Bridge Culvert Inspection

Bridge File Number	75379 -2 Bridge Culvert	Form Type	CULE
Year Built	2009	Lot No.	4
Bridge or Town Name	FAIRVIEW	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO HINES CREEK, 8.10.80.4, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	682:02 C1 13.545	Assistant Class	
Water Body Cl./Year		Inspection Date	19-Jun-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NW SEC 36 TWP 81 RGE 5 W6M	Data Entry Date	10-Jul-2012
Longitude, Latitude	-118:38:39, 56:03:60	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	09-Jul-2012
Contract Main. Area	CMA04	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	8.3 / -10 deg. (LHF)	Dept. Review Date	01-Nov-2012
AADT/Year	220 / 2011 (A)	Follow-Up By	
Road Classification	RCU-209-110		
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	-	1524	SSP	97		12.7	ROUND
1	D/S	-	1810	SP	20	152X51	3.0	ROUND
Special Features		DRIFT CATCHER, BARREL ELBOW						
Special Features Comment		H-pile drift deflector/catcher at u/s end.						

Utilities (Located at)

Utility Attachments			
Telephone	8m South @ c/l.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Curves on both directions. No passing down grade West bound.
Vertical Alignment		5	5	
Roadway Width (m)	8.300			
Embankment		9	4	SE ditch 14mLx0.3mWx0.4mD scour - vegetated.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **15**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		Northeast
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		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		9	9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion		9	9	
Beavers (Y/N)	No			
Upstream End General Rating		**9**	**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: SSP**)				
Barrel Last Accessible Date	19-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	9	Welded steel pipe - rise from manafacture.
Measured Rise (mm)	1460			@ c/l
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		9	9	
Measured Span (mm)	1524			@ c/l
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		9	9	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	9	
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)				
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): , Rise (mm): 1524, Type: SSP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**9**	**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 1810, Type: SP**)				
Barrel Last Accessible Date	19-Jun-2012			Silt 0.8m from d/s crown - viewed from ends.
Special Features				
Special Feature			X	
(Type : **DRIFT CATCHER**)				
Special Feature			X	
(Type : **BARREL ELBOW**)				
Roof		9	N	
Measured Rise (mm)	1820			from d/s
Measured At Ring No.	5			
Sag (mm)	0			
Percent Sag	0			
Sidewall		9	N	
Measured Span (mm)	1815			from d/s
Measured At Ring No.	5			
Deflection (mm)	0			
Percent Deflection	0			
Floor		9	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	N	
Separation (mm)				
Longitudinal Seams		9	N	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		9	N	
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: D/S, Span (mm): , Rise (mm): 1810, Type: SP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			1.0m of silt
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel Extension General Rating		**9**	**N**	GR was '9' on 17-Aug-2009

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		Southwest
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		9	N	silt covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		9	9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion		9	9	
Beavers (Y/N)	No			
Downstream End General Rating		**9**	**9**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		5	5	U/S channel bank has slides
HWM (m below Top of Culvert)				HWM not visible.
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		**5**	**8**	

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) (%)	**100.0/100.0**	**Sufficiency Rating (Last/Now) (%)**	**97.0/99.3**	Est. Repl. Yr	2059	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor ditch in SE corner.	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	Brian Pientsch	Previous Assistant's Name	Tim Miskiman		
Next Inspection Date	19-Sep-2015	Previous Inspection Date	17-Aug-2009		
Inspection Cycle (Default) (months)	39				
Comment					