

Bridge Inspection									
Bridge File Number	74611 -1 Bridge				Form Type	PCS			
Year Built/Year Supstr	1956/1956				Lot No.	1			
Bridge or Town Name	MARWAYNE				Inspector Name	Jason Saly			
Located Over	MARWAYNE CREEK, 6.5.5, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	897:04 C1 18.806				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	29-Nov-2012			
Legal Land Location	SW SEC 24 TWP 52 RGE 3 W4M				Data Entry By	Marcia Chavez			
Longitude, Latitude	-110:19:31, 53:30:06				Data Entry Date	17-Jan-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien			
Contract Main. Area	CMA15				Review Date	14-Dec-2012			
Clear Roadway/Skew	10.1 /				Dept. Reviewer Name	Darron Ahlstedt			
AADT/Year	2,570 / 2011 (A)				Dept. Review Date	30-Jan-2013			
Road Classification	RAU-210-110				Follow-Up By				
Detour Length (km)	5								
Allowable Load (t):	Single	CS1 28 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 65 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									
Hazard Marker At Bridge (Y/N)	No								
Remarks	Not required.								
Other Sign Types									
Utilities (Located at)									
Utility Attachments									
Telephone	Plowed in West r/w.				Gas				
Power	5 wire O/H, E fence line.				Municipal				
Others					Problem (Y/N)	No			
Remarks									
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			8	8	Passing both directions.				
Vertical Alignment			8	8					
Roadway Width (m)	10.000								
Approach Bump			7	6					
Guardrail (Y/N)	Yes				(Guardrail post broken at SW (photo). 18Jun2012).				
Guardrail			4	6					
Length (m)	15.200				Too short.				
Current Standard (Y/N)	No								
Termination Type	Turn Down								
Drainage			7	N	Snow covered.				
<b>Approach Road General Rating</b>			<b>8</b>	<b>8</b>					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : <b>HC, 1 Spans, Lengths(m): 6.1, A-Ident Number: </b> )					
<b>Special Features</b>					
Special Feature			X		
(Type : )					
Special Feature			X		
(Type : )					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	Snow at curbs.
<b>Last</b>	0	0	0	0	
<b>Now</b>	10.0	0.0	0.0	0.0	
Wearing Surface			5	7	(Longit. crack over length of bridge at G1,2 joint where staining is occurring; likely lateral joint failure (photo). 18Jun2012). Longit. cracks reflect through ACP along girder lines.
(Material Type : <b>ACP</b> )					
(Thickness(mm) : <b>150</b> )					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	ACP covered.
Deck Rideability			8	7	
Deck Joints			N	N	(Buffer angles. 26Jan2010) - Covered by ACP.
Bump (Y/N)		No			
Deck Drainage			4	4	Damage to legs from seepage btwn girders.
Drains Clogged (Y/N)		No			
Curbs/Median			4	N	Asphalt is too deep, curb is only 125mm high. (Curb face damage with exposed void at SE (photo). 18Jun2012).
(Curb Type : <b>Standard</b> )					
Scaling (Percent Area)		0			
Bridge Rail			7	7	Double layer.
(Type : <b>GALVANIZED STEEL FLEX BEAM</b> )					
Bridge Rail Posts			7	7	
(Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )					
Bridge Rail/Posts Coating			7	7	
(Type : <b>GALVANIZED</b> )					
Sidewalk			X	X	
<b>Girder Detail Ratings</b>					
	N (count)	1 (count)	2 (count)	3 (count)	
<b>Last</b>	0	0	0	0	
<b>Now</b>	0	0	0	0	
Girders			4	4	Staining on bottom of legs of curbs and 1st interior girder.  Narrow shear crack G6 at S end. G11 wide crack in AZ, 1 leg - photo. W curb unit wide longit. cracking in AZ in 1 leg only. (G2 wide longit. crack outside AZ (photo). 18Jun2012). G12 at AZ wide cracks both legs in AZ. G2,11 wide cracks in 1 leg in AZ G8 end diaphragm cored. G2-5 drift spalls. Lift pockets not grouted (photo).
Last Complete Inspection Date		29-Nov-2012			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
Lift or Connector Pocket Grouted (Y/N)		No			
(Number Of Girders : <b>12</b> )					
<b>Span Alignment Problems</b>					
Vertical (Y/N)		No			
Horizontal (Y/N)		No			
<b>Superstructure General Rating</b>			<b>4</b>	<b>4</b>	

Substructure						
Bridge Component				Last	Now	Explanation of Condition
<b>Abutments</b>						
(Extended Backwall Piles (Y/N) : Y)						
(Extended Backwall Piles Spacing(mm) : 1300)						
(Total Number of Caps/Corbels : 5:5)				Top caps 355 x 305 on 305 x 305 caps with 305 x 305 subcap.		
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>	0	0	0	0		
Bearing Seats/Caps/Corbels				7	6	
(Type : TREATED TIMBER)						
(Depth(mm) : 355)						
(Width(mm) : 305)						
Backwalls/Breastwalls				4	4	Vertical T & G sheathing. Both abut pushing in at base. A1 has additional bracing to contain. (Some material spilling through has been contained with breastwall - photos. 26Jan2010) - No action at this time.
Greatest Height (m)		3.40				
Wingwalls				6	6	
(Total Number of Bearing Piles : 9:9)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>	0	0	0	0		
<b>Now</b>	0	0	0	0		
Piles				5	5	2 split piles constrained with steel clamps A1P7 & A2P2 - photo. (Cored 2012. 18Jun2012).
Paint/Coating				X	X	
Abutment Stability				4	4	Both abut caps slightly rotated approx 30mm. Backwalls bowing. Struts in place - no further action at this time.
Scour/Erosion				5	N	(0.8m minor scour under bridge. 18Jun2012).
<b>Piers/Bents</b>						
(Type : )						
(Total Number of Caps/Corbels : )						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>						
<b>Now</b>						
Bearing Seats/Caps/Corbels				X	X	
(Type : )						
(Depth(mm) : )						
(Width(mm) : )						
(Total Number of Bearing Piles : )						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
<b>Last</b>						
<b>Now</b>						
Pier Shaft/Piles				X	X	
Greatest Height (m)						
Bracing/Struts/Sheathing				5	5	Piles 1-3, 7-9 struts bear on caps.
Nose Plate				X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		X	X	
(Colour Description : )				
(Colour Code : )				
Pier Stability		X	X	
Scour		X	X	
Debris (Y/N)	Yes			Debris on struts; (beaver dam d/s (1.0m). 18Jun2012).
<b>Substructure General Rating</b>		<b>4</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>E</b> )				
(D/S Direction : <b>W</b> )				
Alignment		7	7	
Bank Stability		8	N	Snow
HWM (m below Top of Curb)	1.6			
Drift (Y/N)	Yes			Drift on pile strut.
Slope Protection		5	5	
(Type : <b>NATURAL; NATURAL</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	6	
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>5</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS	2013	Old piles, check for rot.					
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION	2015	Fill lift pockets, if not yet done.					
OTHER ACTION	2013	(Repair curb unit. 18Jun2012).					
OTHER ACTION	2013	(Replace guardrail post. 18Jun2012).					
OTHER ACTION	2013	Assess repairs/replace options.					
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>57.9/56.9</b>	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Bridge life depends on pile condition; 54yr old timbers look OK at this time. "4" rated girder requires no action at this time.		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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	29-Feb-2016		Previous Inspection Date	18-Jun-2012			
Inspection Cycle (Default) (months)	39						
Comment							