

Bridge Culvert Inspection			
Bridge File Number	72006 -1 Bridge Culvert	Form Type	CULE
Year Built	1954	Lot No.	2
Bridge or Town Name	NITON JUNCTI	Inspector Name	Todd Warshawski
Located Over	BRULE CREEK, 8.11.84.51.23, WATERCRS-ST	Inspector Class	BR CLS B
Located On	16:08 R1 19.032;16:08 L1 19.050	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Aug-2012
Legal Land Location	NW SEC 27 TWP 53 RGE 12 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:41:11, 53:36:41	Data Entry Date	04-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA12	Review Date	27-Aug-2012
Clear Roadway/Skew	24.2 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	6,840 / 2011 (A)	Dept. Review Date	18-Sep-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	U/S	-	4920	SP	48.7	152X51	4.0	ROUND
1	MAIN	6400	1980	BP	25.2			RECTANGLE
Special Features	STORM WATER DRAIN							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others	Fibre optics cable South r/w & North r/w. WSC guage North.	Problem (Y/N)	No
Remarks	File tag U/S.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Residence access 100m NE & SE, access 300m NW & SW.
Vertical Alignment		8	8	
Roadway Width (m)	24.200			WBL 11.8, EBL 12.4
Embankment		7	7	5:1 South side.
Sideslope (_:1)	3.0			
(Height of Cover(m) : 1.4)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		SPCSP
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	7	Several narrow cracks
Collar		8	7	Several wide cracks.
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	Under water.
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	900			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 700)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 4920, Type: SP)				
Barrel Last Accessible Date	12-Dec-2001			Viewed from ends, shape and condition appears OK.
Special Features				
Special Feature				Storm Water Drain in median.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			2N stagger.
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	N	
Corrosion By Soil (Y/N)	No			
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: U/S, Span (mm): , Rise (mm): 4920, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		N	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			Large drift pile in SPCSP/box transition.
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel Extension General Rating		N	N	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 6400, Rise (mm): 1980, Type: BP)				
Barrel Last Accessible Date	12-Dec-2001			
Special Features				
Special Feature		X	X	
(Type : STORM WATER DRAIN)				
Special Feature				
(Type :)				
Roof		N	4	South end, East span - exposed rebar, bad repair of scaling.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	5	Medium scaling3 cells wide.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	5	(Abrading with 25mm loss of concrete. 2001/12/12) S.H and rocks is center and West cell.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		N	4	Starting to lose fill, water stop corroded right through lower 300mm, both sides.
Separation (mm)	20			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		X	X	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 6400, Rise (mm): 1980, Type: BP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		7	7	
Baffle		N	X	
(Type :)				
Waterway Adequacy		7	6	
Icing (Y/N)	No			
Silting (Y/N)	Yes			Minor drift pile in SPCSP/box transition.
Drift (Y/N)	Yes			
Barrel General Rating		4	4	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		5	5	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	X	
Bevel End		5	5	Several wide cracks along both barrels.
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
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		6	6	
Bank Stability		6	6	
HWM (m below Top of Culvert)	0.3			Drift/grass in fence accross channel.
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		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	2012	from SPCSP/box transition.					
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) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	58.3/55.1	Est. Repl. Yr	2035	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor conditions of concrete at outlet.		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	Todd Warshawski		Previous Assistant's Name				
Next Inspection Date	10-May-2014		Previous Inspection Date	16-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							