Bridge Culvert Inspection

Bridge File Number	86005 -1 Bridge Culvert	Form Type	CULM
Year Built	1999	Lot No.	2
Bridge or Town Name	BEZANSON	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO WAPITI RIVER, 8.10.58.18.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	43:04 R1 20.994;43:04 L1 20.992	Assistant Class	
Water Body Cl./Year		Inspection Date	08-Mar-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 13 TWP 72 RGE 4 W6M	Data Entry Date	22-Mar-2011
Longitude, Latitude	-118:27:55, 55:13:43	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	16-Mar-2011
Contract Main. Area	CMA05	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	27.6 / 6 deg. (RHF)	Dept. Review Date	07-Mar-2012
AADT/Year	5,580 / 2010 (A)	Follow-Up By	
Road Classification	RAD-412.4-120		
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2700	MP	82	125X26	3.5,3.5,3.5	ROUND
2	MAIN	-	2700	MP	82	125X26	3.5,3.5,3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	WB lane, intersection just east of culverts.
Vertical Alignment		8	8	WB lane 13.0m, 12.8m EB lane.
				N. side only of WB lane.
				N & S side of EB lane.
Roadway Width (m)	25.800			
Embankment		4	N	Ditch erosion SW corner(15mX1mX1m).-05-May-2009
Sideslope (__:1)	7.0			Snow covered.
(Height of Cover(m) : **1.5**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : **1, Span Type: Primary Span**)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	N	Gabion Structure surrounding inlets - vegetated.
(Type : **GABION**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	N	Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**8**	GR carried over.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP**)				
Barrel Last Accessible Date	08-Mar-2011			West pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	2725			At CL EBL
Measured At Ring No.				
Sag (mm)				Upward
Percent Sag	0			
Sidewall		8	8	
Measured Span (mm)	2653			At CL ebl
Measured At Ring No.				
Deflection (mm)				Inward
Percent Deflection	0			
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	30			
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 # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP**)				
Coating		8	8	Trenchcoat.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	This is a drainage project.
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	N	Gabion structure around outlets.
(Type : **GABION**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	GR carried fwd.

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Direction		N		East pipe.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	N	Gabion structure around inlets.
(Type : **GABION**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**8**	GR carried fwd.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP**)				
Barrel Last Accessible Date	08-Mar-2011			East pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	2711			Near c/l EBL
Measured At Ring No.				
Sag (mm)	11			Upward
Percent Sag	0			
Sidewall		8	8	
Measured Span (mm)	2659			Near c/l EBL
Measured At Ring No.				
Deflection (mm)	31			Inward
Percent Deflection	0			
Floor		8	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	30			
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): 2700, Type: MP**)				
Coating		8	6	Trenchcoat. Minor surface rust near d/s end.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	On a drainage project.
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		8	N	Gabion structure around outlets.
(Type : **GABION**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	GR carried fwd.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	U/S channel enters @ 90 degrees.
Bank Stability		9	9	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
HWM (m below Top of Culvert)				NO HWM VISBILE.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable.
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	2011	Install rock ditch drain SW corner, carried over from 05-May-2009.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**89.4/89.4**	Est. Repl. Yr	2049	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	Kris Bosters	Previous Assistant's Name			
Next Inspection Date	08-Dec-2012	Previous Inspection Date	05-May-2009		
Inspection Cycle (Default) (months)	21				
Comment					