

Bridge Inspection							
Bridge File Number	75672 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1964/1964			Lot No.	1		
Bridge or Town Name	MEDICINE HAT			Inspector Name	Tom Carey		
Located Over	ROSS CREEK, 2.7, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	41:06 C1 3.721			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	09-Feb-2012		
Legal Land Location	SE SEC 19 TWP 12 RGE 4 W4M			Data Entry By	Lauren Korte		
Longitude, Latitude	-110:31:60, 50:00:19			Data Entry Date	22-Mar-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Garry Roberts		
Contract Main. Area	CMA23			Review Date	26-Feb-2012		
Clear Roadway/Skew	11 /			Dept. Reviewer Name	Tim Davies		
AADT/Year	1,700 / 2011 (A)			Dept. Review Date	29-Mar-2012		
Road Classification	RAU-211.8-110			Follow-Up By			
Detour Length (km)	16						
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 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)	Yes							
Remarks	SW sign missing							
Other Sign Types								

Utilities (Located at)				
Utility Attachments				
Telephone	East & West R/W.		Gas	Crosses road 40m North.
Power	1 wire 20m to NE.		Municipal	Stream gauging station @ NE.
Others			Problem (Y/N)	No
Remarks				

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Farmer access at NE.
Vertical Alignment		6	6	In long sag curve - sight distance good. No passing SB.
Roadway Width (m)	12.400			Isolated potholes at South approach have been patched.
Approach Bump		5	4	
Guardrail (Y/N)	Yes			Post to rail bolt short at SW. Missing 4 splice bolts at NE.
Guardrail		4	4	
Length (m)	30.400			
Current Standard (Y/N)	No			Not Thriebeam.
Termination Type	TURNED DOWN			
Drainage		7	7	
Approach Road General Rating		6	6	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PE, 3 Spans, Lengths(m): 12.8-12.8-12.8, A-Ident Number:)					
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			5	5	Chipcoat over 100mm ACP. Grout Key cracked @ centerline - sealed Joints tar sealed.
(Material Type : ACP - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 100)					
Lateral Connection Problem (Y/N)		Yes			
Deck Top			N	N	
Deck Rideability			5	5	
Deck Joints			N	N	ACP Covered. 40mm measured at pier curbs.
Bump (Y/N)		No			
Deck Drainage			5	5	Active leakage onto ends of pier & abutments through girder ends. Corrodes piles. Reduced from sealing
Drains Clogged (Y/N)		No			
Curbs/Median			6	6	Some hairline vertical cracks West curb. One 1m long scraped West curb North end, grader scrapes.
(Curb Type : Standard)					
Scaling (Percent Area)		1			
Bridge Rail			4	4	2 layer. Missing 7 splice bolts at SW. 4 post A/B nuts with insufficient thread at East rail.
(Type : STEEL FLEX BEAM)					
Bridge Rail Posts			4	4	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			7	7	
(Type :)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	1	
Now	0	0	0	2	
Girders			3	3	13 Girders have wide longitudinal cracks or spalls in one web. 4 interior girders with spalls or cracks in AZ in one web. G1 S2 "3" rating - concrete soundness unconfirmed 2 stirrups corroded through @ G2S1 and 1 @ G1S3 outside AZ and one web. Due to these defects being in one web outside the AZ and no shear cracking visible in the girders: Rating raised to 3.
Last Complete Inspection Date		14-Jan-2012			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		5			
Lift or Connector Pocket Grouted (Y/N)		Yes			
(Number Of Girders : 39)					
Span Alignment Problems					
Vertical (Y/N)		No			
Horizontal (Y/N)		No			
Superstructure General Rating			4	3	

Substructure						
Bridge Component		Last	Now	Explanation of Condition		
Abutments						
(Extended Backwall Piles (Y/N) : N)						
(Extended Backwall Piles Spacing(mm) :)						
(Total Number of Caps/Corbels : 1:1)						
Some staining and hairline vert. cracks.						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)	Cap inaccessible for measurement.	
Last	0	0	0	0		
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				6	6	
(Type : CONCRETE)						
(Depth(mm) :)						
(Width(mm) :)						
Backwalls/Breastwalls			X	X		
Greatest Height (m)		1.00				
Wingwalls			6	6		
(Total Number of Bearing Piles : 0:0)						
Buried.						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	100	0	0	0		
Now	100	0	0	0		
Piles				N	N	
Paint/Coating			X	X		
Abutment Stability			7	7		
Scour/Erosion			7	7		
Piers/Bents						
(Type : PIER-COLUMN)						
(Total Number of Caps/Corbels : 1:1)						
Hairline cracks with leaching @ East end of South pier & exposed rebar @ West end of South pier - both minor. Cracks @ East end North pier.						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)	Unable to measure.	
Last	0	0	0	0		
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				5	5	
(Type : CONCRETE)						
(Depth(mm) :)						
(Width(mm) :)						
(Total Number of Bearing Piles : 8:8)						
Unable to verify due to ice.						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Pier Shaft/Piles				7	7	
Greatest Height (m)		5.50				
Bracing/Struts/Sheathing			7	7		
Nose Plate			7	7		
Paint/Coating			4	3	Corrosion with scaling & pitting @ some piles. Worst @ end piles. White and red.	
(Colour Description :)						
(Colour Code :)						

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		7	7	
Scour		7	7	
Debris (Y/N)	No			
Substructure General Rating		6	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : E)				
(D/S Direction : W)				
Alignment		7	7	
Bank Stability		5	6	Flood damage has been repaired. Steep cut banks U/S.
HWM (m below Top of Curb)				
Drift (Y/N)	No			
Slope Protection (Type : CONCRETE; RIP RAP)		5	6	Slope protection repaired Cl. 2.
Guidebank/Spurs		X	X	
Adequacy of Opening		7	6	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Post to rail nut and 11 splice bolts. Repair short A/B bolts at East guardrail posts.					
SEAL CURBS							
PATCH DECK							
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	Blast & paint pier piles.					
OTHER ACTION	2013	Replace G2S1 and G1ZS3 or chip out and splice in new partial stirrups and patch girders.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/44.4	Sufficiency Rating (Last/Now) (%)	62.7/59.0	Est. Repl. Yr	2018	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	09-Nov-2013		Previous Inspection Date	14-Jan-2012			
Inspection Cycle (Default) (months)	21						

Comment	
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