

Bridge Culvert Inspection				
Bridge File Number	00692 -1 Bridge Culvert		Form Type	CULM
Year Built	1963		Lot No.	4
Bridge or Town Name	NANTON		Inspector Name	Garry Roberts
Located Over	NANTON CREEK, 2.12.12.12.5, WATERCRS-ST		Inspector Class	BR CLS A
Located On	533:02 C1 31.962		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-May-2010
Legal Land Location	SW SEC 18 TWP 16 RGE 28 W4M		Data Entry By	Erin Roberts
Longitude, Latitude	-113:50:28, 50:20:20		Data Entry Date	15-Jul-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA27		Review Date	02-Jun-2010
Clear Roadway/Skew	8.2 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	1,040 / 2009 (A)		Dept. Review Date	23-Jul-2010
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2895	3200	SPE	26.8	152X51	3.5,3.5,3.5	ELLIPSE
2	MAIN	2895	3200	SPE	26.8	152X51	3.5,3.5,3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	s. ditch		Gas	80m N of CL
Power	300 m TO W		Municipal	
Others	Fibre optics over pipe @ S		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	7	Farm ent 200m W Hill 300m E & 150m W
Vertical Alignment		7	6	
Roadway Width (m)	8.200			
Embankment		7	7	
Sideslope (__:1)	1.8			
(Height of Cover(m) : 1.6)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		South end West pipe
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		6	7	
Heaving (mm)	300			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		6	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2895, Rise (mm): 3200, Type: SPE)				
Barrel Last Accessible Date	22-May-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	6	estimate
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	165			
Percent Sag	5			
Sidewall		5	6	(water seepage thru east sidewall bolts) 25/06/2003
Measured Span (mm)	3060			
Measured At Ring No.	3			
Deflection (mm)	165			
Percent Deflection	5			
Floor		N	N	Silt covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	1N stagger
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)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Minor superficial corrosion
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2895, Rise (mm): 3200, Type: SPE)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	300mm silt
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		5	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		North end West pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	7	
Heaving (mm)	300			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		6	7	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		South end East pipe
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
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		7	7	
Heaving (mm)	300			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		6	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 2895, Rise (mm): 3200, Type: SPE)				
Barrel Last Accessible Date	22-May-2010			East pipe
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Estimate
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	150			
Percent Sag	4			
Sidewall		6	6	
Measured Span (mm)	3034			
Measured At Ring No.	3			
Deflection (mm)	139			
Percent Deflection	4			
Floor		N	N	Silt covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	1N stagger
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)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Minor corrosion
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 2895, Rise (mm): 3200, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	300mm silt
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		North end East pipe
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)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
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		9	8	
Bank Stability		8	7	
HWM (m below Top of Culvert)				No visible HWM
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		9	8	

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) (%)	55.6/66.7	Sufficiency Rating (Last/Now) (%)	69.3/71.8	Est. Repl. Yr	2025	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	22-Aug-2013		Previous Inspection Date	17-Jan-2007			
Inspection Cycle (Default) (months)	39						
Comment							