

Bridge Culvert Inspection				
Bridge File Number	09684 -1 Bridge Culvert		Form Type	CUL1
Year Built	1967		Lot No.	1
Bridge or Town Name	GADSBY		Inspector Name	Owen Salava
Located Over	2ND ORDER TRIBUTARY TO GOUGH LAKE, 32.3.3, WATERCRS-ST		Inspector Class	BR CLS A
Located On	593:02 C1 15.411		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	15-Aug-2012
Legal Land Location	SW SEC 1 TWP 37 RGE 17 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-112:18:13, 52:08:35		Data Entry Date	06-Sep-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA21		Review Date	04-Sep-2012
Clear Roadway/Skew	10 / 30 deg. (RHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	150 / 2011 (A)		Dept. Review Date	17-Sep-2012
Road Classification	RLU-209G-90		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1524	MP	25.6	68X13		ROUND
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power	3 wires 20m North of c/l.		Municipal
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	10.000			
Embankment		7	7	
Sideslope (:1)	3.0			
(Height of Cover(m) : 3.2)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	8	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		4	4	Perforations from corrosion on bottom.
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		6	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	4	Erosion to SW corner, under bevel end.
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 1524 , Type: MP)				
Barrel Last Accessible Date	15-Aug-2012			
Special Features				
Special Feature		5	4	Struts at ends only; missing 3 u/s verticals at inlet struts.
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		5	5	6.3%
Measured Rise (mm)	1428			
Measured At Ring No.				
Sag (mm)	96			
Percent Sag	6			
Sidewall		3	3	Deep pitting in haunches. Haunches dent easily. 3.3%
Measured Span (mm)	1575			
Measured At Ring No.	2			
Deflection (mm)	51			
Percent Deflection	3			
Floor		N	N	Water.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	
Separation (mm)	140			
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		3	3	Deep pitting in haunches.
Corrosion By Soil (Y/N)	No			
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): 1524, Type: MP)				
Fish Passage Adequacy		5	5	
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	
Downstream 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	
Bevel End		5	5	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
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	AGGRADING			
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	2012	1m3 CL1 at inlet.								
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING										
INSTALL STRUTS	2012	Install 3 verticals.								
INSTALL CONCRETE COLLAR/CUTOFF										
REPAIR SEAMS										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	47.0/46.8	Est. Repl. Yr	2020	Maint. Req. (Y/N)	Yes			
Special Comments for Next Inspection	Monitor rust throughout pipe. Struts installed 1993. Pipe was extended in 1984.		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	Owen Salava	Previous Assistant's Name								
Next Inspection Date	15-Nov-2015	Previous Inspection Date	07-Oct-2009							
Inspection Cycle (Default) (months)	39									
Comment										

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS						
PLACE ADDITIONAL RIP RAP	2012	1m3 CL1 at inlet.	Defer until replacement			
REMOVE DRIFT ACCUMULATION						
INSTALL CONCRETE/STEEL LINING						
INSTALL STRUTS	2012	Install 3 verticals.	Programmed	2012		
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	47.0/46.8	Est. Repl. Yr	2020	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection	Monitor rust throughout pipe. Struts installed 1993. Pipe was extended in 1984.		Department Comments	Replacement programmed 2021		
Maintenance Reviewed By	Andrew Smikles		Date	19-Nov-2012	Estimated Total	0
Proposed Long-Term Strategy						
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Owen Salava		Previous Assistant's Name			
Next Inspection Date	15-Nov-2015		Previous Inspection Date	07-Oct-2009		
Inspection Cycle (Default) (months)	39					
Comment						