Bridge Culvert Inspection

Bridge File Number	75615 -2 Bridge Culvert	Form Type	CUL1
Year Built	2007	Lot No.	4
Bridge or Town Name	MAYERTHORPE	Inspector Name	Kris Bosters
Located Over	TRIBUTARY TO LITTLE PADDLE RIVER, 8.11.84.30.19.13, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Brian Cote
Located On	751:04 C1 11.303	Assistant Class	BR CLS B
Water Body Cl./Year		Inspection Date	18-Apr-2013
Navigabil. Cl./Year		Data Entry By	Lisa Fairhurst
Legal Land Location	NW SEC 3 TWP 58 RGE 10 W5M	Data Entry Date	24-Apr-2013
Longitude, Latitude	-115:24:49, 53:59:30	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	21-Apr-2013
Contract Main. Area	CMA12	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	9.5 / 31 deg. (RHF)	Dept. Review Date	01-May-2013
AADT/Year	400 / 2012 (A)	Follow-Up By	
Road Classification	RAU-210-110		
Detour Length (km)	10		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3670	SP	97.54	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	
Power	1 line East r/w.	Municipal	
Others	Bridge plaque installed on top of backwall.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Sag curve with limited sight distance. No passing SB.
Vertical Alignment		5	5	
Roadway Width (m)	9.500			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **10**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**5**	**5**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		Mostly snow covered
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		9	N	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		9	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1200			
Scour Protection		9	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		9	N	
Beavers (Y/N)	No			
Upstream End General Rating		**9**	**9**	GR carried forward from Nov 10/2009

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3670, Type: SP**)				
Barrel Last Accessible Date	10-Nov-2009			(800mm of silt along floor, Nov 10/2009)
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	N	
Measured Rise (mm)				Viewed from ends, shape looks good
Measured At Ring No.				
Sag (mm)				(Estimated sag due to silt. Nov 10/2009)
Percent Sag	1			
Sidewall		9	N	
Measured Span (mm)	3700			
Measured At Ring No.	14			
Deflection (mm)	30			
Percent Deflection	1			0.8%
Floor		N	N	800mm silt/water.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	N	
Separation (mm)	0			
Longitudinal Seams		9	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				Stagger 2N.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		9	N	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 3670, Type: SP**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	800mm.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**9**	**N**	Last rated 9 on Nov 10/2009

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		9	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		9	N	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		9	N	
Beavers (Y/N)	No			
Downstream End General Rating		**9**	**9**	GR carried forward from Nov 10/2009

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	4	Scour pool u/s of apron - photo
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**	**4**	

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) (%)	**100.0/55.6**	**Sufficiency Rating (Last/Now) (%)**	**94.8/71.7**	Est. Repl. Yr	2060	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor scour pool	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	18-Jul-2016	Previous Inspection Date	10-Nov-2009
Inspection Cycle (Default) (months)	39		
Comment			