

Bridge Inspection							
Bridge File Number	73407 -1 Bridge			Form Type	SG		
Year Built/Year Supstr	1960/1960			Lot No.	2		
Bridge or Town Name	MEANDER RIVE			Inspector Name	Brian Pientsch		
Located Over	HAY RIVER, 9, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	35:18 C1 13.100			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	18-Oct-2012		
Legal Land Location	NW SEC 11 TWP 117 RGE 22 W5M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-117:38:11, 59:08:55			Data Entry Date	22-Jan-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Eric Carcoux		
Contract Main. Area	CMA01			Review Date	17-Jan-2013		
Clear Roadway/Skew	9.1 /			Dept. Reviewer Name	David Morrison		
AADT/Year	370 / 2011 (A)			Dept. Review Date	18-Mar-2013		
Road Classification	RAU-210-110			Follow-Up By			
Detour Length (km)	999						
Allowable Load (t):	Single	CS1 42 GIRDER	Semi	CS2 53 GIRDER	Train	CS3 62	----> 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	NOT REQUIRED							
Hazard Marker At Bridge (Y/N)	Yes							
Remarks	Mounted on approach rail post.							
Other Sign Types	Hay River @ NW and SE corners. Curves sign at each end							

Utilities (Located at)			
Utility Attachments			
Telephone	Fibre east R/W		Gas
Power			Municipal
Others	Stream Gauging Station NE.		Problem (Y/N) No
Remarks	At N.E. corner (Environment Canada)82A329		

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Curve both ways.
Vertical Alignment		6	6	No passing - grade rising to north.
Roadway Width (m)	9.500			
Approach Bump		3	7	
Guardrail (Y/N)	Yes			
Guardrail		N	3	Insufficient number of posts and spacing. 3 posts broken at the NW end.
Length (m)	76.000			
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN ENDS			
Drainage		N	6	
Approach Road General Rating		6	6	

Superstructure								
Bridge Component		Last	Now	Explanation of Condition				
(Primary Span : RG, 3 Spans, Lengths(m): 45.1-49.4-45.1, A-Ident Number: A0344-01)								
Special Features								
Special Feature			7	DYWDAG strengthening				
(Type : EXT LONGIT POST TENS)								
Special Feature			X					
(Type :)								
Wearing Surface/Deck Top Detail Ratings								
	N (%)	1 (%)	2 (%)	3 (%)				
Last	20			1				
Now								
Wearing Surface			3	8				
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)								
(Thickness(mm) : 50)								
Deck Top			N	N				
Deck Rideability			7	7				
Deck Joints			6	6	Honel 135.00 strip seal at both abuts.			
Temperature (deg. C)		0						
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))								
(Fixed Type :)								
Gap Size (mm)		Gap Location						
102		Abut. 1						
83		Abut. 2						
Deck Drainage			5	5				
Drains Clogged (Y/N)		No						
Curbs/Median			3	5				
(Curb Type : Standard)								
Scaling (Percent Area)		10						
Bridge Rail			N	4	E. rail horizontal misalignment - installation problem. 2 x post anchor nuts missing holes plugwelded, nuts not properly torqued down throughout, anchor bolts rusting. Parapets severely scaled.			
(Type : GALVANIZED STEEL NON-STANDARD RAIL)								
Bridge Rail Posts		3	4					
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)								
Bridge Rail/Posts Coating			N	5				
(Type : GALVANIZED)								
Sidewalk			X	X				
Girder/Beam								
Cover Plate			3	5	1 bolt in bottom flange splice in span 3, Girder 4 riveted in hole and cannot be removed - splice connection was reviewed by AECOM on 18-Sep-2012 and recommendation was to leave it as is.			
Flange			5	5				
Web			7	7				
Stiffeners			7	7				
Splice			3	5				
Weld			X	X				
Diaphragms/Cross Frame			4	5				

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RG, 3 Spans, Lengths(m): 45.1-49.4-45.1, A-Ident Number: A0344-01)				
Paint Condition		3	3	Bottom of outside flange rusting -photo. Bridgecoat overcoat peeling. Exterior bearings rusting.
(Colour Description : GREEN)				
(Colour Code : 14090)				
Touchup Required (Y/N)	Yes			
Bearings		4	4	N. Abut. bearings vertical girders bearing on backwall.
Temperature (deg. C)	0			
(Expansion Type :)				
(Fixed Type :)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Diagonal and transverse cracks with efflorescence at 3m-. O.C. in first bay.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		4	4	Concrete spalling
(Type : CONCRETE)				
Backwalls/Breastwalls		4	4	Concrete spalling at SW,NW,NE corners near deck.
Wingwalls		3	4	Concrete scaling.
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		4	4	Girders bearing on backwalls @ N abut. in summer 8mm gap @ -7.
Scour/Erosion		5	5	
Piers/Bents				
(Type : PIER-SOLID)				Light scaling.
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		6	6	
Paint/Coating		4	4	Rusting
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		7	7	
Debris (Y/N)	Yes			North pier, tree debris accumulating on nose.
Substructure General Rating		4	4	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		6	6	
HWM (m below Top of Curb)				Hwm not visible.
Drift (Y/N)	Yes			Large size
Slope Protection		4	4	Some riprap and sandbags. Toe of N. headslope eroding. 1.5m high.
(Type :)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS	2013	Both -Bridge scheduled for 2022 replacement.					
REPAINT SUPERSTRUCTURE	2013	Bridge scheduled for 2022 replacement.					
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION	2013	Repair 3 guardrail posts split at NW approach.					
OTHER ACTION	2013	Repair concrete spalls on abutment seat, backwall and wingwalls.-2022 bridge replacement					
OTHER ACTION	2022	Schedule for replacement 2022.					
Structural Condition Rating (Last/Now) (%)	38.9/44.4	Sufficiency Rating (Last/Now) (%)	44.0/47.0	Est. Repl. Yr	2022	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Monitor bearings, monitor erosion at toe of N headslope. Monitor corrosion of girders. Non critical maintenance items being deferred by AT due to bridge being scheduled for replacement in 10 years.		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	Brian Pientsch		Previous Assistant's Name				
Next Inspection Date	18-Jul-2014		Previous Inspection Date	13-Jan-2012			
Inspection Cycle (Default) (months)	21						
Comment							