

Bridge Culvert Inspection				
Bridge File Number	06561 -1 Bridge Culvert		Form Type	CUL1
Year Built	1994		Lot No.	3
Bridge or Town Name	TWIN BUTTE		Inspector Name	Jon Davies
Located Over	DUNGARVAN CREEK, 2.12.22.5.16, WATERCRS-ST		Inspector Class	BR CLS B
Located On	6:04 C1 11.117		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	30-Oct-2011
Legal Land Location	SW SEC 21 TWP 3 RGE 29 W4M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-113:51:30, 49:13:07		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	11.5 /		Dept. Reviewer Name	Tim Davies
AADT/Year	1,010 / 2010 (A)		Dept. Review Date	01-Dec-2011
Road Classification	RAU-211.8-110		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	7000	4500	BPR	34.9			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	In West and East r/w.		Gas	
Power	1 line E fenceline 15m from c/l.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	In gradual sag curve.
Vertical Alignment		6	6	
Roadway Width (m)	10.000			
Embankment		7	7	
Sideslope (__:1)	3.5			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	Yes			Box beam rail.
Approach Road / Embankment General Rating		7	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	8	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	Buried

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	4	Scour protection is generally in almost new condition. Incomplete toe of NW bevel.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion		8	4	1.2m deep x 3m long x 2m deep scour hole at NW bevel.
Beavers (Y/N)	No			
Upstream End General Rating		8	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 7000, Rise (mm): 4500, Type: BPR)				
Barrel Last Accessible Date	30-Oct-2011			
Special Features				
Special Feature				Safety rail at East D/S headwall missing 1 post and 5m of rail. Safety rail at D/S and U/S headwall.
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Roof has short hairline transverse cracks. Estimate.
Measured Rise (mm)	4500			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		8	8	Sidewalls have narrow vertical cracks in mid section. The North c/l crack has leaching
Measured Span (mm)	7000			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	2m rock covered. Flow is against south s/w
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)	0			
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	Pigmented sealer applied to D/S headwall & bevel.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 7000, Rise (mm): 4500, Type: BPR)				
Fish Passage Adequacy		7	7	
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		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	Narrow cracks with staining.
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		8	8	Narrow cracks.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	5	Curves both U/S & D/S. U/S flow hits NW bevel.
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.5			No HWM visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	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	2012	Install 1 post and 5m headwall rail- or remove entirely as not really req.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	82.0/76.8	Est. Repl. Yr	2055	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	30-Jul-2013		Previous Inspection Date	19-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							