

Bridge Culvert Inspection				
Bridge File Number	74663 SC-3 Bridge Culvert		Form Type	CULM
Year Built	1968		Lot No.	4
Bridge or Town Name	CANMORE		Inspector Name	Garry Roberts
Located Over	PIGEON CREEK, 2.13.63, WATERCRS-ST		Inspector Class	BR CLS A
Located On	RAMP 14-1 E		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	08-Feb-2012
Legal Land Location	SW SEC 18 TWP 24 RGE 9 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-115:15:26, 51:02:18		Data Entry Date	16-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	22-Feb-2012
Clear Roadway/Skew	7.2 /		Dept. Reviewer Name	Tim Davies
AADT/Year			Dept. Review Date	22-Mar-2012
Road Classification	RLU-208-100		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4260	2940	RPP	31.7	152X51	4.0	PIPE ARCH
2	MAIN	4260	2940	RPP	31.7	152X51	4.0	PIPE ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East, SE & Roof of East Pipe.	Gas	ATCO-15mS of pipes.
Power	60m East-4West &3West 100m South.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Off ramp E/B.
Vertical Alignment	6	6	One way traffic.
Roadway Width (m)	7.200		
Embankment	6	6	To 2:1 @ Bevels.
Sideslope (__:1)	4.0		6:1 @ South.
(Height of Cover(m) : 1.4)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction			South end of East 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		7	7	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4260, Rise (mm): 2940, Type: RPP)				
Barrel Last Accessible Date	08-Feb-2012			East pipe- Handles 70% of flow.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Holes in roof from Conduit ring 2 and 7.
Measured Rise (mm)	2800			
Measured At Ring No.	5			
Sag (mm)	140			
Percent Sag	4			
Sidewall		7	7	
Measured Span (mm)	4300			
Measured At Ring No.	5			
Deflection (mm)	40			
Percent Deflection	1			
Floor		6	6	
Bulge (mm)	50			
Measured At Ring No.	4			
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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)	No			
Coating		5	5	Superficial corrosion @ Floor. Minor soil corrosion at upper seams.
Corrosion By Soil (Y/N)	Yes			
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): 4260, Rise (mm): 2940, Type: RPP)					
Camber POS/ZERO/NEG	ZERO				
Ponding (Y/N)	No				
Fish Passage Adequacy		5	5	Takes 90% of flow.	
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	
(Pipe # : 1, Span Type: Primary Span)					
Direction				North end of East 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	ABOVE				
Above/Below (mm)	600				
Scour Protection		4	4		
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 300)					
Scour/Erosion		4	4	1600mm DP Scour at D/S End - Rock lined.	
Beavers (Y/N)	No				
Downstream End General Rating		4	4		
Upstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Span Type: Secondary Span)					
Direction				South end of West pipe.	
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
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		7	7	
Heaving (mm)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	600			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 4260, Rise (mm): 2940, Type: RPP)				
Barrel Last Accessible Date	08-Feb-2012			West pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	5	
Measured Rise (mm)	2750			
Measured At Ring No.	4			
Sag (mm)	190			
Percent Sag	6			
Sidewall		7	7	
Measured Span (mm)	4300			
Measured At Ring No.	5			
Deflection (mm)	40			
Percent Deflection	1			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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)	No			
Coating		5	5	Minor soil corrosion at upper seams.
Corrosion By Soil (Y/N)	Yes			Superficial Corrosion @ floor.
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 4260, Rise (mm): 2940, Type: RPP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	6	Only takes 10% of flow.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction				North end of 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	ABOVE			
Above/Below (mm)	500			
Scour Protection		4	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	4	1m deep scour. Rock lined.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Gentle curves both ends.
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.2			No visible HWM.
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) (%)	66.7/55.6	Sufficiency Rating (Last/Now) (%)	64.6/64.7	Est. Repl. Yr	2025	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	08-Nov-2013		Previous Inspection Date	27-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							