

Bridge Culvert Inspection				
Bridge File Number	86163 -1 Bridge Culvert		Form Type	CUL1
Year Built	1961		Lot No.	2
Bridge or Town Name	WATERCOURSE CULVERT ON PROVINCIAL HIGHWAY 35 NEAR MEANDER RI		Inspector Name	Brian Pientsch
			Inspector Class	BR CLS A
Located Over	TRIBUTARY TO HAY RIVER, 9.9, WATERCRS-ST		Assistant Name	Clem Guenette
			Assistant Class	
Located On	35:18 C1 39.124		Inspection Date	10-Jan-2012
Water Body Cl./Year			Data Entry By	Theresa Lacusta
Navigabil. Cl./Year			Data Entry Date	04-Mar-2012
Legal Land Location	NE SEC 10 TWP 119 RGE 20 W5M		Reviewer Name	Eric Carcoux
Longitude, Latitude	-117:20:58, 59:19:22		Review Date	26-Feb-2012
Road Authority	Alberta Transportation (AIT)		Dept. Reviewer Name	David Morrison
Contract Main. Area	CMA01		Dept. Review Date	30-Mar-2012
Clear Roadway/Skew	9.4 / 30 deg. (RHF)		Follow-Up By	
AADT/Year	370 / 2011 (A)			
Road Classification	RAU-210-110			
Detour Length (km)	999			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	SP	26.9	68X13	2.8	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		8	8	Sag curve
Vertical Alignment		8	7	
Roadway Width (m)	10.200			
Embankment		4	4	Cracks and vertical slide 6m East of road shoulder.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		5	N	Snow covered
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	N	Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		5	5	GR carried fwd from 26-May-2010
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SP)				
Barrel Last Accessible Date	26-May-2010			Not accessible, 480mm crown to ice.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	
Measured Rise (mm)	1487			
Measured At Ring No.	20			
Sag (mm)	13			
Percent Sag	1			
Sidewall		7	N	
Measured Span (mm)	1519			
Measured At Ring No.	20			
Deflection (mm)	19			
Percent Deflection	2			
Floor		N	N	Under water/ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	N	
Separation (mm)	90			
Longitudinal Seams		6	N	Riveted pipe.
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		4	N	Pitting rust on floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		3	3	d/s drop.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	4	
Icing (Y/N)	Yes			at downstream bevel.
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		7	N	GR 7 -26-May-2010
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
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	ABOVE			Culvert end undermined by 2m.-26-May-2010
Above/Below (mm)	2000			Completely iced up.
Scour Protection		3	N	Vertical slump 2m high along North side of culvert end.-26-May-2010
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		3	N	Erosion 2m high along North side of culvert end.-26-May-2010
Snow covered				
Beavers (Y/N)	No			
Downstream End General Rating		3	3	GR carried fwd from 26-May-2010
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		4	N	Slumping banks on d/s channel/slide 1.5m high along S and N side of culvert-5m d/s.-26-May-2010
Snow covered				
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : None)				
(Fish Compensation Measure 2 : None)				
Channel General Rating		4	4	GR carried over from 26-May-2010

Structure Usage				
		Last	Now	Explanation of Condition

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	2012	Repair d/s embankment and apron, if not already done.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	52.6/38.2	Est. Repl. Yr	2015	Maint. Req. (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	Lisbeth Medina			
Next Inspection Date	10-Oct-2013		Previous Inspection Date	26-May-2010			
Inspection Cycle (Default) (months)	21						
Comment							