

Bridge Culvert Inspection			
Bridge File Number	76455 -1 Bridge Culvert	Form Type	CULM
Year Built	1966	Lot No.	2
Bridge or Town Name	EDSON	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO MCLEOD RIVER, 8.11.107.32, WATERCRS-ST	Inspector Class	BR CLS B
Located On	47:06 C1 51.209	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	31-Oct-2012
Legal Land Location	NW SEC 21 TWP 52 RGE 18 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:36:11, 53:30:27	Data Entry Date	14-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13	Review Date	13-Nov-2012
Clear Roadway/Skew	9.2 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,020 / 2011 (A)	Dept. Review Date	20-Nov-2012
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	85		

Bridge Culvert Information

Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	56.7	152X51	2.8	ELLIPSE
2	MAIN	-	915	MP	56.7		2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	West r/w, scour gas valves @ NW.
Power	3 wires West r/w, 10 wires OH 50m West r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	File tag in place.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Access 100m NW.
Vertical Alignment	7	6	Sag curve with limited sight distance. No passing.
Roadway Width (m)	9.000		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 8)			
Guardrail (Y/N)	Yes		Minor strile damage to both rials, still functional.
Approach Road / Embankment General Rating	7	6	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		5	5	Sides bent outward approx 100mm.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			(16/Apr/2007)
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
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): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	31-Oct-2012			Only accessible to R11, water/ice 1.1m deep at d/s sections. Shape and condition appear ok.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)	1810			
Measured At Ring No.	17			
Sag (mm)	91			
Percent Sag	4			
Sidewall		N	N	
Measured Span (mm)	1800			
Measured At Ring No.	17			
Deflection (mm)	76			
Percent Deflection	4			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
Total No. of Cracked Rings	0			1N stagger
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	6	Superficial rust lower 1/2.-02-Feb-2009
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			800mm deep water @ D/S section.
Fish Passage Adequacy		5	X	Inlet is 600mm above streambed.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	Gr was "7" @ 02-Feb-2009
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		E		South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	Under water/ice.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			(16/Apr/2007)
Above/Below (mm)	100			
Scour Protection		N	N	Snow covered.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		N	7	G.R. carried fwd from 16/Apr/2007.
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		North pipe. Covered in snow/drift.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		N	N	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	7	
Beavers (Y/N)	Yes			
Upstream End General Rating		N	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 915, Type: MP)				
Barrel Last Accessible Date	28-Sep-2005			Not possible to access 914 pipe. Both ends buried under ice/debris.
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		N	N	
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		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 915, Type: MP)				
Ponding (Y/N)				
Fish Passage Adequacy		N	N	(Fast flow, obstructed opening by debris. 28/Sept/2005)
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	N	(28/Sept/2005)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		North pipe.-covered in ice.
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	(28/Sept/2005)
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)		No		
Downstream End General Rating		N	7	G.R. carried fwd from 16/Apr/2007.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)		Yes		
Channel Bottom Degrading/Aggrading		DEGRADING		Deg d/s. Dam 30m d/s.
Beavers (Y/N)		Yes		
(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	2013	Remove drift from inlet of 900 pipe.					
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) (%)	59.6/61.5	Est. Repl. Yr	2035	Maint. Req. (Y/N)	Yes
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	Eric Carcoux		Previous Assistant's Name				
Next Inspection Date	31-Jul-2014		Previous Inspection Date	09-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							