

Bridge Culvert Inspection			
Bridge File Number	72520 -1 Bridge Culvert	Form Type	CULE
Year Built/Lined	1956/2005	Lot No.	4
Bridge or Town Name	THORHILD	Inspector Name	Eric Carcoux
Located Over	TRIBUTARY TO REDWATER RIVER, 6.63.6, WATERCRS-ST	Inspector Class	BR CLS A
Located On	18:12 C1 25.150	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	26-Aug-2011
Legal Land Location	SE SEC 6 TWP 60 RGE 22 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:16:39, 54:09:08	Data Entry Date	27-Sep-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA07	Review Date	26-Sep-2011
Clear Roadway/Skew	9.2 / 30 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,220 / 2010 (A)	Dept. Review Date	28-Sep-2011
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	3							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
3	U/S FULL LINER	-	1400	MP	9	125X26	2.8	ROUND
3	MAIN FULL LINER	-	1219	SSP	20.6			ROUND
3	D/S FULL LINER	-	1400	MP	9	125X26	2.8	ROUND
4	U/S FULL LINER	-	2000	MP	9	125X26	2.8	ROUND
4	MAIN FULL LINER	-	1819	SSP	20.6			ROUND
4	D/S FULL LINER	-	2000	MP	9	125X26	2.8	ROUND
5	U/S	-	1900	MP	9	125X26	2.8	ROUND
5	MAIN	-	1676	SSP	20.6			ROUND
5	D/S	-	1900	MP	9	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	2 wires North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	File tag not found.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	150m west of local intersection.
Vertical Alignment		8	8	
Roadway Width (m)	9.200			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 3)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Secondary Span)				
Direction		N		West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		7	7	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 1400, Type: MP)				
Barrel Last Accessible Date	26-Aug-2011			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		7	7	Measured @ c/l.
Measured Rise (mm)	1400			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		7	7	Measured @ c/l.
Measured Span (mm)	1400			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 1400, 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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1219, Type: SSP)				
Barrel Last Accessible Date	26-Aug-2011			West pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Measured @ c/l.
Measured Rise (mm)	1200			
Measured At Ring No.				
Sag (mm)	19			
Percent Sag	2			
Sidewall		7	7	Measured @ c/l.
Measured Span (mm)	1200			
Measured At Ring No.				
Deflection (mm)	19			
Percent Deflection	2			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1219, Type: SSP)				
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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Secondary Span)				
Direction		S		West pipe.
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	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Span Type: Secondary Span)				
Direction		N		Centre pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		7	7	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 2000, Type: MP)				
Barrel Last Accessible Date	26-Aug-2011			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		7	7	D/S SECTION
Measured Rise (mm)	1990			
Measured At Ring No.	2			
Sag (mm)	10			
Percent Sag	1			
Sidewall		7	7	D/S SECTION
Measured Span (mm)	2010			
Measured At Ring No.	2			
Deflection (mm)	10			
Percent Deflection	1			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 2000, 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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1819, Type: SSP)				
Barrel Last Accessible Date	26-Aug-2011			Centre pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Measured @ c/l.
Measured Rise (mm)	1790			
Measured At Ring No.				
Sag (mm)	29			
Percent Sag	2			
Sidewall		7	7	Measured @ c/l.
Measured Span (mm)	1820			
Measured At Ring No.				
Deflection (mm)				
Percent Deflection	0			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1819, Type: SSP)				
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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
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		7	7	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Span Type: Secondary Span)				
Direction		S		Center pipe.
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	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 5, Span Type: Secondary Span)				
Direction		N		East pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		7	7	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 5, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 1900, Type: MP)				
Barrel Last Accessible Date	26-Aug-2011			East pipe.
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		7	7	
Measured Rise (mm)	1885			d/s section
Measured At Ring No.				
Sag (mm)	15			
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	1915			d/s section
Measured At Ring No.				
Deflection (mm)	15			
Percent Deflection	1			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 5, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 1900, 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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 5, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1676, Type: SSP)				
Barrel Last Accessible Date	26-Aug-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Measured @ c/l.
Measured Rise (mm)	1670			
Measured At Ring No.				
Sag (mm)	6			
Percent Sag	0			
Sidewall		7	7	Measured @ c/l.
Measured Span (mm)	7			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 5, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1676, Type: SSP)				
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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 5, Span Type: Secondary Span)				
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	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	45 DEGREEE BEND U/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	74.6/74.7	Est. Repl. Yr	2035	Maint. Req. (Y/N)	No
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 Caroux		Previous Assistant's Name				
Next Inspection Date	26-May-2013		Previous Inspection Date	17-Dec-2009			
Inspection Cycle (Default) (months)	21						
Comment							