Bridge Culvert Inspection

Bridge File Number	79450 -1 Bridge Culvert	Form Type	CUL1
Year Built	1981	Lot No.	4
Bridge or Town Name	CASLAN	Inspector Name	Todd Warshawski
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS B
Located On	663:08 C1 5.176	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Mar-2010
Legal Land Location	NW SEC 15 TWP 65 RGE 17 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-112:30:04, 54:37:39	Data Entry Date	23-Mar-2010
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA07	Review Date	11-Mar-2010
Clear Roadway/Skew	8 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	840 / 2008 (A)	Dept. Review Date	24-Mar-2010
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2000	MP	21.9	125X26	2.8	ROUND
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)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not req'd.										

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Roadway curves across pipe. Slight dip in roadway at culvert.
Vertical Alignment		7	7	
Roadway Width (m)	8.000			
Embankment		N	7	
Sideslope (__:1)	2.0			
(Height of Cover (m) :)				0.9m
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
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		N	6	Minor damage to top of bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		X	X	
(Type :)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		N	X	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): - , Rise (mm): 2000, Type: MP**)				
Barrel Last Accessible Date	09-Mar-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Unable to measure rise.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			Est. sag @ 2%
Percent Sag				1.8m clearance from floor to crown.
Sidewall		7	7	
Measured Span (mm)	1988			
Measured At Ring No.				
Deflection (mm)	12			
Percent Deflection	1			
Floor		N	N	Cold mix on floor and ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	60			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
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): 2000, Type: MP**)				
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Ice in pipe approx 150 - 200mm deep. Soil at S end blocks drainage.
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		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	4	Top of bevel turn.-photo
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		X	X	
(Type :)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		N	X	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		8	8	
Roadway Surface		7	7	150mm of water in barrel due to blocked drainage.
(Type :)				Cold mix/gravel.
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		4	4	Soils on South bevel block drainage.
Structure In Use (Y/N)	No			
Grade Separation General Rating		**7**	**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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**82.8/76.8**	Est. Repl. Yr	2035	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	Jason Saly	Previous Assistant's Name			
Next Inspection Date	09-Jun-2013	Previous Inspection Date	05-Dec-2006		
Inspection Cycle (Default) (months)	39				
Comment					