

Bridge Culvert Inspection				
Bridge File Number	74854 -1 Bridge Culvert		Form Type	CULM
Year Built	1995		Lot No.	3
Bridge or Town Name	BROOKS		Inspector Name	Jon Davies
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	873:02 C1 30.936		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-Mar-2012
Legal Land Location	NW SEC 9 TWP 18 RGE 14 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-111:52:60, 50:30:42		Data Entry Date	16-Apr-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	24-Mar-2012
Clear Roadway/Skew	10 / 40 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	380 / 2011 (A)		Dept. Review Date	17-Apr-2012
Road Classification	RCU-208-110		Follow-Up By	
Detour Length (km)	30			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	7600	3800	BP	39.4			RECTANGLE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments							
Telephone	West ditch			Gas	Crossing 100 m South		
Power	7-wire east ditch			Municipal			
Others				Problem (Y/N)	No		
Remarks							

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Road rise to the N and drops to the S. Intersection North
Vertical Alignment		6	6	
Roadway Width (m)	9.000			
Embankment		9	7	
Sideslope ( _ :1)	4.0			
(Height of Cover(m) : <b>0.2</b> )				
Guardrail (Y/N)	Yes			Bridge rail on headwall & guardrail @ each corner, chain link fence at West. Collision damage at NW guardrail, chainlink fence at West damaged. Bolt pulled through GR @ NW Corner - photo
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction				West
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	6	Headwall is a curb with bridgerail. Wide transverse cracks inside face of curb to exterior headwall.
Collar		X	X	
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	N	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 3800, Type: BP, Cell Sequence: 1)				
Barrel Last Accessible Date	22-Mar-2012			North pipe
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	Minor Cracks
Measured Rise (mm)	3800			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		8	7	
Measured Span (mm)	3820			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	500 mm water
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
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)	No			
Longitudinal Stagger (Y/N)	No			
Coating		X	6	Paint at concrete end treatment. Curbs are sealed.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 3800, Type: BP, Cell Sequence: 1)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 3800, Type: BP, Cell Sequence: 2)				
Barrel Last Accessible Date	22-Mar-2012			South pipe
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	7	
Measured Rise (mm)	3800			
Measured At Ring No.				
Sag (mm)	0			
Percent Sag	0			
Sidewall		8	7	
Measured Span (mm)	3810			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	500 mm water silt and rock
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
Separation (mm)	0			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	6	Paint at concrete end treatment. Curbs are sealed.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 3800, Type: BP, Cell Sequence: 2)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				East
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	6	headwall is a curb with bridgerail Narrow transverse cracking
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	N	
Bevel End		7	7	MINOR cracking
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		8	8	
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.9			No HWM visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>7</b>	<b>7</b>	

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	Repair Damaged Bridge rail @ NW - 4 posts and 8 m of fence					
OTHER ACTION	2012	Replace 1 - 4 m radius flex beam and 1 TT post at NW guardrail.					
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>88.9/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>89.1/80.0</b>	Est. Repl. Yr	2055	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	Tim Davies		Previous Assistant's Name	Diego Alvarez			
Next Inspection Date	22-Jun-2015		Previous Inspection Date	01-Apr-2009			
Inspection Cycle (Default) (months)	39						
Comment							