

Bridge Culvert Inspection				
Bridge File Number	09432 -1 Bridge Culvert		Form Type	CUL1
Year Built	1987		Lot No.	4
Bridge or Town Name	LEGAL		Inspector Name	Melanie Johnson
Located Over	FAIRYDELL CREEK, 6.63.9, WATERCRS-ST		Inspector Class	BR CLS B
Located On	651:04 C1 8.960		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	05-Jul-2011
Legal Land Location	SE SEC 28 TWP 57 RGE 24 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:30:30, 53:56:57		Data Entry Date	20-Jul-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA09		Review Date	07-Jul-2011
Clear Roadway/Skew	9.4 / -7 deg. (LHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	980 / 2010 (A)		Dept. Review Date	26-Jul-2011
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	5			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2430	SP	32.9	152X51	3.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South r/w.	Gas	
Power	1 line OH North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag installed @ top of South bevel roof.		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	8	7	Crest curve to west, no passing Westbound. Limited sight distance to West.  Wide transverse crack in roadway over pipe - sealed.
Vertical Alignment	6	6	
Roadway Width (m)	9.400		
Embankment	4	6	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 2.4)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>6</b>	<b>6</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	S		
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
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2430, Type: SP)				
Barrel Last Accessible Date	05-Jul-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	2335			@ cl
Measured At Ring No.				
Sag (mm)	95			
Percent Sag	4			
Sidewall		7	7	
Measured Span (mm)	2530			At c/l.
Measured At Ring No.				
Deflection (mm)	100			
Percent Deflection	4			
Floor		N	7	
Bulge (mm)	0			
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				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Minor superficial rust on half of culvert.
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): 2430, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	5	Fill starting to settle @ bevel ~300mm. Crown cut & bent upward ~200mm.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		8	7	
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)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>74.2/74.1</b>	Est. Repl. Yr	2020	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	Dave Lam		Previous Assistant's Name	Bryce Clayton			
Next Inspection Date	05-Oct-2014		Previous Inspection Date	12-Mar-2008			
Inspection Cycle (Default) (months)	39						
Comment							