Bridge Inspection

Bridge File Number	09399 -1 Bridge	Form Type	SG
Year Built/Year Supstr	1995/1995	Lot No.	2
		Inspector Name	Garry Roberts
Bridge or Town Name	MORLEY	Inspector Class	BR CLS A
Located Over	OLD FORT CREEK, 2.13.55, WATERCRS-ST	Assistant Name	
		Assistant Class	
Located On	1A:04 C1 5.512	Inspection Date	19-Sep-2012
Water Body Cl./Year		Data Entry By	Lauren Korte
Navigabil. Cl./Year		Data Entry Date	03-Oct-2012
Legal Land Location	SE SEC 21 TWP 25 RGE 8 W5M	Reviewer Name	Joel Wozney
Longitude, Latitude	-115:03:02, 51:08:31	Review Date	21-Sep-2012
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	Tim Davies
Contract Main. Area	CMA28	Dept. Review Date	11-Oct-2012
Clear Roadway/Skew	10 / -45 deg. (LHF)	Follow-Up By	
AADT/Year	1,710 / 2011 (A)		
Road Classification	RAU-209-110		
Detour Length (km)	5		

Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	---> On Critical Spans --->Critical Member
Design Loading:		CS750					---> 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)	No
Remarks	Not required.
Other Sign Types	

Utilities (Located at)

Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	South ditch.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Curve and grade @ East.
Vertical Alignment		6	6	
Roadway Width (m)	7.300			
Approach Bump		6	6	
Guardrail (Y/N)	Yes			Missing 2 splice bolts at SE. Improper transition bolts at NE.
Guardrail		4	4	7.6 type VI @ NW @ entrance.
Length (m)	45.600			Not thriebeam.
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN			
Drainage		7	4	Erosion at NW approach posts and starting to undermine drain trough.
Approach Road General Rating		**5**	**5**	

Superstructure

Bridge Component	Last	Now	Explanation of Condition
(Primary Span : **FR, 3 Spans, Lengths(m): 17-22-17, A-Ident Number: A1248-01**)			
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	7	7	Isolated cracking.
(Material Type : **MIX TYPE 2 ACP**)			
(Thickness(mm) : **80**)			
Deck Top	N	N	Paved over.
Deck Rideability	7	7	
Deck Joints	6	3	Finger plates sit up 10mm @ West. A1 has 2 cracked finger weld in WBL and 3 in EBL. A2 has 2 cracked finger welds at WBL. Approx. 0.5m2 paving lip spalls at A1 and 0.2m2 at A2.
Temperature (deg. C) 23			
(Expansion Type : **FINGER PLATES**)			
(Fixed Type :)			

Gap Size (mm)	Gap Location
95	West abutment
85	East abutment

Deck Drainage	6	6	
Drains Clogged (Y/N) No			
Curbs/Median	7	6	Typical transverse curb cracks. Efflorescence @ cracks underneath curbs.
(Curb Type : **Standard**)			
Scaling (Percent Area) 1			
Bridge Rail	7	7	Missing isolated splice bolts but splices are welded so not required.
(Type : **GALVANIZED STEEL BRIDGE TUBE**)			
Bridge Rail Posts	8	8	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)			
Bridge Rail/Posts Coating	7	7	
(Type : **GALVANIZED**)			
Sidewalk	X	X	
Girder/Beam			
Cover Plate	X	X	
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 : **FR, 3 Spans, Lengths(m): 17-22-17, A-Ident Number: A1248-01**)				
Paint Condition		X	X	Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		8	8	Bottom of pier has rocker bearing.
Temperature (deg. C)	23			
(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		7	7	Efflorescene @ deck exterior @ transverse cracks.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			South side of bottom flange @ West pier has minor misalignment of 50 mm as built.
Horizontal (Y/N)	Yes			
Superstructure General Rating		**7**	**7**	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Abutments				
Bearing Seats/Caps		8	8	
(Type : **CONCRETE**)				
Backwalls/Breastwalls		6	6	Minor stains and scaling @ East abut from previous leaking backwall trough.
Wingwalls		7	7	Settlement cracks.
Piles		N	N	Buried.
Paint/Coating		5	5	Graffiti at both abutments.
Abutment Stability		8	8	
Scour/Erosion		8	8	
Piers/Bents				
(Type : **PIER-TRESTLE**)				
Bearing Seats/Caps		8	8	
(Type :)				
(Total Number of Bearing Piles : **4:4**)				Concrete pier footing.
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	Weathering steel.
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		8	7	
Debris (Y/N)	No			

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Substructure General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **N**)				Bend U/S but confined by high banks.
(D/S Direction : **S**)				
Alignment		6	6	
Bank Stability		8	7	
HWM (m below Top of Curb)				No visible HWM.
Drift (Y/N)	No			
Slope Protection		8	7	At pier footings. Remainder is natural shale.
(Type : **CONCRETE; CONCRETE**)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**6**	**6**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL	2012	Replace 2 rail transition bolts @ NE 2 splice bolts @ SE.				
GALVANIZE/PAINT BRIDGE RAIL						
RETROFIT BRIDGE RAIL						
SEAL CURBS						
PATCH DECK	2012	Patch paving lip spalls 0.5 m2 @ A1 0.2m2 @ A2.				
SEAL DECK						
OVERLAY DECK						
REPAIR/REPLACE DECK JOINTS	2012	Repair 4 broken welds @ A1, 2 @ A2.				
RESET/ PAINT BEARINGS						
REPAINT SUPERSTRUCTURE						
STRAIGHTEN/REPLACE MEMBERS						
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION	2012	0.3m3 ACP at NW corner.				
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**83.3/83.3**	**Sufficiency Rating (Last/Now) (%)**	**72.9/71.9**	Est. Repl. Yr	2061	Maint. Reqd. (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	19-Jun-2014	Previous Inspection Date	07-Dec-2010		
Inspection Cycle (Default) (months)	21				
Comment					