

Bridge Culvert Inspection				
Bridge File Number	78459 -1 Bridge Culvert		Form Type	CUL1
Year Built	1981		Lot No.	2
Bridge or Town Name	ROLLING HILL		Inspector Name	Jon Davies
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	525:02 C1 7.181		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	07-Mar-2012
Legal Land Location	NE SEC 35 TWP 14 RGE 13 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-111:40:05, 50:13:20		Data Entry Date	08-Apr-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	24-Mar-2012
Clear Roadway/Skew	10.4 /		Dept. Reviewer Name	Tim Davies
AADT/Year	190 / 2011 (A)		Dept. Review Date	17-Apr-2012
Road Classification	RCU-210-110		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1830	1120	FP	41	68X13		ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	Crossing 100 m West
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	Super-elevated smooth curve. Intersection 30 m East.
Vertical Alignment	8	8	
Roadway Width (m)	10.400		
Embankment	N	6	
Sideslope (_ :1)	3.0		
(Height of Cover(m) : 3.9)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction			400mm drainage pipe from upper road- way, 500 mm top of primary to top of this pipe.
End Treatment (Concrete, Steel, Others, None)	NONE		
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		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	4	All of rip rap displaced.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	4	Erosion around the pipe caused by cattle all around U/S end.
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1830, Rise (mm): 1120, Type: FP)				
Barrel Last Accessible Date	14-May-2002			
Special Features				
Special Feature				Barrel not accessible due water and ice levels. No sight line possible.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(2020 x 880 4th seam d/s INSPECTED TO MID FROM D/S END) 14 May 2002
Measured Rise (mm)	880			
Measured At Ring No.	4			
Sag (mm)	240			
Percent Sag	21			
Sidewall		N	N	
Measured Span (mm)	2020			
Measured At Ring No.	4			
Deflection (mm)	190			
Percent Deflection	10			
Floor		N	N	FLOOR BULGE NOT SEEN DUE TO WATER.
Bulge (mm)	40			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	(Seam #2 100 mm separation horizontally) 14 May 2002 (#3 80 mm vert. sep.(Seam #1 from u/s end 60mm vert. sep.,fill mat. @ inter-face) 14 May 2002
Separation (mm)	100			
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		N	N	(EXTENSIVE RUST ON FLOOR, MINOR PIT) 14 May 2002
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			At U/S

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1830, Rise (mm): 1120, Type: FP)				
Fish Passage Adequacy		X	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	N	(500 mm DP ROCK @ U/S) 14 May 2002
Icing (Y/N)	Yes			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				2-400 mm surface drain culverts NORTH
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Downstream End General Rating		N	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	u/s end has sharp 90deg. turn,just as it enters culvert.
Bank Stability		N	4	U/S erosion at both banks
HWM (m below Top of Culvert)	0.5			No HWM visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			@ U/S
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	2012	Determine prior to irrigation season if pipe is still in use. If so de-water and confirm rise and span to estimate year of replacement.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	67.7/68.8	Est. Repl. Yr	2012	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				
Next Inspection Date	07-Jun-2015		Previous Inspection Date	03-Mar-2009			
Inspection Cycle (Default) (months)	39						
Comment							