

Bridge Culvert Inspection			
Bridge File Number	71130 -1 Bridge Culvert	Form Type	CUL1
Year Built	1988	Lot No.	4
Bridge or Town Name	BLACK DIAMON	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO SHEEP RIVER, 2.13.27.2.11, WATERCRS-ST	Inspector Class	BR CLS B
Located On	7:08 C1 0.306	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	25-Oct-2011
Legal Land Location	SW SEC 16 TWP 20 RGE 2 W5M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-114:13:42, 50:41:18	Data Entry Date	25-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA27	Review Date	08-Nov-2011
Clear Roadway/Skew	13.4 / 7 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	5,450 / 2010 (A)	Dept. Review Date	01-Dec-2011
Road Classification	RLU-208G-90	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	-	2134	SP	33.5	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	S. Row	Gas	S. Row
Power	N. Row	Municipal	
Others	TV cable S. row. Street light N, S row.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	50 km/hr speed limit.
Vertical Alignment	6	6	HILL TO EAST
Roadway Width (m)	13.400		
Embankment	7	7	CONCRETE SLAB @ S EMBANKMENT
Sideslope (__:1)	2.0		N. side is 5:1 then 2:1 near bottom.
(Height of Cover(m) : 1.7)			
Guardrail (Y/N)	No		Handrail @ S sidewalk
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction			South end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		Concrete headwall joins sidewalk to crown.
Headwall	6	6	Construction joint above pipe
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)	50			
Invert Above/Below Stream Bed				At stream bed.
Above/Below (mm)	0			
Scour Protection		7	6	300 mm rock in eroded areas from past high water.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
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): 2134, Type: SP)				
Barrel Last Accessible Date	25-Oct-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)	2108			
Measured At Ring No.	6			
Sag (mm)	26			
Percent Sag	1			
Sidewall		8	8	INWARD
Measured Span (mm)	2120			
Measured At Ring No.	6			
Deflection (mm)	14			
Percent Deflection	1			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				1N stagger
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	6	
Corrosion By Soil (Y/N)	No			Superficial corrosion at floor.
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): 2134, Type: SP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North end.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Bends 50 deg at downstream end. MANMADE CHANNEL U/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	79.0/77.9	Est. Repl. Yr	2033	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	25-Jul-2013		Previous Inspection Date	07-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							