

Bridge Culvert Inspection				
Bridge File Number	79625 -1 Bridge Culvert		Form Type	CULE
Year Built	1982		Lot No.	4
Bridge or Town Name	FT MCMURRAY		Inspector Name	Wade Nanninga
Located Over	SALT CK, 8.11.39.1.3.1, WATERCRS-ST		Inspector Class	BR CLS A
Located On	63:10 L1 39.959		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	16-Nov-2011
Legal Land Location	NW SEC 35 TWP 87 RGE 9 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-111:19:24, 56:35:38		Data Entry Date	12-Dec-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA07		Review Date	23-Nov-2011
Clear Roadway/Skew	13.4 / -45 deg. (LHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	6,900 / 2010 (A)		Dept. Review Date	15-Dec-2011
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	U/S	-	3050	SP	84.74	152X51	3.0	ROUND
1	MAIN	2019	2226	SPE	63.4	152X51	3.0	ELLIPSE
1	D/S	-	3050	SP	14.02	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East & West r/w.	Gas	
Power	2-3 wires OH 30m & 35m East.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Entrance @ SW & NE.
Vertical Alignment	8	8	
Roadway Width (m)	26.800		2 @ 13.4M
Embankment	7	7	
Sideslope (__:1)	6.0		
(Height of Cover(m) : 2)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	9	8	
Collar	9	8	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		9	8	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 3050, Type: SP)				
Barrel Last Accessible Date	16-Nov-2011			There are grouted couplers between existing pipe and extensions. Barrel 1/4 full with ice/silt.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag	1			Est. sag.
Sidewall		8	8	
Measured Span (mm)	3100			
Measured At Ring No.	9			
Deflection (mm)	50			
Percent Deflection	2			
Floor		N	N	Covered by water and silt.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		9	9	
Separation (mm)	0			
Longitudinal Seams		9	9	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		9	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: U/S, Span (mm): , Rise (mm): 3050, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		8	8	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE)				
Barrel Last Accessible Date	16-Nov-2011			There are grouted couplers between existing pipe and extensions.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	6	
Measured Rise (mm)	2180			
Measured At Ring No.	8			
Sag (mm)	46			
Percent Sag	2			
Sidewall		5	5	
Measured Span (mm)	2140			
Measured At Ring No.	8			
Deflection (mm)	121			
Percent Deflection	6			
Floor		N	3	
Bulge (mm)	0			Perforations visible above ice-crimping of corrugations at 5 o'clock.
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	6	
Separation (mm)	0			
Longitudinal Seams		N	5	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	3	Pitting rust in sidewall. 50mm perforation in floor near d/s connecion. R1-R10 ~ perforations in floor.
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): 2019, Rise (mm): 2226, Type: SPE)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	Increased velocities due to smaller dia.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	4	Decreased due to floor rating.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Sides pushed in 200m.
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	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)				
Channel General Rating		8	8	

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							
Structural Condition Rating (Last/Now) (%)	55.6/44.4	Sufficiency Rating (Last/Now) (%)	62.7/57.3	Est. Repl. Yr	2030	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor perforations.		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	Wade Nanninga		Previous Assistant's Name				
Next Inspection Date	16-Aug-2013		Previous Inspection Date	10-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							