

Bridge Culvert Inspection				
Bridge File Number	09400 -1 Bridge Culvert		Form Type	CUL1
Year Built	1928		Lot No.	3
Bridge or Town Name	MORLEY		Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO BOW RIVER, 2.13.54, WATERCRS-ST		Inspector Class	BR CLS A
Located On	1A:04 C1 10.545		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	31-Aug-2012
Legal Land Location	SE SEC 25 TWP 25 RGE 8 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:59:24, 51:09:39		Data Entry Date	03-Oct-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Joel Wozney
Contract Main. Area	CMA28		Review Date	14-Sep-2012
Clear Roadway/Skew	7.3 /		Dept. Reviewer Name	Tim Davies
AADT/Year	1,710 / 2011 (A)		Dept. Review Date	11-Oct-2012
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	10			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3050	2740	BP	17			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	North & South ditch.		Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks	Posted speed 65 km/hr.			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	Curve to East & West. Limited sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	7.300			
Embankment		4	4	Slopes are steep @ D/S end. Ditch erosion from NE held back with timber.
Sideslope (__:1)	1.5			
(Height of Cover(m) : 2.7)				
Guardrail (Y/N)	Yes			Guardrail 350mm to center. 3 Broken posts @ NW Guardrail.
Approach Road / Embankment General Rating		4	4	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				North.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Horizontal cracking.
Collar		X	X	
Wingwalls		5	4	Efflorescence cracking & stains at NE & NW. Cracks up to 10mm wide with minor spalling.
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	Tree across u/s end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		4	4	Banks eroded to natural bedrock.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	3 m3 scour behind NE wing.
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3050, Rise (mm): 2740, Type: BP)				
Barrel Last Accessible Date	31-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	1 minor spall at each end of roof.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		5	5	Minor spalls at NW from shallow cover.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	Rock covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	Minor leakage.
Separation (mm)	30			
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)	No			
Corrosion By Water (Y/N)	No			
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): 3050, Rise (mm): 2740, Type: BP)				
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		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				South.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		5	4	SW wingwall cracked - up to 10mm wide with minor spalling.
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		5	5	SW eroded to bedrock.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		5	5	
HWM (m below Top of Culvert)	1.5			No visible HWM.
Drift (Y/N)	Yes			Fallen trees U/S & D/S.
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2013	5 m3 Class II @ NE - behind wingwall.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS	2013						
OTHER ACTION	2013	Repair NW guardrail posts.					
OTHER ACTION	2013	Remove trees from D/S & U/S ends & in box					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	48.0/47.2	Est. Repl. Yr	2025	Maint. Req. (Y/N)	Yes
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	31-May-2014		Previous Inspection Date	07-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							