

Bridge Culvert Inspection				
Bridge File Number	06684 -1 Bridge Culvert		Form Type	CULM
Year Built/Lined	1952/1990		Lot No.	3
Bridge or Town Name	SHAUGHNESSY		Inspector Name	Jason Rusu
Located Over	PIYAMI COULEE, 2.12.16, WATERCRS-ST		Inspector Class	BR CLS A
Located On	25:02 C1 19.040		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	09-Dec-2011
Legal Land Location	NW SEC 31 TWP 10 RGE 21 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-112:50:46, 49:52:01		Data Entry Date	17-Jan-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	26-Dec-2011
Clear Roadway/Skew	12.5 /		Dept. Reviewer Name	Tim Davies
AADT/Year	3,100 / 2010 (A)		Dept. Review Date	18-Jan-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
2	MAIN FULL LINER	-	1600	MP	60	68X13	3.5	ROUND
3	MAIN FULL LINER	-	1600	MP	60	68X13	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West and east r/w	Gas	
Power	East ditch 3-wire 15m from c.l	Municipal	
Others	Fibre optics at east r/w	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	Curve to north, superelevated, no passing s/b, limited sight distance.
Vertical Alignment	5	5	
Roadway Width (m)	11.500		
Embankment	7	7	2:1 over pipe Bench at 6:1-3 m wide at west embankment.
Sideslope (__:1) (Height of Cover(m) : 7)	3.0		
Guardrail (Y/N)	Yes		W. side only - delineators E. side. Accident damage 7 sections from South
Approach Road / Embankment General Rating	5	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)			
Direction	W		South pipe
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		5	5	Corrosion on the floor with pitting
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 400)		5	5	
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Barrel Last Accessible Date	09-Dec-2011			Dog leg in both pipes to north
Special Features				
Special Feature (Type :)				S pipe
Special Feature (Type :)				
Special Feature (Type :)				
Roof		6	6	
Measured Rise (mm)	1560			
Measured At Ring No.	4			
Sag (mm)	40			
Percent Sag	3			
Sidewall		6	6	
Measured Span (mm)	1620			
Measured At Ring No.	4			
Deflection (mm)	20			
Percent Deflection	1			
Floor		5	4	Extensive corrosion w/pitting and scaling.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)				
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Coating		5	4	Corrosion with some pitting/scaling along floor and haunches
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
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
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		South Culvert - east end
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	5	Corrosion on floor
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		5	5	Rock at sides of bevel. None @ S/B & banks
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Secondary Span)				
Direction		W		North pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Secondary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	5	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Barrel Last Accessible Date	09-Dec-2011			
Special Features				
Special Feature				N pipe
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Inward
Measured Rise (mm)	1620			
Measured At Ring No.	4			
Sag (mm)				
Percent Sag				
Sidewall		6	6	
Measured Span (mm)	1560			
Measured At Ring No.	4			
Deflection (mm)				
Percent Deflection				
Floor		5	4	Extensive corrosion and pitting
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	10			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Coating		5	4	Extensive corrosion with some pitting along floor
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	fast flow steep grade
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
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
(Pipe # : 3, Span Type: Secondary Span)				
Direction		E		North East
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		6	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 400)		6	6	
Scour/Erosion		6	6	
Beavers (Y/N)		No		
Downstream End General Rating		6	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	90 deg cut bank at south u/s. West Channel meanders through valley with 1.2 m high banks. drift @ u/s
Bank Stability		5	5	
HWM (m below Top of Culvert)	0.4			Grass on banks and on fence 0.4 m below crown at outlet, 0.9 m below at inlet.
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading	AGGRADING			
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	2012	Replace 2 guard rail sections (3.7 m x2) @ SW					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	67.5/67.5	Est. Repl. Yr	2041	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	09-Sep-2013		Previous Inspection Date	06-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							