Bridge Culvert Inspection

Bridge File Number	70047 -2 Bridge Culvert	Form Type	CUL1
Year Built	2011	Lot No.	4
Bridge or Town Name	CAYLEY	Inspector Name	Tim Davies
Located Over	TRIBUTARY TO MOSQUITO CREEK, 2.12.12.12.6, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	2:10 L1 32.093;2:10 R1 32.143	Assistant Class	
Water Body Cl./Year		Inspection Date	13-Dec-2011
Navigabil. Cl./Year		Data Entry By	Anne Roberts
Legal Land Location	SE SEC 7 TWP 17 RGE 28 W4M	Data Entry Date	31-Jan-2012
Longitude, Latitude	-113:49:41, 50:24:43	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	28-Jan-2012
Contract Main. Area	CMA27	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	22 / -45 deg. (LHF)	Dept. Review Date	06-Feb-2012
AADT/Year		Follow-Up By	
Road Classification	RFD-412.4-130		
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	112.3	125X26	3.5	ROUND
Special Features		STORM WATER DRAIN						
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ROW	Gas	Sour gas crossing 20m North
Power	Overhead and West ROW	Municipal	
Others	Fibre optics West and East ROW	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	9	Curve to South 250m Hill to South 300m
Vertical Alignment		6	9	
Roadway Width (m)	22.000			
Embankment		9	9	3:1 at West 5:1 to level at pipe at East
Sideslope (__:1)	4.0			
(Height of Cover(m) : **2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**9**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West end
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		9	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		9	8	
Beavers (Y/N)	No			
Upstream End General Rating		**9**	**8**	

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	13-Dec-2011			
Special Features				
Special Feature		9	9	At R4
(Type : **STORM WATER DRAIN**)				
Special Feature				
(Type :)				
Roof		8	8	Minor constructions dents
Measured Rise (mm)	2446			
Measured At Ring No.	5			Upward
Sag (mm)	46			
Percent Sag	2			
Sidewall		8	8	Minor construction dents
Measured Span (mm)	2368			
Measured At Ring No.	5			Inward
Deflection (mm)	32			
Percent Deflection	1			
Floor		9	9	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	9	
Separation (mm)	0			
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		9	9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (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**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**9**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		East End
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		9	9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		9	9	
Beavers (Y/N)	No			
Downstream End General Rating		**9**	**9**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	Channel curves 90 degrees North at West
Bank Stability		7	8	Channel not well defined at West
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(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 #
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) (%)	**100.0/88.9**	**Sufficiency Rating (Last/Now) (%)**	**97.9/91.3**	Est. Repl. Yr	2061	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	Jon Davies	Previous Assistant's Name	
Next Inspection Date	13-Sep-2013	Previous Inspection Date	18-Oct-2011
Inspection Cycle (Default) (months)	21		
Comment			