

Bridge Culvert Inspection			
Bridge File Number	09063 -1 Bridge Culvert	Form Type	CUL1
Year Built	1953	Lot No.	4
Bridge or Town Name	TWIN BUTTE	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO DUNGARVAN CREEK, 2.12.22.5.16.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	6:04 C1 13.497	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	30-Oct-2011
Legal Land Location	SW SEC 28 TWP 3 RGE 29 W4M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-113:51:30, 49:14:24	Data Entry Date	28-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA26	Review Date	10-Nov-2011
Clear Roadway/Skew	9.9 /	Dept. Reviewer Name	Tim Davies
AADT/Year	1,010 / 2010 (A)	Dept. Review Date	01-Dec-2011
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	30		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2000	2000	BP	22.6			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ditch and East ditch	Gas	
Power	1 line East ditch	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	6	Field entrance at NW corner. Slight hill to South. 300m sight distance. Crest curve 300m to the North.
Vertical Alignment	6	6	
Roadway Width (m)	9.900		
Embankment	6	6	
Sideslope (__:1)	2.5		
(Height of Cover(m) : 2.6)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		West
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	6	
Collar	6	5	Wide cracks with broken concrete at SW toe.
Wingwalls (Shape :)	X	X	
Cutoff Wall	X	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	Ingrown
(Type : RIP RAP, CONCRETE)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		6	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2000, Rise (mm): 2000, Type: BP)				
Barrel Last Accessible Date	30-Oct-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Typical hairline flex cracks down c/l of roof. Roof has cracks, leaching. 40mm settlement @ W section.
Measured Rise (mm)	2000			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	Vertical cracks, some leaching. Typical settlement/hairline cracks on sidewall.
Measured Span (mm)	2000			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		6	6	U/S section settled @ centerline 38mm.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	
Separation (mm)	50			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
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	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2000, Rise (mm): 2000, Type: BP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		6	6	
Collar		5	5	North side cracked & broken.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	N	
Bevel End		5	5	Cracks @ N bevel up to 3mm wide.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		7	7	Ingrown
(Type : RIP RAP, CONCRETE)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	
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		7	7	

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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	69.5/68.4	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	30-Jul-2013		Previous Inspection Date	28-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							