Bridge Culvert Inspection

Bridge File Number	76088 -2 Bridge Culvert	Form Type	CUL1
Year Built	2005	Lot No.	4
Bridge or Town Name	NORDEGG	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.193, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	11:02 C1 6.209	Assistant Class	
Water Body Cl./Year		Inspection Date	08-Feb-2012
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	NW SEC 13 TWP 35 RGE 19 W5M	Data Entry Date	06-Mar-2012
Longitude, Latitude	-116:35:03, 52:00:42	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	22-Feb-2012
Contract Main. Area	CMA18	Dept. Reviewer Name	Andrew Smikles
Clear Roadway/Skew	12.2 / 0 deg.	Dept. Review Date	09-Mar-2012
AADT/Year	360 / 2010 (A)	Follow-Up By	
Road Classification	RAU-213.4-120		
Detour Length (km)			

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	5150		RPB	16.5	152X51	3.5	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Curves East & West. Hill to East. Culvert grouted under HC bridge.
Vertical Alignment		6	6	
Roadway Width (m)	12.200			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **1.4**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		X	X	
Wingwalls		9	9	
(Shape :)				
Cutoff Wall		N	N	Buried.

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		9	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		9	N	
Beavers (Y/N)	No			
Upstream End General Rating		**9**	**N**	GR was 9 from 06May2010.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 5150, Rise (mm): , Type: RPB**)				
Barrel Last Accessible Date	08-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		9	9	No measurement; natural floor.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		9	9	
Measured Span (mm)	5150			
Measured At Ring No.	5			
Deflection (mm)	0			
Percent Deflection	0			
Floor		X	X	Rock floor.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		9	9	
Separation (mm)	0			
Longitudinal Seams		9	9	
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)	Yes			
Coating		9	9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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): 5150, Rise (mm): , Type: RPB**)				
Fish Passage Adequacy		X	X	No flow. Steep.
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**9**	**9**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		X	X	
Wingwalls		9	9	
(Shape :)				
Cutoff Wall		N	N	Buried.
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		9	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		9	N	
Beavers (Y/N)	No			
Downstream End General Rating		**9**	**N**	GR was 9 from 06May2010.

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	Meandering stream.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	

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) (%)	**100.0/100.0**	**Sufficiency Rating (Last/Now) (%)**	**91.3/83.2**	Est. Repl. Yr	2055	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	Owen Salava	Previous Assistant's Name	
Next Inspection Date	08-Nov-2013	Previous Inspection Date	06-May-2010
Inspection Cycle (Default) (months)	21		
Comment			