

Bridge Culvert Inspection			
Bridge File Number	81211 E-1 Bridge Culvert	Form Type	CULM
Year Built	1990	Lot No.	4
Bridge or Town Name	EDSON	Inspector Name	Todd Warshawski
Located Over	SUNDANCE CREEK, 8.11.107.30, WATERCRS-ST	Inspector Class	BR CLS B
Located On	16:04 R1 45.839	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Aug-2012
Legal Land Location	NE SEC 7 TWP 53 RGE 18 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:38:08, 53:34:02	Data Entry Date	22-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA13	Review Date	21-Aug-2012
Clear Roadway/Skew	12.7 / 6 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	6,080 / 2011 (A)	Dept. Review Date	30-Aug-2012
Road Classification	RAD-412.4-120	Follow-Up By	
Detour Length (km)	1		

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3990	SP	55.2	152X51	3.0	ROUND
2	MAIN	-	3990	SP	55.2	152X51	3.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	North r/w	Gas	
Power	5 wires O/H 100m East.	Municipal	
Others		Problem (Y/N)	No
Remarks	File tag in place.-NE headwall		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Superelevated. Gradual curve with good sight distance.
Vertical Alignment	7	7	
Roadway Width (m)	12.700		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 3.5)			
Guardrail (Y/N)	Yes		Guardrails both sides.
<b>Approach Road / Embankment General Rating</b>	<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>			
Direction	N		East pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	8	8	
Collar	7	7	Several narrow cracks.
Wingwalls	X	X	
(Shape : )			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1100			
Scour Protection		6	6	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Upstream End 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): , Rise (mm): 3990, Type: SP)</b>				
Barrel Last Accessible Date	08-Mar-2007			East pipe. Viewed from ends, shape and condition appear ok.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	(Measured just above springline to East. 2001/12/05) (Est 8%. 2001/12/05)
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	30			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)	4030			
Measured At Ring No.	7			
Deflection (mm)	40			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				2N stagger.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3990, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	G.R. was "8" from 08/Mar/2007.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		East pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Several narrow cracks.
Collar		7	7	Several narrow cracks.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		7	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		West pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Several narrow cracks.
Collar		7	7	Several narrow cracks.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		6	6	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>400</b> )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3990, Type: SP)</b>				
Barrel Last Accessible Date	08-Mar-2007			West pipe. Viewed from ends, shape and condition appear ok.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	
Measured Rise (mm)				(Estimate @ R9. 08/Mar/2007)
Measured At Ring No.	9			
Sag (mm)	30			
Percent Sag	8			
Sidewall		N	N	
Measured Span (mm)	4055			(1.6%. 08/Mar/2007)
Measured At Ring No.	7			
Deflection (mm)	65			
Percent Deflection	2			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	
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): 3990, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	G.R. was "7" from 08/Mar/2007.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Several wide cracks.
Collar		7	7	Several narrow cracks.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
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		8	8	
Bank Stability		7	8	
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>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>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>67.8/67.7</b>	Est. Repl. Yr	2048	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	As this structure has not been accessed for 2 or more cycles, a Level 2 inspection is required as per Bim Manual Section 13.9.1.5 Based on observed site evaluations we are recommending that his be deferred to a later date.		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	Todd Warshawski		Previous Assistant's Name				
Next Inspection Date	09-May-2014		Previous Inspection Date	27-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							