

Bridge Culvert Inspection			
Bridge File Number	75384 -1 Bridge Culvert	Form Type	CUL1
Year Built	1961	Lot No.	4
Bridge or Town Name	PARKLAND BEA	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO CLEAR BROOK, 14.2.3, WATERCRS-ST	Inspector Class	BR CLS B
Located On	2:10 L1 5.940;2:10 R1 5.984	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	12-Oct-2011
Legal Land Location	NW SEC 32 TWP 14 RGE 27 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-113:39:20, 50:13:05	Data Entry Date	19-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA26	Review Date	08-Nov-2011
Clear Roadway/Skew	26 / -35 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	8,620 / 2010 (A)	Dept. Review Date	21-Nov-2011
Road Classification	RAD-412.4-120	Follow-Up By	
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	3800	2400	RPP	93.9	152X51	4.0	PIPE ARCH
Special Features	CONC FLOOR, SHOTCRETE BEAM							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	At East r/w.	Gas	
Power		Municipal	
Others	Fibre optics @ West r/w	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	7	Int 200m North
Vertical Alignment		9	9	600mm CSP 15m North.
Roadway Width (m)	26.000			
Embankment		4	4	3m diameter by 2m deep scour @ ditch to NW.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 2.7)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		8	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West end.
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	5	SW invert has heaved at the haunch area. No voids or scour at side observed
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 2400, Type: RPP)				
Barrel Last Accessible Date	12-Oct-2011			
Special Features				
Special Feature		N	6	Concrete floor starts at R12 Concrete half walls begins in R12
(Type : CONC FLOOR)				
Special Feature		7	6	
(Type : SHOTCRETE BEAM)				
Roof		6	6	100mm visible roof sag @ East section. Estimate. No roof measurement due to concrete floor and silt. Measurements from past inspection
Measured Rise (mm)	2240			
Measured At Ring No.				
Sag (mm)	160			
Percent Sag	6			
Sidewall		5	5	No span measurements D/S of concrete half wall.
Measured Span (mm)	4010			
Measured At Ring No.	11			
Deflection (mm)	210			
Percent Deflection	5			
Floor		N	N	CONCRETE FLOOR IN GOOD CONDITION. @ East SECTION Silt, rock and water at West section.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	5	Seven bolts not installed where old and new barrel meet.
Separation (mm)	15			
Longitudinal Seams		7	6	1N stagger
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	ALKALI STAINS @ EAST (OLD) SECTION CIRC & LONGITUDINAL SEAMS of roof and sidewalls. Rust stains with seepage at bolt holes throughout at haunches and sidewalls.
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): 3800, Rise (mm): 2400, Type: RPP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(Ice within 1.5m of roof)
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East
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	Concrete floor and half wall extends out in bevel end.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			Steel of bevel is at stream bed.
Above/Below (mm)	300			300mm drop to stream bed from concrete floor.
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
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		5	5	MEETS CULVERT @ D/S @ 45 DEG. ANGLE Abandoned RxR pipe 10m D/S
Bank Stability		5	5	Cut banks u/s
HWM (m below Top of Culvert)	0.8			No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	64.2/62.3	Est. Repl. Yr	2027	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	12-Jul-2013		Previous Inspection Date	23-Jan-2010			
Inspection Cycle (Default) (months)	21						
Comment							