

Bridge Culvert Inspection			
Bridge File Number	71646 -1 Bridge Culvert	Form Type	CUL1
Year Built	1980	Lot No.	2
Bridge or Town Name	TANGENT	Inspector Name	Russel Vanderschaaf
Located Over	2ND ORDER TRIBUTARY TO SMOKY RIVER, 8.10.58.5.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	740:02 C1 9.282	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	08-Nov-2011
Legal Land Location	NW SEC 33 TWP 78 RGE 24 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-117:40:28, 55:48:24	Data Entry Date	14-Dec-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA03	Review Date	12-Dec-2011
Clear Roadway/Skew	8.5 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	330 / 2010 (A)	Dept. Review Date	10-Jan-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	100		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2610	2877	SPE	70.1	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	O/H East of highway & crosses hwy.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	6	On the start of an S curve.
Vertical Alignment	6	6	Mild rise on S approach. No passing SBL south.
			Delineator posts installed.
Roadway Width (m)	8.500		
Embankment	N	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 9)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	5	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	9	8	
Collar	N	8	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		N	7	
Heaving (mm)	400			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	N	Due to poor alignment south side of pipe appears to be subject to scaling.-04-Feb-2009
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		1	5	No problems evident
Beavers (Y/N)	Yes			Blocking 40% of culvert capacity
Upstream End General Rating		9	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)				
Barrel Last Accessible Date	08-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2847			
Measured At Ring No.	9			
Sag (mm)	30			
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	2647			
Measured At Ring No.	9			
Deflection (mm)	37			
Percent Deflection	2			
Floor		9	7	
Bulge (mm)	0			
Measured At Ring No.	9			
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2 o'clock seam improper lap & 8 o'clock
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Superficial rust on floor.
Corrosion By Soil (Y/N)	No			
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): 2610, Rise (mm): 2877, Type: SPE)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		6	4	Beaverdam in u/s bevel.
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	3	Beaverdam upstream end blocking ~40%.-photo
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		N	4	Banks sloughing.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	4	Erosion and sloughing.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		4	4	Channel curves south at outlet. Vertical banks & slumps d/s
Bank Stability		4	4	Sloughing bank
HWM (m below Top of Culvert)	1.3			Staining on sidewalls.-04-Feb-2009
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	Yes			

Structure Usage				
		Last	Now	Explanation of Condition
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2011	Remove u/s beaverdam in bevel					
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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	68.8/50.2	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor d/s scour and erosion.		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	Jordan Evans			
Next Inspection Date	08-Feb-2015		Previous Inspection Date	04-Feb-2009			
Inspection Cycle (Default) (months)	39						
Comment							