

Bridge Inspection										
Bridge File Number	78570 E-1 Bridge					Form Type	SG			
Year Built/Year Supstr	1981/1981					Lot No.	2			
Bridge or Town Name	MEDICINE HAT					Inspector Name	Tom Carey			
Located Over	14062:02 L1 0.059;14062:02 R1 0.061					Inspector Class	BR CLS A			
Located On	1:21 R1 2.211					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	07-Feb-2012			
Legal Land Location	NE SEC 3 TWP 13 RGE 6 W4M					Data Entry By	Anne Roberts			
Longitude, Latitude	-110:44:23, 50:03:19					Data Entry Date	24-Mar-2012			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Garry Roberts			
Contract Main. Area	CMA23					Review Date	26-Feb-2012			
Clear Roadway/Skew	15.3 /					Dept. Reviewer Name	Tim Davies			
AADT/Year	20,270 / 2011 (A)					Dept. Review Date	29-Mar-2012			
Road Classification	RFD-412.4-130					Follow-Up By				
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 28			Semi	CS2 49		Train	CS3 62	----> On Critical Spans ---->Critical Member
Design Loading:	MS23									----> Primary Span

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 14062 L1 5.3m, 14062 R1 5.3m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)	5.2	In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	Yes
Remarks		(Measured 5.410 S/B and 5.404 N/B. Existing posting is accurate)										
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)		In Advance (Y/N)		At Bridge (Y/N)					
Remarks		Not required										
Hazard Marker At Bridge (Y/N)		Yes										
Remarks												
Other Sign Types		CURVE, SPEED INFO										

Utilities (Located at)									
Utility Attachments									
Telephone						Gas			
Power	SE					Municipal	Lighting @ deck underside		
Others						Problem (Y/N)	No		
Remarks									

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Over Box Spring Road
Vertical Alignment		7	7	
Roadway Width (m)	12.500			Minor damage at SW. Wrong lap and missing 4 splice bolts at SE Wrong lap at NE Not thriebeam
Approach Bump		6	6	
Guardrail (Y/N)	Yes			
Guardrail		4	4	
Length (m)	41.000			
Current Standard (Y/N)	No			
Termination Type	TURN DOWN			
Drainage		6	6	
Approach Road General Rating		7	7	

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : WG, 2 Spans, Lengths(m): 25-25, A-Ident Number: A0857-01)						
Special Features						
Special Feature						
(Type :)						
Special Feature						
(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		4	4	Isollated long & trans cracks		
(Material Type : CONCRETE)		Moderate popouts				
(Thickness(mm) : 50)		Construction joint @ E span that corresponds with spalling & efflorence @ deck underside has a crack				
Deck Top		N	N			
Deck Rideability		7	7			
Deck Joints		4	4	(Active leakage at NE abut and seal appears partially out of extrusion above at A2) Joint gravel filled - seal not seen above extrusion. Rated 4 due to past comment		
Temperature (deg. C)		-6				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
46		E abut				
35		W abut				
Deck Drainage		4	4	Possible leakage through E span construction joint. No deck drains		
Drains Clogged (Y/N)		No				
Curbs/Median		7	7	Typ vert crking @ 1m spacing		
(Curb Type : Standard)						
Scaling (Percent Area)		0				
Bridge Rail		7	7	Missing isolated bolts at fixed rail splices but not required		
(Type : BRIDGE TUBE)						
Bridge Rail Posts		7	7			
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating		6	6			
(Type :)						
Sidewalk		X	X			
Girder/Beam						
Cover Plate		X	X	10 lines		
Flange		8	8			
Web		8	8			
Stiffeners		8	8			
Splice		8	8			
Weld		8	8			
Diaphragms/Cross Frame		8	8			

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 2 Spans, Lengths(m): 25-25, A-Ident Number: A0857-01)				
Paint Condition		X	X	Weathering steel
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		6	6	Missing A/B nuts @ West abut- 2 at G7 and 1 at G8 Fixed at A2
Temperature (deg. C)	-6			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : ROCKER BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Some efflorescence @ east span between G4- G5 approx 1m2 Surface spall over travel lane underside of deck - from construction joint above
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
Backwalls/Breastwalls		8	8	
Wingwalls		7	7	
Piles		N	N	Buried
Paint/Coating		6	6	Tar coating
Abutment Stability		8	6	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 7)				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		8	8	
Nose Plate		X	X	
Paint/Coating		6	6	White paint on piles
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	X	
Debris (Y/N)	No			

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		5	5	
Traffic Safety Features		7	7	
Type	MEDIAN			
Slope Protection		7	7	
(Type : CONCRETE; CONCRETE)				
Bank Stability		7	7	
Drainage		7	7	
Grade Separation General Rating		5	5	

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 underside @ E span-0.05 OHV m3					
SEAL DECK	2012	Seal E span construction joint					
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Repair leaking seal A2 - if not done					
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	Install N/B advance VC sign					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	61.6/60.6	Est. Repl. Yr	2042	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				
Next Inspection Date	07-Nov-2013		Previous Inspection Date	14-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							