

Bridge Culvert Inspection				
Bridge File Number	74608 -1 Bridge Culvert		Form Type	CUL1
Year Built	1957		Lot No.	2
Bridge or Town Name	MORLEY		Inspector Name	Garry Roberts
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	1:04 R1 24.603;1:04 L1 24.666		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Feb-2012
Legal Land Location	NW SEC 23 TWP 25 RGE 6 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:44:27, 51:09:05		Data Entry Date	13-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	21-Feb-2012
Clear Roadway/Skew	27.2 /		Dept. Reviewer Name	Tim Davies
AADT/Year	18,610 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2430	2430	BP	71.7			RECTANGLE
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not Required										

Utilities (Located at)

Utility Attachments											
Telephone	In south ditch.					Gas					
Power						Municipal					
Others	Fibre optic cable-N ditch					Problem (Y/N)	No				
Remarks											

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Steep grade with truck lane, curve to the east. Limited sight distance to the E
Vertical Alignment		5	5	
Roadway Width (m)	27.200			
Embankment		7	7	
Sideslope (__:1)	3.5			
(Height of Cover(m) : 0.9)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		5	5	

Upstream End

		Last	Now	Explanation of Condition
Culvert Component				S end
Direction				
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Collar		X	X	
Wingwalls		3	3	Spalling along top edges and sides.
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		X	X	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Upstream End General Rating		3	3	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2430, Rise (mm): 2430, Type: BP)				
Barrel Last Accessible Date	10-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	6	First 2.0 m from south end has alkaline & rust stains & MED SCALING @ roof
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	7	
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2430, Rise (mm): 2430, Type: BP)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Handles drainage.
Icing (Y/N)	No			
Siltting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North end
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls (Shape :)		4	4	1 mm DIAGONAL CRACKS @ NE. MOVING AWAY FROM BARREL @ NE TO 100 mm & @ NW TO 70mm.
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		X	4	
Scour/Erosion		X	4	Loss of fill -1m deep
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
Roadway Surface (Type :)		6	5	
Icing (Y/N)	No			
Traffic Safety Features Type		X	X	

Structure Usage				
		Last	Now	Explanation of Condition
Lighting		X	X	
Barrel Leakage (Y/N)	Yes			
Drainage		4	5	900mm CSP located 10m E of d/s end
Structure In Use (Y/N)	Yes			
Grade Separation General Rating		4	5	

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	2012	Install 12" wide steel plates at North barrel to wing seam					
OTHER ACTION	2012	Fill void at NE- 3m3 pit run.					
OTHER ACTION	2012	Repour South wingwalls- approx 20m2					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/66.7	Sufficiency Rating (Last/Now) (%)	55.6/61.5	Est. Repl. Yr	2024	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	10-Nov-2013		Previous Inspection Date	15-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							