Bridge Culvert Inspection

Bridge File Number	73883 -1 Bridge Culvert	Form Type	CULE
Year Built	1952	Lot No.	4
Bridge or Town Name	REDCLIFF	Inspector Name	Tom Carey
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	1:20 L1 44.005;1:20 R1 44.028	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Feb-2012
Legal Land Location	SE SEC 34 TWP 13 RGE 7 W4M	Data Entry By	Lauren Korte
Longitude, Latitude	-110:52:19, 50:07:17	Data Entry Date	26-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA23	Review Date	26-Feb-2012
Clear Roadway/Skew	25 /	Dept. Reviewer Name	Tim Davies
AADT/Year	8,440 / 2011 (A)	Dept. Review Date	29-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	Pl./Slab Thickness	Shape
1	MAIN	1520	1980	BP	28			RECTANGLE
1	D/S	2580	2330	SPE	51.8			ELLIPSE
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)		No									
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not required.										

Utilities (Located at)

Utility Attachments			
Telephone	South side & North side over pipe.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	WBL flat, hill to W. EBL each direction.
Vertical Alignment		7	7	
Roadway Width (m)	26.000			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.7**)				
Guardrail (Y/N)	Yes			@ South side only NOW.
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				South end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
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): 1520, Rise (mm): 1980, Type: BP**)				
Barrel Last Accessible Date	10-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	7	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		5	5	Medium scaling.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		X	X	Construction joint only.
Separation (mm)	0			
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)	Yes			
Longitudinal Stagger (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1520, Rise (mm): 1980, 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	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: D/S, Span (mm): 2580, Rise (mm): 2330, Type: SPE**)				
Barrel Last Accessible Date	10-Feb-2012			SPCSP @ North.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	Roof appears to be flattening but still has arch capability. Longitudinal seam along roof C/L.
Measured Rise (mm)	2280			
Measured At Ring No.	3			Est.
Sag (mm)	50			
Percent Sag	2			
Sidewall		6	6	Ring 4 East S/W 150 x 50 hole.
Measured Span (mm)	2580			
Measured At Ring No.	8			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Covered with dirt.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: D/S, Span (mm): 2580, Rise (mm): 2330, Type: SPE**)				
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		**5**	**5**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				North.
End Treatment (Concrete, Steel, Others, None)	STEEL			Asphalt packed around end.
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type :)				
(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		7	7	
(Type :)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		7	7	(Also handles drainage). ((Did see .5 m water/94 - not in last 10 years) - 940330).
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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**65.4/65.4**	Est. Repl. Yr	2028	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	10-Nov-2013	Previous Inspection Date	15-Jul-2010		
Inspection Cycle (Default) (months)	21				
Comment					