

Bridge Culvert Inspection				
Bridge File Number	81980 -1 Bridge Culvert		Form Type	CULM
Year Built	1993		Lot No.	4
Bridge or Town Name	FT MCMURRAY		Inspector Name	Wade Nanninga
Located Over	MUNICIPAL		Inspector Class	BR CLS B
Located On	63:12 L1 32.711		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	08-Mar-2010
Legal Land Location	SW SEC 6 TWP 93 RGE 10 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-111:36:28, 57:02:19		Data Entry Date	07-Apr-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA07		Review Date	29-Mar-2010
Clear Roadway/Skew	25 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	13,060 / 2008 (A)		Dept. Review Date	12-Apr-2010
Road Classification	RAU-213.4-120		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information								
Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	14000	14000	CPA	62			ARCH
2	MAIN	14000	14000	CPA	62			ARCH
Special Features								
Special Features Comment								

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: MUNICIPAL 2.9m									
Posted Vertical Clearance (Y/N)			No									
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)	No	Lane	WB	On Bridge (m)		In Advance (Y/N)	No
Remarks		Not required. Not for public access.										

Utilities (Located at)			
Utility Attachments			
Telephone			Gas
Power			Municipal
Others			Problem (Y/N)
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Do not inspect prior to contacting Syncrude Security (Tim Gray @780-790-5919). On gradual curve.  300m North of 81232 Embankment incorporates MSE retaining wall.
Vertical Alignment		9	9	
Roadway Width (m)	13.600			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover (m) : )				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Secondary Span)</b>				
Direction		W		South barrel
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Minor vertical cracks on headwall.
Collar		X	X	
Wingwalls (Shape : <b>RIGHT ANGLE</b> )		8	8	MSE wall.
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection (Type : <b>CONCRETE</b> ) (Avg. Rock Size (mm) : )		X	7	
Scour/Erosion		X	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Secondary Span, Location Code: MAIN, Span (mm): 14000, Rise (mm): 14000, Type: CPA)</b>				
Barrel Last Accessible Date	17-Jul-2008			Permission from Syncrude required. Pipe not in use currently/partially filled in.  Mud/water in pipe-too deep to access. Viewed from ends-looks good.
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		8	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	7	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	Covered by fill.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	7	
Separation (mm)	0			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Secondary Span, Location Code: MAIN, Span (mm): 14000, Rise (mm): 14000, Type: CPA)</b>				
Longitudinal Seams		8	7	At roof.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		8	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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			
<b>Barrel General Rating</b>		<b>8</b>	<b>7</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Secondary Span)</b>				
Direction		E		South barrel.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Narrow vertical cracks on headwall.
Collar		X	X	
Wingwalls		8	8	MSE wall.
(Shape : <b>RIGHT ANGLE</b> )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		X	7	
(Type : <b>CONCRETE</b> )				
(Avg. Rock Size (mm) : )				
Scour/Erosion		X	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Primary Span)				
Direction		W		North barrel.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Minor vertical cracks in headwall.
Collar		X	X	
Wingwalls		8	8	
(Shape : <b>RIGHT ANGLE</b> )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		X	7	
(Type : <b>CONCRETE</b> )				
(Avg. Rock Size (mm) : )				
Scour/Erosion		X	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): 14000, Rise (mm): 14000, Type: CPA)				
Barrel Last Accessible Date	17-Jul-2008			North barrel. Partially filled in, not in use.
<b>Special Features</b>				
Special Feature				Viewed from ends.
(Type : )				
Special Feature				
(Type : )				
Roof		8	7	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	7	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	Floor covered with fill.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	7	
Separation (mm)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): 14000, Rise (mm): 14000, Type: CPA)</b>				
Longitudinal Seams		8	8	At roof.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		8	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
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			
<b>Barrel General Rating</b>		<b>8</b>	<b>7</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Primary Span)</b>				
Direction		E		North barrel.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Minor vertical cracks in headwall.
Collar		X	X	
Wingwalls		8	8	
(Shape : <b>RIGHT ANGLE</b> )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		X	7	
(Type : <b>CONCRETE</b> )				
(Avg. Rock Size (mm) : )				
Scour/Erosion		X	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		7	7	Partially filled with dirt.
Roadway Surface		N	N	
(Type : )				
Icing (Y/N)		No		
Traffic Safety Features		4	5	
Type				
Lighting		4	5	Lights not currently on or not working.
Barrel Leakage (Y/N)		No		
Drainage		8	6	
Structure In Use (Y/N)		No		
<b>Grade Separation General Rating</b>		<b>7</b>	<b>5</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>88.9/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>85.4/77.9</b>	Est. Repl. Yr	2052	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Do not inspect barrel prior to contacting Ayncrude Security (780-790-5919)		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	08-Dec-2011		Previous Inspection Date	17-Jul-2008			
Inspection Cycle (Default) (months)	21						
Comment							