

Bridge Inspection									
Bridge File Number	01916 -1 Bridge				Form Type	CON			
Year Built/Year Supstr	1957/1957				Lot No.	2			
Bridge or Town Name	MARWAYNE				Inspector Name	Jason Saly			
Located Over	VERMILION RIVER, 6.5, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	897:06 C1 8.143				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	29-Nov-2012			
Legal Land Location	NE SEC 11 TWP 54 RGE 3 W4M				Data Entry By	Marcia Chavez			
Longitude, Latitude	-110:20:12, 53:39:19				Data Entry Date	14-Jan-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien			
Contract Main. Area	CMA15				Review Date	14-Dec-2012			
Clear Roadway/Skew	8.2 /				Dept. Reviewer Name	Andrew Smikles			
AADT/Year	1,330 / 2011 (A)				Dept. Review Date	17-Jan-2013			
Road Classification	RCU-210-110				Follow-Up By				
Detour Length (km)	15								
Allowable Load (t):	Single	CS1 27 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 62 GIRDER	----> On Critical Spans ---->Critical Member		
Design Loading:	HS20						----> Primary Span		
Posting Information									
Required Load Posting (t)	Single		28	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)	Yes								
Remarks	Too low.								
Other Sign Types	"Bump"; River ID								
Utilities (Located at)									
Utility Attachments									
Telephone	Plowed in West r/w.				Gas				
Power					Municipal				
Others					Problem (Y/N)	No			
Remarks									
Approach Road									
			<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>				
Horizontal Alignment			5	5	Bridge in center of superelevated curve and at bottom of sag curve from south.				
Vertical Alignment			5	5					
Roadway Width (m)	9.300								
Approach Bump			6	6					
Guardrail (Y/N)	Yes				Damage to NE transition section.				
Guardrail			6	4					
Length (m)	30.400								
Current Standard (Y/N)	Yes								
Termination Type	Turn Down								
Drainage			7	N	Snow covered.				
<b>Approach Road General Rating</b>			<b>5</b>	<b>5</b>					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : CT, 3 Spans, Lengths(m): 12.8-18.3-12.8, A-Ident Number: )						
<b>Special Features</b>						
Special Feature			X			
(Type : )						
Special Feature			X			
(Type : )						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)	Snow @ curbs.	
<b>Last</b>	10					
<b>Now</b>	10.0	0.0	0.0	0.0		
Wearing Surface				7	5	FRSF; minor surface defects, N span, SB lane.
(Material Type : <b>CONCRETE</b> )						
(Thickness(mm) : <b>50</b> )						
Deck Top				N	N	
Deck Rideability				7	7	
Deck Joints				3	5	
Temperature (deg. C)		-16				
(Expansion Type : <b>THERMOPLASTIC POLYMER</b> )						
(Fixed Type : <b>THERMOPLASTIC POLYMER</b> )						
Gap Size (mm)		Gap Location				
		South abut - A1				
		North abut - A2				
Deck Drainage				4	6	Jnts appear to be water tight.
Drains Clogged (Y/N)		No				
Curbs/Median				N	N	(2% of curb is heavily scaled & 13% medium scaled. 19/Oct/2006) - Snow covered. W curb spalled, S2; spall at NE corner along fascia.
(Curb Type : <b>Standard</b> )						
Scaling (Percent Area)		15				
Bridge Rail				6	5	HSS retrofit rail installed flush to curb face, S1,2 steel posts. 5 bolts missing on NE vertical bar rail to posts. 5 posts at SW have tops chipped from wide load; 1 post on E rail has minor crack at top rail; 2 posts deteriorated at base. Minor rail damage along E rail, 2nd post from N.
(Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )						
Bridge Rail Posts				6	6	
(Type : <b>GALVANIZED POST STEEL; GALVANIZED POST STEEL</b> )						
Bridge Rail/Posts Coating				7	7	
(Type : <b>GALVANIZED</b> )						
Sidewalk				X	X	
Girders				4	5	S3G4 has been patched; jnts appear to be water tight.
Diaphragms/Cross Frame				7	7	Minute hairline cracking at bottom of CIP trees.
Bearings				7	7	10% rust @ masonry interface.
Temperature (deg. C)		-16				
(Expansion Type : <b>STEEL SLIDING PLATES WITH BRONZE PLATE IN BETWEEN</b> )						
(Fixed Type : <b>STEEL SLIDING PLATES WITH BRONZE PLATE IN BETWEEN</b> )						
Coating Adequate (Y/N)		No				
Functioning (Y/N)		Yes				
Deck Underside				6	6	Applicable to lowest corner, NE. All other areas have little cracking, salt staining. Now has overlay. Rust stains at SW corner.
Stains (Percent Area)		10				

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : CT, 3 Spans, Lengths(m): 12.8-18.3-12.8, A-Ident Number: )				
<b>Span Alignment Problems</b>				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
<b>Superstructure General Rating</b>		<b>4</b>	<b>5</b>	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
<b>Abutments</b>				
Bearing Seats		7	5	Horiz. cracks in N abut. Scaling at the E end of N abut.
Backwalls/Breastwalls		6	6	A2 stained from leaking joint.
Wingwalls		7	7	
Piles		N	N	Buried.
Paint/Coating		7	X	
Abutment Stability		8	8	
Scour/Erosion		7	7	
<b>Piers/Bents</b>				
(Type : <b>PIER-SOLID</b> )				
Bearing Seats/Caps		8	8	
(Type : <b>CONCRETE</b> )				
Pier Shaft/Piles		8	8	
Nose Plate		7	7	Surface corrosion.
Paint/Coating		7	6	
(Colour Description : )				
(Colour Code : )				
Pier Stability		7	7	
Scour		8	N	Snow/ice covered.
Debris (Y/N)	No			
<b>Substructure General Rating</b>		<b>7</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel</b>				
(U/S Direction : <b>W</b> )				
(D/S Direction : <b>E</b> )				
Alignment		8	8	
Bank Stability		8	N	Snow covered.
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	Yes			
Slope Protection		7	N	A1 has bagged concrete on lower hslp; A2 Class 1 & 2 riprap on hslp.
(Type : <b>CONCRETE; RIP RAP</b> )				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	

Structure Usage				
		Last	Now	Explanation of Condition
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	Based on slope protection rating from 26Jan2010.

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	2013	Patch curb spalls.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Set HMs to std.					
OTHER ACTION	2013	Replace transition section of guardrail at NE.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>61.1/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>56.5/54.8</b>	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	29-Feb-2016		Previous Inspection Date	26-Jan-2010			
Inspection Cycle (Default) (months)	39						
Comment							