Bridge Culvert Inspection

Bridge File Number	13779 -2 Bridge Culvert	Form Type	CULM
Year Built	2012	Lot No.	4
Bridge or Town Name	GRIMSHAW	Inspector Name	Brian Pientsch
Located Over	2ND ORDER TRIBUTARY TO STRONG CREEK, 8.10.59.1.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	2A:36 C1 8.120	Assistant Class	
Water Body Cl./Year		Inspection Date	31-Jul-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NE SEC 16 TWP 83 RGE 23 W5M	Data Entry Date	11-Sep-2012
Longitude, Latitude	-117:33:38, 56:12:06	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	05-Sep-2012
Contract Main. Area	CMA04	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	11.3 / -12 deg. (LHF)	Dept. Review Date	26-Sep-2012
AADT/Year	1,450 / 2011 (A)	Follow-Up By	
Road Classification	RAU-210-110		
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	39	125X26	2.8	ROUND
2	MAIN	-	2400	MP	39	125X26	2.8	ROUND
Special Features		BARREL DEICING PIPE						
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Temporary telephone S ditch	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment			8	Intersection 150m East.
Vertical Alignment			9	
Roadway Width (m)	11.300			
Embankment			9	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **0.9**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating			**8**	

Upstream End

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

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type:**)				
Cutoff Wall			X	
Bevel End			9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection			9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion			9	
Beavers (Y/N)	No			
Upstream End General Rating			**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Barrel Last Accessible Date	05-Jul-2012			
Special Features				
Special Feature			X	
(Type : **BARREL DEICING PIPE**)				
Special Feature				
(Type :)				
Roof			9	
Measured Rise (mm)	2416			@cl Deflection is upward
Measured At Ring No.				
Sag (mm)	16			
Percent Sag	0			
Sidewall			9	
Measured Span (mm)	2380			@ cl Deflection in inward
Measured At Ring No.				
Deflection (mm)	20			
Percent Deflection	0			
Floor			9	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams			9	
Separation (mm)				
Longitudinal Seams			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			9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			
Fish Passage Adequacy			9	
Baffle			X	
(Type :)				
Waterway Adequacy			9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Barrel Last Accessible Date	05-Jul-2012			
Special Features				
Special Feature			X	
(Type : **BARREL DEICING PIPE**)				
Special Feature				
(Type :)				
Roof			9	@cl Deflection is upward
Measured Rise (mm)	2415			
Measured At Ring No.				
Sag (mm)	15			
Percent Sag				
Sidewall			9	@cl Deflection in inward
Measured Span (mm)	2359			
Measured At Ring No.				
Deflection (mm)	41			
Percent Deflection				
Floor			9	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams			8	Slight horizontal alignment deflection at N. coupler to enable coupler to fit square to barrel.
Separation (mm)				
Longitudinal Seams			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			9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			
Fish Passage Adequacy			9	
Baffle			X	
(Type :)				
Waterway Adequacy			9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			**9**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type:**)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection			9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion			9	
Beavers (Y/N)	No			
Downstream End General Rating			**9**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment			9	
Bank Stability			9	
HWM (m below Top of Culvert)				No HWM visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating			**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) (%)	**/100.0**	**Sufficiency Rating (Last/Now) (%)**	**/100.0**	Est. Repl. Yr	2062	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		Previous Assistant's Name			
Next Inspection Date	30-Apr-2014	Previous Inspection Date			
Inspection Cycle (Default) (months)	21				
Comment					