

Bridge Culvert Inspection				
Bridge File Number	80020 -1 Bridge Culvert		Form Type	CUL1
Year Built	1984		Lot No.	4
Bridge or Town Name	RAYMOND		Inspector Name	Jon Davies
Located Over	RID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	844:02 C1 7.842		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Jun-2012
Legal Land Location	SW SEC 7 TWP 6 RGE 20 W4M		Data Entry By	Kelsey Roberts
Longitude, Latitude	-112:41:45, 49:27:13		Data Entry Date	24-Jun-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA25		Review Date	15-Jun-2012
Clear Roadway/Skew	10 / 25 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	370 / 2011 (A)		Dept. Review Date	29-Jun-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	PI./Slab Thickness	Shape
1	MAIN	2130	1410	FP	23	68X13	3.5	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)				
Utility Attachments				
Telephone	WEST DITCH		Gas	100M N. 40 M S., 35 M W.
Power	1 LINE EAST DITCH and crossing 25m North.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Residential access both ends
Vertical Alignment		9	9	
Roadway Width (m)	10.000			1:1 OVER PIPE
Embankment		6	6	
Sideslope ( _ :1)	2.0			
(Height of Cover(m) : 1.4)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				West
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		N	N	submerged P.R. 6 19-Feb-2000
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		6	6	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2130, Rise (mm): 1410, Type: FP)				
Barrel Last Accessible Date	19-Feb-2000			Not accessible due to high water level
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	P.R.4 7.8% estimated sag. 19-Feb-2000. Moderate roof sag at 1/2 length seen from U/S end.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	110			
Percent Sag	7			
Sidewall		N	N	P.R.5 5.1% deflection. 19-Feb-2000.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	110			
Percent Deflection	5			
Floor		N	N	(300mm silt & 400mm of water) 2002/06/18
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(UPPER HALF OK (6) UPPER ONLY) 02/06/18
Separation (mm)	40			
Longitudinal Seams		X	X	
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)				
Longitudinal Stagger (Y/N)				
Coating		N	N	(SIDEWALL SHOWING SOME PITTING) 02/06/18- P.R. 4
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2130, Rise (mm): 1410, Type: FP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		4	4	0.2m freeboard- 19-Jun-2000
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	GR carried forward
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				WEST
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	N	submerged
Heaving (mm)	0			P.R. 6- 19-Feb-2000
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
Beavers (Y/N)		No		
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.4			HWM not 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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>51.1/50.9</b>	Est. Repl. Yr	2020	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Roof shape appears stable. Recommend Level 11 inspection if next 2015 Aug/Sept/Oct inspection barrel not accessible- or reschedule to inspect from ice.		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	11-Sep-2015		Previous Inspection Date	19-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							