Bridge Culvert Inspection

Bridge File Number	08868 -1 Bridge Culvert	Form Type	CULE
Year Built/Lined	1961/1993	Lot No.	2
Bridge or Town Name	FAIRVIEW	Inspector Name	Russel Vanderschaaf
Located Over	ISLAND CREEK, 8.10.80.2, WATERCRS-ST	Inspector Class	BR CLS B
Located On	682:02 C1 20.094	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	-118:32:52, 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	8.2 / 0 deg.	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 FULL LINER	-	2600	MP	84	125X26	3.5	ROUND
1	D/S FULL LINER	-	3050	SPE	47.25	152X51	3.0	ROUND
Special Features		CONC THRUST BEAM, BARREL ELBOW						
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	Buried S side slope	Gas	
Power	OHP 50m N of cl	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Sag curve no passing.
Vertical Alignment		5	5	
Roadway Width (m)	8.200			
Embankment		8	8	
Sideslope (__:1)	3.5			
(Height of Cover(m) : **10**)				
Guardrail (Y/N)	Yes			Broken turndown end NE corner.-photo
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	650			
Scour Protection		9	3	AJ-24 A Jacks Scouring on NE corner 3mWx4mLx1mD.-photo
(Type : **CONCRETE**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		9	3	2m high beaverdam 10m u/s. Scouring on NE corner 3mWx4mLx1mD.-photo
Beavers (Y/N)	Yes			
Upstream End General Rating		**7**	**3**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2600, Type: MP**)				
Barrel Last Accessible Date	19-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	
Measured Rise (mm)	2470			20M from inlet
Measured At Ring No.				
Sag (mm)	130			
Percent Sag	5			
Sidewall		5	5	
Measured Span (mm)	2732			20m from inlet.
Measured At Ring No.				
Deflection (mm)	132			
Percent Deflection	5			
Floor		5	5	Covered by concrete & ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Bulge at 2 o'clock 40m from, inlet.
Separation (mm)	100			
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)	No			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2600, Type: MP**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		3	3	Vertical elbows in extension
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**5**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 3050, Type: SPE**)				
Barrel Last Accessible Date	19-Jun-2012			Water 1.5m from crown d/s end - viewed from ends.
Special Features				
Special Feature		9	9	2-23 degree vertical elbows
(Type : **BARREL ELBOW**)				1-45 degree horizontal elbow
Special Feature				
(Type :)				
Roof		9	N	19.88 from d/s end.
Measured Rise (mm)	3047			
Measured At Ring No.				
Sag (mm)	3			
Percent Sag				
Sidewall		9	N	19.88 from d/s end.
Measured Span (mm)	3052			
Measured At Ring No.				
Deflection (mm)	2			
Percent Deflection				
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			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 3050, Type: SPE**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		3	3	vertical elbows
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		**9**	**N**	GR was '9' on 25-Oct-2011

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		9	9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1400			
Scour Protection		9	9	AJ-24 Jacks
(Type : **CONCRETE**)				
(Avg. Rock Size(mm) :)				
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	
HWM (m below Top of Culvert)				No HWM visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Beaver dam u/s. stable
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		**8**	**8**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP	2013	Place 15m2 Class I riprap on u/s end.				
REMOVE DRIFT ACCUMULATION						
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION	2013	Remove beaver dam u/s end.				
OTHER ACTION	2013	Repair damaged turn down end.				
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**56.2/55.6**	Est. Repl. Yr	2051	Maint. Reqd. (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	Brian Pientsch	Previous Assistant's Name			
Next Inspection Date	19-Sep-2015	Previous Inspection Date	25-Oct-2011		
Inspection Cycle (Default) (months)	39				
Comment					