

Bridge Culvert Inspection				
Bridge File Number	74347 -1 Bridge Culvert		Form Type	CULE
Year Built	1954		Lot No.	4
Bridge or Town Name	HINTON		Inspector Name	Shane Hall
Located Over	CACHE PERCOTTE CREEK, 8.11.137, WATERCRS-ST		Inspector Class	BR CLS A
Located On	16:02 L1 32.007;16:02 R1 32.000		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	12-Aug-2012
Legal Land Location	SW SEC 29 TWP 51 RGE 24 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:30:52, 53:25:32		Data Entry Date	09-Sep-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13		Review Date	30-Aug-2012
Clear Roadway/Skew	25.5 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	5,630 / 2011 (A)		Dept. Review Date	18-Sep-2012
Road Classification	RAD-412.4-120		Follow-Up By	
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	U/S	-	2120	SP	34.7	152X51	3.0	ROUND
1	MAIN	1675	1675	BP	116.5			SQUARE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North r/w.	Gas	
Power	5 wires OH North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	File tag South end.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Local road intersection 50 m SW.
Vertical Alignment	7	7	
Roadway Width (m)	25.500		12.6 WBL, 12.9 EBL.
Embankment	4	4	Erosion gully at NE 1m x 1m x 50m. Appears relatively stable with rock base. Ditch drainage CSP's @ SE (600mm) & SW (800mm).
Sideslope (__:1)	3.0		
(Height of Cover(m) : 16)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	7	
Collar	6	6	Wide transverse cracks.
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	5	Settlement up to 0.5m beside bevel. Stable. Collar undermined.-photo
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	5	
Beavers (Y/N)	No			
Upstream End General Rating		6	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2120, Type: SP)				
Barrel Last Accessible Date	12-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2061			
Measured At Ring No.	8			
Sag (mm)	59			
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	2181			
Measured At Ring No.	8			
Deflection (mm)	61			
Percent Deflection	3			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			Not staggered @ end rings. 1N stagger elsewhere
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Rusting @ floor seams due to piping. Superficial
Corrosion By Soil (Y/N)	Yes			
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: U/S, Span (mm): , Rise (mm): 2120, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	Steep slope at inlet.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(0.7m ice to crown. 2000/04/21)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		7	7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1675, Rise (mm): 1675, Type: BP)				
Barrel Last Accessible Date	12-Aug-2012			
Special Features				
Special Feature				"7" CIP Concrete Transition
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	R5 & R6, seepage & rust stains. 15mm displacement @ section 7 (from U/S BP).
Measured Rise (mm)	1664			
Measured At Ring No.				
Sag (mm)	11			
Percent Sag	1			
Sidewall		5	5	Vertical cracks @ most walls, 4 to 6mm, no stain @ top. Heavy rust stain @ bottom. Seepage through section 5.
Measured Span (mm)	1687			
Measured At Ring No.				
Deflection (mm)	12			
Percent Deflection	1			
Floor		5	5	Top 20 mm is abraded.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		5	5	Construction seams, differential settlement is 47mm @ section 18 (from U/S BP).
Separation (mm)	0			
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)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1675, Rise (mm): 1675, Type: BP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	4	Water velocity too high, even at low low flows.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(0.7m ice to crown. 2000/04/21)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		6	6	Wide diagonal crack on West wall.
(Shape : FLARE)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Sharp bend @ inlet.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			200mm dia. logs.
Channel Bottom Degrading/Aggrading	DEGRADING			At d/s end.
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	56.6/55.6	Est. Repl. Yr	2045	Maint. Req. (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	Eric Carcoux		Previous Assistant's Name				
Next Inspection Date	12-May-2014		Previous Inspection Date	16-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							