Bridge Culvert Inspection

Bridge File Number	78538 -1 Bridge Culvert	Form Type	CUL1
Year Built	1988	Lot No.	2
Bridge or Town Name	CHIP LAKE	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO LOBSTICK RIVER, 8.11.84.51.17, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	16:08 R1 35.017	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Aug-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SW SEC 32 TWP 53 RGE 10 W5M	Data Entry Date	27-Aug-2012
Longitude, Latitude	-115:26:47, 53:36:51	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	27-Aug-2012
Contract Main. Area	CMA12	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	12.7 /	Dept. Review Date	30-Aug-2012
AADT/Year	6,230 / 2011 (A)	Follow-Up By	
Road Classification	RAD-412.4-120		
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	-	2740	SP	54.3	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	File tag U/S (South).		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Local road intersection 200m West. Crest 800m East.
Vertical Alignment		7	7	
Roadway Width (m)	12.700			EBL
Embankment		6	6	5:1 at shoulder.
Sideslope (__:1)	3.0			
(Height of Cover(m) : **3**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

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

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		6	6	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **400**)				
Scour/Erosion		6	6	
Beavers (Y/N)	Yes			Beaver dam @ inlet.
Upstream End General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2740, Type: SP**)				
Barrel Last Accessible Date	07-Dec-2001			Viewed from ends, shape and condition appears ok.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	80			
Percent Sag	3			
Sidewall		N	N	Ring 1 - 2706.-21-Nov-2008
Measured Span (mm)	2820			
Measured At Ring No.				
Deflection (mm)	80			
Percent Deflection	3			
Floor		N	N	Under silt and 900mm deep water.-21-Nov-2008
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	Superficial rust up to sidewalls.-21-Nov-2008
Corrosion By Soil (Y/N)				
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): , Rise (mm): 2740, Type: SP**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		**N**	**N**	(Previous G.R. was "6". Carried forward for at least 3 inspections from 07/Dec/2001)

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		5	5	Minor sloughing of u/s banks.
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(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	2012	Remove u/s beaver dam.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**58.6/58.4**	Est. Repl. Yr	2033	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	As this structure has not been accessed for 2 or more cycles, a Level 2 inspection is required as per Bim Manual Section 13.9.1.5 Based on observed site evaluations we are recommending that his be deferred to a later date.	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	Todd Warshawski	Previous Assistant's Name			
Next Inspection Date	10-May-2014	Previous Inspection Date	13-Sep-2010		
Inspection Cycle (Default) (months)	21				
Comment					