

Bridge Culvert Inspection			
Bridge File Number	09577 -1 Bridge Culvert	Form Type	CULM
Year Built	1950	Lot No.	4
Bridge or Town Name		Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO PATS CREEK, 8.10.55.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	688:02 C1 0.318	Assistant Name	Lisbeth Medina
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	04-Apr-2011
Legal Land Location	SW SEC 23 TWP 83 RGE 21 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:12:14, 56:12:38	Data Entry Date	18-May-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA04	Review Date	17-May-2011
Clear Roadway/Skew	8.2 / 17 deg. (RHF)	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,110 / 2010 (A)	Dept. Review Date	14-Nov-2011
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	16		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1219	MP	50	68X13	2.8	ROUND
2	MAIN	-	1230	MP	50	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Fibre optic BC (N side of 688) (BC 75mE)	Gas	
		Municipal	
		Problem (Y/N)	No
Power	3 wire OH u/s ends of pipe.		
Others	Telus buried cable		
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Curve approx. 300m west of culverts.
Vertical Alignment		7	7	
Roadway Width (m)	8.200			
Embankment		8	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : 4.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		East pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		4	4	Seam separation (photo 1) Dent on roof of entrance to pipe.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1219, Type: MP)				
Barrel Last Accessible Date				Barrel not accessible due to deep water. Water/ice 0.6m to crown.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1219, Type: MP)				
Coating		5	5	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			Minor
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	Minor drift, odd small stick. Viewed from ends.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		N	N	Culvert inaccessible.

Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Span Type: Primary Span)					
Direction		N			
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		
Heaving (mm)	0				
Invert Above/Below Stream Bed					
Above/Below (mm)	0				
Scour Protection		7	6		
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 200)					
Scour/Erosion		7	6		
Beavers (Y/N)	No				
Downstream End General Rating		5	5		

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		Pipe 2 is West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
Upstream End General Rating		7	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1230, Type: MP)				
Barrel Last Accessible Date	30-May-2007			Culvert couldn't be inspected-water/ice 0.6m to culvert crown.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	N	Barrel accessible up to blockage in pipe.-30-May-2007
Measured Rise (mm)	1115			
Measured At Ring No.				
Sag (mm)	104			
Percent Sag	8			
Sidewall		3	N	
Measured Span (mm)	1400			
Measured At Ring No.				
Deflection (mm)	181			
Percent Deflection	15			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		4	N	Two circumferential seams with up to 125 mm gap.-30-May-2007
Separation (mm)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1230, Type: MP)				
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		5	5	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		4	5	Blockage inside pipe. No blockage evident through ends.
Baffle		X	X	
(Type :)				
Waterway Adequacy		4	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	GR carried fwd.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		
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	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		6	6	
HWM (m below Top of Culvert)	0.5			
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		6	6	

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) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	32.9/42.1	Est. Repl. Yr	2013	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor waterway adequacy.		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	Brian Pientsch		Previous Assistant's Name	Jordan Evans			
Next Inspection Date	04-Jul-2014		Previous Inspection Date	30-May-2007			
Inspection Cycle (Default) (months)	39						
Comment							