Bridge Culvert Inspection

Bridge File Number	78485 -1 Bridge Culvert	Form Type	CUL1
Year Built	1984	Lot No.	4
Bridge or Town Name	HAYES	Inspector Name	Jason Rusu
Located Over	BRP - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS A
Located On	875:02 C1 17.263	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	17-Mar-2012
Legal Land Location	SE SEC 10 TWP 12 RGE 14 W4M	Data Entry By	Erin Roberts
Longitude, Latitude	-111:49:39, 49:58:55	Data Entry Date	11-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA24	Review Date	23-Mar-2012
Clear Roadway/Skew	17.4 /	Dept. Reviewer Name	Tim Davies
AADT/Year	290 / 2011 (A)	Dept. Review Date	17-Apr-2012
Road Classification	RCU-208-110	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	3327	2095	RPE	27.4	152X51	3.0	ELLIPSE

Special Features	
Special Features Comment	

Utilities (Located at)

Utility Attachments			
Telephone	South side.	Gas	45m West.
Power	3 wires North, 3 wires East.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	West side of the intersection.
Vertical Alignment		7	7	
Roadway Width (m)	8.200			
Embankment		N	6	
Sideslope (__:1)	2.5			
(Height of Cover(m) : **0.4**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		North
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)	300			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **150**)				
Scour/Erosion		N	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): 3327, Rise (mm): 2095, Type: RPE**)				
Barrel Last Accessible Date	03-Mar-2009			Water too deep to enter.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	N	Viewed from ends shape looks good.
Measured Rise (mm)	2038			Est.
Measured At Ring No.	3			
Sag (mm)	57			
Percent Sag	3			
Sidewall		7	N	
Measured Span (mm)	3340			
Measured At Ring No.	3			
Deflection (mm)	13			Est.
Percent Deflection	1			
Floor		N	N	(Some silt on floor.) 3-March-2009
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	N	(Some not nestled well.) 3-March-2009
Separation (mm)	5			
Longitudinal Seams		6	N	
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)	No			
Coating		6	N	(Staining & scaling.) 3-March-2009
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
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): 3327, Rise (mm): 2095, Type: RPE**)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**6**	**N**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		S		South
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **150**)				
Scour/Erosion		N	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		8	8	Turn outs 12m D/S. Headgate 17m D/S.
Bank Stability		N	7	
HWM (m below Top of Culvert)				None visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(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) (%)	66.7/55.6	Sufficiency Rating (Last/Now) (%)	76.4/71.5	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	Tim Davies	Previous Assistant's Name			
Next Inspection Date	17-Jun-2015	Previous Inspection Date	03-Mar-2009		
Inspection Cycle (Default) (months)	39				
Comment					