

Bridge Culvert Inspection				
Bridge File Number	73648 -1 Bridge Culvert		Form Type	CULM
Year Built	1960		Lot No.	4
Bridge or Town Name	PINCHER CREEK		Inspector Name	Jon Davies
Located Over	FOOTHILL CREEK, 2.12.22.5.8, WATERCRS-ST		Inspector Class	BR CLS B
Located On	6:04 C1 28.368		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	30-Oct-2011
Legal Land Location	SE SEC 1 TWP 5 RGE 30 W4M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-113:54:19, 49:21:18		Data Entry Date	28-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA26		Review Date	10-Nov-2011
Clear Roadway/Skew	10.4 /		Dept. Reviewer Name	Tim Davies
AADT/Year	1,170 / 2010 (A)		Dept. Review Date	01-Dec-2011
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	5460	2440	BP	34.1			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	West ditch and East ditch			Gas	50m N		
Power	2 wires crosses road 300m N.			Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Reduced sight from North. 300m sight distance. Local road int 200m South
Vertical Alignment		6	6	
Roadway Width (m)	10.400			
Embankment		5	5	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	5	Exposed rebar at NW. Diagonal cracks & leaching, minor scaling.
Collar		X	X	
Wingwalls		6	6	Concrete inlet slab - heaving 50mm & cracking. Some transverse cracks up to 2mm wide.
(Shape : FLARE)				
Cutoff Wall		5	5	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
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): 1820, Rise (mm): 2440, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	30-Oct-2011			North cell.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	Some typical hairline vertical cracks esp 4.5 m from D/S but no leaching.
Measured Span (mm)	1820			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	Floor 25mm. Roof 10mm.
Separation (mm)	25			
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1820, Rise (mm): 2440, Type: BP, Cell Sequence: 1)				
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		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1820, Rise (mm): 2440, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date	30-Oct-2011			Mid cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Typical settlement cracks - some vertical cracks up to 1mm wide
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	
Measured Span (mm)	1820			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	25			
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1820, Rise (mm): 2440, Type: BP, Cell Sequence: 2)				
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		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1820, Rise (mm): 2440, Type: BP, Cell Sequence: 3)				
Barrel Last Accessible Date	30-Oct-2011			South cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Some hairline cracks
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	some hairline vertical cracks
Measured Span (mm)	1820			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	25			
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 1820, Rise (mm): 2440, Type: BP, Cell Sequence: 3)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		6	6	Typical diagonal cracks & leaching - 2mm wide. Concrete outlet slab good condition
(Shape : FLARE)				
Cutoff Wall		6	6	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	250			
Scour Protection		7	7	Ingrown.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	90 deg turn D/S. 45 deg @ U/S.
Bank Stability		4	4	Steep banks & slumping U/S and D/S away from pipe.
HWM (m below Top of Culvert)	1.0			(Medium size drift grass on U/S shrub) November 29 2011.
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		4	4	

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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	66.4/66.4	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							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	30-Jul-2013		Previous Inspection Date	29-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							