

Bridge Culvert Inspection				
Bridge File Number	00361 -1 Bridge Culvert		Form Type	CUL1
Year Built	1963		Lot No.	2
Bridge or Town Name	MORNINGSIDE		Inspector Name	Jason Saly
Located Over	WOLF CREEK, 5.56, WATERCRS-ST		Inspector Class	BR CLS A
Located On	2:26 L1 36.678;2:26 R1 36.683		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	19-Mar-2013
Legal Land Location	SE SEC 10 TWP 42 RGE 26 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:39:47, 52:36:03		Data Entry Date	01-Apr-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA17		Review Date	26-Mar-2013
Clear Roadway/Skew	22.8 / -15 deg. (LHF)		Dept. Reviewer Name	Chris Black
AADT/Year	23,260 / 2011 (A)		Dept. Review Date	09-Apr-2013
Road Classification	RFD-412.4-130		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	3495	3854	SPE	82	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West r/w.	Gas	
Power	2 lines South 100m.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Entrance approx 120m South of pipe. On grade.
Vertical Alignment	7	7	
Roadway Width (m)	22.800		
Embankment	7	N	Snow covered.
Sideslope (_ :1)	3.0		
(Height of Cover(m) : 4)			
Guardrail (Y/N)	Yes		
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		5	5	Some rusting on top of bevel - minor. 3 missing bolts on N side at connection to barrel circular seam.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		4	N	(Well vegetated. 15Sep2011).
Scour/Erosion		4	N	(Erosion @ U/S end @ N side bevel, minor. 15Sep2011).
Beavers (Y/N)	No			
Upstream End General Rating		4	4	GR carried forward from 15Sep2011 based on scour rating.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3495, Rise (mm): 3854, Type: SPE)				
Barrel Last Accessible Date	19-Mar-2013			(3430 span x 3920 rise @ end. 22May2003).
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		N	7	Unable to measure rise due to ice. (Est. 1%. 13Jan2010).
Measured Rise (mm)	3854			
Measured At Ring No.	29			
Sag (mm)	0			
Percent Sag	0			
Sidewall		N	7	(Span @ (R1=3433,62mm. 13Jan2010); R2=3442=53mm, R10=3427=68mm=1.9%; R20=3438=57mm; R29=3455=40mm; (R30 = 3440=55mm. 13Jan2010). Inward.
Measured Span (mm)	3427			
Measured At Ring No.	10			
Deflection (mm)	68			
Percent Deflection	2			
Floor		N	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	4	3 nuts missing from circumferential seam between R11 & R12.
Separation (mm)	0			
Longitudinal Seams		N	7	1N
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Minor corrosion.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3495, Rise (mm): 3854, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	7	
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				
Above/Below (mm)	0			
Scour Protection		7	N	(Well vegetated. 15Sep2011) - Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	N	Snow covered.
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	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
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	2013	To E bevel, if not yet done.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2013	Install 3 bolts/nuts along seam between R11 and R12.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/77.8	Sufficiency Rating (Last/Now) (%)	59.1/71.1	Est. Repl. Yr	2033	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	19-Dec-2014		Previous Inspection Date	15-Sep-2011			
Inspection Cycle (Default) (months)	21						
Comment							