

Bridge Culvert Inspection				
Bridge File Number	70640 -1 Bridge Culvert		Form Type	CUL1
Year Built	1992		Lot No.	4
Bridge or Town Name	LINDBROOK		Inspector Name	Jason Saly
Located Over	HASTINGS CREEK, 6.62.12, WATERCRS-ST		Inspector Class	BR CLS A
Located On	630:02 C1 35.911		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	26-Jun-2012
Legal Land Location	SW SEC 18 TWP 51 RGE 19 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-112:48:13, 53:24:12		Data Entry Date	13-Jul-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA09		Review Date	05-Jul-2012
Clear Roadway/Skew	9 / 26 deg. (RHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	1,790 / 2011 (A)		Dept. Review Date	19-Jul-2012
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2430	SP	57.3	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	Along west ditch.			Gas	35m East of c/l along r/w.		
Power	1 wire O/H 20m East of c/l.			Municipal			
Others				Problem (Y/N)	No		
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Residence approach roads both sides. No passing SB. Crest vertical curve to South with limited sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	9.000			
Embankment		6	6	Minor gully at NW. Grassed in.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 5)				
Guardrail (Y/N)	Yes			100m guardrail along East side. 156m guardrail along West side.
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	Well vegetated.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2430 , Type: SP)				
Barrel Last Accessible Date	26-Jun-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Could not measure rise due to silt on floor.
Measured Rise (mm)	2400			
Measured At Ring No.	8			
Sag (mm)	30			(1.2%. 10Aug2009).
Percent Sag	1			
Sidewall		7	7	
Measured Span (mm)	2437			
Measured At Ring No.	8			
Deflection (mm)	7			0.3%
Percent Deflection	0			
Floor		N	N	Small amounts of rock in barrel floor; silt on floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Superficial corrosion on floor plates below longitudinal seams.
Corrosion By Soil (Y/N)	Yes			
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): 2430, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	~100mm silt, length of barrel floor. Small logs/branches inside w/s bevel. Grass growing inside U/S bevel floor.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
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		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)	600			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)		No		
Downstream End General Rating		7	7	
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)	1.0			(30/May/2006) Not visible this inspection.
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading				(Large beaver dam upstream of inlet doesn't affect pipe much where it is. 30/May/2006) Not visible due to brush overgrowth.
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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	75.8/75.7	Est. Repl. Yr	2048	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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	26-Sep-2015		Previous Inspection Date	10-Aug-2009			
Inspection Cycle (Default) (months)	39						
Comment							