

Bridge Culvert Inspection				
Bridge File Number	75212 -1 Bridge Culvert		Form Type	CUL1
Year Built	1994		Lot No.	4
Bridge or Town Name	DUCHESS		Inspector Name	Jon Davies
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	36:08 C1 11.829		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	14-Jan-2012
Legal Land Location	NE SEC 36 TWP 20 RGE 15 W4M		Data Entry By	Anne Roberts
Longitude, Latitude	-111:57:05, 50:44:27		Data Entry Date	27-Feb-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	20-Jan-2012
Clear Roadway/Skew	19 /		Dept. Reviewer Name	Tim Davies
AADT/Year	1,740 / 2010 (A)		Dept. Review Date	11-Mar-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	5			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	45.6	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone			Gas	Crossing 200 m South
Power	At East ROW		Municipal	
Others			Problem (Y/N)	No
Remarks				

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	6	7	Intersection with SH 550 60 m to North. Hill to South
Vertical Alignment	6	5	
Roadway Width (m)	10.500		
Embankment	7	6	
Sideslope ( _ :1)	4.0		
(Height of Cover(m) : 1.4)			
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	W		
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		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>200</b> )				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : <b>1</b> , Primary Span, Location Code: <b>MAIN</b> , Span (mm): , Rise (mm): <b>2400</b> , Type: <b>MP</b> )				
Barrel Last Accessible Date	14-Jan-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	2260			Est
Measured At Ring No.	2			
Sag (mm)	75			
Percent Sag	3			
Sidewall		7	7	
Measured Span (mm)	2415			
Measured At Ring No.	1			
Deflection (mm)	15			
Percent Deflection	1			
Floor		N	N	Ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	5	50mm vert gap @ bevel ext @both ends - No problems
Separation (mm)	80			
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		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		9	9	
Bank Stability		8	7	
HWM (m below Top of Culvert)	0.6			[May 28/08] No visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>9</b>	<b>9</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>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>82.9/80.7</b>	Est. Repl. Yr	2036	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	This site was previously confused with 75211 saphn and rise measured were checked to confirm. GPS and map show this site South of SH 550		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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	14-Oct-2013		Previous Inspection Date	22-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							