

Bridge Culvert Inspection			
Bridge File Number	84079 -1 Bridge Culvert	Form Type	CULM
Year Built	2007	Lot No.	4
Bridge or Town Name	CALGARY	Inspector Name	Jason Rusu
Located Over	IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS A
Located On	22X:04 C1 12.453	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Feb-2013
Legal Land Location	SW SEC 31 TWP 22 RGE 28 W4M	Data Entry By	Lauren Korte
Longitude, Latitude	-113:52:23, 50:54:26	Data Entry Date	10-Mar-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	DEERFOOT/STONEY	Review Date	04-Mar-2013
Clear Roadway/Skew	13.8 / 0 deg.	Dept. Reviewer Name	Tim Davies
AADT/Year	15,870 / 2011 (A)	Dept. Review Date	13-Mar-2013
Road Classification	RCU-210-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	10000	4000	RPE	55	152X51		ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	9	Inside East city limits.
Vertical Alignment	8	8	
Roadway Width (m)	13.800		
Embankment	5	5	Under construction- lane widening for SE Ring Road underway at North side. 5:1 at top, then 3:1 to top of culverts.
Sideslope (:1)	3.0		
(Height of Cover(m) : 4.2)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	8	8	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		West Pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	9	9	
Collar	8	8	
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	8	8	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	Storm water outlet 10m U/S.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 5000, Rise (mm): 4000, Type: RPE, Cell Sequence: 1)				
Barrel Last Accessible Date	09-Feb-2013			Barrel to large to measure.
Special Features				
Special Feature				West Pipe.
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	
Measured Rise (mm)				
Measured At Ring No.				Estimate.
Sag (mm)	10			
Percent Sag	0			
Sidewall		8	8	
Measured Span (mm)	4993			
Measured At Ring No.	6			
Deflection (mm)	7			
Percent Deflection	0			
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			At roof seams only- 3N.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	
Corrosion By Soil (Y/N)	Yes			Isolated alkali at upper seams.
Corrosion By Water (Y/N)	No			
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): 5000, Rise (mm): 4000, Type: RPE, Cell Sequence: 1)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	300 silt at both ends.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 5000, Rise (mm): 4000, Type: RPE, Cell Sequence: 2)				
Barrel Last Accessible Date	09-Feb-2013			East Pipe.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	Estimate.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	11			
Percent Sag	0			
Sidewall		8	8	Estimate.
Measured Span (mm)	5011			
Measured At Ring No.	8			
Deflection (mm)	11			
Percent Deflection	0			
Floor		8	8	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
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)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Isolated alkali at upper seams.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
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): 5000, Rise (mm): 4000, Type: RPE, Cell Sequence: 2)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	250 silt at ends and center rings.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		8	8	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		8	8	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Irrigation canal.
Bank Stability		8	8	
HWM (m below Top of Culvert)				No Visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

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) (%)	88.9/88.9	Sufficiency Rating (Last/Now) (%)	86.5/86.5	Est. Repl. Yr	2060	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	09-Nov-2014		Previous Inspection Date	24-May-2011			
Inspection Cycle (Default) (months)	21						
Comment							