

Bridge Culvert Inspection			
Bridge File Number	75421 -1 Bridge Culvert	Form Type	CUL1
Year Built	1961	Lot No.	3
Bridge or Town Name	LACOMBE	Inspector Name	Jason Saly
Located Over	WHELP BROOK, 5.56.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	2:26 L1 15.418;2:26 R1 15.406	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	20-Mar-2013
Legal Land Location	NE SEC 15 TWP 40 RGE 27 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-113:48:03, 52:26:50	Data Entry Date	01-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA19	Review Date	26-Mar-2013
Clear Roadway/Skew	23.6 / 10 deg. (RHF)	Dept. Reviewer Name	Chris Black
AADT/Year	30,370 / 2011 (A)	Dept. Review Date	09-Apr-2013
Road Classification	RFD-412.4-130	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2314	2552	SPE	104	152X51	3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others	Fibre optic cable west ditch.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	100m North of CPR O/P.
Vertical Alignment		7	7	
Roadway Width (m)	23.600			
Embankment		7	7	
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 8.7)				
Guardrail (Y/N)	Yes			SB West side TD. NB East side terminal next to bridge parapet. Minor creasing, still functional.
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		6	N	Debris/snow covered.
Heaving (mm)	150			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		6	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	N	
Beavers (Y/N)	Yes			Beaver dam at bevel.
Upstream End General Rating		6	N	GR was 6 from 14Sep2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE)				
Barrel Last Accessible Date	20-Mar-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	(Rise @ R2 = 2554, 2mm. R20 = 2545, 7mm. R30 = 2543, 9mm. 14Sep2011) - Could not measure rise due to ice.
Measured Rise (mm)	2535			
Measured At Ring No.	10			
Sag (mm)	17			
Percent Sag	1			(0.7%. 14Sep2011).
Sidewall		7	7	Span at R2=2342=28mm Span at R10=2349=35mm Span at R20=2330=16mm Span at R30=2332=18mm Span at R42=2354=40mm 2.2%
Measured Span (mm)	2365			
Measured At Ring No.	40			
Deflection (mm)	51			
Percent Deflection	2			
Floor		7	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				Proper lap R20-43; wrong lap R1-19.
Proper Lap (Y/N)	No			1N.
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Soil corrosion leaching through at bolts and seams, 5%. By water @ U/S bevel, superficial corrosion.
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): 2314, Rise (mm): 2552, Type: SPE)				
Fish Passage Adequacy		5	4	Rating due to beaver dam at inlet; fish cannot get through.
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		E		
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	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		5	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	N	(Scour basin d/s of outlet; outlet scour has been repaired. 14Sep2011).
Beavers (Y/N)	No			
Downstream End General Rating		5	N	GR was 5 from 14Sep2011.
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)				HWM not visible. Small.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(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	2013	Remove beaver dam from W bevel.					
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) (%)	75.4/68.0	Est. Repl. Yr	2028	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	20-Dec-2014		Previous Inspection Date	14-Sep-2011			
Inspection Cycle (Default) (months)	21						
Comment							