

Bridge Culvert Inspection			
Bridge File Number	71014 -1 Bridge Culvert	Form Type	CUL1
Year Built	1952	Lot No.	4
Bridge or Town Name	ONOWAY	Inspector Name	Melanie Johnson
Located Over	TRIBUTARY TO STURGEON RIVER, 6.65.21, WATERCRS-ST	Inspector Class	BR CLS B
Located On	37:02 C1 1.595	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	07-Nov-2011
Legal Land Location	SE SEC 4 TWP 55 RGE 2 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:13:36, 53:42:56	Data Entry Date	19-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA09	Review Date	13-Nov-2011
Clear Roadway/Skew	8.6 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	1,800 / 2010 (A)	Dept. Review Date	15-Dec-2011
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	3		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	48.2	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	North r/w.	Gas	
Power	2 wires North r/w.	Municipal	
Others	Alta Supernet fibre optics South r/w.	Problem (Y/N)	No
Remarks	File tag South end.		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Intersection to east, both directions.
Vertical Alignment	7	7	Curve to west, no passing, slight sag curve.
Roadway Width (m)	8.500		
Embankment	7	7	
Sideslope ( __:1)	5.0		
(Height of Cover(m) : 3.6)			
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 : )			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	Tear in floor near end. Bevel section was assembled / repaired poorly. 1st 2 barrel sections heaving.
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	6	Shrubs growing around end.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	07-Nov-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		4	4	Sag was evident and estimated at 200mm. Ice /silt on floor, unable to measure rise. Sag est. @ 10%
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	200			
Percent Sag	10			
Sidewall		N	4	Bolts missing near U/S end. 200x200 hole in sidewall ring 7 construction damage.
Measured Span (mm)	1894			
Measured At Ring No.	7			
Deflection (mm)	170			
Percent Deflection	10			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Due to repair method chosen at u/s end bolts are missing from longitudinal & circumferential seams. East side welded and coated with galvacon near U/S end.
Separation (mm)	0			
Longitudinal Seams		4	N	Bolts missing on longitudinal seams, both sides of pipe near U/S end due to repair method..  1N
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Lower 1/2 of pipe has surface rust.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1724, Rise (mm): 1901, Type: SPE)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	Deep silt.-23-Mar-2010
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>3</b>	<b>4</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		6	6	
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>8</b>	<b>8</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>33.3/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>50.1/55.1</b>	Est. Repl. Yr	2019	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	Eric Carcoux		Previous Assistant's Name	Brian Cote			
Next Inspection Date	07-Aug-2013		Previous Inspection Date	09-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							