Bridge Culvert Inspection

Bridge File Number	75953 -1 Bridge Culvert	Form Type	CUL1
Year Built	1999	Lot No.	4
Bridge or Town Name	HILL SPRING	Inspector Name	Jason Rusu
Located Over	UID - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS A
Located On	505:02 C1 21.338	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Jun-2012
Legal Land Location	NE SEC 19 TWP 4 RGE 27 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-113:37:06, 49:19:11	Data Entry Date	25-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	10-Jul-2012
Clear Roadway/Skew	8 /	Dept. Reviewer Name	Tim Davies
AADT/Year	550 / 2011 (A)	Dept. Review Date	30-Jul-2012
Road Classification	RCU-208-110	Follow-Up By	
Detour Length (km)	8		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2440	2440	PCB	22			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North ROW	Gas	
Power	North ROW	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	ROAD ALLOWANCE 300M West.
Vertical Alignment		7	7	
Roadway Width (m)	8.500			
Embankment		7	7	
Sideslope (__:1)	10.0			
(Height of Cover(m) : **0.3**)				
Guardrail (Y/N)	Yes			Accident damage at North- minor.
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				SOUTH
End Treatment (Concrete, Steel, Others, None)	NONE			
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		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2440, Rise (mm): 2440, Type: PCB**)				
Barrel Last Accessible Date	09-Sep-2009			Irrigation canal running full.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	PR 8
Measured Rise (mm)	2440			
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		8	N	PR 8
Measured Span (mm)	2440			
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		7	N	PR 7
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	N	PR 8
Separation (mm)	10			
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)				
Corrosion By Water (Y/N)				
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): 2440, Rise (mm): 2440, Type: PCB**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**N**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				NORTH
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	

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) (%)	**88.9/55.6**	**Sufficiency Rating (Last/Now) (%)**	**81.4/66.4**	Est. Repl. Yr	2050	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	Garry Roberts	Previous Assistant's Name			
Next Inspection Date	10-Sep-2015	Previous Inspection Date	09-Sep-2009		
Inspection Cycle (Default) (months)	39				
Comment					