Bridge Culvert Inspection

Bridge File Number	81510 -2 Bridge Culvert	Form Type	CULE
Year Built	2010	Lot No.	4
Bridge or Town Name		Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO WANDERING RIVER, 8.11.55.3.4, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	63:04 C1 30.492	Assistant Class	
Water Body Cl./Year		Inspection Date	09-Aug-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 31 TWP 75 RGE 15 W4M	Data Entry Date	06-Sep-2011
Longitude, Latitude	-112:19:46, 55:32:23	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	15-Aug-2011
Contract Main. Area	CMA07	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	26.4 / -16 deg. (LHF)	Dept. Review Date	12-Sep-2011
AADT/Year	3,800 / 2010 (A)	Follow-Up By	
Road Classification	RFD-412.4-130		
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	-	1829	SSP	53		12.7	ROUND
1	D/S	-	2000	MP	63	125X26	2.8	ROUND
Special Features								
Special Features Comment		Median ditch tied into WSP.						

Utilities (Located at)

Utility Attachments			
Telephone	W row	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment			8	Near km 85
Vertical Alignment			8	
Roadway Width (m)	26.200			
Embankment			8	
Sideslope (__:1)	5.0			
(Height of Cover(m) : **3.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating			**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall			X	
Bevel End			9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection			8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion			8	
Beavers (Y/N)	No			
Upstream End General Rating			**8**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SSP**)				
Barrel Last Accessible Date	09-Aug-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof			9	
Measured Rise (mm)	1820			cl
Measured At Ring No.				
Sag (mm)	9			
Percent Sag				
Sidewall			9	
Measured Span (mm)	1830			cl
Measured At Ring No.				
Deflection (mm)	1			
Percent Deflection				
Floor			9	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams			9	
Separation (mm)				
Longitudinal Seams			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			9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SSP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy			8	
Baffle			X	
(Type :)				
Waterway Adequacy			8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			**9**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 2000, Type: MP**)				
Barrel Last Accessible Date	09-Aug-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof			9	
Measured Rise (mm)	1995			cl
Measured At Ring No.				
Sag (mm)	5			
Percent Sag				
Sidewall			9	
Measured Span (mm)	2008			cl
Measured At Ring No.				
Deflection (mm)	8			
Percent Deflection				
Floor			9	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams			9	
Separation (mm)				
Longitudinal Seams			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			9	Polymer coating over galv.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG				

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 2000, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy			8	
Baffle			X	
(Type :)				
Waterway Adequacy			8	
Icing (Y/N)				
Silting (Y/N)				
Drift (Y/N)				
Barrel Extension General Rating			**9**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection			9	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion			9	
Beavers (Y/N)	No			
Downstream End General Rating			**9**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment			7	
Bank Stability			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**	

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**	**Sufficiency Rating (Last/Now) (%)**	**/94.0**	Est. Repl. Yr	2060	Maint. Reqd. (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		Previous Assistant's Name			
Next Inspection Date	09-May-2013	Previous Inspection Date			
Inspection Cycle (Default) (months)	21				
Comment					