

Bridge Culvert Inspection			
Bridge File Number	77142 -1 Bridge Culvert	Form Type	CUL1
Year Built	1970	Lot No.	3
Bridge or Town Name	DIDSBURY	Inspector Name	Jason Saly
Located Over	TRIBUTARY TO DOGPOUND CREEK, 3.89.8.6, WATERCRS-ST	Inspector Class	BR CLS A
Located On	766:04 C1 27.401	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	15-Feb-2012
Legal Land Location	NW SEC 12 TWP 31 RGE 3 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-114:18:32, 51:38:48	Data Entry Date	08-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA28	Review Date	29-Feb-2012
Clear Roadway/Skew	8.5 /	Dept. Reviewer Name	Andrew Smikles
AADT/Year	280 / 2010 (A)	Dept. Review Date	09-Mar-2012
Road Classification	RLU-209G-90	Follow-Up By	
Detour Length (km)	3		

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	23.8	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	East ditch.			Gas	Crossing 200m south.		
Power	1 OH E r/w.			Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	No passing NB due to shallow crest to North.
Vertical Alignment		7	7	
Roadway Width (m)	8.500			ACP crack over pipe.
Embankment		8	7	Steep embankment.
Sideslope (__:1)	2.0			
(Height of Cover(m) : 1.4)				
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		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		5	N	(Natural and pitrun, gravel. 30Sep2009) - Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	Based on scour rating from 30Sep2009.
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	15-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	4	Rise at R1=2865=12mm Rise at R3=2651=226mm=7.9%
Measured Rise (mm)	2651			
Measured At Ring No.	3			
Sag (mm)	226			7.9%
Percent Sag	8			
Sidewall		4	4	Span at R1=2625=15mm Span at R3=2816=206mm=7.9% Span at R5=2640=30mm
Measured Span (mm)	2816			
Measured At Ring No.	3			
Deflection (mm)	211			7.9%
Percent Deflection	8			
Floor		4	4	(Floor cracked @ 1 bolt @ joint between 2nd & 3rd sections @ circumferential seam. 30Sep2009). Rating carried forward due to previous inspector's comments.
Bulge (mm)	25			
Measured At Ring No.	2			
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Localized 25mm floor bulge @ cracked circumferential seam.
Separation (mm)	0			
Longitudinal Seams		5	5	(Floor plate cracked @ 1 bolt @ joint between sections 3 & 4 circumferential seam. 01/Mar/2006) Unable to verify due to rusting/corrosion through bolt holes.
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Some rust & corrosion around the bolts on lower joints, not serious.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			Minor superficial corrosion.
Ponding (Y/N)	No			

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)				
Fish Passage Adequacy		X	X	Outlet end 600mm above streambed.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
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		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			Bevel undermined 0.6m.
Above/Below (mm)	600			
Scour Protection		3	3	(1m drop to scour hole off bevel. Some rock @ scour hole. 30Sep2009).
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		3	3	Scour at D/S end 15m x 22m. Under invert and around sidelope.
Beavers (Y/N)	No			2 logs @ outlet.
Downstream End General Rating		3	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			(D/S end. 30Sep2009).
Beavers (Y/N)	No			
(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 Class I D/S end.					
REMOVE DRIFT ACCUMULATION							
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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	50.6/50.5	Est. Repl. Yr	2030	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2006.07.28With normal maintenance culvert should be good until 2030.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	15-May-2015		Previous Inspection Date	30-Sep-2009			
Inspection Cycle (Default) (months)	39						
Comment							