

Bridge Inspection							
Bridge File Number	02430 -1 Bridge			Form Type	PSR		
Year Built/Year Supstr	1963/1963			Lot No.	2		
Bridge or Town Name	MARKERVILLE			Inspector Name	Owen Salava		
Located Over	MEDICINE RIVER, 3.88, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	54:08 C1 12.865			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	05-Nov-2012		
Legal Land Location	SE SEC 18 TWP 36 RGE 1 W5M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-114:07:24, 52:05:10			Data Entry Date	20-Nov-2012		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA18			Review Date	14-Nov-2012		
Clear Roadway/Skew	9.1 / 30 deg. (RHF)			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	2,150 / 2011 (A)			Dept. Review Date	26-Nov-2012		
Road Classification	RAU-209-110			Follow-Up By			
Detour Length (km)	32						
Allowable Load (t):	Single	CS1 42 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 64 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	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)	Yes							
Remarks	Too high, 0.6m offline, 1.4m curb to bottom.							
Other Sign Types	Creek ID, Road Info							

Utilities (Located at)			
Utility Attachments			
Telephone	South r/w.	Gas	
Power	4 wire 20m North of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection to East 100m.
Vertical Alignment		7	7	
Roadway Width (m)	12.600			
Approach Bump		8	8	
Guardrail (Y/N)	Yes			
Guardrail		8	8	
Length (m)	45.600			
Current Standard (Y/N)	Yes			
Termination Type	Turned down			
Drainage		7	7	Gap between concrete drains and slope protection, ok.
Approach Road General Rating		7	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 24.1-24.4-24.1, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	5	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface			7	6	Approach paving, small potholes both about paving lips.
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			5	5	Possible leakage onto P1 at teh N end.
Temperature (deg. C)		10			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
Gap Size (mm)		Gap Location			
62		A1 - Gland - Exp.			
56		P1 - Gland - Exp.			
65		P2 - Gland - Exp.			
56		A2 - Gland - Exp.			
Deck Drainage			6	6	See deck jnts.
Drains Clogged (Y/N)		No			
Curbs/Median			3	4	Small spalls both curbs. Spall to underside at NW wingwall contact area.
(Curb Type : Standard)					
Scaling (Percent Area)		10			
Bridge Rail			6	6	Two vertical slats bent, minor. E pier N side, one in S3 S side near E abut.
(Type : GALVANIZED STEEL VERTICAL BAR)					
Bridge Rail Posts		4	6		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		7	7		
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Girders			6	6	Typical cracking around shoe plates. Center span not accessible due to open water. Skew pressures have cracked curbs at corners of deck.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : 15)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 3 Spans, Lengths(m): 24.1-24.4-24.1, A-Ident Number:)				
Diaphragms/Cross Frame		7	7	
Bearings		5	5	Vertical cracks in pier 2 following SW & NW anchor bolts. Interior bearings on abuts painted. Outside of abuts & pier bearing rusted.
Temperature (deg. C)	10			
(Expansion Type : SLIDING PLATE)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		7	7	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			The bearings are off center of masonry plates.
Horizontal (Y/N)	No			
Superstructure General Rating		6	5	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	5	Spall at top of NE wing due to skew pressure.
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		7	7	
Piers/Bents				
(Type : PIER-SOLID)				Minor stain P2. N end of P1 si wet below the jnt.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0)				
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	Minor stain P2, rust - no action.
(Colour Description :)				
(Colour Code :)				
Pier Stability		5	5	(Plumb bob from deck points towards the west pier leaning west approx 50mm and the east pier leaning east approx 50mm. 03/03/18).
Scour		N	N	
Debris (Y/N)	No			
Substructure General Rating		5	5	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : N)				Parallels hwy 40m U/S.
(D/S Direction : S)				
Alignment		5	5	
Bank Stability		7	7	
HWM (m below Top of Curb)				(Drift is on top of piers. 99/10/26)
Drift (Y/N)	No			
Slope Protection		5	6	Grass growing in panel gaps at E hslp. (Type : CONCRETE; CONCRETE)
Guidebank/Spurs		7	7	Guidebank at NW corner.
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel 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							
SEAL CURBS	2013	Patch curb spalls, 0.1m3 OH-V.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Repair P1, if required.					
RESET/ PAINT BEARINGS							
WASHING	2013	Clean & inspect jnts, P1, possible leak.					
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Patch paving lip potholes.					
OTHER ACTION	2013	Set HMs to std.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	61.1/55.6	Sufficiency Rating (Last/Now) (%)	51.2/48.2	Est. Repl. Yr	2033	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	05-Aug-2014		Previous Inspection Date	12-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							