Bridge Culvert Inspection

Bridge File Number	01212 -1 Bridge Culvert	Form Type	CUL1
Year Built	1972	Lot No.	4
Bridge or Town Name	ISLAND LAKE	Inspector Name	Todd Warshawski
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS B
Located On	2:42 C1 34.283	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	29-Mar-2013
Legal Land Location	NW SEC 22 TWP 68 RGE 24 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:34:58, 54:54:08	Data Entry Date	17-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA10	Review Date	03-Apr-2013
Clear Roadway/Skew	9.6 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,510 / 2012 (A)	Dept. Review Date	23-Apr-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	50		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1980	CP	30.5			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	Not required.											

Utilities (Located at)

Utility Attachments			
Telephone	West r/w	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	On curve near bottom of sag. Limited sight distance both directions.
Vertical Alignment		6	6	
Roadway Width (m)	9.600			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1.9**)				
Guardrail (Y/N)	Yes			Minor strike damage on both rails, still functional.
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		
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)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		X	X	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1980, Type: CP**)				
Barrel Last Accessible Date	29-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Longitudinal medium cracks on roof intermittent.
Measured Rise (mm)	1970			
Measured At Ring No.	6			
Sag (mm)				
Percent Sag	0			
Sidewall		8	8	
Measured Span (mm)	1970			
Measured At Ring No.	6			
Deflection (mm)	5			
Percent Deflection	0			
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	4	Minor seam spalls at R 2/3 and R 11/12.
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		X	X	
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): 1980, Type: CP**)				
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		**6**	**6**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
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)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		X	X	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		9	X	Concrete pipe, no floor cast.
Roadway Surface		7	7	
(Type :)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	NONE			
Lighting		X	X	
Barrel Leakage (Y/N)	Yes			At seams

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Drainage		7	7	
Structure In Use (Y/N)	No			Tree growing at d/s end.
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) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**78.3/78.3**	Est. Repl. Yr	2035	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor seams for further deterioration.	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	Kris Bosters	Previous Assistant's Name			
Next Inspection Date	29-Dec-2014	Previous Inspection Date	07-Jul-2011		
Inspection Cycle (Default) (months)	21				
Comment					