Bridge Culvert Inspection

Bridge File Number	00649 -1 Bridge Culvert	Form Type	CUL1
Year Built	1978	Lot No.	4
Bridge or Town Name	MOUNTAIN VIE	Inspector Name	Jason Rusu
Located Over	MAMI CREEK, 2.12.22.16, WATERCRS-ST	Inspector Class	BR CLS A
Located On	5:02 C1 17.129	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Oct-2011
Legal Land Location	SE SEC 19 TWP 2 RGE 27 W4M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-113:35:25, 49:07:56	Data Entry Date	21-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	09-Nov-2011
Clear Roadway/Skew	13 / 35 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	1,290 / 2010 (A)	Dept. Review Date	25-Nov-2011
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	42		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4920	SP	80.5	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	SOUTH R/W	Gas	TO WEST 80m
Power	1 WIRE N, 1 WIRE to W	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	No passing. Crest curve to the east. Limited sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	12.500			
Embankment		N	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		N	6	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		N	6	(gravel/islands in bevel -submerged) Bevel at East bent inward 200mm.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1200			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **350**)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		**N**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 4920, Type: SP**)				
Barrel Last Accessible Date	28-Oct-2011			Vertically ellipsed barrel.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Shape is consistant and no visual signs of sag.
Measured Rise (mm)	4920			
Measured At Ring No.	4			
Sag (mm)				est
Percent Sag	0			
Sidewall		6	6	Has isolated bulges on 3rd ring W. side & 3 & 4 ring E side-64 mm INWARD.
Measured Span (mm)	4620			
Measured At Ring No.	12			
Deflection (mm)				EST
Percent Deflection	1			
Floor		N	N	Silt and gravel covered 500mm.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		6	6	MINOR SUPERFICIAL CORROSION @ ROOF @ 2ND RING FROM D/S
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	5	((SOIL CORROSION THRU LOWER CIRC SEAM HOLES @ 5 & 7 O'CLOCK '92; '94) Minor corrosion at water line.
Corrosion By Soil (Y/N)	Yes			
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): 4920, Type: SP**)				
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**6**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		NORTH
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		N	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		**N**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	CURVES @ NORTH
Bank Stability		N	6	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
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) (%)	**66.7/66.7**	**Sufficiency Rating (Last/Now) (%)**	**67.6/70.6**	Est. Repl. Yr	2036	Maint. Reqd. (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	Jason Rusu	Previous Assistant's Name	
Next Inspection Date	28-Jul-2013	Previous Inspection Date	20-Dec-2009
Inspection Cycle (Default) (months)	21		
Comment			