Bridge Culvert Inspection

Bridge File Number	80735 -1 Bridge Culvert	Form Type	CUL1
Year Built	1985	Lot No.	4
Bridge or Town Name	WATER VALLEY	Inspector Name	Garry Roberts
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	579:02 C1 27.380	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	18-Jul-2012
Legal Land Location	NW SEC 14 TWP 29 RGE 6 W5M	Data Entry By	Kelsey Roberts
Longitude, Latitude	-114:45:00, 51:29:19	Data Entry Date	27-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA28	Review Date	27-Jul-2012
Clear Roadway/Skew	11.5 /	Dept. Reviewer Name	Tim Davies
AADT/Year	210 / 2011 (A)	Dept. Review Date	06-Sep-2012
Road Classification	RCU-211-110	Follow-Up By	
Detour Length (km)	64		

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	25	125X26	2.8	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)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not req										

Utilities (Located at)

Utility Attachments			
Telephone	South ditch	Gas	
Power	2 wire to south	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	On a curve - limited sight distances. GRADE RISING TO WEST.
Vertical Alignment		6	6	
Roadway Width (m)	11.500			
Embankment		5	6	
Sideslope (__:1)	2.5			
(Height of Cover(m) : **1.2**)				
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		X	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	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): , Rise (mm): 2400, Type: MP**)				
Barrel Last Accessible Date	18-Jul-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	2400			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		7	7	MINOR DENTS @ N END
Measured Span (mm)	2370			
Measured At Ring No.	2			
Deflection (mm)	30			
Percent Deflection	1			
Floor		6	N	150 mm of fill-gravel & dirt
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	60			
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		7	7	
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 2400, Type: MP**)				
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				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		X	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	7	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		7	X	
Roadway Surface		7	7	Gated @ both ends
(Type : **SOIL**)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Barrel Leakage (Y/N)	No			
Drainage		7	7	
Structure In Use (Y/N)	Yes			
Grade Separation General Rating		**7**	**7**	

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) (%)**	**83.1/82.4**	Est. Repl. Yr	2040	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	18-Oct-2015	Previous Inspection Date	29-May-2009		
Inspection Cycle (Default) (months)	39				
Comment					