

Bridge Culvert Inspection				
Bridge File Number	75579 -1 Bridge Culvert		Form Type	CUL1
Year Built	1962		Lot No.	4
Bridge or Town Name	WILLINGDON		Inspector Name	Jason Saly
Located Over	TRIBUTARY TO VERMILION RIVER, 6.5.30, WATERCRS-ST		Inspector Class	BR CLS A
Located On	45:06 C1 21.351		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	23-Jan-2013
Legal Land Location	NW SEC 32 TWP 55 RGE 14 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-112:03:27, 53:48:05		Data Entry Date	28-Feb-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA14		Review Date	13-Feb-2013
Clear Roadway/Skew	9.5 / 15 deg. (RHF)		Dept. Reviewer Name	Chris Black
AADT/Year	400 / 2011 (A)		Dept. Review Date	14-Mar-2013
Road Classification	RAU-209-110		Follow-Up By	
Detour Length (km)	6			

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2311	1473	CPE	22			ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	Plowed in South ditch.		Gas	Across Hwy 150m East.
Power			Municipal	
Others	CN Railway 35m South of c/l.		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection 650m West. Abandoned rail line 30m South.
Vertical Alignment		8	8	
Roadway Width (m)	9.500			
Embankment		8	N	Snow covered; no signs of problems.
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)		NONE		
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		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		6	N	(Concrete bag riprap has deteriorated. Overgrown with vegetation. 06Jun2011).
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		6	N	GR was 6 from 06Jun2011.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2311, Rise (mm): 1473, Type: CPE)				
Barrel Last Accessible Date	12-Aug-2009			Pipe snowed in, would be restricted space; viewed from ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	(No problems noted, under water. 12Aug2009).
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	(Losing fill @ circumferential seams, minor. 12Aug2009). Grout falling out of some seams. Minor infiltration starting @ R1-2.
Separation (mm)	70			
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 2311, Rise (mm): 1473, Type: CPE)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		N	N	Previous GR was 7 from 12Aug2009, but controlling elements rated 8.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 250)		6	N	(Concrete bag riprap has deteriorated. Overgrown by vegetation. 06Jun2011).
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Downstream End General Rating		6	N	GR was 6 from 06Jun2011.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	45 degrees u/s.
Bank Stability		7	N	Snow covered.
HWM (m below Top of Culvert)	0.3			(14/Apr/2007)
Drift (Y/N)	No			
Channel Bottom Degradation/Aggrading	AGGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel 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) (%)	58.2/56.3	Est. Repl. Yr	2024	Maint. Req. (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	Jason Saly		Previous Assistant's Name				
Next Inspection Date	23-Oct-2014		Previous Inspection Date	06-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							