

Bridge Culvert Inspection			
Bridge File Number	78643 -1 Bridge Culvert	Form Type	CUL1
Year Built	1977	Lot No.	4
Bridge or Town Name	KINUSO	Inspector Name	Russel Vanderschaaf
Located Over	JERRY CREEK, 8.11.80.39.9, WATERCRS-ST	Inspector Class	BR CLS B
Located On	33:14 C1 17.733	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Feb-2013
Legal Land Location	NE SEC 28 TWP 70 RGE 9 W5M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-115:17:58, 55:05:31	Data Entry Date	08-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA06	Review Date	07-Apr-2013
Clear Roadway/Skew	9.9 / -10 deg. (LHF)	Dept. Reviewer Name	
AADT/Year	770 / 2012 (A)	Dept. Review Date	
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	99		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2314	2552	SPE	89.6	152X51	3.5	ELLIPSE
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		7	7	Sag, curve & crest both sides. No passing southbound. Pipe in horizontal curve.
Vertical Alignment		6	6	
Roadway Width (m)	9.900			
Embankment		6	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 12.1)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		N	N	Under snow
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	Rate based on 50% visibility.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			Drift 50-100mm over barrel end
Above/Below (mm)	300			
Scour Protection		6	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 1000)				
Scour/Erosion		6	N	Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE)				
Barrel Last Accessible Date	05-Apr-2011			Could only access to ring 6 due to ice conditions
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	N	Holes in roof near outlet from equipment damage.
Measured Rise (mm)	2465			Measurements not taken due to ice on floor.
Measured At Ring No.	8			
Sag (mm)	87			
Percent Sag	3			
Sidewall		4	N	(Cracked seams. Damage at 9:00 on ring 14 & missing bolt at 9:00 ring 17.- 5 Apr 2011) Could only access to ring 6 due to ice conditions
Measured Span (mm)	2443			
Measured At Ring No.	8			
Deflection (mm)	129			
Percent Deflection	6			
Floor		N	N	Under water/ice.
Bulge (mm)	0			
Measured At Ring No.	8			
Abrasion (Y/N)	Yes			
Circumferential Seams		7	N	
Separation (mm)	0			
Longitudinal Seams		4	N	(Rings 8,11, 12 & 13 at 3:00 o'clock are cracked. Ring 8, 110mm of steel left. 5 Apr 2011)
Total No. of Cracked Rings	4			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)	110			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Superficial 4-8 o'clock.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			Towards D/S end.
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE)				
Fish Passage Adequacy		4	4	Outlet above S.B.
Baffle (Type :)		X	X	
Waterway Adequacy		N	N	Scour D/S.-23-Jul-2009
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	GR carried forward from 5 Apr 2011
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		N	N	Bevel cantilevers 2.0m over riprap - photo.-23-Jul-2009
Heaving (mm)	0			Snow cover Only 15% visible.
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	2000			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 500)		5	N	Missing two timber planks in drop structure, others rotten.-23-Jul-2009 Snow covered.
Scour/Erosion		5	N	Snow covered
Beavers (Y/N)		No		
Downstream End General Rating		N	N	GR 5-(23-Jul-2009)
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.0			Drift u/s bevel
Drift (Y/N)	No			Drift accumulation across channel 20m D/S. -23-Jul-2009
Channel Bottom Degrading/Aggrading		DEGRADING		Degrading D/S only.
Beavers (Y/N)		No		
(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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	55.9/55.8	Est. Repl. Yr	2016	Maint. Req. (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	12-Nov-2014		Previous Inspection Date	05-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							