

Bridge Inspection							
Bridge File Number	00433 -1 Bridge			Form Type	PCS		
Year Built/Year Supstr	1961/1961			Lot No.	2		
Bridge or Town Name	CARSTAIRS			Inspector Name	Owen Salava		
Located Over	BEAVERDAM CREEK, 3.89.8.11, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	580:02 C1 13.112			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	27-Oct-2011		
Legal Land Location	SE SEC 2 TWP 30 RGE 3 W5M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-114:18:48, 51:31:59			Data Entry Date	21-Nov-2011		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA28			Review Date	10-Nov-2011		
Clear Roadway/Skew	9.1 /			Dept. Reviewer Name	Andrew Smikles		
AADT/Year	1,220 / 2010 (A)			Dept. Review Date	22-Nov-2011		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	6						
Allowable Load (t):	Single	CS1 29 GIRDER	Semi	CS2 52 GIRDER	Train	CS3 74 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	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Posted:	Lane	WB	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	Mounted on 1st guardrail post.							
Other Sign Types	Jct 766 sign 25m East of bridge.							

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	South ditch and curb.	Gas	
Power	7 wires North side of r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	Crest to East.
Vertical Alignment		7	7	
Roadway Width (m)	9.000			West approach settled 25mm.
Approach Bump		5	5	
Guardrail (Y/N)	Yes			Insufficient length and posts. Not thrie beam.
Guardrail		5	5	
Length (m)	7.600			
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		7	7	
Approach Road General Rating		7	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PGO, 3 Spans, Lengths(m): 8.5-8.5-8.5, A-Ident Number:)					
Special Features					
Special Feature			X	200mm curb height. 50mm concrete & 50mm ACP, assume this due to 200mm curb height.	
(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	6	Random longit. & trans. cracks, sealed. (Lift pockets void of grout. Some minor breaks @ exteriors. Snow covered @ S. Repaired @ NE. 31Jan2006).
(Material Type : ACP)					
(Thickness(mm) : 90)					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			8	8	
Deck Joints			X	N	Trans. cracks over abuts/piers - photos. Buffer angles. ACP covered.
Bump (Y/N)	No				
Deck Drainage			7	7	
Drains Clogged (Y/N)	No				
Curbs/Median			4	4	S2 N curb cracked inside fascia - photo. Also spalled at N curb under post over P2 - photo. Spalled outside edge in S1 S curb - photo. S2 has curb spall at P2.
(Curb Type : Standard)					
Scaling (Percent Area)	10				
Bridge Rail			7	7	Double layer. Not proper splice detail.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			7	7	
(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	0	
Girders			6	6	Narrow cracks in AZ of all spans, in end diaphragms only. Minor exterior spalls.
Last Complete Inspection Date	27-Oct-2011				
Cracking (Y/N)	Yes				
Spalling (Percent Area)	1				
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			6	6	

Substructure					
Bridge Component		Last	Now	Explanation of Condition	
Abutments					
(Extended Backwall Piles (Y/N) : Y)					
(Extended Backwall Piles Spacing(mm) : 1500)					
(Total Number of Caps/Corbels : 3:3)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	
Bearing Seats/Caps/Corbels				5	5
(Type : TREATED TIMBER)					
(Depth(mm) : 300)					
(Width(mm) : 300)					
Backwalls/Breastwalls			7	7	
Greatest Height (m)		1.30			
Wingwalls			6	6	
Wingwall missing at southwest corner, does not appear to be a problem.					
(Total Number of Bearing Piles : 7:7)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	
Piles			6	6	
Paint/Coating			X	X	
Abutment Stability			7	7	
Scour/Erosion			8	8	
Piers/Bents					
(Type : PIER-COLUMN)					
Steel HP cap on TT subcap with steel capital on piles except over subcap.					
(Total Number of Caps/Corbels : 2:2)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now	0	0	0	0	
Bearing Seats/Caps/Corbels				8	8
(Type : STEEL)					
(Depth(mm) : 356)					
(Width(mm) : 356)					
(Total Number of Bearing Piles : 7:7)					
4th from South @ West has 6mm split, banded. Fully sheeted in, only top portion of piles visible.					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	14				
Now	14	0	0	0	
Pier Shaft/Piles			N	N	
Greatest Height (m)		3.10			
Bracing/Struts/Sheathing			7	7	
Nose Plate			7	7	
Paint/Coating			4	4	
HP cap painted, peeling 20%. Black.					
(Colour Description :)					
(Colour Code :)					

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		8	8	
Scour		7	7	
Debris (Y/N)	Yes			Old piles in stream.
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				
(D/S Direction : N)				
Alignment		6	6	
Bank Stability		5	5	Steep cut D/S.
HWM (m below Top of Curb)	2.1			(98/02/06)
Drift (Y/N)	No			
Slope Protection		5	5	West headslope only.
(Type : RIP RAP; RIP RAP)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
REPAIR/REPLACE BRIDGE RAIL										
SEAL CURBS	2012	Patch spall 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	Upgrade approach guardrail to meet standard.								
OTHER ACTION	2012	Patch West approach.								
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now)	61.1/61.1	Sufficiency Rating (Last/Now)	70.0/69.4	Est. Repl. Yr	2022	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	Dave Lam		Previous Assistant's Name							
Next Inspection Date	27-Jan-2015		Previous Inspection Date		02-Oct-2009					
Inspection Cycle (Default) (months)	39									
Comment										

Maintenance Recommendations						
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
SEAL CURBS	2012	Patch spall curbs.	Defer to Rehab			
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	Upgrade approach guardrail to meet standard.	Operations			
OTHER ACTION	2012	Patch West approach.	Operations			
OTHER ACTION						
OTHER ACTION						
Structural Condition Rating (Last/Now) (%)	61.1/61.1	Sufficiency Rating (Last/Now) (%)	70.0/69.4	Est. Repl. Yr	2022	Maint. Req. (Y/N) Yes
Special Comments for Next Inspection			Department Comments	Rehab scheduled in PMA in 2021. DA		
Maintenance Reviewed By	Darron Ahlstedt		Date	30-Oct-2012	Estimated Total	0
Proposed Long-Term Strategy						
On 3-Year Program (Y/N)						
Proposed Action						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name			
Next Inspection Date	27-Jan-2015		Previous Inspection Date	02-Oct-2009		
Inspection Cycle (Default) (months)	39					

Comment	
---------	--