

Bridge Culvert Inspection				
Bridge File Number	70824 -1 Bridge Culvert		Form Type	CUL1
Year Built	1951		Lot No.	1
Bridge or Town Name	TORRINGTON		Inspector Name	Owen Salava
Located Over	TRIBUTARY TO SPRUCE CREEK, 3.46.24.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	27:08 C1 21.173		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	24-Oct-2012
Legal Land Location	SE SEC 2 TWP 33 RGE 27 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:43:07, 51:47:40		Data Entry Date	08-Nov-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA29		Review Date	30-Oct-2012
Clear Roadway/Skew	11 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	1,320 / 2011 (A)		Dept. Review Date	19-Nov-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1500	SP	61	152X51		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	At North & South end.	Gas	
Power	2 wires at north end.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	In sag curve.
Vertical Alignment		7	7	
Roadway Width (m)	11.000			
Embankment		5	5	Slight erosion on SW corner due to ditch drainage.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 6.6)				
Guardrail (Y/N)	Yes			
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	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	Drift @ bevel.
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	Snow covered.
(Type : CONCRETE)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	Snow covered.
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): 1500, Type: SP)				
Barrel Last Accessible Date	24-Oct-2012			Most of pipe is vertically ellipsed with D/S 1/3 being closer to round @ D/S 1490 x 1490.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1580			-80
Measured At Ring No.	12			Upwards
Sag (mm)	80			-5.3%
Percent Sag	5			
Sidewall		6	6	
Measured Span (mm)	1410			
Measured At Ring No.	12			Inwards
Deflection (mm)	90			- 6.0%
Percent Deflection	6			
Floor		N	6	
Bulge (mm)	0			
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)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	5	Scaling & some corrosion pitting on floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	D/S end above streambed.
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
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		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	Bevel is pushed to the east, minor. Perched 0.3m.
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection		N	5	
(Type : CONCRETE)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		N	5	3 x 3 scour hole off end of bevel, rock filled.
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	90 degree bend @ U/S end.
Bank Stability		8	8	
HWM (m below Top of Culvert)	1.0			(03/11/13)
Drift (Y/N)	Yes			Dead trees in channel on U/S.
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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	Assess fish passage.		2020						
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	57.7/57.7	Est. Repl. Yr	2020	Maint. Req. (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	24-Jul-2014	Previous Inspection Date	08-Feb-2011							
Inspection Cycle (Default) (months)	21									
Comment										

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	Assess fish passage.	Defer			
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	57.7/57.7	Est. Repl. Yr	2020	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection			Department Comments	Current regional need year is 2020		
Maintenance Reviewed By	Andrew Smikles		Date	07-Jan-2013	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	24-Jul-2014		Previous Inspection Date	08-Feb-2011		
Inspection Cycle (Default) (months)	21					
Comment						