

Bridge Culvert Inspection			
Bridge File Number	70347 -2 Bridge Culvert	Form Type	CULM
Year Built	2010	Lot No.	4
Bridge or Town Name	HATTONFORD	Inspector Name	Kris Bosters
Located Over	2ND ORDER TRIBUTARY TO PADDLE RIVER, 8.11.84.30.33.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	751:02 C1 27.483	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	BR CLS B
Navigabil. Cl./Year		Inspection Date	18-Apr-2013
Legal Land Location	NW SEC 15 TWP 56 RGE 11 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:33:44, 53:50:25	Data Entry Date	30-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA12	Review Date	29-Apr-2013
Clear Roadway/Skew	9.2 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	200 / 2012 (A)	Dept. Review Date	01-May-2013
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	50		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1804	SSP	35		12.7	ROUND
2	MAIN	-	1804	SSP	35		12.7	ROUND
Special Features								
Special Features Comment	Tagged u/s end North pipe. Outside diameter is 1829 inside 1804.							

Utilities (Located at)

Utility Attachments			
Telephone	West r/w	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Entrances to NE and SW
Vertical Alignment	6	6	Crest curve to N and S. Limited sight distance and no passing in both directions.
Roadway Width (m)	9.500		
Embankment	8	8	ACP patch over crossing is rough. Two transverse cracks in ACP.
Sideslope (__:1)	4.0		
(Height of Cover(m) : 3.2)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	W		South pipe
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		9	N	Mostly snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion		9	N	
Beavers (Y/N)	Yes			Dam 25m u/s.
Upstream End General Rating		9	9	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1804, Type: SSP)				
Barrel Last Accessible Date	08-Oct-2010			South pipe Not accessible due to water and ice.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	N	Viewed from ends, shale looks great.
Measured Rise (mm)	1800			near cl
Measured At Ring No.				
Sag (mm)	4			
Percent Sag	0			
Sidewall		9	N	near cl
Measured Span (mm)	1800			
Measured At Ring No.				
Deflection (mm)	4			
Percent Deflection				
Floor		9	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	N	Welded pipe
Separation (mm)				
Longitudinal Seams		9	N	Welded pipe
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		7	7	Ungalvanized WSP has superficial rust.
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): 1804, Type: SSP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		9	N	4 rows at d/s end.
(Type : SPOILER)				
Waterway Adequacy		9	9	@ u/s
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		9	N	Last rated 9 on Oct 8, 2010.

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		E		South pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls (Shape :)			X	
Cutoff Wall			X	
Bevel End			9	
Heaving (mm)				
Invert Above/Below Stream Bed Above/Below (mm)				
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 600)			N	Snow covered
Scour/Erosion			N	
Beavers (Y/N)				
Downstream End General Rating			9	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		North pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall			X	
Collar			X	
Wingwalls (Shape :)			X	
Cutoff Wall			X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End			9	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection			N	Mostly snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion			N	
Beavers (Y/N)	Yes			Dam 25m u/s.
Upstream End General Rating			9	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1804, Type: SSP)				
Barrel Last Accessible Date	08-Oct-2010			North pipe, not accessible due to water & ice.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	N	Viewed from ends, shape looks great.
Measured Rise (mm)	1770			near cl
Measured At Ring No.				
Sag (mm)	34			
Percent Sag	2			
Sidewall		9	N	near cl
Measured Span (mm)	1840			
Measured At Ring No.				
Deflection (mm)	36			
Percent Deflection	2			
Floor		9	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	N	Welded pipe
Separation (mm)				
Longitudinal Seams		9	N	Welded pipe
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		7	7	Ungalvanized WSP has superficial rust.
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): 1804, Type: SSP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		9	9	
Baffle		9	N	4 rows at d/s end.-08-Oct-2010
(Type : SPOILER)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		9	N	Lat rated 9 on 08-Oct-2010
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		North pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	350			
Scour Protection		9	N	Snow covered
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion		9	N	
Beavers (Y/N)	No			
Downstream End General Rating		9	9	
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)				Not visible
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	Yes			
(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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	100.0/55.6	Sufficiency Rating (Last/Now) (%)	98.5/76.0	Est. Repl. Yr	2060	Maint. Req. (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	Kris Bosters		Previous Assistant's Name				
Next Inspection Date	18-Jul-2016		Previous Inspection Date	08-Oct-2010			
Inspection Cycle (Default) (months)	39						
Comment							