Bridge Culvert Inspection

Bridge File Number	86145 -2 Bridge Culvert	Form Type	CULM
Year Built	2008	Lot No.	4
Bridge or Town Name		Inspector Name	Brian Pientsch
Located Over	WATERCOURSE, WATERCRS-NI	Inspector Class	BR CLS A
Located On	695:04 C1 9.293	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	19-Mar-2013
Legal Land Location	SE SEC 30 TWP 101 RGE 23 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:45:17, 57:47:18	Data Entry Date	09-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA01	Review Date	03-Apr-2013
Clear Roadway/Skew	9 / 12 deg. (RHF)	Dept. Reviewer Name	
AADT/Year	100 / 2012 (A)	Dept. Review Date	
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	999		

Bridge Culvert Information

Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	28.8	125X26	2.8	ROUND
2	MAIN	-	2200	MP	28.8	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Buried South ditch.	Gas	
Power	4 wire OHP both edges of row	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Bump over culvert. Signed both directions.
Vertical Alignment		7	7	
Roadway Width (m)	9.000			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) :)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
Direction		N		West pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		N	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	19-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	No rise measurements due to ice on floor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		8	8	
Measured Span (mm)	2198			CL
Measured At Ring No.				Deflection inward.
Deflection (mm)	2			
Percent Deflection				
Floor		N	N	ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)				
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		7	7	Superficial rust lower half
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			8	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection			N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion			N	
Beavers (Y/N)	No			
Downstream End General Rating			**8**	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Bevel End			8	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection			N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion			N	
Beavers (Y/N)	No			
Upstream End General Rating			**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	19-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	No rise measurement -floor ice covered
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		8	8	
Measured Span (mm)	2155			CL Deflection inward
Measured At Ring No.				
Deflection (mm)	45			
Percent Deflection				
Floor		N	N	Ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)				
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		7	7	Superficial rust lower half.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		N	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		9	9	
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.5			Grass on fence across u/s row.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**9**	**9**	

Maintenance Recommendations						
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**84.8/84.8**	Est. Repl. Yr	2053	Maint. Reqd. (Y/N)	No

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	Brian Pientsch	Previous Assistant's Name			
Next Inspection Date	19-Jun-2016	Previous Inspection Date	04-Dec-2012		
Inspection Cycle (Default) (months)	39				
Comment					