Bridge Culvert Inspection

Bridge File Number	70854 -1 Bridge Culvert	Form Type	CUL1
Year Built	1957	Lot No.	2
Bridge or Town Name	ONOWAY	Inspector Name	Melanie Johnson
Located Over	3RD ORDER TRIBUTARY TO TOAD CREEK, 6.65.18.1.1.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	777:01 C1 8.648	Assistant Class	
Water Body Cl./Year		Inspection Date	23-Aug-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 36 TWP 55 RGE 2 W5M	Data Entry Date	14-Sep-2011
Longitude, Latitude	-114:10:32, 53:47:36	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	07-Sep-2011
Contract Main. Area	CMA09	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	9.7 / -15 deg. (LHF)	Dept. Review Date	15-Sep-2011
AADT/Year	870 / 2010 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	20		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1901	SP	39.5	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	90m North.
Power	1 wire 20 m NE r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag installed on top of West roof.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Resident entrances both ways.
Vertical Alignment		8	8	
Roadway Width (m)	9.500			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **3.6**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
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): , Rise (mm): 1901, Type: SP**)				
Barrel Last Accessible Date	23-Aug-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	
Measured Rise (mm)	1810			
Measured At Ring No.	4			
Sag (mm)	91			
Percent Sag	5			
Sidewall		7	5	
Measured Span (mm)	1815			
Measured At Ring No.	4			
Deflection (mm)	91			
Percent Deflection	5			
Floor		N	N	0.6m water/rocks.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			(15/Aug/2001)
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				Proper lap only on new extension. Longitudinal stagger on old part only.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	Minor superficial rust of lower 1/3.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1901, Type: SP**)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(92/10/7) Not visible.
Icing (Y/N)	Yes			
Silting (Y/N)	No			At East end
Drift (Y/N)	Yes			
Barrel General Rating		**5**	**5**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
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)	500			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			Drift caught on bevel.
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				
Drift (Y/N)	Yes			HWM not visible.
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel 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	2011	Remove small amount of drift @ East bevel.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**66.1/63.9**	Est. Repl. Yr	2025	Maint. Reqd. (Y/N)	Yes

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	Dave Lam	Previous Assistant's Name	
Next Inspection Date	23-Nov-2014	Previous Inspection Date	05-May-2008
Inspection Cycle (Default) (months)	39		
Comment			