

Bridge Culvert Inspection			
Bridge File Number	79654 -1 Bridge Culvert	Form Type	CUL1
Year Built	1982	Lot No.	3
Bridge or Town Name	STRATHMORE	Inspector Name	Jon Davies
Located Over	TRIBUTARY TO BOW RIVER, 2.13.19, WATERCRS-ST	Inspector Class	BR CLS B
Located On	1:12 R1 20.576;1:12 L1 20.575	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	23-Feb-2012
Legal Land Location	SE SEC 14 TWP 24 RGE 25 W4M	Data Entry By	Anne Roberts
Longitude, Latitude	-113:23:10, 51:02:16	Data Entry Date	19-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA30	Review Date	01-Mar-2012
Clear Roadway/Skew	30.5 / 16 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	14,030 / 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	-	1524	SP	102.4	152X51	3.0	ROUND
Special Features	STORM WATER DRAIN							
Special Features Comment								

Utilities (Located at)

Utility Attachments	OTHER UTILITIES-Bell West fibre optic Nov 2006.; TELEPHONE UTILITIES-Telus fiber optic over culvert Dec 2005.		
Telephone	SOUTH OF ROAD	Gas	40 m WEST
Power	North ROW	Municipal	
Others	5 WIRE 50 m WEST & LIGHT STDS.	Problem (Y/N)	No
Remarks	F. Optics North and South ROW		

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	6	6	60 KM/HR, INTERSECTION TO STRATHMORE THIS CULVERT GOES UNDER HWY. 1 AND SERVICE ROADS AT NORTH.
Vertical Alignment	7	7	
Roadway Width (m)	30.500		
Embankment	7	7	@ Service road 4.2m @ HWY 1
Sideslope (__:1)	3.0		
(Height of Cover(m) : 4.5)			
Guardrail (Y/N)	Yes		GUARDRAIL ON SERVICE ROAD ONLY. Rebolt 5 sections rail and reset 3 TT post at NE
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		
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		5	5	Minor damage
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1524 , Type: SP)				
Barrel Last Accessible Date	23-Feb-2012			
Special Features				
Special Feature		7	7	Line/ CULE starts at D/S of storm water drain. Span at D/S end of liner 1430mm. Estimate most of sag and deflection occur 2/3 length est <5% SPAN NEAR MID POINT OF LINER 1430 mm. Estimate entered U/S 1/4 and D/S 1/4 of line.
(Type : STORM WATER DRAIN)				
Special Feature (Type :)				
Roof		7	7	CUL-E / Liner starts at end of R 10
Measured Rise (mm)	1475			
Measured At Ring No.	9			
Sag (mm)	49			
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	1540			
Measured At Ring No.	9			
Deflection (mm)	16			
Percent Deflection	1			
Floor		N	N	water avg 600 mm water at D/S Bevel
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		6	6	10mm vert Sep @ 2 O'clock @ R 6
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		6	6	RUST IS COMING THROUGH LOWER BOLT HOLES. WATER AND SOIL. Minor
Corrosion By Soil (Y/N)	Yes			
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): , Rise (mm): 1524, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	1m of water at D/S end
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		5	5	
Heaving (mm)	0			
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	
Beavers (Y/N)		No		
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Rock lined erosion @ SW WELL VEGETATED. 1500mm SPCSP 15m D/S
Bank Stability		6	6	
HWM (m below Top of Culvert)	0.6			Storm Water Retention pond @ u/s end - No visible HWM
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading		AGGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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	Rebolt section 5 of guardrail and reset 3TT posts at NW of service road North end culvert					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	62.1/62.1	Est. Repl. Yr	2027	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	23-Nov-2013		Previous Inspection Date	24-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							