Bridge Culvert Inspection

Bridge File Number	83088 -1 Bridge Culvert	Form Type	CUL1
Year Built	2003	Lot No.	4
Bridge or Town Name	SYLVAN LAKE	Inspector Name	Owen Salava
Located Over	2ND ORDER TRIBUTARY TO SYLVAN CK, 3.83.1.3, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	20:02 C1 2.816	Assistant Class	
Water Body Cl./Year		Inspection Date	11-Jul-2012
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	SE SEC 33 TWP 38 RGE 1 W5M	Data Entry Date	20-Aug-2012
Longitude, Latitude	-114:04:25, 52:18:29	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	31-Jul-2012
Contract Main. Area	CMA19	Dept. Reviewer Name	Andrew Smikles
Clear Roadway/Skew	14.7 / 16 deg. (RHF)	Dept. Review Date	21-Aug-2012
AADT/Year	8,840 / 2011 (A)	Follow-Up By	
Road Classification	RAU-213.4-120		
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	1800	1200	PCB	32.5			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East R/W.	Gas	
Power	3 line OH East R/W.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Within town limits with intersection 50m South at Cuendet Industrial Way. Turning lanes both sides.
Vertical Alignment		9	9	
Roadway Width (m)	17.500			
Embankment		8	8	
Sideslope (__:1)	5.0			
(Height of Cover(m) : **0.4**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
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		8	8	Bevel was sawn leaving reinforcing exposed.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		N	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		N	8	
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): 1800, Rise (mm): 1200, Type: PCB**)				
Barrel Last Accessible Date	11-Jul-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	9	
Measured Rise (mm)	1200			
Measured At Ring No.	2			
Sag (mm)	0			
Percent Sag	0			
Sidewall		9	9	
Measured Span (mm)	1800			
Measured At Ring No.	2			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Covered with silt.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	2nd last seam from East tapered indicating negative camber.
Separation (mm)	40			
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		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1200, Type: PCB**)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel General Rating		**9**	**9**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	Bevel end sawn leaving reinforcement exposed.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		N	8	
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	6	Man made channel; entry 90 deg. turn from N & S ditches.
Bank Stability		9	9	
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		**9**	**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) (%)	**100.0/100.0**	**Sufficiency Rating (Last/Now) (%)**	**97.8/95.5**	Est. Repl. Yr	2075	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	Owen Salava	Previous Assistant's Name			
Next Inspection Date	11-Apr-2014	Previous Inspection Date	08-Dec-2010		
Inspection Cycle (Default) (months)	21				
Comment					