

Bridge Culvert Inspection				
Bridge File Number	78934 -1 Bridge Culvert		Form Type	CUL1
Year Built/Lined	1980/1984		Lot No.	3
Bridge or Town Name	EXSHAW		Inspector Name	Garry Roberts
Located Over	ELPOCA CK, 2.13.56.20.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	40:10 C1 48.785		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	24-Jun-2011
Legal Land Location	SW SEC 5 TWP 20 RGE 8 W5M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-115:05:04, 50:39:55		Data Entry Date	13-Jul-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	28-Jun-2011
Clear Roadway/Skew	11 / -27 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	440 / 2010 (A)		Dept. Review Date	15-Jul-2011
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
2	MAIN FULL LINER	-	2000	MP	132.9	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	
Remarks	None visible.		

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Horizontal curve 400 m south. 300mm DP EROSN @ SE down to rock
Vertical Alignment		7	7	
Roadway Width (m)	11.000			
Embankment		6	6	W side is 3:1 to 2:1 with 2 berms. E side is 2.5 to 1 w/ 1 large berm.
Sideslope (__:1)	2.0			
(Height of Cover(m) : 23)				
Guardrail (Y/N)	Yes			1 BROKEN POST @ SE & NW
Approach Road / Embankment General Rating		6	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		7	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
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 # : 2 , Secondary Span, Location Code: MAIN , Span (mm): , Rise (mm): 2000 , Type: MP)				
Barrel Last Accessible Date	24-Jun-2011			
Special Features				
Special Feature				Elbow in SPCSP at D/S
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Local bulges @ roof & sidewall. Worst bulge dim 2050x1880mm in MP liner-insignificant @ 5m from u/s. from grouting of liner.
Measured Rise (mm)	1880			
Measured At Ring No.	3			
Sag (mm)	120			
Percent Sag	6			
Sidewall		4	4	2880 spanx 2600 rise @ old pipe @ 5th ring from d/s-crks @ N sidewall. Rating due to cracked seam.
Measured Span (mm)	2050			
Measured At Ring No.	3			
Deflection (mm)	50			
Percent Deflection	2			
Floor		6	6	Minor @ lowerside wall
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	90			
Longitudinal Seams		4	4	Cracks in original SPCSP @ 2 o'clock - north sidewall. Looking d/s - 10 bolt locations cracked 105 mm steel 5th ring from d/s No change at 2011 inspection.
Total No. of Cracked Rings	1			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	105			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Superficial corrosion @ floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP)				
Fish Passage Adequacy		7	7	
Baffle (Type :)		6	6	At D/S SPCSP ring only.
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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	Spring @ SW
Bank Stability		6	6	
HWM (m below Top of Culvert)				Hwm not visible. At u/s channel - Minor.
Drift (Y/N)		Yes		
Channel Bottom Degrading/Aggrading		NONE		
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	2011	INSTALL TWO 5'x6"x8" TT GUARDRAIL POST @ SE & NW					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	58.9/58.8	Est. Repl. Yr	2030	Maint. Req. (Y/N)	Yes
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	24-Mar-2013		Previous Inspection Date	29-Sep-2009			
Inspection Cycle (Default) (months)	21						
Comment							