

Bridge Culvert Inspection			
Bridge File Number	79379 -1 Bridge Culvert	Form Type	CUL1
Year Built	1981	Lot No.	2
Bridge or Town Name	SPRUCE GROVE	Inspector Name	Eric Carcoux
Located Over	TRIBUTARY TO ATIM CREEK, 6.65.8.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	16:14 R1 25.382;16:14 L1 25.391	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Aug-2012
Legal Land Location	SE SEC 13 TWP 53 RGE 27 W4M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:50:22, 53:34:17	Data Entry Date	19-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Stew Hagan
Contract Main. Area	CMA11	Review Date	13-Sep-2012
Clear Roadway/Skew	24 / -23 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	33,060 / 2011 (A)	Dept. Review Date	09-Oct-2012
Road Classification	RAD-412.4-120	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1600	MP	83	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	South r/w.	Gas		
Power	3 wires North r/w.	Municipal		
Others		Problem (Y/N)	No	
Remarks	File tag U/S.			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Slight horizontal curve.
Vertical Alignment		9	9	
Roadway Width (m)	24.000			WBL 12.2, EBL 11.8. Crack in asphalt over culvert on EBL. Typical on Hwy 16.
Embankment		8	4	2-1mx2mx0.8m deep jp;es @ NOrth embankment near outlet.-photo
Sideslope (__:1)	6.0			
(Height of Cover(m) : 1.8)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	8	

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		7	7	One corner of bevel at invert is pushed in 300mm est. Covered by grass.
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			Bagged concrete deteriorated. Settlement along sides of bevel up to 0.3m. Stable.
Scour Protection		6	6	
(Type : CONCRETE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Barrel Last Accessible Date	07-Oct-2010			Pipe appears to have been over compacted on sides.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	5	Upwards.
Measured Rise (mm)	1733			
Measured At Ring No.				
Sag (mm)	133			
Percent Sag				
Sidewall		3	5	Inwards.
Measured Span (mm)	1412			
Measured At Ring No.				
Deflection (mm)	188			
Percent Deflection				
Floor		5	5	Silt on floor for D/S 1/2. Minor superficial rust. Dent on floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Minor upward dent 75mm on floor @ 1/4 L .Not nesting together at most coupler locations 30mm gaps between plates.
Separation (mm)	180			
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		5	5	Superficial rust on floor U/S 1/2.
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 1600, Type: MP)				
Fish Passage Adequacy		X	X	Overgrown by willows D/S. 0.6m perched end.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	D/S end half blocked by willows & dirt.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	5	
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		5	5	Half covered with dirt and willows.
Heaving (mm)	150			
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)	150			
Scour Protection		5	4	3mx3mx1m deep scour hole
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	4	
Beavers (Y/N)		No		
Downstream End General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
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)				
Channel General Rating		7	7	

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	2012	Fill holes in embankment.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/55.6	Sufficiency Rating (Last/Now) (%)	43.4/52.8	Est. Repl. Yr	2030	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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	10-May-2014		Previous Inspection Date	07-Oct-2010			
Inspection Cycle (Default) (months)	21						
Comment							