Bridge Culvert Inspection

Bridge File Number	81935 -1 Bridge Culvert	Form Type	CULM
Year Built	1999	Lot No.	4
Bridge or Town Name	KEG RIVER	Inspector Name	Russel Vanderschaaf
Located Over	WATERCOURSE, WATERCRS-NI	Inspector Class	BR CLS B
Located On	35:10 C1 37.818	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	15-Nov-2011
Legal Land Location	NE SEC 13 TWP 100 RGE 23 W5M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-117:37:17, 57:41:10	Data Entry Date	16-Dec-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA04	Review Date	12-Dec-2011
Clear Roadway/Skew	10.5 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,050 / 2010 (A)	Dept. Review Date	09-Jan-2012
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	999		

Bridge Culvert Information

Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	32	125X26	2.8	ROUND
2	MAIN	-	2400	MP	32	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	2 sets of OH 40m west	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	10.500			
Embankment		7	6	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
Direction				(South pipe, west)
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**
(Pipe # : **1, Span Type: Primary Span**)				
Cutoff Wall		X	X	
Bevel End		6	5	Water 1200mm deep
Heaving (mm)				
Invert Above/Below Stream Bed				Covered with snow.+ water
Above/Below (mm)				
Scour Protection		N	N	Covered with snow.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	Covered in snow + water
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Barrel Last Accessible Date				(South pipe) Viewed from ends. 1200mm ice to crown.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	VIEWED FROM ENDS-shape appears good.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
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		N	6	Rusting at water level
Corrosion By Soil (Y/N)				
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): , Rise (mm): 2400, Type: MP**)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Approx. 1.2m ponding.
Fish Passage Adequacy		7	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Span Type: Primary Span**)				
Direction				(South pipe,east)
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	(UNDER snow-RATING BASED ON WHAT SEEN
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		N	N	Covered with snow + ice
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Direction				(North pipe, west)
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Bevel End		6	5	UNDER snow-BASED ON WHAT ABLE TO VIEW 1m of water
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		N	N	Covered with snow+ ice.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Barrel Last Accessible Date				(North pipe) viewed from ends. 1400mm-space from ice to crown.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(VIEWED FROM ENDS-2001/05/10)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
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		N	6	From ends, minor superficial rust lower 3/4.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP**)				
Ponding (Y/N)	Yes			Approx. 1m ponding.
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **2, Span Type: Secondary Span**)				
Direction				(North pipe-east)
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	(UNDER snow, RATING BASED ON WHAT viewed.
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		N	N	Covered with snow + ice
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	No visible problems thru snow.
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	7	
Bank Stability		7	8	
HWM (m below Top of Culvert)				HWM NOT VISIBLE
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Beaver huts in D/S channel.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	

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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**61.5/60.5**	Est. Repl. Yr	2042	Maint. Reqd. (Y/N)	No

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	Lisbeth Medina		
Next Inspection Date	15-Aug-2013	Previous Inspection Date	16-Feb-2010		
Inspection Cycle (Default) (months)	21				
Comment					