

Bridge Culvert Inspection			
Bridge File Number	71907 -1 Bridge Culvert	Form Type	CUL1
Year Built	1981	Lot No.	2
Bridge or Town Name	HOLYOKE	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO MURIEL CREEK, 7.5.7, WATERCRS-ST	Inspector Class	BR CLS B
Located On	657:04 C1 7.287	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	14-Dec-2011
Legal Land Location	NW SEC 6 TWP 60 RGE 4 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-110:36:19, 54:09:48	Data Entry Date	14-Jan-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA08	Review Date	04-Jan-2012
Clear Roadway/Skew	9.7 / 11 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	940 / 2010 (A)	Dept. Review Date	18-Jan-2012
Road Classification	RCU-210-110	Follow-Up By	
Detour Length (km)	50		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	36	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	
Power	3 wires 20.0 m East of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag @ top of East end roof.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Entrance SE & SW. In sag, limited sight distance. No passing.
Vertical Alignment		7	7	
Roadway Width (m)	9.700			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 2.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	6	
Heaving (mm)	150			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	N	
Beavers (Y/N)	Yes			1.5m high dam @ inlet - photo.
Upstream End General Rating		7	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2200 , Type: MP)				
Barrel Last Accessible Date	14-Dec-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	4	Sag not measured due to ice. Noticable flattening of roof sections.
Measured Rise (mm)	2070			Sag estimated at 10%
Measured At Ring No.				
Sag (mm)	130			
Percent Sag	6			
Sidewall		4	4	West of centerline.
Measured Span (mm)	2409			
Measured At Ring No.	2			
Deflection (mm)	209			
Percent Deflection	10			
Floor		5	N	Covered by ice.
Bulge (mm)	0			Minor, rocks washed into barrel.-Aug,2008
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		5	5	
Separation (mm)	140			
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		6	6	Bottom 1/2 of culvert has minor superficial rusting.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
Fish Passage Adequacy		X	X	
Baffle (Type :)		X	X	
Waterway Adequacy		4	4	Restricted by beaver dam @ inlet.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		4	4	
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		7	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		4	N	Grassed over, not much rock visible.-Aug,2008
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		4	N	Bevel projecting from fill 1m. Grassed over, not much rock visible.-AUG, 2008
Beavers (Y/N)		No		
Downstream End General Rating		4	4	GR carried fwd from Aug 6, 2008
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	8	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)		Yes		
Channel Bottom Degrading/Aggrading				
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	2012	30m3 @ outlet end, if not not already done.					
REMOVE DRIFT ACCUMULATION	2012	Remove dam @ inlet.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS	2012						
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) (%)	44.9/43.7	Est. Repl. Yr	2030	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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	14-Mar-2015		Previous Inspection Date	10-Aug-2008			
Inspection Cycle (Default) (months)	39						
Comment							