

Bridge Culvert Inspection				
Bridge File Number	02083 -1 Bridge Culvert		Form Type	CUL1
Year Built	1982		Lot No.	4
Bridge or Town Name	STRATHMORE		Inspector Name	Jon Davies
Located Over	2ND ORDER TRIBUTARY TO BOW RIVER, 2.13.19.4, WATERCRS-ST		Inspector Class	BR CLS B
Located On	1:12 L1 25.045;1:12 R1 25.045		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	23-Feb-2012
Legal Land Location	SW SEC 17 TWP 24 RGE 24 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-113:19:21, 51:02:16		Data Entry Date	20-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA30		Review Date	01-Mar-2012
Clear Roadway/Skew	25 / 14 deg. (RHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	9,870 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	SP	64	152X51	3.0	ROUND
Special Features	STORM WATER DRAIN							
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	SOUTH R/W		Gas	
Power	30.0 m SOUTH EB LANE (7W)		Municipal	
Others	Fibre optics South and North ROW		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	MEDIAN CROSSING 15 m WEST. Intersection SE + W Hills E & W
Vertical Alignment		7	7	
Roadway Width (m)	25.000			
Embankment		7	7	2:1 over U/S pipe
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1.6)				
Guardrail (Y/N)	Yes			GUARDRAIL ON NORTH SIDE ONLY.
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		7	7	New concrete collar

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		7	N	PR 7 Ice covered up stream end
Bevel End		6	N	PR 6
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 350)		5	N	PR 5
Scour/Erosion		5	N	PR 5
Beavers (Y/N)	No			
Upstream End General Rating		5	5	GR carried forward
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: SP)				
Barrel Last Accessible Date	23-Feb-2012			
Special Features				
Special Feature (Type : STORM WATER DRAIN)		7	7	
Special Feature (Type :)				
Roof		6	6	
Measured Rise (mm)	1770			
Measured At Ring No.	13			Estimate. Ice covered floor
Sag (mm)	30			
Percent Sag	2			
Sidewall		6	6	
Measured Span (mm)	1850			
Measured At Ring No.	13			
Deflection (mm)	50			
Percent Deflection	3			
Floor		5	N	(Perforations in rings 8 & 9 west side near median drain on floor plate) 15 Sept 2008 (New concrete floor from the end of ring 6 to the end of ring 9) 12 Aug 2010 PR 5
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	10			
Longitudinal Seams		6	6	POOR JOINT AT 2:00 LOCATION NORTH SIDE MEDIAN DRAIN-gap @ ring 7
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)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	(Severe rusting and perforations on lower plates of rings 8, 9 Numerous Rings easy to dent) 15-Sept-2008 Only superficial corrosion remains visible
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: SP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	Grown in
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	HEAVY VEGETATION U/S OF PIPE Field access CSP culvert with 1500 10m D/S
Bank Stability		7	7	
HWM (m below Top of Culvert)				No HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	68.5/68.5	Est. Repl. Yr	2029	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	23-Nov-2013		Previous Inspection Date	12-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							