

Bridge Culvert Inspection			
Bridge File Number	70562 -1 Bridge Culvert	Form Type	CUL1
Year Built	1956	Lot No.	1
Bridge or Town Name	DELIA	Inspector Name	Owen Salava
Located Over	MCCONNELL COULEE, 3.30.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	576:02 C1 21.374	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Jan-2011
Legal Land Location	SW SEC 14 TWP 29 RGE 18 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-112:25:59, 51:28:27	Data Entry Date	03-Mar-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA21	Review Date	03-Feb-2011
Clear Roadway/Skew	8.3 /	Dept. Reviewer Name	Chris Black
AADT/Year	520 / 2009 (A)	Dept. Review Date	07-Mar-2011
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	-	2019	SP	39	152X51	3.0	ROUND
Special Features								
Special Features Comment	2019mm dia. is not normal SPCSP size. Should confirm with file review or count bolt hole spaces.							

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	70 M West
Power	N side U/S end-3W O/H in ditch	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Land access road 100m W. Limited sight distance from West. In sag curve with no passing WB.
Vertical Alignment		6	6	
Roadway Width (m)	8.300			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 5.1)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
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		5	5	(Some perforations on floor.)
Heaving (mm)	150			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		6	N	(Sparse rock. 18Feb2009).
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	N	Snow covered.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm):				Rise (mm): 2019, Type: SP)
Barrel Last Accessible Date	27-Jan-2011			(Measured 2100 x 2138 @ R7. 18Feb2009). 2019mm not std dia. so sags & deflections could be in error.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		3	3	Isolated perforations in R8-10 lower roof. Unable to measure snow on floor.
Measured Rise (mm)	2138			
Measured At Ring No.	7			(Upwards. 18Feb2009).
Sag (mm)	119			(5.9%. 18Feb2009).
Percent Sag	6			
Sidewall		3	3	Perforations in rings 5 - 11 inclusive - both sidewalls. 50 x 75 dia hole R 11 west side from construction.
Measured Span (mm)	2100			
Measured At Ring No.	7			
Deflection (mm)	81			
Percent Deflection	4			
Floor		4	N	Snow covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	Barrel extended 2 rings each end.
Separation (mm)	0			
Longitudinal Seams		6	6	Bolts loose. (2%)
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				1N Stagger
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		3	3	Perforated sidewalls R5-11 inclusive.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2019, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>3</b>	<b>3</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		5	5	(Bevel end undermined 600mm. Minor bend in floor. 18Feb2009). Snow covered floor.
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	N	(Rock in channel. 18Feb2009). Snow covered.
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		5	N	Snow covered.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	Winding U/S & D/S.
Bank Stability		6	6	
HWM (m below Top of Culvert)				No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>6</b>	<b>6</b>	

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>33.3/33.3</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>52.5/52.5</b>	Est. Repl. Yr	2018	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	Pipe still has adequate shape & perforations are not close to being critical. Continue to monitor on regular cycle.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	Advance replacement to 2016. RS						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	27-Apr-2014		Previous Inspection Date	18-Feb-2009			
Inspection Cycle (Default) (months)	39						
Comment							