

Bridge Culvert Inspection			
Bridge File Number	74830 -1 Bridge Culvert	Form Type	CUL1
Year Built	1957	Lot No.	4
Bridge or Town Name	THREE HILLS	Inspector Name	Owen Salava
Located Over	2ND ORDER TRIBUTARY TO THREEHILLS CREEK, 3.41.2.4.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	21:14 C1 21.736	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	18-Sep-2012
Legal Land Location	SE SEC 24 TWP 30 RGE 24 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:14:38, 51:34:41	Data Entry Date	03-Oct-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA20	Review Date	27-Sep-2012
Clear Roadway/Skew	9.9 /	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,490 / 2011 (A)	Dept. Review Date	16-Oct-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	31	152X51	3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ditch.	Gas	
Power		Municipal	
Others	Fibre optic E r/w.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Crest curve to South, no passing SBL, good sight distance.
Vertical Alignment	6	6	
Roadway Width (m)	9.900		
Embankment	6	6	Wide transverse crack over pipe (photo).
Sideslope (__:1)	4.0		
(Height of Cover(m) : 1)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	6	6	

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)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		7	7	Well vegetated.
(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): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	18-Sep-2012			(VE 5% - Design size 1724 x 1901 Top of silt to roof 1.0 at D/S. 04-Mar-2006).
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	(Estimate roof 1895. 04-Mar-2006).
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	6			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	1745			
Measured At Ring No.	6			
Deflection (mm)	21			1.2%
Percent Deflection	1			
Floor		N	N	900 mm silt.Not visible.
Bulge (mm)				
Measured At Ring No.				(Abrasion=No. 04Mar2006).
Abrasion (Y/N)	No			
Circumferential Seams		7	7	Where visible.
Separation (mm)	0			
Longitudinal Seams		7	7	Lower seams not seen because of silting. Upper seams rate "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		6	6	Superficial corrosion at exterior of roof at D/S. Rust through bolt holes at D/S. Alkali at bolt holes - minor.
Corrosion By Soil (Y/N)	Yes			
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): 1724, Rise (mm): 1901, Type: SPE)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	No water in pipe.
Icing (Y/N)	No			Siltation to 900 mm at D/S.
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream 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	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		7	7	Well vegetated.
(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	No defined channel.
Bank Stability		8	8	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	75.4/75.4	Est. Repl. Yr	2025	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Culvert appears to carry flow only at times of high water.		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	18-Jun-2014		Previous Inspection Date	10-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							