

Bridge Culvert Inspection			
Bridge File Number	71711 -1 Bridge Culvert	Form Type	CULM
Year Built	1952	Lot No.	4
Bridge or Town Name	BOW ISLAND	Inspector Name	Tom Carey
Located Over	CHERRY COULEE, 2.10, WATERCRS-ST	Inspector Class	BR CLS A
Located On	3:14 C1 20.196	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Nov-2011
Legal Land Location	NE SEC 36 TWP 10 RGE 11 W4M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-111:22:05, 49:52:11	Data Entry Date	07-Dec-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA24	Review Date	21-Nov-2011
Clear Roadway/Skew	13 /	Dept. Reviewer Name	Tim Davies
AADT/Year	4,560 / 2010 (A)	Dept. Review Date	15-Dec-2011
Road Classification	RAU-213-130	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	5943	1981	BP	25			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	N & S ditch	Gas	
Power	4 line 40 m south	Municipal	
Others	Fibre optics in North R/W.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	In speed zone (slowing to 50 km/hr). Town intersections.
Vertical Alignment		7	7	
Roadway Width (m)	13.000			
Embankment		7	7	4:1 at North
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 1.8)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		South end
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		7	7	Minor spall at East
(Shape : FLARE)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
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): 1981, Rise (mm): 1981, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	11-Nov-2011			East cell.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Some minor leaking and leaching
Measured Rise (mm)	1981			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		6	6	Vert & longit. cracks up to 1mm wide Minor spalls at U/S
Measured Span (mm)	1970			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		N	6	30% abrasion.
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No			
Circumferential Seams		8	8	where it was extended
Separation (mm)	0			
Longitudinal Seams		X	X	
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 1981, Rise (mm): 1981, Type: BP, Cell Sequence: 1)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Minor weeds at U/S
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1981, Rise (mm): 1981, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date	11-Nov-2011			Center barrel.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Some minor leaking and leaching
Measured Rise (mm)	1981			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		6	6	Vertical cracks up to 1mm wide.
Measured Span (mm)	1975			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		6	6	Chamfer is scaling @ floor Not causing problems Floor at center cell 25% abrasion.
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	Yes			
Circumferential Seams		8	8	Where it was extended
Separation (mm)	0			
Longitudinal Seams		X	X	
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 1981, Rise (mm): 1981, Type: BP, Cell Sequence: 2)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Debris of old tarps and bicycle Won't impede flow
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1981, Rise (mm): 1981, Type: BP, Cell Sequence: 3)				
Barrel Last Accessible Date	11-Nov-2011			West cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	
Measured Rise (mm)	1990			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		6	6	Vert cracks up to 1mm wide- In general Isolated 2mm wide crack at NW
Measured Span (mm)	1980			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		5	5	Some scaling on the floor- 20%
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	Yes			
Circumferential Seams		8	8	At extensions
Separation (mm)	0			
Longitudinal Seams		X	X	
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 1981, Rise (mm): 1981, Type: BP, Cell Sequence: 3)				
Fish Passage Adequacy		4	7	regraded at U/S
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		7	7	Minor scaling of parging.
(Shape : FLARE)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
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		6	6	U/S 2x1800 CSP - under service road. D/S 2x1800 mm CSP under CPR Curves both ends
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.6			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Minor at D/S
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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	61.5/67.8	Est. Repl. Yr	2024	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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	11-Aug-2013		Previous Inspection Date	24-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							