

Bridge Culvert Inspection				
Bridge File Number	09721 -1 Bridge Culvert		Form Type	CULE
Year Built	1955		Lot No.	4
Bridge or Town Name	STRATHMORE		Inspector Name	Jon Davies
Located Over	TRIBUTARY TO SERVICEBERRY CREEK, 3.33.9.13, WATERCRS-ST		Inspector Class	BR CLS B
Located On	1:12 R1 11.526;1:12 L1 11.525		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	23-Feb-2012
Legal Land Location	NW SEC 12 TWP 24 RGE 26 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-113:30:54, 51:02:15		Data Entry Date	20-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA30		Review Date	01-Mar-2012
Clear Roadway/Skew	30.2 / 45 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	14,030 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3600	1800	BP	54.9			RECTANGLE
1	D/S	3000	2400	PCB	46.8			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North fence line.	Gas	
Power	4 wire S, 1 wire N, 30m from CL	Municipal	
Others	Fibre optics @ N R/W	Problem (Y/N)	No
Remarks	AGT conduit attached to u/s headwall.		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	INTERSECTION 100 m WEST, ACCEL & DECEL LANES. Hill to E
Vertical Alignment	7	7	
Roadway Width (m)	30.200		
Embankment	7	7	Not at head wall. Diagonal W/B only on side slope
Sideslope (__:1)	4.0		
(Height of Cover(m) : 1.8)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		CONCRETE BOX. BP
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	5	6	Light scaling. Small spalls
Collar	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape : FLARE)		4	4	MOVED AWAY 150mm @ NW & IN 200mm @ NE. ANCHORED. (Concrete apron has heaved 100 mm & is broken up) 24-Aug-2010 Voided 600mm behind sep @ NW
Cutoff Wall		N	N	Ice covered
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 250)		5	N	(Rip Rap not complete at NE of ramp) 24 Aug 2010 PR 5
Scour/Erosion		5	N	(Small scour/erosion at NE apron. Contributing to heave and break up of apron) 24 Aug 2010 PR 5
Beavers (Y/N)	No			
Upstream End General Rating		5	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	23-Feb-2012			Con box W Cell
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		7	7	
Measured Rise (mm)	2000			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		5	5	Deep scaling @ 1/3 length at lower east wall
Measured Span (mm)	1970			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	5	
Separation (mm)	30			
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 1)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Siltting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date	23-Feb-2012			Con box east cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	2000			Estimate
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	Light scaling west wall at 1/3 length
Measured Span (mm)	1980			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	5	Measured at 1/3 length west wall
Separation (mm)	30			
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 2)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Siltting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: D/S, Span (mm): 3000, Rise (mm): 2400, Type: PCB)				
Barrel Last Accessible Date	23-Feb-2012			Pre cast con. box. extension
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	Estimate.
Measured Rise (mm)	2400			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		N	7	
Measured Span (mm)	3000			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	Construction joints foam filled.
Separation (mm)				
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: D/S, Span (mm): 3000, Rise (mm): 2400, Type: PCB)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Siltting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		N	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	OTHERS			
Headwall		7	7	Gabions on roof
Collar		X	X	
Wingwalls		7	7	Gabions flared
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	Unable to confirm due to ice
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		7	N	PR 7
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 100)				
Scour/Erosion		7	N	PR 7
Beavers (Y/N)	No			
Downstream End General Rating		7	7	GR carried forward
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	45 degree bend U/S
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.4			(D/S end) 08-oct-2008
Drift (Y/N)	No			No High Water mark visible
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
(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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	61.5/60.5	Est. Repl. Yr	2044	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	23-Nov-2013		Previous Inspection Date	24-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							