

Bridge Culvert Inspection				
Bridge File Number	71809 -1 Bridge Culvert		Form Type	CUL1
Year Built	1955		Lot No.	4
Bridge or Town Name	RICINUS		Inspector Name	Owen Salava
Located Over	ALFORD CREEK, 6.159.12, WATERCRS-ST		Inspector Class	BR CLS A
Located On	591:02 C1 24.706		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	24-Oct-2011
Legal Land Location	SW SEC 16 TWP 36 RGE 7 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-114:56:37, 52:05:10		Data Entry Date	28-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA18		Review Date	14-Nov-2011
Clear Roadway/Skew	7.9 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	490 / 2010 (A)		Dept. Review Date	02-Dec-2011
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	50			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2489	1752	RPP	20.1	152X51	2.8	PIPE ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	In r/w to South.	Gas	
Power	2 wires 15m North of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Typical approaches both sides of culvert.
Vertical Alignment	9	9	
Roadway Width (m)	7.900		
Embankment	6	9	End of culvert at crown 1.5m from shoulder of road on North end U/S. Slight settlement over pipe. 2 transverse cracks over pipe, previously sealed.
Sideslope (:1)	2.0		
(Height of Cover(m) : 0.6)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	8	8	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		
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	Minor damage to bevel end at roof.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1752, Type: RPP)				
Barrel Last Accessible Date	24-Oct-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	2.5%
Measured Rise (mm)	1708			
Measured At Ring No.	3			
Sag (mm)	44			
Percent Sag	2			
Sidewall		5	5	
Measured Span (mm)	2370			
Measured At Ring No.	3			
Deflection (mm)	119			
Percent Deflection	5			
Floor		N	5	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	5	2 bolts have loose nuts.
Separation (mm)				
Longitudinal Seams		5	5	1N Stagger
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Superficial corrosion lower 1/3.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			Est 200mm neg camber.
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1752, Type: RPP)				
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		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
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	ABOVE			
Above/Below (mm)	300			
Scour Protection		N	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
Downstream End General Rating		4	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		5	5	No erosion to channel banks.
HWM (m below Top of Culvert)				(HWM to top of pipe from recent flood. June 28/05). No visible HWM.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	58.3/59.3	Est. Repl. Yr	2023	Maint. Req. (Y/N)	No
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2004.12.27 Culvert should be good with minor maintenance until 2015.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	24-Jan-2015		Previous Inspection Date	06-Dec-2010			
Inspection Cycle (Default) (months)	39						
Comment							