

Bridge Culvert Inspection			
Bridge File Number	09308 -1 Bridge Culvert	Form Type	CULM
Year Built	1997	Lot No.	4
Bridge or Town Name	LYALTA	Inspector Name	Garry Roberts
Located Over	SERVICEBERRY CREEK, 3.33.9, WATERCRS-ST	Inspector Class	BR CLS A
Located On	564:06 C1 13.437	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Jan-2012
Legal Land Location	SW SEC 30 TWP 25 RGE 25 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-113:29:14, 51:09:15	Data Entry Date	07-Feb-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA30	Review Date	18-Jan-2012
Clear Roadway/Skew	9.3 / 30 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	1,460 / 2010 (A)	Dept. Review Date	09-Feb-2012
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	5		

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3000	MP	30	125X26	2.8	ROUND
2	MAIN	-	3000	MP	30	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South Row	Gas	
Power	North Row	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	IN SAG CURVE.
Vertical Alignment	5	5	
Roadway Width (m)	9.300		
Embankment	4	5	
Sideslope (__:1)	5.0		
(Height of Cover(m) : 0.6)			
Guardrail (Y/N)	Yes		
<b>Approach Road / Embankment General Rating</b>	<b>5</b>	<b>5</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>			
Direction	N		NORTH END WEST PIPE
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
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Cutoff Wall		X	X	
Bevel End		6	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)</b>				
Barrel Last Accessible Date	12-Jan-2012			WEST PIPE
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	7	Est. Roof
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	60			
Percent Sag	2			
Sidewall		8	8	Inward.
Measured Span (mm)	2943			
Measured At Ring No.	2			
Deflection (mm)	57			
Percent Deflection	2			
Floor		N	N	AVG 1.3 m DP SILT
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	Some loss of material at South joint - minor
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)				
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		4	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	7	1.3 m DP
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		SOUTH END WEST PIPE
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		7	7	External angle iron ribs on bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		NORTH END EAST PIPE
End Treatment (Concrete, Steel, Others, None)	STEEL			Channel flows through this pipe
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		6	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)				
Barrel Last Accessible Date	12-Jan-2012			East PIPE
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	Est. Roof
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	40			
Percent Sag	1			
Sidewall		8	8	Inward.
Measured Span (mm)	2960			
Measured At Ring No.	2			
Deflection (mm)	40			
Percent Deflection	1			
Floor		N	N	Avg. 1.0m ice
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
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)				
Coating		7	7	Minor superficial rust - East wall
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 # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3000, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>8</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		SOUTH END EAST PIPE
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	X	
Bevel End		7	7	External angle iron ribs on bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
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		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				NO VISIBLE HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
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>88.9/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>77.1/75.4</b>	Est. Repl. Yr	2042	Maint. Req'd. (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	William Reardon		Previous Assistant's Name				
Next Inspection Date	12-Apr-2015		Previous Inspection Date	04-Dec-2008			
Inspection Cycle (Default) (months)	39						
Comment							