

Bridge Culvert Inspection			
Bridge File Number	79223 -1 Bridge Culvert	Form Type	CULM
Year Built	1980	Lot No.	4
Bridge or Town Name	MORLEY	Inspector Name	Garry Roberts
Located Over	BATEMAN CREEK, 2.13.43.7, WATERCRS-ST	Inspector Class	BR CLS A
Located On	68:04 C1 17.536	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Aug-2012
Legal Land Location	SW SEC 18 TWP 24 RGE 6 W5M	Data Entry By	Lauren Korte
Longitude, Latitude	-114:49:40, 51:02:41	Data Entry Date	26-Sep-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA28	Review Date	31-Aug-2012
Clear Roadway/Skew	12.2 / 70 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	310 / 2011 (A)	Dept. Review Date	02-Oct-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	16		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2607	2881	SPE	141.6	152X51	4.0	ELLIPSE
2	MAIN	-	1219	MP	63	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	5	5	On South curve.
Vertical Alignment	5	5	Steep grade.
Roadway Width (m)	12.200		
Embankment	5	5	
Sideslope (__:1)	1.5		
(Height of Cover(m) : 6)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	5	5	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
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): 2607, Rise (mm): 2881, Type: SPE)				
Barrel Last Accessible Date	28-Aug-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	H2O leaking through bolt at East sidewall and ring #6 from D/S-spring or piping staining.
Measured Rise (mm)	2825			
Measured At Ring No.	21			Est.
Sag (mm)	56			
Percent Sag	1			
Sidewall		7	7	Install damage @ ring 7 and Ring 25, East side - welded repair.
Measured Span (mm)	2670			
Measured At Ring No.	21			
Deflection (mm)	63			
Percent Deflection	2			
Floor		N	7	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Superficial rusting on lower areas. Soil and water eff coming through bolt holes @ U/S.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2607, Rise (mm): 2881, Type: SPE)				
Camber POS/ZERO/NEG	POS			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
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			
Above/Below (mm)	100			
Scour Protection		N	5	Minor scour 300mm DP just off bevel-rock lined.
(Type : NATURAL)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
Downstream End General Rating		7	5	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		North. 20m West of SPE.
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
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	2500			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
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): 1219, Type: MP)				
Barrel Last Accessible Date	06-Jan-2011			Not accessible due to mud and standing water.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	N	P.R 6.
Measured Rise (mm)	1180			
Measured At Ring No.	8			
Sag (mm)	39			
Percent Sag	3			
Sidewall		7	N	P.R 7.
Measured Span (mm)	1225			
Measured At Ring No.	7			
Deflection (mm)				
Percent Deflection				
Floor		6	N	P.R 6.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Separation and minor voids at last seam at d/s- carried forward.
Separation (mm)	320			
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	N	(Minor superficial) P.R 6.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1219, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	Mud and silt full length.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		6	N	P.R 6.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	150			
Invert Above/Below Stream Bed	ABOVE			Outlet drains to ditch, not channel.
Above/Below (mm)	300			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Bends @ D/S.
Bank Stability		6	6	
HWM (m below Top of Culvert)	0.6			No visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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) (%)	66.7/77.8	Sufficiency Rating (Last/Now) (%)	70.2/74.1	Est. Repl. Yr	2033	Maint. Req. (Y/N)	No
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	28-May-2014		Previous Inspection Date	06-Jan-2011			
Inspection Cycle (Default) (months)	21						
Comment							