

Bridge Culvert Inspection			
Bridge File Number	70056 -2 Bridge Culvert	Form Type	CUL1
Year Built	2007	Lot No.	4
Bridge or Town Name	LANGDON	Inspector Name	Jon Davies
Located Over	WID - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS B
Located On	1:12 L1 0.531;1:12 R1 0.533;RAMP 159-2 C;RAMP 159-2 F	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Feb-2012
Legal Land Location	NW SEC 11 TWP 24 RGE 27 W4M	Data Entry By	Anne Roberts
Longitude, Latitude	-113:40:19, 51:02:16	Data Entry Date	20-Mar-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA30	Review Date	01-Mar-2012
Clear Roadway/Skew	49 / 5 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	14,270 / 2010 (A)	Dept. Review Date	22-Mar-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	MAIN	-	1500	SSP	95		12.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments							
Telephone	South ROW	Gas	200m West and at East				
Power	South and North ROW	Municipal					
Others	Fibre Optics South and North ROW	Problem (Y/N)	No				
Remarks							

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Int. 300m W (Hwy 9)
Vertical Alignment		7	7	Hill to E & W Located at Ramplanes for interchange
Roadway Width (m)	49.000			
Embankment		7	7	2.1 at pipes
Sideslope (__:1)	5.0			
(Height of Cover(m) : 3)				
Guardrail (Y/N)	No			thriebeam guardrails for canal service access
Approach Road / Embankment General Rating		7	7	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	3m long 1600 CSP bevel
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SSP)				
Barrel Last Accessible Date	23-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	8	(C.L.) 26- April- 2007
Measured Rise (mm)	1524			Estimate
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	8	C.L.
Measured Span (mm)	1524			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	Welded Seams U/S
Separation (mm)	150			
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		7	7	Coating rating applicable to CSP bevel extensions
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 1500, Type: SSP)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	8	
Downstream 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 :)				
Cutoff Wall		X	X	
Bevel End		8	8	1600 Bevel extension CSP 3m sleeved over SSP end
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Service road 1500 CSP culvert 12m South and North
Bank Stability		8	5	Scour 6 m U/S at West bank from 600 mm CSP Hwy drainage pipe.
HWM (m below Top of Culvert)				Not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			U/S silting 3 m
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) (%)	55.6/88.9	Sufficiency Rating (Last/Now) (%)	70.4/86.8	Est. Repl. Yr	2057	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	27-Nov-2013		Previous Inspection Date	24-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							