

Bridge Inspection									
Bridge File Number	08866 -1 Bridge				Form Type	PCS			
Year Built/Year Supstr	1967/1967				Lot No.	1			
Bridge or Town Name	MAGNOLIA BRI				Inspector Name	Kris Bosters			
Located Over	TRIBUTARY TO STURGEON RIVER, 6.65.27, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	757:02 C1 0.257				Assistant Name	Brian Cote			
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	07-Aug-2012			
Legal Land Location	SW SEC 20 TWP 53 RGE 6 W5M				Data Entry By	Lisa Fairhurst			
Longitude, Latitude	-114:51:37, 53:35:28				Data Entry Date	27-Aug-2012			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	CMA12				Review Date	21-Aug-2012			
Clear Roadway/Skew	10 /				Dept. Reviewer Name	Brent Herrick			
AADT/Year	610 / 2011 (A)				Dept. Review Date	30-Aug-2012			
Road Classification	RCU-209-110				Follow-Up By				
Detour Length (km)	3								
Allowable Load (t):	Single	CS1 30 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 70 GIRDER	----> On Critical Spans ---->Critical Member		
Design Loading:	HS20						----> Primary Span		
Posting Information									
Required Load Posting (t)	Single				Semi		Truck Train		
Posted Loading (t)	Single				Semi		Truck Train		
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Remarks	Not required.								
Hazard Marker At Bridge (Y/N)	Yes								
Remarks	Not to standard location								
Other Sign Types	Stop ahead, divided highway ahead.								
Utilities (Located at)									
Utility Attachments									
Telephone	6m West.				Gas				
Power					Municipal				
Others	CNR utility cable				Problem (Y/N)	No			
Remarks	CNR utility cable buried in both ditch r/w.								
Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			4	4	Super elevated in sharp curve, no passing both directions. Located 100m South of BF 76431. Entrance at NW.				
Vertical Alignment			7	7					
Roadway Width (m)	10.000								
Approach Bump			6	6					
Guardrail (Y/N)	Yes								
Guardrail			N	6					
Length (m)	11.400								
Current Standard (Y/N)	No								
Termination Type	Turn Down								
Drainage			N	4	10m x 1.2m x 1.0m deep erosion channel forming in SE				
Approach Road General Rating			4	4					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : HC, 3 Spans, Lengths(m): 10.1-10.1-10.1, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now	0.0	0.0	0.0	0.0	
Wearing Surface			6	5	Longitudinal cracks in pavement over girder lines, sealed.
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	Paved over.
Deck Rideability			7	7	
Deck Joints			N	N	ACP covered.
Bump (Y/N)		Yes			
Deck Drainage			4	6	Seepage between girders likely contributing to leg spalls. Erosion on North headslope
Drains Clogged (Y/N)		No			
Curbs/Median			N	4	NW corner damaged rebar exposed - photo.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			4	4	Double layer. Missing 4 bolts at all lap connections (136 bolts) - photo
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			4	4	Missing rail to post bolt, NE on S2.
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			6	6	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	4	
Girders			4	3	S1(G5,6,7,8 9), S2(G1,3,5,6,7,8), S3(G3,4,6,8,) have spalls or wide cracks within anchor zone. Some with rusted rebar but in one leg only. S1G6, S2G9, S3G6,7,9 spalls in AZ, two legs - photo Span 3 West girders over P2 have limited brg surface area, 150mm - photo. Corrosion occurring but does not appear to have any section loss.
Last Complete Inspection Date		07-Aug-2012			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		10			
Lift or Connector Pocket Grouted (Y/N)		Yes			
(Number Of Girders : 33)					
Span Alignment Problems					
Vertical (Y/N)		No			
Horizontal (Y/N)		No			
Superstructure General Rating			4	3	

Substructure						
Bridge Component		Last	Now	Explanation of Condition		
Abutments						
(Extended Backwall Piles (Y/N) : Y)				Steel at South		
(Extended Backwall Piles Spacing(mm) : 800)						
(Total Number of Caps/Corbels : 5:5)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				7	7	
(Type : TREATED TIMBER)						
(Depth(mm) : 300)						
(Width(mm) : 300)						
Backwalls/Breastwalls				6	6	
Greatest Height (m)		1.80				
Wingwalls				N	7	
(Total Number of Bearing Piles : 8:8)				Some of the piles are not visible, buried under dirt.		
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Piles				7	7	
Paint/Coating				X	X	
Abutment Stability				6	6	
Scour/Erosion				4	4	
0.3m wide erosion gullies north abutment.						
Piers/Bents						
(Type : PIER-COLUMN)				Uneven bearing of G1 at P2 - photo #5. Reduced bearing area of girder on cap.		
(Total Number of Caps/Corbels : 10:10)				Too high to measure.- estimated		
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				4	6	
(Type : TREATED TIMBER)						
(Depth(mm) : 300)						
(Width(mm) : 300)						
(Total Number of Bearing Piles : 18:18)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	36	0	0	0		
Pier Shaft/Piles				7	N	
Greatest Height (m)		5.50				
Bracing/Struts/Sheathing				4	4	
Missing 3 planks - photo. 20% visible (sheathed). P1 streamside (north side) not low enough - photo .						
Nose Plate				6	6	
Paint/Coating				6	6	
(Colour Description :)						
(Colour Code :)						

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		7	7	
Scour		7	7	
Debris (Y/N)	Yes			
Substructure General Rating		4	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		N	7	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	Yes			
Slope Protection		4	5	Very minor erosion on North headslope.
(Type : NONE)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2012	Replace missing splice bolts and rail to post bolt NE of S2.					
SEAL CURBS							
PATCH DECK							
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION	2012	Replace girders.					
OTHER ACTION	2012	Reset hazard markers.					
OTHER ACTION	2012	Lower pier 1 sheathing, 3 row of 50mm thickness x 250 width x 4000 length.					
OTHER ACTION	2012	Assess bridge to determine best repair strategy.					
Structural Condition Rating (Last/Now) (%)	44.4/50.0	Sufficiency Rating (Last/Now) (%)	53.6/56.0	Est. Repl. Yr	2022	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Delay repairs is assessment currently being completed.		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	Jacob Oresile		Previous Assistant's Name				
Next Inspection Date	07-Nov-2015		Previous Inspection Date	29-Jan-2009			
Inspection Cycle (Default) (months)	39						
Comment							