

Bridge Culvert Inspection				
Bridge File Number	06910 -1 Bridge Culvert		Form Type	CULE
Year Built	1956		Lot No.	4
Bridge or Town Name	BLACKIE		Inspector Name	Jon Davies
Located Over	2ND ORDER TRIBUTARY TO FRANK LAKE, 2.12.12.16.1.2.1, WATERCRS-ST		Inspector Class	BR CLS B
Located On	799:02 C1 8.919		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	24-Jan-2013
Legal Land Location	NW SEC 36 TWP 19 RGE 27 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-113:37:44, 50:39:08		Data Entry Date	21-Feb-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA27		Review Date	03-Feb-2013
Clear Roadway/Skew	9.6 /		Dept. Reviewer Name	Tim Davies
AADT/Year	540 / 2011 (A)		Dept. Review Date	04-Mar-2013
Road Classification	RCU-209-110		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	U/S	-	2400	MP	7.4	125X26	2.8	ROUND
1	MAIN	-	2134	SP	54.3	152X51	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	West ROW		Gas	Crossing 200 m South
Power	East ROW		Municipal	
Others	Fibre optics East ROW		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Intersection 800 m north In sag. Hill to south
Vertical Alignment	6	6	
Roadway Width (m)	9.600		
Embankment	7	7	4:1 east
Sideslope (__:1)	3.0		
(Height of Cover(m) : 4)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		EAST Round 2400 CSP
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	7	Round rock
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		8	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: U/S, Span (mm): , Rise (mm): 2400, Type: MP)				
Barrel Last Accessible Date	24-Jan-2013			Primary span: 2134 Dia. SPCSP 51.6m with 2134 Dia. SPCSP 6m at east
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof			7	Est. Good general roof shape.
Measured Rise (mm)	2050			
Measured At Ring No.	9			
Sag (mm)	84			
Percent Sag	3			
Sidewall			7	
Measured Span (mm)	2170			
Measured At Ring No.	9			
Deflection (mm)	36			
Percent Deflection	2			
Floor			N	300 mm of ice through out
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams			7	
Separation (mm)	10			
Longitudinal Seams			7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			1-N stagger
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating			6	Minor corrosion at bolt holes and below water.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2400, Type: MP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy			5	
Baffle			X	
(Type :)				
Waterway Adequacy			7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating			7	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2134, Type: SP)				
Barrel Last Accessible Date	24-Jan-2013			2400 CSP at East
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Est. General shape is good
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	60			
Percent Sag	2			
Sidewall		7	7	Est.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	60			
Percent Deflection	2			
Floor		N	N	Snow and ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	6	
Separation (mm)	30			
Longitudinal Seams		7	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	7	Minor corrosion below water line.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2134, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
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		WEST
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	3.7 m long. patch welded on seam to barrel. Bolts missing.
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	Scour at invert 4 m x 2 m x 1mdeep. Partially rock lined.
Beavers (Y/N)	No			
Downstream End General Rating		6	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		8	7	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	Yes			Minor drift extending 6 m from d/s invert.
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		6	6	

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) (%)	78.4/74.4	Est. Repl. Yr	2030	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	Rex Davidson		Previous Assistant's Name				
Next Inspection Date	24-Apr-2016		Previous Inspection Date	16-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							