Bridge Culvert Inspection

Bridge File Number	73103 -1 Bridge Culvert	Form Type	CUL1
Year Built	1987	Lot No.	4
Bridge or Town Name	STANDARD	Inspector Name	Garry Roberts
Located Over	TRIBUTARY TO SEVERN CREEK, 3.33.8.2, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	840:02 C1 16.475	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Jan-2012
Navigabil. Cl./Year		Data Entry By	Anne Roberts
Legal Land Location	SW SEC 2 TWP 26 RGE 22 W4M	Data Entry Date	08-Feb-2012
Longitude, Latitude	-112:58:54, 51:11:05	Reviewer Name	Tom Carey
Road Authority	Alberta Transportation (AIT)	Review Date	18-Jan-2012
Contract Main. Area	CMA29	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	8.5 / -6 deg. (LHF)	Dept. Review Date	09-Feb-2012
AADT/Year	620 / 2010 (A)	Follow-Up By	
Road Classification	RCU-208-110		
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1800	SP	43.6			ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	None visible		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Int SH 564 100m S Hill to N 100m
Vertical Alignment		6	6	
Roadway Width (m)	8.500			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **4.6**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				East
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	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
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): , Rise (mm): 1800, Type: SP**)				
Barrel Last Accessible Date	10-Jan-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	7	
Measured Rise (mm)	1790			
Measured At Ring No.	6			
Sag (mm)	10			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	1860			
Measured At Ring No.	6			
Deflection (mm)	60			
Percent Deflection	3			
Floor		8	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	7	
Separation (mm)	0			
Longitudinal Seams		8	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		7	6	Minor soil corrosion at isolated seams
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			
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): 1800, Type: SP**)				
Fish Passage Adequacy		8	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	7	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**7**	**7**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				West
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		8	8	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	90 deg @ u/s end
Bank Stability		6	7	
HWM (m below Top of Culvert)				No visible HWM
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		**5**	**5**	

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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**78.4/75.2**	Est. Repl. Yr	2038	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	Diego Alvarez
Next Inspection Date	10-Apr-2015	Previous Inspection Date	21-Oct-2008
Inspection Cycle (Default) (months)	39		
Comment			