

Bridge Culvert Inspection			
Bridge File Number	09851 -1 Bridge Culvert	Form Type	CULM
Year Built	1967	Lot No.	4
Bridge or Town Name	MUNDARE	Inspector Name	Jason Saly
Located Over	NORRIS CREEK, 6.62.10, WATERCRS-ST	Inspector Class	BR CLS A
Located On	16:22 L1 1.263;16:22 R1 1.268	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	19-Jul-2012
Legal Land Location	SW SEC 13 TWP 53 RGE 20 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-112:49:22, 53:34:26	Data Entry Date	09-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA14	Review Date	28-Jul-2012
Clear Roadway/Skew	25 /	Dept. Reviewer Name	Andrew Smikles
AADT/Year	10,610 / 2011 (A)	Dept. Review Date	13-Aug-2012
Road Classification	RAD-412.4-120	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2134	1549	RPP	66.5	152X51	3.0	PIPE ARCH
2	MAIN	2134	1549	RPP	66.5	152X51	3.0	PIPE ARCH
Special Features	STORM WATER DRAIN							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ditch.	Gas	
Power	2 wires OH 30m North of WBL c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Gradual curve 100m to the East.
Vertical Alignment		9	8	
Roadway Width (m)	25.000			Both EBL & WBL combined.
Embankment		4	4	Sloughing @ South end between culverts. Transverse wide cracks both lanes immediately West of culverts.
Sideslope (__:1)	5.0			
(Height of Cover(m) : 1.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		East culvert.
End Treatment (Concrete, Steel, Others, None)	STEEL			
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		5	5	Minor dent to crown.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	5	Well grassed.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	5	Minor embankment sloughing between 2 culverts.
Beavers (Y/N)	No			
Upstream End General Rating		4	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2134, Rise (mm): 1549, Type: RPP)				
Barrel Last Accessible Date	16-Dec-2010			East culvert. Pipe half full of water; viewed from ends, shape appears adequate.
Special Features				
Special Feature		5	N	
(Type : STORM WATER DRAIN)				
Special Feature				
(Type :)				
Roof		5	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		5	N	Inward.
Measured Span (mm)	2120			
Measured At Ring No.	14			
Deflection (mm)	14			
Percent Deflection	1			(.65%. 16Dec2010).
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	N	
Separation (mm)	0			
Longitudinal Seams		5	N	
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	Typical scaling rust at waterline.
Corrosion By Soil (Y/N)	No			
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): 2134, Rise (mm): 1549, Type: RPP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	N	GR was 5 from 16Dec2010.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		East culvert.
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)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		N	6	Well vegetated.
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West culvert.
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		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	5	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	5	Minor embankment sloughing between 2 culverts.
Beavers (Y/N)	Yes			
Upstream End General Rating		4	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 2134, Rise (mm): 1549, Type: RPP)				
Barrel Last Accessible Date	16-Dec-2010			East culvert. Pipe over half full; viewed from ends, shape appears adequate.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		5	N	Inward.
Measured Span (mm)	2120			
Measured At Ring No.	14			
Deflection (mm)	14			
Percent Deflection	1			(.65%. 16Dec2010).
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	N	
Separation (mm)	0			
Longitudinal Seams		5	N	
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	Typical scaling rust at waterline.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 2134, Rise (mm): 1549, Type: RPP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	N	GR was 5 from 16Dec2010.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		West culvert.
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)	200			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		N	6	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	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		8	8	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	54.9/55.7	Est. Repl. Yr	2025	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	19-Apr-2014		Previous Inspection Date	16-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							