Bridge Culvert Inspection

Bridge File Number	08081 -1 Bridge Culvert	Form Type	CUL1
Year Built	1977	Lot No.	4
Bridge or Town Name	PEACE RIVER	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO PEACE RIVER, 8.10.60, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	684:02 C1 12.668	Assistant Class	
Water Body Cl./Year		Inspection Date	14-Dec-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NW SEC 23 TWP 82 RGE 23 W5M	Data Entry Date	20-Jan-2013
Longitude, Latitude	-117:29:17, 56:07:43	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	08-Jan-2013
Contract Main. Area	CMA04	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	9.8 /	Dept. Review Date	19-Mar-2013
AADT/Year	1,860 / 2011 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	24		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2905	3203	SPE	36.6	152X51	3.5	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	2 wire cross hwy 40m North of pipe.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Entrance SW and NE. Road posted to 80kph.
Vertical Alignment		7	7	
Roadway Width (m)	9.000			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **2.3**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**5**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		6	N	Snow covered.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		6	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**6**	GR carried fwd from 08-Oct-2009

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2905, Rise (mm): 3203, Type: SPE**)				
Barrel Last Accessible Date	14-Dec-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	No measurements due to ice.
Measured Rise (mm)	3130			
Measured At Ring No.	5			
Sag (mm)	73			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	2979			
Measured At Ring No.	5			
Deflection (mm)	74			
Percent Deflection	3			
Floor		4	N	Corrugations on bottom are deformed from gravel and have torn parallel to corrugation at a few locations. -08-Oct-2009
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		8	7	
Separation (mm)	0			
Longitudinal Seams		8	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				1N Stagger
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	4	Scaling rust on floor.
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): 2905, Rise (mm): 3203, Type: SPE**)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		6	N	Snow covered
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	GR carried fwd form 08-Oct-2009

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**6**	**6**	

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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**75.3/75.3**	Est. Repl. Yr	2023	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor condition of floor.	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	14-Mar-2016	Previous Inspection Date	08-Oct-2009		
Inspection Cycle (Default) (months)	39				
Comment					