Bridge Culvert Inspection

Bridge File Number	81064 -1 Bridge Culvert	Form Type	CUL1
Year Built	1987	Lot No.	3
Bridge or Town Name	TURNER VALLE	Inspector Name	Jon Davies
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS B
Located On	546:02 C1 6.025	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	08-Feb-2013
Legal Land Location	SW SEC 32 TWP 19 RGE 3 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:23:17, 50:38:51	Data Entry Date	09-Mar-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA27	Review Date	21-Feb-2013
Clear Roadway/Skew	9 /	Dept. Reviewer Name	Tim Davies
AADT/Year	770 / 2011 (A)	Dept. Review Date	13-Mar-2013
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	999		

Bridge Culvert Information

Number of Culverts	1

Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	24	125X26	2.8	ROUND

Special Features	CONC FLOOR
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	South Ditch.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	On curve.
Vertical Alignment		7	7	Field entrance 15m East.
Roadway Width (m)	9.200			
Embankment		7	7	
Sideslope (__:1)	3.5			
(Height of Cover(m) : **1.1**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

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

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		X	5	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	5	
Beavers (Y/N)	No			
Upstream End General Rating		**4**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Barrel Last Accessible Date	08-Feb-2013			
Special Features				
Special Feature			N	Ice covered.
(Type : **CONC FLOOR**)				
Special Feature				
(Type :)				
Roof		8	7	Estimate.
Measured Rise (mm)	2369			
Measured At Ring No.	2			
Sag (mm)	32			
Percent Sag	1			
Sidewall		9	8	
Measured Span (mm)	2432			
Measured At Ring No.	2			
Deflection (mm)	32			
Percent Deflection	1			
Floor		N	N	Concrete floor - covered with dirt and ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	7	
Separation (mm)	58			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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): , Rise (mm): 2400, Type: MP**)				
Coating		8	8	
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		X	7	Handles ditch drainage.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		South.
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)	100			
Scour Protection		X	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		6	X	
Roadway Surface		6	5	
(Type : **SOIL**)				
Icing (Y/N)	Yes			Due to poor drainage.
Traffic Safety Features		X	X	
Type	NONE			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		4	4	Poor drainage due to grade at U/S and D/S.
Structure In Use (Y/N)	Yes			Cattle action at U/S observed.
Grade Separation General Rating		**4**	**4**	

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	Re-grade U/S and D/S area and place compact approx. 8m³ of granular fill on and around 600mm CSP.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**88.9/77.8**	**Sufficiency Rating (Last/Now) (%)**	**82.4/70.7**	Est. Repl. Yr	2028	Maint. Reqd. (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	Jason Rusu	Previous Assistant's Name			
Next Inspection Date	08-May-2016	Previous Inspection Date	31-Oct-2009		
Inspection Cycle (Default) (months)	39				
Comment					