

Bridge Culvert Inspection				
Bridge File Number	02159 -1 Bridge Culvert		Form Type	CULE
Year Built	1980		Lot No.	4
Bridge or Town Name	STRATHMORE		Inspector Name	Jon Davies
Located Over	2ND ORDER TRIBUTARY TO CROWFOOT CREEK, 2.13.14.9.3, WATERCRS-ST		Inspector Class	BR CLS B
Located On	1:14 R1 3.914;1:14 L1 3.914		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Feb-2012
Legal Land Location	SW SEC 18 TWP 24 RGE 23 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-113:12:19, 51:02:16		Data Entry Date	18-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA30		Review Date	27-Feb-2012
Clear Roadway/Skew	25 / 15 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	7,520 / 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	U/S	-	2150	SP	45.1	152X51	3.5	ROUND
1	MAIN	-	2134	MP	42.6	125X26	3.0	ROUND
Special Features	BARREL ELBOW, CONC FLOOR							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ditch.	Gas	50 m North. Crossing 100 m West.
Power	30 m South OF C.L. (7W).	Municipal	
Others	Fibre optics North R/W.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Hill to East.
Vertical Alignment	7	7	
Roadway Width (m)	25.000		
Embankment	5	5	20.0 m Of ditch eroded by ditch water at SW & North Sides. Appears stable. 50% rock lined @ SW. At North end over pipe. 4:1 at road side slopes.
Sideslope (___:1)	2.0		
(Height of Cover(m) : 6.1)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	S		SPCSP. South End.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	6	7	
Collar	6	7	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	Submerged.
Bevel End		6	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) : 200)				
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: U/S , Span (mm): , Rise (mm): 2150 , Type: SP)				
Barrel Last Accessible Date	16-Feb-2012			R1-13 elbow R14 MP starts.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	
Measured Rise (mm)	2005			Estimate. Shape is adequate.
Measured At Ring No.	12			
Sag (mm)	145			
Percent Sag	7			
Sidewall		7	7	
Measured Span (mm)	2230			
Measured At Ring No.	12			
Deflection (mm)	81			
Percent Deflection	3			
Floor		N	N	500mm - Silt and Ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
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)	No			
Coating		6	6	Superficial on floor & haunches. Some rust @ CIR seams coming through bolt holes.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 2150, Type: SP)					
Ponding (Y/N)	No				
Fish Passage Adequacy		7	7		
Baffle		X	X		
(Type :)					
Waterway Adequacy		6	6		
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	No				
Barrel Extension General Rating		5	5		
Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2134, Type: MP)					
Barrel Last Accessible Date	16-Feb-2012			Start at Ring 14.	
Special Features					
Special Feature		5	5	Separation at joint with MP 75mm. 400mm of silt and ice.	
(Type : BARREL ELBOW)					
Special Feature		N	N		
(Type : CONC FLOOR)					
Roof		5	5	Measured with concrete floor.	
Measured Rise (mm)	2085			Estimate shape is adequate.	
Measured At Ring No.	17				
Sag (mm)	125				
Percent Sag	6				
Sidewall		5	5		
Measured Span (mm)	2260				
Measured At Ring No.	17				
Deflection (mm)	126				
Percent Deflection	6				
Floor		N	N	Concrete Floor.	
Bulge (mm)					
Measured At Ring No.					
Abrasion (Y/N)					
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)	No				
Longitudinal Stagger (Y/N)	No				
Coating		6	6	Superficial on floor & haunches.	
Corrosion By Soil (Y/N)					
Corrosion By Water (Y/N)	Yes				
Camber POS/ZERO/NEG	ZERO				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2134, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		MP. & Timber.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Cracks and spall East.
Collar		X	X	
Wingwalls		4	4	Pushing in @ West Planks rotted. Old wings are left in & protect slope.
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	550			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	5	
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.4			(23-May-2008). 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		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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	58.7/59.6	Est. Repl. Yr	2029	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	16-Nov-2013		Previous Inspection Date	17-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							