

Bridge Culvert Inspection				
Bridge File Number	01173 -1 Bridge Culvert		Form Type	CUL1
Year Built	1966		Lot No.	4
Bridge or Town Name	GLENWOOD		Inspector Name	Calvin Roberts
Located Over	SCOTTS COULEE, 2.12.22.5.7, WATERCRS-ST		Inspector Class	BR CLS B
Located On	507:04 C1 33.517		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	28-Nov-2012
Legal Land Location	SE SEC 3 TWP 6 RGE 27 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-113:32:44, 49:26:11		Data Entry Date	13-Dec-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA26		Review Date	02-Dec-2012
Clear Roadway/Skew	9.8 /		Dept. Reviewer Name	Tim Davies
AADT/Year	300 / 2011 (A)		Dept. Review Date	27-Dec-2012
Road Classification	RCU-208-110		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	3150	3530	SPE	61.2	152X75		ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power	3 Wire crosses 50m East.		Municipal
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Bottom of sag curve, poor sight distance. West bound, r/a enters 50 m to East.
Vertical Alignment	5	5	
Roadway Width (m)	8.200		
Embankment	5	3	Steep over pipe.
Sideslope (__:1)	1.5		
(Height of Cover(m) : 7.4)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>5</b>	<b>5</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction			North.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	X	X	
Collar	6	6	Some cracking- concrete shoulder beside collar.
Wingwalls	X	X	
(Shape : )			
Cutoff Wall	5	5	Cracked and spalled, still functioning.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3150, Rise (mm): 3530, Type: SPE)</b>				
Barrel Last Accessible Date	28-Nov-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	7	Rings are numbered incorrectly.
Measured Rise (mm)	3512			
Measured At Ring No.	12			
Sag (mm)	18			
Percent Sag	1			
Sidewall		5	5	
Measured Span (mm)	3174			
Measured At Ring No.	12			
Deflection (mm)	24			
Percent Deflection	1			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	6	Isolated, loose or missing bolts.
Separation (mm)	0			
Longitudinal Seams		5	5	Ring 1 missing 7 nuts in West wall. Ring 2 missing 5 nuts in West wall. Ring 4 missing 3 nuts in West wall. Ring 5 missing 5 nuts in West wall. Ring 3, 6, 9 missing 1 nut in West wall.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			1N stagger.
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Rust with some light pitting on floor. Alkali staining at upper seams, East sidewall.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): 3150, Rise (mm): 3530, Type: SPE)				
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			
<b>Barrel General Rating</b>		<b>5</b>	<b>5</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				South.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		X	7	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	7	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
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>	

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>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>67.3/65.4</b>	Est. Repl. Yr	2030	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	28-Feb-2016		Previous Inspection Date	09-Sep-2009			
Inspection Cycle (Default) (months)	39						
Comment							