

Bridge Culvert Inspection			
Bridge File Number	08867 -1 Bridge Culvert	Form Type	CULE
Year Built	1956	Lot No.	1
Bridge or Town Name	FAIRVIEW	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO ISLAND CREEK, 8.10.80.2.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	682:02 C1 20.602	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	19-Jun-2012
Legal Land Location	SW SEC 3 TWP 82 RGE 4 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-118:32:23, 56:04:21	Data Entry Date	10-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA04	Review Date	09-Jul-2012
Clear Roadway/Skew	8.7 /	Dept. Reviewer Name	David Morrison
AADT/Year	220 / 2011 (A)	Dept. Review Date	01-Nov-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1429	1575	SPE	110.26	152X51	3.5	ELLIPSE
1	D/S	-	1500	MP	54.5	125X26	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South r/w	Gas	
Power	3 OH line in N. r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Sag curve 100m west.
Vertical Alignment	5	5	Site dist.~75m to West.
Roadway Width (m)	8.700		
Embankment	6	6	North side steepens to 2:1 - 10m from shoulder.
Sideslope (__:1)	3.0		
(Height of Cover(m) : 8)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	5	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		
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)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	4	Small scour 0.5mWx0.3mLx0.3mD at bevel end.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	4	Settlement along bevel edges. Small scour 0.5mWx0.3mLx0.3mD at bevel end.
Beavers (Y/N)	No			
Upstream End General Rating		5	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1429, Rise (mm): 1575, Type: SPE)				
Barrel Last Accessible Date	19-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		3	3	Cracks in roof @ 12:00 in circ. seams in rings 18 - 23 and 26 ranging from 30-100mm long. photo Roof flatening occurring in these same rings.
Measured Rise (mm)	1364			
Measured At Ring No.	26			
Sag (mm)	211			
Percent Sag	13			
Sidewall		3	3	Sidewall crimping in rings 22,23 & 26. (photo) Crack 130mm long @ 8:00 in ring 23 not near longitudinal seam.- photo
Measured Span (mm)	1646			
Measured At Ring No.	26			
Deflection (mm)	217			
Percent Deflection	15			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.	26			
Abrasion (Y/N)	No			
Circumferential Seams		3	3	Cracks @ 12:00 position in 7 rings. Photo
Separation (mm)	0			
Longitudinal Seams		5	5	
Total No. of Cracked Rings	0			
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		4	4	Pitting/scaling rust bottom 0.6m. photo
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: MAIN, Span (mm): 1429, Rise (mm): 1575, Type: SPE)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		3	3	Outlet 400mm above S.B.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 1500, Type: MP)				
Barrel Last Accessible Date	19-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)	1428			
Measured At Ring No.	47			
Sag (mm)	72			
Percent Sag	5			
Sidewall		6	6	
Measured Span (mm)	1571			
Measured At Ring No.	47			
Deflection (mm)	71			
Percent Deflection	5			
Floor		8	8	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Const. damage at leading edge of ring 50 from 12:00-3:00 position max deflection-60mm.
Separation (mm)	60			
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)				
Coating		7	7	
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: D/S, Span (mm): , Rise (mm): 1500, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		3	3	Outlet perched 300mm.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	CSP end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		4	4	Vert. banks u/s & d/s.
HWM (m below Top of Culvert)	0.2			Potential for drift.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	40.2/39.9	Est. Repl. Yr	2015	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor upstream scour. Monitor sag/deflections and cracks. Preliminary Eng. currently being completed.		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	19-Sep-2015		Previous Inspection Date	12-Nov-2009			
Inspection Cycle (Default) (months)	39						
Comment							