

Bridge Culvert Inspection			
Bridge File Number	77484 -1 Bridge Culvert	Form Type	CUL1
Year Built	1974	Lot No.	3
Bridge or Town Name	KANANASKIS	Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO KANANASKIS RIVER, 2.13.56.8, WATERCRS-ST	Inspector Class	BR CLS A
Located On	40:12 C1 27.025	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	01-Apr-2013
Legal Land Location	NE SEC 1 TWP 23 RGE 9 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-115:07:35, 50:55:58	Data Entry Date	11-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA28	Review Date	01-Apr-2013
Clear Roadway/Skew	15.2 / -30 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	1,690 / 2012 (A)	Dept. Review Date	06-May-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	50		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1738	1920	SPE	82.3	152X51	3.0	ELLIPSE
Special Features	DRIFT CATCHER							
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	Both row.	Gas		
Power	Crosses South.	Municipal		
Others	Fiber optics in West ROW.	Problem (Y/N)	No	
Remarks				

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	Entrance to Emergency Services North and South - extra turn lane added. Limited sight distance to south.
Vertical Alignment	6	6	
Roadway Width (m)	15.200		
Embankment	7	7	
Sideslope (__:1)	4.0		
(Height of Cover(m) : 1.8)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	5	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		East. Located on East side of berm.
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
Bevel End		5	5	Dents in sides of bevel (tear in floor of bevel - 950322). Floor gravel covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
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): 1738, Rise (mm): 1920, Type: SPE)				
Barrel Last Accessible Date	01-Apr-2013			
Special Features				
Special Feature		6	6	Rock catchers extended U/S & existing planks gapped to allow better flow Rock build up to top of catcher at U/S side.
(Type : DRIFT CATCHER)				
Special Feature				
(Type :)				
Roof		7	7	Not measured- 1.3m gravel to roof. Roof lines appear good. Estimate.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag	3			
Sidewall		7	7	Inward.
Measured Span (mm)	1675			
Measured At Ring No.	16			
Deflection (mm)	63			
Percent Deflection	3			
Floor		N	N	Average 400mm deep of gravel and rock.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	Tear in roof repaired-partial plate bolted in @ midspan.
Separation (mm)	0			
Longitudinal Seams		7	7	Only viewed top seams due to gravel.
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		6	6	Minor soil staining at South seams. Minor superficial corrosion @ unpainted bevel ends & abrasion areas @ sidewall
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): 1738, Rise (mm): 1920, Type: SPE)				
Fish Passage Adequacy		5	5	Dry.
Baffle (Type :)		X	X	
Waterway Adequacy		5	5	600 mm deep rock & gravel on floor. 630 at D/S.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		West.
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)	500			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 250)		7	7	
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	Pedestrian bridge located 30m West of d/s end.
Bank Stability		6	5	North bank is starting to erode from flow around rock catcher.
HWM (m below Top of Culvert)	0.5			HWM 2005-09-16
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading		AGGRADING		Both ends.
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	2013	Clean U/S channel on both sides of rock catcher.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	65.2/65.1	Est. Repl. Yr	2030	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Gravel levels in culvert are as low as they have ever been indicating rock catcher is working and should be maintained. G. Roberts April 1,2013		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	01-Jan-2015		Previous Inspection Date	25-May-2011			
Inspection Cycle (Default) (months)	21						
Comment							