

Bridge Culvert Inspection				
Bridge File Number	72058 -1 Bridge Culvert		Form Type	CUL1
Year Built	1964		Lot No.	4
Bridge or Town Name	DUCHESS		Inspector Name	Tom Carey
Located Over	EID - ONE TREE CK, WATERCRS-IC		Inspector Class	BR CLS A
Located On	544:02 C1 8.691		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	15-Feb-2010
Legal Land Location	SW SEC 14 TWP 20 RGE 14 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-111:50:52, 50:41:18		Data Entry Date	03-Mar-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	23-Feb-2010
Clear Roadway/Skew	8.7 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	1,520 / 2008 (A)		Dept. Review Date	08-Mar-2010
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	1738	1920	SPE	40.2	152X51	2.8,2.8,2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	South side		Gas
Power	North side, 3 - wire		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	BOTTOM OF SAG CURVE
Vertical Alignment		5	5	
Roadway Width (m)	8.700			
Embankment		N	N	Snow (SLUMPING SLIGHTLY @ SOUTH)
Sideslope ( :1)	2.0			
(Height of Cover (m) : 6.5)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH
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		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	N	Snow
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size (mm) : <b>350</b> )				
Scour/Erosion		8	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>9</b>	<b>N</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1738, Rise (mm): 1920, Type: SPE)				
Barrel Last Accessible Date	15-Feb-2010			Has been lined with a 1600mm csp and grouted in. The ends have been extended with 1800 CSP's sloped ends
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		9	9	ice on floor
Measured Rise (mm)	1595			
Measured At Ring No.	2			
Sag (mm)	5			
Percent Sag				
Sidewall		9	9	
Measured Span (mm)	1610			
Measured At Ring No.	2			
Deflection (mm)	10			
Percent Deflection				
Floor		9	N	ice 200mm Dp
Bulge (mm)	0			
Measured At Ring No.	2			
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	20			
Longitudinal Seams		X	X	All CSP
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		9	9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1738, Rise (mm): 1920, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>9</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	N	Snow
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 300)				
Scour/Erosion		8	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>N</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		6	N	snow
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Snow
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/100.0</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>84.5/86.2</b>	Est. Repl. Yr	2046	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	15-May-2013		Previous Inspection Date	21-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							