

Bridge Culvert Inspection				
Bridge File Number	09583 -1 Bridge Culvert		Form Type	CUL1
Year Built	1979		Lot No.	4
Bridge or Town Name	WHITBURN		Inspector Name	Brian Pientsch
Located Over	KSITUAN RIVER, 8.10.82, WATERCRS-ST		Inspector Class	BR CLS A
Located On	49:04 C1 2.216		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	05-Jul-2011
Legal Land Location	NW SEC 10 TWP 79 RGE 8 W6M		Data Entry By	Lisa Fairhurst
Longitude, Latitude	-119:10:12, 55:50:02		Data Entry Date	12-Aug-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05		Review Date	13-Jul-2011
Clear Roadway/Skew	10.5 / -30 deg. (LHF)		Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,650 / 2010 (A)		Dept. Review Date	16-Nov-2011
Road Classification	RAU-210-110		Follow-Up By	
Detour Length (km)	10			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	6160	SP	112.8	152X51	6.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	N and S r/w		Gas	
Power	2 wire S		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	In sag curve. Limited sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	10.500			
Embankment		8	8	Gabion wall on East slope. 3.0 m bench and toe is 5:1. @ west slope.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 12.5)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Headwall has cracks and has pulled away from pipe 25mm.
Collar		5	5	Several cracks on south side of collar.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
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): 6160 , Type: SP)				
Barrel Last Accessible Date	27-Oct-2009			Inaccessible due to water
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	(Roof sag estimated.
Measured Rise (mm)				Approx. 600mm of silt & rock on invert.
Measured At Ring No.				Rise not measurable. - Oct 29 2009)
Sag (mm)	50			Viewed from ends and looks good
Percent Sag				
Sidewall		7	7	(Measured span 6150 near c/l-97/02/21)
Measured Span (mm)	6069			
Measured At Ring No.	12			
Deflection (mm)	91			
Percent Deflection	2			Inward deflection.
Floor		N	N	Silt/rock covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			Abrasion visible along lower sides.
Circumferential Seams		7	N	
Separation (mm)	0			
Longitudinal Seams		7	N	
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)	No			
Coating		4	4	Pitting rust above water line.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
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): , Rise (mm): 6160, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		6	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	N	Previously rated 7 Oct 27 2009
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	Poor finishing between headwall and collar. Do not appear to be connected
Collar		5	5	Med. cracks throughout.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 800)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		4	4	Bank slumping @ SW corner Vertical banks 100m d/s.
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		4	4	

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) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	68.0/58.0	Est. Repl. Yr	2027	Maint. Req'd. (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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	05-Apr-2013		Previous Inspection Date	27-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							