

Bridge Culvert Inspection				
Bridge File Number	07209 -1 Bridge Culvert		Form Type	CUL1
Year Built	1970		Lot No.	4
Bridge or Town Name	ORION		Inspector Name	Jon Davies
Located Over	PEIGAN CREEK, 2.7.1.13, WATERCRS-ST		Inspector Class	BR CLS B
Located On	887:04 C1 12.254		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	25-Jun-2012
Legal Land Location	SE SEC 24 TWP 7 RGE 7 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-110:49:09, 49:34:20		Data Entry Date	26-Jul-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA24		Review Date	09-Jul-2012
Clear Roadway/Skew	9 /		Dept. Reviewer Name	Tim Davies
AADT/Year	230 / 2011 (A)		Dept. Review Date	30-Jul-2012
Road Classification	RCU-209-110		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	-	4877	SP	73.5	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	West ROW.		Gas
Power	East ROW.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Road rises to the North and South- curves both ends.
Vertical Alignment		6	6	
Roadway Width (m)	8.300			
Embankment		7	7	
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 9)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				East.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		6	5	Isolated wide cracks and settlement up to 75mm at SE.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	5	Minor inward deflection at SE at seam with Ring 1.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		7	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		7	5	Minor scour.
Beavers (Y/N)	No			
Upstream End General Rating		6	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 4877 , Type: SP)				
Barrel Last Accessible Date	28-Jul-2002			Not accessible- deep water.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	Viewed from U/S end- general shape appears to be good.
Measured Rise (mm)	4870			
Measured At Ring No.				
Sag (mm)	7			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)	4730			
Measured At Ring No.				
Deflection (mm)	3			
Percent Deflection				
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	(staggered) 28-Jul-2002
Separation (mm)	0			
Longitudinal Seams		N	N	(#4, #5 RING FROM D/S INSTALLATION BULGES) 2002/07/28
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		N	N	(some alkali staining on roof around bolt holes) 2002/07/28
Corrosion By Soil (Y/N)				
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): 4877, Type: SP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(Some silt and large rocks in the pipe) 2002/07/28
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		N	N	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				
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)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		7	7	
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	DEGRADING			
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							
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) (%)	66.2/65.4	Est. Repl. Yr	2027	Maint. Req. (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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	25-Sep-2015		Previous Inspection Date	15-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							