

Bridge Culvert Inspection				
Bridge File Number	07496 -1 Bridge Culvert		Form Type	CULM
Year Built	1960		Lot No.	2
Bridge or Town Name	WARBURG		Inspector Name	Todd Warshawski
Located Over	STRAWBERRY CREEK, 6.112, WATERCRS-ST		Inspector Class	BR CLS B
Located On	39:08 C1 6.772		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Jan-2013
Legal Land Location	SW SEC 3 TWP 49 RGE 3 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:21:51, 53:11:33		Data Entry Date	11-Feb-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11		Review Date	16-Jan-2013
Clear Roadway/Skew	11.2 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	2,850 / 2011 (A)		Dept. Review Date	14-Feb-2013
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3660	2440	BP	53.6			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	North & south r/w.		Gas	
Power	3 wires North r/w, 25m from c/l.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Access road each way, no passing. In sag curve, limited sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	11.200			
Embankment		N	4	Erosion gully @ SW 20m long, 5m wide, 1m deep outside of road r/w.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 4.5)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		4	4	Some cracks, separated from barrel approx 25mm. Moved in 50mm East side. Flared
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	N	Snow covered
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	Scoured 10m x 10m wide.-27-May-2009
Beavers (Y/N)	No			
Upstream End General Rating		4	4	GR carried forward.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1830, Rise (mm): 2440, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	10-Jan-2013			East cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	Short longitudinal medium cracks, some transverse cracking. 25m from U/S transverse medium crack leaking water At U/S.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	6			est
Percent Sag	0			
Sidewall		5	5	Several vertical cracks with efflorescence East wall. Series of medium vertical cracks 10m to 25m from U/S. Medium vertical cracks on walls.
Measured Span (mm)	1840			
Measured At Ring No.				
Deflection (mm)				
Percent Deflection	0			
Floor		N	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	
Separation (mm)	20			
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 1830, Rise (mm): 2440, Type: BP, Cell Sequence: 1)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	6	Minor drift at inlet.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		5	5	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1830, Rise (mm): 2440, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date	10-Jan-2013			West cell.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	Longitudinal, transverse medium cracking. est
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		5	5	West sidewall medium cracks have efflorescence. cl
Measured Span (mm)	1840			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Covered with ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	20			
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 1830, Rise (mm): 2440, Type: BP, Cell Sequence: 2)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	6	Minor drift at inlet.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		X	X	
Wingwalls		4	4	Wide vertical cracks both wings. Wingwall moved 150mm inwards.
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	Snow covered
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	Scour along side of channel, 5m wide, 20m long.-27-May-2009
Beavers (Y/N)	No			
Downstream End General Rating		4	4	GR carried fwd.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		5	5	
HWM (m below Top of Culvert)	0.0			Drift on slopes. Caught on cell divider.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	Remove drift at inlet.					
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) (%)	56.4/53.6	Est. Repl. Yr	2030	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor wingwall stability.		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	Wade Nanninga		Previous Assistant's Name				
Next Inspection Date	10-Oct-2014		Previous Inspection Date	25-Jan-2011			
Inspection Cycle (Default) (months)	21						
Comment							