Bridge Culvert Inspection

Bridge File Number	76548 -1 Bridge Culvert	Form Type	CUL1
Year Built	1966	Lot No.	4
Bridge or Town Name	LUNDBRECK	Inspector Name	Garry Roberts
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	3:04 C1 13.893	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	29-Nov-2011
Legal Land Location	SW SEC 30 TWP 7 RGE 1 W5M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:07:55, 49:35:09	Data Entry Date	09-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA26	Review Date	08-Dec-2011
Clear Roadway/Skew	13.4 /	Dept. Reviewer Name	Tim Davies
AADT/Year	3,630 / 2010 (A)	Dept. Review Date	10-Jan-2012
Road Classification	RAU-213.4-120	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1742	1920	MPE	26.2		3.5	ELLIPSE
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	North r/w	Gas	
Power		Municipal	
Others	Fiber optic in S ditch	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Reduced sight distance due to crest curve over RR overpass 200 m east.
Vertical Alignment		5	5	
Roadway Width (m)	13.400			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **2.2**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				North end.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	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): 1742, Rise (mm): 1920, Type: MPE**)				
Barrel Last Accessible Date	29-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	est
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	8			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	1750			
Measured At Ring No.	2			
Deflection (mm)	8			
Percent Deflection				
Floor		N	N	400mm dirt throughout barrel
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	100			
Longitudinal Seams		6	6	Rivetted seams
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)	Yes			
Longitudinal Stagger (Y/N)				
Coating		4	4	Alkali corrosion at riveted seams, with pitting
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1742, Rise (mm): 1920, Type: MPE**)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
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**
Direction				South end.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		X	X	
Roadway Surface		6	6	FENCES ARE IN POOR REPAIR. APPEARS NOT IN USE. dirt built up at ends of pipe
(Type :)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Drainage		5	5	
Structure In Use (Y/N)	No			
Grade Separation General Rating		**6**	**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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**75.5/74.8**	Est. Repl. Yr	2025	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	29-Aug-2013	Previous Inspection Date	18-May-2010		
Inspection Cycle (Default) (months)	21				
Comment					