

Bridge Culvert Inspection			
Bridge File Number	01094 -1 Bridge Culvert	Form Type	CUL1
Year Built	1959	Lot No.	1
Bridge or Town Name	BALZAC	Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO WEST NOSE CREEK, 2.13.32.1.3, WATERCRS-ST	Inspector Class	BR CLS A
Located On	772:02 C1 0.324	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	26-Jul-2012
Legal Land Location	SW SEC 12 TWP 26 RGE 2 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:09:52, 51:12:02	Data Entry Date	02-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA29	Review Date	07-Aug-2012
Clear Roadway/Skew	8.6 / 30 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	1,430 / 2011 (A)	Dept. Review Date	06-Sep-2012
Road Classification	RLU-209-110	Follow-Up By	
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	2055	1533	RPP	29	152X51		PIPE ARCH
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ditch.	Gas	
Power	West ditch - 40 m, 1 - wire.	Municipal	Waterline 100 m South.
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	6	Intersection 100m South.
Vertical Alignment		7	7	
Roadway Width (m)	8.600			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.3)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West.
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		7	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Upstream End General Rating		7	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2055, Rise (mm): 1533, Type: RPP)				
Barrel Last Accessible Date	26-Jul-2012			
Special Features				
Special Feature		6	4	1 strut has fallen over. Several others are leaning. Struts are not helping cracked seams.
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		5	6	
Measured Rise (mm)	1500			
Measured At Ring No.	6			
Sag (mm)	33			
Percent Sag	2			
Sidewall		2	2	Cracked seams.
Measured Span (mm)	2180			
Measured At Ring No.	6			
Deflection (mm)	125			
Percent Deflection	6			
Floor		N	N	Silt covered to 0.4m deep. Only U/S end of floor is visible.
Bulge (mm)	200			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		2	2	
Total No. of Cracked Rings	5			
Total No. of Rings with Two Cracked Seams	0			Ring 3- North s/w. Cracked seams at R 2, 3, 4, 7, 9,
Min. Remaining Steel Between Cracks (mm)	25			Stagger in roof seam. Not in sidewalls.
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	Rust and alkali at bolts. South & West.
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): 2055, Rise (mm): 1533, Type: RPP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Silt to 0.4m.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		3	2	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	5	Minor damage to North side.
Heaving (mm)	50			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		4	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	4	Minor scour.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	Low wide banks.
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	2014	Replace Pipe.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/22.2	Sufficiency Rating (Last/Now) (%)	51.7/45.4	Est. Repl. Yr	2014	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	2 Notifications sent to at Tim Davies July 27/12. Inspect on 1/2 cycle until repaired or replaced.		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	26-Oct-2015		Previous Inspection Date	02-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							