

Bridge Culvert Inspection				
Bridge File Number	74598 W-2 Bridge Culvert		Form Type	CUL1
Year Built	1992		Lot No.	3
Bridge or Town Name	MORLEY		Inspector Name	Garry Roberts
Located Over	MUNICIPAL		Inspector Class	BR CLS A
Located On	1:06 L1 7.208		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Feb-2012
Legal Land Location	SW SEC 9 TWP 25 RGE 5 W5M		Data Entry By	Erin Roberts
Longitude, Latitude	-114:38:40, 51:06:42		Data Entry Date	14-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	CMA28		Review Date	22-Feb-2012
Clear Roadway/Skew	12.7 /		Dept. Reviewer Name	Tim Davies
AADT/Year	18,200 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information								
Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	4900	3400	BPR	32.9			RECTANGLE
Special Features								
Special Features Comment								

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: MUNICIPAL 3.2m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	3.3	In Advance (Y/N)	Yes
Remarks	N/B posting is on E/B culvert.											

Utilities (Located at)			
Utility Attachments			
Telephone	South ditch	Gas	
Power	South ROW	Municipal	
Others	Fibre Optics Cable-North ditch	Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	
Vertical Alignment		6	6	
Roadway Width (m)	12.700			
Embankment		7	7	
Sideslope (___:1)	2.0			
(Height of Cover(m) : 0.7)				
Guardrail (Y/N)	Yes			3 broken posts at SW.
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Diagonal cracks
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls		7	7	Narrow cracks with leaching
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		X	X	
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4900, Rise (mm): 3400, Type: BPR)				
Barrel Last Accessible Date	11-Feb-2012			
<b>Special Features</b>				
Special Feature				Safety Hand Rail- missing 2.3 m section at SW
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	SEPARATION CRACK @ JOINT EXTENDS INTO SIDEWALLS CHAMFER @ midspan
Measured Rise (mm)	3400			
Measured At Ring No.				Hairline map cracking in various locations. Minor high load scrapes.
Sag (mm)	0			
Percent Sag				
Sidewall		7	7	Vertical cracking to 0.5 mm with some seepage causing efflorescence every est 1.5 m (may correspond to old H. steel piles). Sidewall has 6 form ties leaching through. @ West sidewall
Measured Span (mm)	4900			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		7	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	@ median joint
Separation (mm)	30			
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		6	6	Barrel walls coated with pigmented sealer - gray
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4900, Rise (mm): 3400, Type: BPR)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				South
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Diagonal cracks
Collar		X	X	
Wingwalls		7	7	Diagonal cracking. Common wall with 74598E
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		X	X	
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		5	5	4.9 m clear roadway, T intersection at North end.
Roadway Surface		5	5	
(Type : )				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
Drainage		7	7	
Structure In Use (Y/N)	Yes			
<b>Grade Separation General Rating</b>		<b>5</b>	<b>5</b>	

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	Replace missing handrail section 40mm I.D. x 2.3m					
OTHER ACTION	2012	Replace 3 approach rail posts.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>75.5/75.5</b>	Est. Repl. Yr	2048	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	11-Nov-2013		Previous Inspection Date	15-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							