along East girder. Light standard @ West curb.		Problem (Y/N)	No
Remarks				

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	On curve.
Vertical Alignment		5	5	Hills to both ends. Up to 22m Wide @ Lights to North. In urban 60km zone.
Roadway Width (m)	22.000			
Approach Bump		6	5	
Guardrail (Y/N)	Yes			Incorrect lap at NW and missing 5 splice bolts at NE and 2 post bolts.
Guardrail		4	4	Not thriebeam.
Length (m)	30.000			
Current Standard (Y/N)	No			
Termination Type	turned down			
Drainage		5	5	
Approach Road General Rating		5	5	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : WG, 4 Spans, Lengths(m): 33.5-42.7-42.7-33.5, A-Ident Number: A0615-01)					
Special Features					
Special Feature			7	"9" Dywidag @ east Girder Line Bridge has 4 steel spans. 6.1m spans are HC girders in roof slabs of approach spans.	
(Type :)					
Special Feature			N		
(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			5	4	Transverse cracks - chipcoat on concrete fibre reinforced overlay. 60mm in total thickness. Worn in several areas. 1 pothole at NBL of Sp.1 and Sp.4.
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Deck Top			N	N	
Deck Rideability			6	5	
Deck Joints			6	4	Both joints are welded on wrong side but are functional. Joint plumbing is leaking at both abuts.
Temperature (deg. C)		12			
(Expansion Type : FINGER PLATES)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
55		North abutment			
50		South abutment			
Deck Drainage			6	4	Drains @ approaches - none on bridge. Deck drainage is missing abut plumping causing erosion.
Drains Clogged (Y/N)		No			
Curbs/Median			6	6	
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			5	5	Paint @ West rail, galvanizing @ East. Several post A/B nuts not fully engaged. Minor bent verticals & Posts @ 6 Panels @ SW Bridgerail corroded 5% - some pitting, localized area. Top rail of East pedrail corrosion @ joints due to galvacon coating only.
(Type : VERTICAL BAR)					
Bridge Rail Posts		4	4		
(Type : POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		4	4		
(Type : PAINT)					
Sidewalk			6	6	
Girder/Beam					
Cover Plate			X	X	
Flange			7	7	
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 : WG, 4 Spans, Lengths(m): 33.5-42.7-42.7-33.5, A-Ident Number: A0615-01)				
Paint Condition		4	4	A few localized areas with superficial corrosion.
(Colour Description : YELLOW)				
(Colour Code : 13538)				
Touchup Required (Y/N)	No			
Bearings		6	5	
Temperature (deg. C)	12			
(Expansion Type : ROCKER BEARING)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		4	5	Efflorescence, cracks & corrosion stains @ deck exterior and weep tubes. Exposed rebar @ abutments. 90% rates 7.
Stains (Percent Area)	2			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	5	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		6	4	Spall at NW abut seat.
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	
Wingwalls		7	7	
Piles		N	N	Buried.
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		7	4	Erosion gully at NW from joint drainage.
Piers/Bents				
(Type : PIER-SOLID)				All piers have vertical cracks wider at the bottom - 1 mm @ top, 2 mm @ bottom.
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	No Coating @ Concrete. Minor corrosion @ nose plates.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		N	N	Water too fast to see scour.
Debris (Y/N)	No			
Substructure General Rating		6	4	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				Sidewalk under span 1.
(D/S Direction : E)				
Alignment		8	8	
Bank Stability		7	7	
HWM (m below Top of Curb)	6.5			No visible HWM.
Drift (Y/N)	No			
Slope Protection		8	8	Along South slope only. Concrete apron @ North.
(Type : RIP RAP; RIP RAP)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	7	

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	2012	Patch deck pothole (X2) 0.5m2.					
SEAL DECK	2012	Seal cracks in chipcoat/ ACP.					
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Repair deck joint plumbing- both abuts. Install deflector plates.					
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2012	Repair NW erosion 0.5m3 pit run.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Post for C52-49 and C53-55.					
OTHER ACTION	2012	Patch NW abut seat-0.5 m2.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/50.0	Sufficiency Rating (Last/Now) (%)	43.1/38.8	Est. Repl. Yr	2037	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	Jason Rusu			
Next Inspection Date	13-Mar-2014		Previous Inspection Date	11-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							