

Bridge Culvert Inspection				
Bridge File Number	75157 -1 Bridge Culvert		Form Type	CUL1
Year Built	1991		Lot No.	4
Bridge or Town Name	SCANDIA		Inspector Name	Jon Davies
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	36:06 C1 7.166		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Jan-2012
Legal Land Location	SW SEC 28 TWP 15 RGE 15 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-112:01:14, 50:17:10		Data Entry Date	25-Feb-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	20-Jan-2012
Clear Roadway/Skew	11.4 / -15 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	1,580 / 2010 (A)		Dept. Review Date	11-Mar-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	3967	2510	RPB	28	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	West side.		Gas
Power	3 W 20m E of CL		Municipal
Others			Problem (Y/N) No
Remarks	Fibre optic cable west ditch		

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		9	7	Intersection to South DAMAGED RAIL SW CORNER - minor
Vertical Alignment		9	9	
Roadway Width (m)	10.400			
Embankment		8	6	Minor settlement at West
Sideslope (_ :1)	4.5			
(Height of Cover(m) : 0.7)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		9	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		5	5	25 to 150mm rock
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 100)				
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): 3967, Rise (mm): 2510, Type: RPB)				
Barrel Last Accessible Date	11-Jan-2012			(Culvert is lined under bridge and grouted with concrete) 20021009
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	
Measured Rise (mm)	2510			Estimate
Measured At Ring No.	4			
Sag (mm)	0			
Percent Sag				
Sidewall		N	7	
Measured Span (mm)	3930			Inward
Measured At Ring No.	4			
Deflection (mm)	37			
Percent Deflection	0			
Floor		N	N	900 mm of ice
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	6	
Separation (mm)				
Longitudinal Seams		N	7	Unable to view lower seams
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		N	N	White staining on roof heavy leaching on circumferential seams and roof /side wall seams. (Corrosion with pitting on the floor and sidewalls) 2006/03/24 - PR 4
Corrosion By Soil (Y/N)	Yes			
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): 3967, Rise (mm): 2510, Type: RPB)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
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		8	8	Canal banks appear re-groomed and amoured recently
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.6			No HWM visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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) (%)	55.6/77.8	Sufficiency Rating (Last/Now) (%)	63.6/73.7	Est. Repl. Yr	2036	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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	11-Oct-2013		Previous Inspection Date	22-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							