

Bridge Culvert Inspection				
Bridge File Number	00524 -1 Bridge Culvert		Form Type	CUL1
Year Built	1958		Lot No.	1
Bridge or Town Name	DIDSBURY		Inspector Name	Owen Salava
Located Over	DEADRICK CREEK, 3.33.24, WATERCRS-ST		Inspector Class	BR CLS A
Located On	582:02 C1 32.269		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Aug-2011
Legal Land Location	SE SEC 22 TWP 31 RGE 1 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-114:03:15, 51:39:50		Data Entry Date	09-Sep-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA29		Review Date	15-Aug-2011
Clear Roadway/Skew	9 / 20 deg. (RHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	3,140 / 2010 (A)		Dept. Review Date	15-Sep-2011
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	2489	1753	RPP	46.3	152X51	3.0	PIPE ARCH
Special Features	VERT TIMBER STRUTS							
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	North ditch.	Gas	
Power		Municipal	Fibre optics @ North r/w.
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	No passing.
Vertical Alignment		6	6	Crest curve in both directions, limited sight distance.
Roadway Width (m)	9.000			
Embankment		8	8	
Sideslope (:1)	3.5			
(Height of Cover(m) : 4.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	50			
Scour Protection		7	7	Well grown over.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
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 # : 1, Primary Span, Location Code: MAIN, Span (mm): 2489, Rise (mm): 1753, Type: RPP)				
Barrel Last Accessible Date	10-Aug-2011			
Special Features				
Special Feature		4	6	
(Type : VERT TIMBER STRUTS)				
Special Feature				
(Type :)				
Roof		4	4	
Measured Rise (mm)	1590			
Measured At Ring No.	7			
Sag (mm)	163			
Percent Sag	9			
Sidewall		2	2	Cracked seam, 44mm steel between crack.
Measured Span (mm)	2595			
Measured At Ring No.	7			
Deflection (mm)	106			4.3%
Percent Deflection	4			
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		2	2	
Total No. of Cracked Rings	10			Cracks at W longit. sidewall seam R5-14.
Total No. of Rings with Two Cracked Seams	0			Minimum steel at section 13 is 44mm (photo).
Min. Remaining Steel Between Cracks (mm)	44			Cracks have not changed.
Proper Lap (Y/N)	No			Numbered N to S.
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Superficial floor corrosion.
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): 2489, Rise (mm): 1753, Type: RPP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		2	4	
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		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		5	5	Ingrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		5	5	400mm deep erosion.
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	Farmer has dugout at D/S. Wide flat drainage area.
Bank Stability		8	8	Well grown over.
HWM (m below Top of Culvert)	1.2			(HWM. 2000/05/04)
Drift (Y/N)	No			
Channel Bottom Degrading/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						
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) (%)	22.2/44.4	Sufficiency Rating (Last/Now) (%)	47.4/57.3	Est. Repl. Yr	2016	Maint. Req'd. (Y/N)	No
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Special Comments for Next Inspection	Monitor cracks at std inspection intervals.	Department Comments
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Maintenance Reviewed By	Date	Estimated Total	0
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Proposed Long-Term Strategy

On 3-Year Program (Y/N)

Proposed Action

Previous Inspector's Name	Dave Lam	Previous Assistant's Name
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Next Inspection Date	10-Nov-2014	Previous Inspection Date	23-Sep-2009
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Inspection Cycle (Default) (months)	39
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Comment

Maintenance Recommendations

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INSTALL STRUTS						
INSTALL CONCRETE COLLAR/CUTOFF						
REPAIR SEAMS						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	22.2/44.4	Sufficiency Rating (Last/Now) (%)	47.4/57.3	Est. Repl. Yr	2016	Maint. Req. (Y/N) No
Special Comments for Next Inspection	Monitor cracks at std inspection intervals. Issued LRA to AT.		Department Comments	Tentatively programmed to be replaced in 2018. AS		
Maintenance Reviewed By	Andrew Smikles		Date	22-Aug-2012	Estimated Total	0
Proposed Long-Term Strategy						
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name			
Next Inspection Date	10-Nov-2014		Previous Inspection Date	23-Sep-2009		
Inspection Cycle (Default) (months)	39					
Comment						