

Bridge Culvert Inspection				
Bridge File Number	73638 -1 Bridge Culvert		Form Type	CULM
Year Built	1953		Lot No.	4
Bridge or Town Name	PINCHER CREEK		Inspector Name	Jon Davies
Located Over	KETTLES CREEK, 2.12.31.4, WATERCRS-ST		Inspector Class	BR CLS B
Located On	6:04 C1 43.047		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	30-Oct-2011
Legal Land Location	NE SEC 14 TWP 6 RGE 30 W4M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-113:56:12, 49:28:46		Data Entry Date	28-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA26		Review Date	08-Nov-2011
Clear Roadway/Skew	11.3 /		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	36.6			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	West ditch & East ditch.		Gas	Pump station at NE and gas @ SE
Power	3 wire East fenceline 15m from c/l.		Municipal	
Others	1 line crossing channel 50m south		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Access roads all 4 corners.
Vertical Alignment		6	6	No passing, crest curve to the South with limited sight distance.
Roadway Width (m)		11.000		Intransistion zone down to 50km/hr.
Embankment		7	6	
Sideslope (___:1)		3.0		
(Height of Cover(m) : 0.7)				
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	Impact damage.
Collar		X	X	
Wingwalls		6	6	Concrete inlet slab - cracked 2003/05/08
(Shape : FLARE)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		7	7	Grown in. Natural @ banks.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		6	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		6	6	Typical hairline settlement cracks on roof and sidewalls.
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	Minor abrasion at lower sidewall area. NE sidewall damage at end, loss of concrete at joint with wingwall 700mm x 110mm
Measured Span (mm)	1820			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	6	Minor abrasion throughout.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	Minor settlement at the seam with some spalling in the floor section
Separation (mm)	20			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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			

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)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	((Was running full in 1986 - 940113)).
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			Center Cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Typical hairline roof & settlement cracks.
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	Poor construction joint & occasional honeycomb. Cracked @ joint - eroded to waterstop. Some minor abrasion @ sidewalls.
Measured Span (mm)	1820			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	6	Minor abrasion throughout.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		5	5	
Separation (mm)	25			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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			

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)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	((Ran full 1986 - 940113)).
Icing (Y/N)	No			At U/S caught on cell division walls.
Silting (Y/N)	No			
Drift (Y/N)	Yes			
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		6	6	Hairline cracks.
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	Narrow settlement cracks.
Measured Span (mm)	1820			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		5	5	Minor abrasion throughout.
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	Yes			
Circumferential Seams		5	5	
Separation (mm)	25			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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			

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)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			At U/S cell division wall.
Drift (Y/N)	Yes			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	Vertical cracks.
Collar		X	X	
Wingwalls		5	5	Bottom of NE wing moved out 90mm away. Typical diagonal cracks 1mm wide. Concrete outlet slab wide transverse cracks.
(Shape : FLARE)				
Cutoff Wall		5	N	PR5
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		7	7	In grown, natural @ banks.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Pedestrian bridge for golf course 15m U/S. ((Ran full 1986 - 940113)) Series of concrete dams D/S to accomodate elevation drop.
Bank Stability		4	4	Bank eroding 20m and 50m D/S at South
HWM (m below Top of Culvert)	103.0			No HWM visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Structure Usage				
		Last	Now	Explanation of Condition

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) (%)	60.1/59.2	Est. Repl. Yr	2028	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							