

Bridge Culvert Inspection				
Bridge File Number	77057 -1 Bridge Culvert		Form Type	CUL1
Year Built	1969		Lot No.	1
Bridge or Town Name	BEAVERLODGE		Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO BEAVERLODGE RIVER, 8.10.58.18.8.1.5, WATERCRS-ST		Inspector Class	BR CLS B
Located On	722:02 C1 30.775		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	17-Jan-2013
Legal Land Location	NW SEC 26 TWP 71 RGE 10 W6M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-119:26:09, 55:10:53		Data Entry Date	02-Feb-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05		Review Date	23-Jan-2013
Clear Roadway/Skew	8.7 /		Dept. Reviewer Name	David Morrison
AADT/Year	960 / 2011 (A)		Dept. Review Date	21-Mar-2013
Road Classification	RCU-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	1829	1118	FP	17.1	68X13	3.5	ARCH
Special Features	VERT STEEL STRUTS							
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power	1 wire o/h West r/w	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Passing both directions.
Vertical Alignment		8	8	
Roadway Width (m)	8.700			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	8	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				Bevel end is snow covered.(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	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	N	Snow covered
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		7	7	GR carried over from 14-May-2010
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1829, Rise (mm): 1118, Type: FP)				
Barrel Last Accessible Date	25-May-2004			3m into pipe measured 1940x930mm-May 25, 2004
Special Features				
Special Feature		7	N	
(Type : VERT STEEL STRUTS)				
Special Feature				
(Type :)				
Roof		N	N	Roof is pushed down 200mm on east end 6.1% defl. May 25, 2004
Measured Rise (mm)				Could not access pipe due to snow cover.
Measured At Ring No.				
Sag (mm)	188			
Percent Sag	17			
Sidewall		N	N	(span x rise) Due to water in pipe cannot determine if floor has buldge location. 16.8% sag, but no reverse-curvature, buldge may affect measurement.- May 25, 2004
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	111			
Percent Deflection	6			
Floor		N	N	Water too deep.
Bulge (mm)	50			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	3.6m in from east end seperation with infiltration. May 25, 2004
Separation (mm)	80			
Longitudinal Seams		6	N	Rivettted seams. May 25, 2004
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		4	N	Pitting rust on floor of pipe.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
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): 1829, Rise (mm): 1118, Type: FP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	N	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	GR CARRIED OVER -25-May-2004
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				(EAST)
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	N	500mm silt covers bevel end.-14-May-2010 Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	N	Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	Snow covered
Beavers (Y/N)	No			
Downstream End General Rating		7	7	GR carried over from 14-May-2010
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	W. ditch runs into culvert 90 degrees.
Bank Stability		8	8	
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable
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 #	Structural Condition Rating (Last/Now) (%)	Sufficiency Rating (Last/Now) (%)	55.8/62.1	Est. Repl. Yr	2014	Maint. Req. (Y/N)	Yes
SHOTCRETE REPAIRS													
PLACE ADDITIONAL RIP RAP													
REMOVE DRIFT ACCUMULATION													
INSTALL CONCRETE/STEEL LINING													
INSTALL STRUTS													
INSTALL CONCRETE COLLAR/CUTOFF													
REPAIR SEAMS													
OTHER ACTION	2013	Level 2 Inspection											
OTHER ACTION													
OTHER ACTION													
OTHER ACTION													
Special Comments for Next Inspection	Monitor shape of barrel and circumferential seams. Pipe has been inaccessible for 3 inspections. Recommend a Level 2 inspection.												
Maintenance Reviewed By	Date												
Proposed Long-Term Strategy	Estimated Total 0												
On 3-Year Program (Y/N)													
Proposed Action													
Previous Inspector's Name	Russel Vanderschaaf	Previous Assistant's Name											
Next Inspection Date	17-Oct-2014	Previous Inspection Date											
Inspection Cycle (Modified) (months)	21	14-May-2010											
Comment													

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	2013	Level 2 Inspection				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	55.8/62.1	Est. Repl. Yr	2014	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection	Monitor shape of barrel and circumferential seams. Pipe has been inaccessible for 3 inspections. Recommend a Level 2 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	Russel Vanderschaaf		Previous Assistant's Name			
Next Inspection Date	17-Oct-2014		Previous Inspection Date	14-May-2010		
Inspection Cycle (Modified) (months)	21					
Comment						