Bridge Culvert Inspection

Bridge File Number	09168 -1 Bridge Culvert	Form Type	CUL1
Year Built	1982	Lot No.	4
Bridge or Town Name	WINTERBURN	Inspector Name	Kris Bosters
Located Over	WEDGEWOOD CREEK, 6.99, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Brian Cote
Located On	627:04 C1 17.419	Assistant Class	
Water Body Cl./Year		Inspection Date	31-Oct-2012
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 3 TWP 52 RGE 26 W4M	Data Entry Date	06-Nov-2012
Longitude, Latitude	-113:44:23, 53:27:15	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	04-Nov-2012
Contract Main. Area	CMA11	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	13 / -25 deg. (LHF)	Dept. Review Date	13-Nov-2012
AADT/Year	5,450 / 2011 (A)	Follow-Up By	
Road Classification	RAU-213.4-120		
Detour Length (km)	20		

Bridge Culvert Information

Number of Culverts	1	

Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724		SPE	53	152X51		ELLIPSE

Special Features	
Special Features Comment	SPE 1901x1724

Utilities (Located at)

Utility Attachments			
Telephone	N. r/w	Gas	
Power	N. r/w 7 wire	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 80 m East.
Vertical Alignment		9	9	
Roadway Width (m)	13.000			
Embankment		5	5	Ditch erosion SE - grassed & stable.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **3.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream 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 :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		X	X	
Bevel End		5	5	Damaged when dam in inlet removed - corner bent inward approx 150
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	5	0.5m bevel protruding from fill. not enough fill on end to weigh pipe down. Not much rock visible.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		5	5	
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): 1724, Rise (mm): , Type: SPE)				
Barrel Last Accessible Date	09-Jan-2003			too much water & 1.0 m water level to crown. Viewed from end, looks good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	N	at c/l (Jan 9/03)
Measured Span (mm)	1760			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	Slightly wavy.
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		5	N	Superficial corrosion lower 1/3.-10-Jul-2009
Corrosion By Soil (Y/N)				
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): 1724, Rise (mm): , Type: SPE**)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			0.75
Fish Passage Adequacy		4	4	Steep inlet.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	GR 7 carried forward.- March 30, 2006

Downstream 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	
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		5	5	1.0m bevel protruding from fill, well vegetated. Rock not visible
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
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	Both channels run parallel to ditch for some distance.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM Not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	Yes			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
(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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	51.3/51.0	Est. Repl. Yr	2033	Maint. Reqd. (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	Arnold Assenheimer	Previous Assistant's Name			
Next Inspection Date	31-Jan-2016	Previous Inspection Date	10-Jul-2009		
Inspection Cycle (Default) (months)	39				
Comment					