

Bridge Culvert Inspection				
Bridge File Number	75061 -1 Bridge Culvert		Form Type	CULM
Year Built	1986		Lot No.	3
Bridge or Town Name	BOW ISLAND		Inspector Name	Tom Carey
Located Over	SMR - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	3:14 C1 24.847		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Nov-2011
Legal Land Location	SE SEC 4 TWP 11 RGE 10 W4M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-111:18:14, 49:52:24		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 / -30 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	2,920 / 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	10500	3800	BP	35.8			RECTANGLE
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	South r/w		Gas
Power	4W 25N and 50W		Municipal
Others	Fibre optics in North R/W.		Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	RR 103 75m W of culverts
Vertical Alignment		8	8	
Roadway Width (m)	13.000			
Embankment		8	8	One broken post at South. One split post at North. Minor damage at SE.
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 1.1)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		8	8	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		South end. Railing on headwall and wings
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Small crack atop W. cell.
Collar		X	8	
Wingwalls		7	7	
(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	BELOW			
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	11-Nov-2011			West Cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	8	
Measured Rise (mm)	3800			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		N	8	
Measured Span (mm)	3500			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	AVG 500mm water
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	Continuous cast.
Separation (mm)				
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): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 1)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		N	8	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date		11-Nov-2011		Center Cell
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	6	Minor honey comb at roof at U/S.
Measured Rise (mm)		3800		
Measured At Ring No.		1		
Sag (mm)		0		
Percent Sag		0		
Sidewall		N	5	
Measured Span (mm)		3500		
Measured At Ring No.		1		
Deflection (mm)		0		
Percent Deflection		0		
Floor		N	N	AVG 500mm water.
Bulge (mm)		0		
Measured At Ring No.				
Abrasion (Y/N)		No		
Circumferential Seams		X	X	Continuous cast.
Separation (mm)				
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): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 2)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
Barrel General Rating		N	6	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 3)				
Barrel Last Accessible Date		11-Nov-2011		
Special Features				
Special Feature				East cell
(Type :)				
Special Feature				
(Type :)				
Roof		N	8	
Measured Rise (mm)		3800		
Measured At Ring No.		1		
Sag (mm)		0		
Percent Sag		0		
Sidewall		N	8	
Measured Span (mm)		3500		
Measured At Ring No.		1		
Deflection (mm)		0		
Percent Deflection		0		
Floor		N	N	AVG 500mm deep water.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		X	X	
Separation (mm)				
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): 3500, Rise (mm): 3800, Type: BP, Cell Sequence: 3)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			Railing on headwall and wings
Headwall		7	7	
Collar		X	X	
Wingwalls		7	7	Pulled away 20mm at both sides
(Shape : FLARE)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	5	Minor 300mm deep x 1.0m dia scour at top NW corner.
Beavers (Y/N)	No			
Downstream End General Rating		7	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	Well rip-rapped large radius curve at U/S
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.1			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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	Replace 2 gaurdrail posts.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/66.7	Sufficiency Rating (Last/Now) (%)	70.8/74.5	Est. Repl. Yr	2043	Maint. Req. (Y/N)	Yes
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	25-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							