Bridge Culvert Inspection

Bridge File Number	13194 -1 Bridge Culvert	Form Type	CUL1
Year Built	1998	Lot No.	4
Bridge or Town Name	BEISEKER	Inspector Name	Garry Roberts
Located Over	CROSSFIELD CREEK, 3.33.20, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	72:10 C1 12.091	Assistant Class	
Water Body Cl./Year		Inspection Date	15-Jun-2012
Navigabil. Cl./Year		Data Entry By	Kelsey Roberts
Legal Land Location	SE SEC 14 TWP 28 RGE 28 W4M	Data Entry Date	10-Jul-2012
Longitude, Latitude	-113:49:41, 51:23:13	Reviewer Name	Joel Wozney
Road Authority	Alberta Transportation (AIT)	Review Date	26-Jun-2012
Contract Main. Area	CMA29	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	11.2 / 10 deg. (RHF)	Dept. Review Date	12-Jul-2012
AADT/Year	1,930 / 2011 (A)	Follow-Up By	
Road Classification	RAU-210-110		
Detour Length (km)	7		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	6470	SP	64.6	152X51	5.0,5.0,5.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North Row	Gas	
Power	South row and crosses 100m west	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	INTERSECTION OF SH 791 200 m WEST.
Vertical Alignment		6	6	HILL TO EAST & WEST Merge lanes over culvert
Roadway Width (m)	11.200			
Embankment		6	6	4:1 TO 3:1 @ BOTTOM
Sideslope (__:1)	3.0			
(Height of Cover(m) : **4.5**)				
Guardrail (Y/N)	Yes			2 split posts at South. 1 broken post with 2 missing bolts at North.
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		NORTH
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	7	Isolated transverse cracks
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		N	N	Buried
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1500			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **800**)				
Scour/Erosion		8	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): , Rise (mm): 6470, Type: SP**)				
Barrel Last Accessible Date	04-Oct-2010			Water too deep to enter, viewed from both ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	No visible distortion TOO LARGE TO MEASURE P.R. 7
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	N	P.R. 7
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	1100mm deep water
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	N	P.R. 7
Separation (mm)	0			
Longitudinal Seams		7	N	P.R. 7
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			1N stagger
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	N	P.R. 7
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 6470, Type: SP**)				
Ponding (Y/N)	Yes			1.0m water
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		**7**	**N**	P.R. 7

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		South
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	Isolated transverse cracks
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Buried
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1500			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **800**)				
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	45 DEG. BEND @ D/S. 20m
Bank Stability		7	7	
HWM (m below Top of Culvert)				No visible HWM
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		**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) (%)	**77.8/55.6**	**Sufficiency Rating (Last/Now) (%)**	**75.6/64.9**	Est. Repl. Yr	2048	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	15-Mar-2014	Previous Inspection Date	04-Oct-2010		
Inspection Cycle (Default) (months)	21				
Comment					