

Bridge Culvert Inspection				
Bridge File Number	76132 -1 Bridge Culvert		Form Type	CUL1
Year Built	1956		Lot No.	1
Bridge or Town Name	SEVEN PERSON		Inspector Name	Jon Davies
Located Over	TRIBUTARY TO WOLTAN COULEE, 2.7.1.13.3.1, WATERCRS-ST		Inspector Class	BR CLS B
Located On	887:04 C1 10.709		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	25-Jun-2012
Legal Land Location	SW SEC 18 TWP 7 RGE 6 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-110:49:03, 49:33:31		Data Entry Date	25-Jul-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA24		Review Date	09-Jul-2012
Clear Roadway/Skew	8.1 /		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)	6			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2314	2552	SPE	59.4	152X51	3.5	ELLIPSE
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	West ROW.	Gas	
Power		Municipal	
Others	Fibre optic cable crosses 650m South.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Incline North & South.
Vertical Alignment	4	4	
Roadway Width (m)	8.100		
Embankment	4	4	EROSION BOTH U/S & D/S EMBANKMENTS.
Sideslope (__:1)	4.0		
(Height of Cover(m) : 5.3)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	4	4	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction			East.
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		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	4	Rock displaced.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		6	4	Loss of fill at bevel edges.
Beavers (Y/N)	No			
Upstream End General Rating		6	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE)				
Barrel Last Accessible Date	25-Jun-2012			
Special Features				
Special Feature		5	5	R2-17.
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		4	3	Rise measured inside top and bottom of strut plates. Total addition of 190mm for both timbers depth. R7 rise 2278 mm no change. R9 rise 2251 mm. Estimate no change in general roof shape relative to condition of struts.
Measured Rise (mm)	2239			
Measured At Ring No.	13			
Sag (mm)	313			
Percent Sag	12			
Sidewall		2	2	No change at R9 2550mm.
Measured Span (mm)	2712			
Measured At Ring No.	14			
Deflection (mm)	398			
Percent Deflection	17			
Floor		6	N	P.R 6 Water and silt.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	5	
Separation (mm)	20			
Longitudinal Seams		2	2	Cracks in R2-11 and R13-17.
Total No. of Cracked Rings	15			R5, 9 and 14 have 2 cracked seams.
Total No. of Rings with Two Cracked Seams	3			30mm remaining steel at R9 and R14.
Min. Remaining Steel Between Cracks (mm)	30			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	5	Minor corrosion along 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 # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	1 point increase for struts.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				West.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	5	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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	2012	Install liner or replace culvert.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	37.7/35.8	Est. Repl. Yr	2015	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	25-Sep-2015		Previous Inspection Date	15-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							