

Bridge Culvert Inspection				
Bridge File Number	77221 -1 Bridge Culvert		Form Type	CUL1
Year Built	1970		Lot No.	3
Bridge or Town Name	CALGARY		Inspector Name	Garry Roberts
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	2:15 R1 43.528;2:15 L1 43.645		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	14-Jan-2013
Legal Land Location	NW SEC 14 TWP 25 RGE 1 W5M		Data Entry By	Lauren Korte
Longitude, Latitude	-114:02:22, 51:08:13		Data Entry Date	28-Jan-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Tom Carey
Contract Main. Area	DEERFOOT/STONEV		Review Date	17-Jan-2013
Clear Roadway/Skew	50 /		Dept. Reviewer Name	Tim Davies
AADT/Year	92,100 / 2011 (A)		Dept. Review Date	29-Jan-2013
Road Classification	RFD-616.6-130		Follow-Up By	
Detour Length (km)				

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	1850	2300	RPP	89	152X51		PIPE ARCH
Special Features								
Special Features Comment								

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

Utilities (Located at)			
Utility Attachments			
Telephone	In area.		Gas
Power	Main transmission lines to West.		Municipal
Others	Light standards.		Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Turnout lane. B1710
Vertical Alignment		6	6	Grade up to North.
Roadway Width (m)	50.000			
Embankment		3	4	Level over pipe & 2:1 at sides at East 4:1 at West. 1x1x1m long erosion at East side slope.
Sideslope (___:1)	2.0			
(Height of Cover(m) : 1.5)				
Guardrail (Y/N)	Yes			Guardrail East & parapets West. Cable barrier at median.
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

Upstream End				
<b>Culvert Component</b>		Last	Now	Explanation of Condition
Direction		E		East.
End Treatment (Concrete, Steel, Others, None)		NONE		
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	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 # : 1, Primary Span, Location Code: MAIN, Span (mm): 1850, Rise (mm): 2300, Type: RPP)				
Barrel Last Accessible Date	14-Jan-2013			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		4	4	300mm tear at roof at ring #6 from East. Roof rates 7 other than here.
Measured Rise (mm)	2393			
Measured At Ring No.	16			Upward.
Sag (mm)	93			
Percent Sag	4			
Sidewall		6	6	
Measured Span (mm)	1730			
Measured At Ring No.	20			
Deflection (mm)	120			
Percent Deflection	6			
Floor		7	7	Gravel to 700mm thick on floor at West 12 rings only.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	One bolt missing at seam between #15 & #16 rings.
Separation (mm)	0			
Longitudinal Seams		7	6	Isolated bolt tipping and pulling into plates.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		5	5	Alkali stains at bolts- isolated.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1850, Rise (mm): 2300, Type: RPP)</b>				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		X	7	Also handles drainage. 12 D/S rings are silted to 700mm.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		West.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	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		X	X	
Roadway Surface		5	5	
(Type : )				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type				
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		6	6	
Structure In Use (Y/N)	Yes			
<b>Grade Separation General Rating</b>		<b>5</b>	<b>5</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2013	Repair NE ditch erosion approx 30m3 pit run and top soil.					
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>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>62.5/55.0</b>	Est. Repl. Yr	2023	Maint. Req. (Y/N)	Yes
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	14-Oct-2014		Previous Inspection Date	10-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							