

Bridge Culvert Inspection			
Bridge File Number	06766 -1 Bridge Culvert	Form Type	CULE
Year Built	1952	Lot No.	3
Bridge or Town Name	LUNDBRECK	Inspector Name	Calvin Roberts
Located Over	SCREWDRIVER CREEK, 2.12.35.6, WATERCRS-ST	Inspector Class	BR CLS B
Located On	507:02 C1 11.652	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Nov-2012
Legal Land Location	SW SEC 22 TWP 6 RGE 2 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:12:09, 49:29:07	Data Entry Date	13-Dec-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA26	Review Date	14-Nov-2012
Clear Roadway/Skew	12 / 30 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	600 / 2011 (A)	Dept. Review Date	27-Dec-2012
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	U/S	4440	2785	RPE	26.2	152X51	3.0	ELLIPSE
1	MAIN	3600	1800	BP	29.6			RECTANGLE
1	D/S	4440	2785	RPE	30.5	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West ROW.	Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	8	7	At bottom of long hill to South.
Vertical Alignment	6	6	
Roadway Width (m)	10.300		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 6.1)			
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	W		West.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	7	
Collar	7	7	
Wingwalls	X	X	
(Shape : )			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		7	7	Steel grate across the opening of the pipe is displaced. Heavy build up of drift in bevel.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	Yes			CSP in the SW corner from the road ditch.
<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: U/S, Span (mm): 4440, Rise (mm): 2785, Type: RPE)				
Barrel Last Accessible Date	10-Nov-2012			Both U/S and D/S RPRE.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	6	Est. Welded patches on roof.
Measured Rise (mm)	2660			
Measured At Ring No.	4			
Sag (mm)	125			
Percent Sag	4			
Sidewall		6	6	
Measured Span (mm)	4500			
Measured At Ring No.	4			
Deflection (mm)	60			
Percent Deflection	1			
Floor		4	N	800mm rock on floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		X	7	
Separation (mm)	0			
Longitudinal Seams		X	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		X	4	Medium corrosion with isolated pitting @ North sidewall.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): 4440, Rise (mm): 2785, Type: RPE)</b>				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	5	
Baffle		X	5	Steel H-iron, only visible @ D/S.
<b>(Type : SPOILER)</b>				
Waterway Adequacy		5	4	(6m high in flood of 95) 20030219
Icing (Y/N)	No			
Silting (Y/N)	No			60% drift blockage at U/S entrance.
Drift (Y/N)	Yes			
<b>Barrel Extension General Rating</b>		<b>6</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 1)</b>				
Barrel Last Accessible Date	10-Nov-2012			Concrete box, South cell.
<b>Special Features</b>				
Special Feature				North cell.
<b>(Type : )</b>				
Special Feature				
<b>(Type : )</b>				
Roof		7	7	
Measured Rise (mm)	1800			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	1800			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		5	4	Some deterioration of the floor- minor. Some rebar showing.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)	0			
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)				
Coating		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 1)</b>				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 2)</b>				
Barrel Last Accessible Date	10-Nov-2012			Concrete box- North cell.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	1800			
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	1800			
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		7	4	Some deteriorating of floor, minor. Some rebar showing.
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No			
Circumferential Seams		7	X	
Separation (mm)				
Longitudinal Seams		7	X	
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)	No			
Coating		6	X	
Corrosion By Soil (Y/N)	No			
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): 1800, Rise (mm): 1800, Type: BP, Cell Sequence: 2)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		5	8	
(Type : )				
Waterway Adequacy		5	6	(6m high in floor of 95)20030219
Icing (Y/N)	No			Drift in the u/s end at the entrance to box cells.
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		E		East.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	7	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		6	N	Buried.
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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		6	6	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			Large drift at U/S.
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>6</b>	<b>6</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	At U/S Sp- reset gate, remove drift.					
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>66.7/66.7</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>64.8/61.6</b>	Est. Repl. Yr	2045	Maint. Req. (Y/N)	Yes
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	10-Feb-2016		Previous Inspection Date	12-Sep-2009			
Inspection Cycle (Default) (months)	39						
Comment							