Bridge Culvert Inspection

Bridge File Number	75385 -1 Bridge Culvert	Form Type	CUL1
Year Built	1988	Lot No.	4
Bridge or Town Name	NEW DAYTON	Inspector Name	Jason Rusu
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	4:04 L1 19.235;4:04 R1 19.275	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	23-Mar-2013
Legal Land Location	SW SEC 27 TWP 5 RGE 18 W4M	Data Entry By	Lauren Korte
Longitude, Latitude	-112:21:34, 49:24:52	Data Entry Date	11-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA24	Review Date	07-Apr-2013
Clear Roadway/Skew	26 /	Dept. Reviewer Name	Tim Davies
AADT/Year	2,640 / 2012 (A)	Dept. Review Date	22-Apr-2013
Road Classification	RFD-412.4-130	Follow-Up By	
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2000	MP	34	125X26	2.8	ROUND
1	D/S	-	2000	MP	49	125X26	2.8	ROUND
Special Features		STORM WATER DRAIN, CONC FLOOR						
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)
Remarks	Not required.										

Utilities (Located at)

Utility Attachments			
Telephone	At East r/w.	Gas	
Power	3 wires @ East 70 m from c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Steep hill to South - 300 m sight distance.
Vertical Alignment		6	6	
Roadway Width (m)	26.000			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **3**)				
Guardrail (Y/N)	Yes			At West side.
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West end.
End Treatment (Concrete, Steel, Others, None)	STEEL			

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Headwall		X	X	
Collar		X	X	
Wingwalls		7	7	Concrete wings along bevels.
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	Superficial corrosion @ haunches.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
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): 2000, Type: MP**)				
Barrel Last Accessible Date	23-Mar-2013			
Special Features				
Special Feature		8	8	150mm mud and ice covered.
(Type : **STORM WATER DRAIN**)				
Special Feature		6	N	
(Type : **CONC FLOOR**)				
Roof		5	5	3 isolated sags in roof East half - 100mm.
Measured Rise (mm)				
Measured At Ring No.	13			Est.
Sag (mm)	100			
Percent Sag	5			
Sidewall		7	7	Pipe is approx 1850mm throughout - closer to 5% ellipse than round.
Measured Span (mm)	1850			Inward.
Measured At Ring No.	5			
Deflection (mm)				
Percent Deflection	0			
Floor		N	N	Concrete & dirt covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	Re-enforced with bolts and sealed with spray foam.
Separation (mm)	60			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2000, Type: MP**)				
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		6	6	Superficial rust.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**5**	**5**	

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

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		X	X	Concrete & dirt.
Roadway Surface		7	7	
(Type : **CONCRETE**)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		6	6	
Structure In Use (Y/N)	Yes			Guide fences both ends.
Grade Separation 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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**72.4/72.3**	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	23-Dec-2014	Previous Inspection Date	17-Jun-2011		
Inspection Cycle (Default) (months)	21				
Comment					