Bridge Culvert Inspection

Bridge File Number	70830 -1 Bridge Culvert	Form Type	CUL1
Year Built	1956	Lot No.	4
Bridge or Town Name	CHAMPION	Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO LONG COULEE CREEK, 2.12.12.9.3, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	529:04 C1 6.770	Assistant Class	
Water Body Cl./Year		Inspection Date	06-Mar-2010
Navigabil. Cl./Year		Data Entry By	Kelsey Roberts
Legal Land Location	SW SEC 14 TWP 15 RGE 23 W4M	Data Entry Date	25-Mar-2010
Longitude, Latitude	-113:04:14, 50:15:07	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	12-Mar-2010
Contract Main. Area	CMA25	Dept. Reviewer Name	Lorenz Bohnert
Clear Roadway/Skew	8.8 / 6 deg. (RHF)	Dept. Review Date	26-Mar-2010
AADT/Year	310 / 2008 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2100	2270	SPE	38.4	152X51	3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	pedistal 100m W. S.side	Gas	
Power	north ditch - 2 line	Municipal	
Others		Problem (Y/N)	No
Remarks	Telephone running thru culvert from south side to new residence NE of culvert.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	hills both directions-poor sight distance
Vertical Alignment		5	5	
Roadway Width (m)	8.800			
Embankment		7	6	
Sideslope (__:1)	2.0			
(Height of Cover (m) : **4**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH
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		5	5	bevel is hanging 400mm
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		5	4	Undermined both sides 0.4m
(Type : **RIP RAP**)				
(Avg. Rock Size (mm) : **250**)				
Scour/Erosion		5	4	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**4**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2100, Rise (mm): 2270, Type: SPE**)				
Barrel Last Accessible Date	06-Mar-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	Labelled as Ring 10
Measured Rise (mm)	2145			
Measured At Ring No.	7			
Sag (mm)	125			
Percent Sag	6			
Sidewall		7	7	inward
Measured Span (mm)	2096			Ring labelled as Ring "10"
Measured At Ring No.	7			
Deflection (mm)	4			
Percent Deflection	0			
Floor		N	5	Corrosion by soil and water.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	
Separation (mm)	0			
Longitudinal Seams		6	6	ring 8 has 4-5mm.gap along seam.-some visible loose nuts.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): 2100, Rise (mm): 2270, Type: SPE**)				
Fish Passage Adequacy		5	4	Bevel perched 300mm
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**5**	**5**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		SOUTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	150			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	1000			
Scour Protection		5	5	
(Type : **RIP RAP**)				
(Avg. Rock Size (mm) : **250**)				
Scour/Erosion		5	5	Scour hole at end of bevel. Appears to be armoured 6m x 6m est 1m deep
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**5**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**5**	**5**	

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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**63.2/55.0**	Est. Repl. Yr	2018	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	Tim Davies	Previous Assistant's Name			
Next Inspection Date	06-Jun-2013	Previous Inspection Date	23-Feb-2007		
Inspection Cycle (Default) (months)	39				
Comment					