Bridge Culvert Inspection

Bridge File Number	80435 -1 Bridge Culvert	Form Type	CUL1
Year Built	1987	Lot No.	4
Bridge or Town Name	CHAMPION	Inspector Name	Jason Rusu
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS B
Located On	529:04 C1 24.729	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Feb-2010
Legal Land Location	SE SEC 21 TWP 15 RGE 21 W4M	Data Entry By	Kelsey Roberts
Longitude, Latitude	-112:49:34, 50:16:08	Data Entry Date	23-Mar-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	12-Mar-2010
Clear Roadway/Skew	13 /	Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	240 / 2008 (A)	Dept. Review Date	26-Mar-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	22		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	31.2	125X26	3.0	ROUND
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)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks											

Utilities (Located at)

Utility Attachments			
Telephone	SW corner 5m	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	approach into gravel piteast of culvert N. side in taper
Vertical Alignment		5	5	
Roadway Width (m)	13.000			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover (m) : **1.3**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		NORTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
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		8	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		X	N	ingrown
(Type : **NATURAL**)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		X	N	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**N**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): - , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	23-Feb-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Estimate 1% sag est.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	10			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	2220			
Measured At Ring No.	2			
Deflection (mm)	20			
Percent Deflection	1			
Floor		N	N	dirt covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	South seam ends bent-gap 50mm. Backfill has infiltrated through this gap. Appears to be stable, no fill coming through seam
Separation (mm)	50			
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): 2200, 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	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		SOUTH
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		X	N	Ingrown
(Type : **NATURAL**)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		X	N	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**N**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		5	X	
Roadway Surface		7	7	Fenced off on both
(Type :)				
Icing (Y/N)	No			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		5	5	
Structure In Use (Y/N)	No			
Grade Separation General Rating		**5**	**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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**83.5/78.0**	Est. Repl. Yr	2043	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	Tim Davies	Previous Assistant's Name			
Next Inspection Date	27-May-2013	Previous Inspection Date	23-Feb-2007		
Inspection Cycle (Default) (months)	39				
Comment					