Bridge Culvert Inspection

Bridge File Number	77134 -1 Bridge Culvert	Form Type	CUL1
Year Built	1986	Lot No.	4
Bridge or Town Name	CONRICH	Inspector Name	Garry Roberts
Located Over	WID - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS A
Located On	791:04 C1 5.417	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	17-Jul-2012
Legal Land Location	SW SEC 31 TWP 24 RGE 27 W4M	Data Entry By	Kelsey Roberts
Longitude, Latitude	-113:46:20, 51:05:11	Data Entry Date	23-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Ash Morjaria
Contract Main. Area	CMA30	Review Date	28-Jul-2012
Clear Roadway/Skew	11 / 30 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	240 / 2011 (A)	Dept. Review Date	24-Aug-2012
Road Classification	RLU-207G-60	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4420	2794	RPE	39	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	OVER TOP W SIDE/RW	Gas	
Power	25M S-@ W RW 1m	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	CURVE TO NORTH
Vertical Alignment		6	6	ON GRADE Approaches 4 corners Hazard markers all 4 corners
Roadway Width (m)	10.000			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **0.8**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream 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 :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		X	X	
Bevel End		7	7	SOME ROCKS IN BEVEL
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		6	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): 4420, Rise (mm): 2794, Type: RPE**)				
Barrel Last Accessible Date	17-May-2009			Water too deep to enter, viewed from ends and shape appears good.
Special Features				
Special Feature				Walkway bolted to D/S roof
(Type :)				
Special Feature				
(Type :)				
Roof		5	N	Roof not measured- lines are good PR 5
Measured Rise (mm)	2574			
Measured At Ring No.	2			
Sag (mm)	220			
Percent Sag	7			
Sidewall		6	N	PR 6
Measured Span (mm)	4555			
Measured At Ring No.	2			
Deflection (mm)	134			
Percent Deflection	3			
Floor		6	N	PR 6
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	PR 8
Separation (mm)	0			
Longitudinal Seams		6	N	100mm inward bulge @ ring 8 roof seam ON FLOOR & ROOF, NOT ON SIDEWALLS PR 6
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)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		4	N	(Some pitting @ u/s floor) May 17/09 PR 4
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 # : **1, Primary Span, Location Code: MAIN, Span (mm): 4420, Rise (mm): 2794, Type: RPE**)				
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		**5**	**N**	PR 5

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		N	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	Walkway bolter allross TD1 of bevel Some rocks in bevel
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	8	
HWM (m below Top of Culvert)				Not visible
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		**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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**67.3/67.5**	Est. Repl. Yr	2030	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	Garry Roberts	Previous Assistant's Name			
Next Inspection Date	17-Oct-2015	Previous Inspection Date	17-May-2009		
Inspection Cycle (Default) (months)	39				
Comment					