Bridge Culvert Inspection

Bridge File Number	76547 -1 Bridge Culvert	Form Type	CUL1
Year Built	1985	Lot No.	4
Bridge or Town Name	CANMORE	Inspector Name	Garry Roberts
Located Over	CANMORE CK, 2.13.67, WATERCRS-ST	Inspector Class	BR CLS A
Located On	742:02 C1 3.929	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	17-Jan-2013
Legal Land Location	NW SEC 29 TWP 24 RGE 10 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-115:22:27, 51:04:45	Data Entry Date	06-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA28	Review Date	22-Jan-2013
Clear Roadway/Skew	11 / -50 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	3,480 / 2011 (A)	Dept. Review Date	21-Feb-2013
Road Classification	RCU-211-110	Follow-Up By	
Detour Length (km)	2		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3668	SP	87.8	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ROW.	Gas	
Power		Municipal	
Others	Street Lights.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	6	In curve and grade West.
Vertical Alignment		6	6	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope (__:1)	2.0			
(Height of Cover(m) : **5**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				South. Steel wier @ bevel.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		7	7	Steel cut off wall.

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		6	7	Some rock in bevel acting as an apron for wier. Some 1.5m rock @ SE bank. Mostly natural @ North.
(Type : **NATURAL**)				
(Avg. Rock Size(mm) : **1000**)				
Scour/Erosion		6	7	
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): , Rise (mm): 3668, Type: SP**)				
Barrel Last Accessible Date	17-Jan-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	3478			
Measured At Ring No.	9			
Sag (mm)	190			
Percent Sag	5			
Sidewall		7	7	
Measured Span (mm)	3690			
Measured At Ring No.	10			
Deflection (mm)	22			
Percent Deflection				
Floor		7	7	
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			1N stagger.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Superficial corrosion throughout floor.
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 3668, Type: SP**)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Minor drift @ U/S and D/S Bevel.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		**7**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				North.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		7	X	Galvanized pipe/steel bracing @ bottom of Bevel.
Bevel End		7	7	Rock in bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) : **1000**)				
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		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)	2.5			No visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	

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) (%)**	**76.5/75.5**	Est. Repl. Yr	2030	Maint. Reqd. (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	17-Apr-2016	Previous Inspection Date	05-Nov-2009
Inspection Cycle (Default) (months)	39		
Comment			