

Bridge Culvert Inspection				
Bridge File Number	76799 -1 Bridge Culvert		Form Type	CUL1
Year Built	1957		Lot No.	1
Bridge or Town Name	DUCHESS		Inspector Name	Tom Carey
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	544:02 C1 12.887		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	15-Feb-2010
Legal Land Location	SE SEC 18 TWP 20 RGE 13 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-111:47:18, 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	8.6 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	1,530 / 2008 (A)		Dept. Review Date	08-Mar-2010
Road Classification	RCU-210-110		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2100	2100	BP	15.2			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments								
Telephone	SOUTH & NORTH R/W			Gas	CROSSES ROAD 60 m WEST			
Power	3 W SOUTH DITCH			Municipal				
Others	Waterline 20m west			Problem (Y/N)	No			
Remarks								

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	int 400m east (Guardrail needed)
Vertical Alignment		8	8	
Roadway Width (m)	8.600			
Embankment		N	N	Snow (CUT @ 90 DEG. @ SIDES OF BOX @ SOUTH. Sloughing @ SE)
Sideslope (:1)	3.0			
(Height of Cover (m) : 0.4)				
Guardrail (Y/N)	No			Transverse cracks up to 30m wide in A.C.P @ either side of box.
Approach Road / Embankment General Rating		3	3	general rating carried forward

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		SOUTH
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
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	BELOW			(981103)
Above/Below (mm)	300			
Scour Protection		N	N	(Scour @ SE) Snow covered
(Type :)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		N	N	(Sloughing @ SE to road ACP broken) Snow covered
Beavers (Y/N)	No			
Upstream End General Rating		3	3	general rating carried forward
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2100, Rise (mm): 2100, Type: BP)				
Barrel Last Accessible Date	15-Feb-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	7	d/s end of east sidewall has lots of honey comb and is (scaling with 25 mm loss of concrete 300 mm from bottom.) No problems Sidewall is 2100@ south and 2140 at north
Measured Span (mm)	2100			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
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			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2100, Rise (mm): 2100, Type: BP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	steel posts broken out of corners
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			(981103)
Above/Below (mm)	200			
Scour Protection		N	N	(riprap protecting west bank) snow covered
(Type :)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		N	N	snow covered
Beavers (Y/N)	No			
Downstream End General Rating		5	N	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	45 DEG BEND U/S & 90 DEG. D/S COVERED IN PITRUN (920113) (SOME ROCK PUSHED INTO U/S 1/3 OF BOX)
Bank Stability		7	N	Snow
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		5	5	

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	2010	Consider INSTALLING GUARDRAIL- based on past comment of 900 cuts @ embankment					
OTHER ACTION	2010	CLASS 1 & REWORK SLOPE If it has been done					
OTHER ACTION	2010	REPAIR EROSION @ SE EMBANKMENT - 5m3 - if not done					
OTHER ACTION	2010	Fill cracks in A.C.P @ roadway					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	57.1/57.0	Est. Repl. Yr	2020	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	15-May-2013		Previous Inspection Date	21-Feb-2007			
Inspection Cycle (Default) (months)	39						
Comment							