

Bridge Culvert Inspection			
Bridge File Number	73503 -1 Bridge Culvert	Form Type	CUL1
Year Built	1959	Lot No.	1
Bridge or Town Name	BONANZA	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO POUCE COUPE RIVER, 8.10.97.4, WATERCRS-ST	Inspector Class	BR CLS B
Located On	719:02 C1 12.318	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	06-Mar-2012
Legal Land Location	SW SEC 21 TWP 80 RGE 12 W6M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-119:49:39, 55:56:43	Data Entry Date	27-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05	Review Date	22-Mar-2012
Clear Roadway/Skew	10 /	Dept. Reviewer Name	David Morrison
AADT/Year	380 / 2011 (A)	Dept. Review Date	01-Mar-2013
Road Classification	RCU-209-110	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	-	1524	SP	45.7	152X51	3.0,3.0,2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	2w o/h East r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Field entrances N & S of pipe.
Vertical Alignment	8	8	
Roadway Width (m)	9.300		
Embankment	6	3	NW ditch scoured 1mWx6mLx0.5mD-photo NE ditch scoured 2mWx2mLx0.5mD-photo
Sideslope (:1)	2.5		
(Height of Cover(m) : 5)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
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		7	7	
Heaving (mm)	250			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
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	06-Mar-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	
Measured Rise (mm)	1536			
Measured At Ring No.	5			
Sag (mm)	39			
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	1461			Dents R3 probably due to construction.
Measured At Ring No.	11			
Deflection (mm)	32			
Percent Deflection	2			
Floor		7	3	LAST 1/3 OF BARREL ON STEEP GRADE at C/L.
Bulge (mm)	0			40-100mm dia perforations from R7-R11.-photo
Measured At Ring No.				280mm dia perforation at R11 with infiltration.-photo
Abrasion (Y/N)	No			
Circumferential Seams		6	4	4 Nuts missing, majority with insufficient thread.
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				1N
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	3	Pitting rust on floor.
Corrosion By Soil (Y/N)	No			40-100mm dia perforations from R7-R11.-photo
Corrosion By Water (Y/N)	Yes			1 80mm dia. perforation at R11 with infiltration-photo
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	Yes			0.5 m @ d/s end.-19-Nov-2008

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		4	4	Vertical drop R11 d/s end.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	3	As per D. Morrison-07-Aug-2012
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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)	600			
Scour Protection		4	N	Snow/ice covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	N	6 x 10 x 0.5m scour hole. snow/ice covered.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	GR carried over 19-Nov-2008
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Culvert)				HWM NOT VISIBLE
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2012	Place 10m3 class 1m in NW and NE ditches.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2012	Install concrete floor.					
OTHER ACTION	2012	Complete level 2 inspection/assessment.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/33.3	Sufficiency Rating (Last/Now) (%)	59.5/43.9	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Consider delaying repairs until assessment complete.		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	Laurie McCarron		Previous Assistant's Name	Russel Vanderschaaf			
Next Inspection Date	06-Jun-2015		Previous Inspection Date	19-Nov-2008			
Inspection Cycle (Default) (months)	39						
Comment							