Bridge Culvert Inspection

Bridge File Number	81181 -1 Bridge Culvert	Form Type	CUL1
Year Built	1987	Lot No.	3
Bridge or Town Name	INNISFAIL	Inspector Name	Owen Salava
Located Over	2ND ORDER TRIBUTARY TO WASKASOO CREEK, 3.81.3.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	LOCAL ROAD	Assistant Class	
Water Body Cl./Year		Inspection Date	14-Mar-2013
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	NW SEC 7 TWP 36 RGE 27 W4M	Data Entry Date	27-Mar-2013
Longitude, Latitude	-113:51:25, 52:04:60	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	17-Mar-2013
Contract Main. Area	UNDEFINED CMA	Dept. Reviewer Name	Chris Black
Clear Roadway/Skew	8 / 46 deg. (RHF)	Dept. Review Date	28-Mar-2013
AADT/Year	89 / 2011 (E)	Follow-Up By	
Road Classification	RLU-208G-90		
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	3587	2535	RPE	30.5	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		4	4	Sharp curves through culvert area. R/W 125m North of pipe.
Vertical Alignment		6	6	
Roadway Width (m)	8.000			
Embankment		6	6	
Sideslope (__:1)	1.0			
(Height of Cover(m) : **1.8**)				
Guardrail (Y/N)	Yes			Damage to NW turned down end.
Approach Road / Embankment General Rating		**4**	**4**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	
Heaving (mm)	200			
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): 3587, Rise (mm): 2535, Type: RPE**)				
Barrel Last Accessible Date	14-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Unable to measure; 1.2m to ice.
Measured Rise (mm)	2462			
Measured At Ring No.	5			
Sag (mm)	73			(2.9%. 12Aug2011).
Percent Sag	3			
Sidewall		7	7	Unable to measure; 1.2m to ice.
Measured Span (mm)	3660			
Measured At Ring No.	5			
Deflection (mm)	73			(12Aug2011)
Percent Deflection	2			
Floor		N	N	Under ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		8	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 3587, Rise (mm): 2535, Type: RPE**)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
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		W		Overgrown with brush.
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)	200			
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			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	Gentle curves. BF 01842, 200m D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
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	2013	Replace NW turndown end.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**71.8/71.8**	Est. Repl. Yr	2042	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	Owen Salava	Previous Assistant's Name	
Next Inspection Date	14-Dec-2017	Previous Inspection Date	12-Aug-2011
Inspection Cycle (Default) (months)	57		
Comment			