Bridge Inspection

Bridge File Number	07825 -1 Bridge	Form Type	PCS
Year Built/Year Supstr	1975/1975	Lot No.	1
		Inspector Name	Owen Salava
Bridge or Town Name	MONITOR	Inspector Class	BR CLS A
Located Over	2ND ORDER TRIBUTARY TO SOUNDING CREEK, 4.4.3.1, WATERCRS-ST	Assistant Name	
		Assistant Class	
Located On	41:12 C1 56.014	Inspection Date	19-Jul-2012
Water Body Cl./Year		Data Entry By	Marcia Chavez
Navigabil. Cl./Year		Data Entry Date	01-Aug-2012
Legal Land Location	SW SEC 3 TWP 34 RGE 4 W4M	Reviewer Name	John O'Brien
Longitude, Latitude	-110:30:04, 51:53:14	Review Date	31-Jul-2012
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	Andrew Smikles
Contract Main. Area	CMA22	Dept. Review Date	02-Aug-2012
Clear Roadway/Skew	13.7 /	Follow-Up By	
AADT/Year	570 / 2011 (A)		
Road Classification	RAU-211.8-110		
Detour Length (km)	13		

Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	---> On Critical Spans --->Critical Member
Design Loading:		HS25					---> 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	No posting required.							

Hazard Marker At Bridge (Y/N)	No
Remarks	Not required.
Other Sign Types	

Utilities (Located at)

Utility Attachments			
Telephone		Gas	Crossing 400m South.
Power	4 wire 32m East of c/l. (Along fence line).	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	11.500			
Approach Bump		7	7	
Guardrail (Y/N)	Yes			Insufficient length, post spacing.
Guardrail		N	7	
Length (m)	30.000			
Current Standard (Y/N)	No			
Termination Type	Turn Down			
Drainage		N	7	
Approach Road General Rating		**8**	**8**	

Superstructure

Bridge Component		Last	Now	Explanation of Condition
(Primary Span : **VS, 1 Spans, Lengths(m): 9.1, A-Ident Number:**)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				
	N (%) / 1 (%) / 2 (%) / 3 (%)			
Last	30 / 0 / 0 / 0			
Now	0.0 / 0.0 / 0.0 / 0.0			
Wearing Surface		7	7	Stops 1000mm from curb @ W, 600mm @ E.
(Material Type : **ACP**)				
(Thickness(mm) : **50**)				
Lateral Connection Problem (Y/N)	No			
Deck Top		N	N	ACP covered.
Deck Rideability		8	8	
Deck Joints		N	N	ACP covered.
Bump (Y/N)	No			
Deck Drainage		N	6	No deck drains.
Drains Clogged (Y/N)				
Curbs/Median		N	6	Plow damage @ corners, minor. Map cracking.
(Curb Type : **Standard**)				
Scaling (Percent Area)	1			
Bridge Rail		5	5	Single layer. 2 post to rail bolts are non-standard square and hex head.
(Type : **GALVANIZED STEEL FLEX BEAM**)				
Bridge Rail Posts		N	5	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)				
Bridge Rail/Posts Coating		7	7	
(Type : **GALVANIZED**)				
Sidewalk		X	X	
Girder Detail Ratings				
	N (count) / 1 (count) / 2 (count) / 3 (count)			
Last	0 / 0 / 0 / 2			
Now	0 / 0 / 2 / 0			
Girders		3	2	G1, G12 diag. ck >0.5m with staining; G12 has corrosion staining & crack is not continuous. 12/12 girders have longit. hairline cracks down c/l from end. 2/12 girder curb units have narrow cracks predominantly in middle portion. G7 has wide longit. crack with no rust stains on underside. Appears in line with void - photo. G1, G12 diag.cracks @ abut 0.75m.
Last Complete Inspection Date	19-Jul-2012			
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
Lift or Connector Pocket Grouted (Y/N)	Yes			
(Number Of Girders : **12**)				
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		**3**	**2**	

Substructure

Bridge Component	Last	Now	Explanation of Condition
Abutments			
(Extended Backwall Piles (Y/N) : **Y**)			
(Extended Backwall Piles Spacing(mm) : **1300**)			
(Total Number of Caps/Corbels : **5:5**)			2 - 300 x 300 I-beams welded together full length of flange. 300 x 300 I-beam sub caps.
Bearing Seats/Caps/Corbels Detail Ratings			
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Bearing Seats/Caps/Corbels				8	8	
(Type : **STEEL**)						
(Depth(mm) : **600**)						
(Width(mm) : **300**)						
Backwalls/Breastwalls				6	6	A2 measured.
Greatest Height (m)	2.60					
Wingwalls				N	6	
(Total Number of Bearing Piles : **13:13**)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Piles				7	7	
Paint/Coating				7	7	Galvanized caps.
Abutment Stability				6	6	Minor bulge @ A2.
Scour/Erosion				N	5	Localized scour 0.8m deep under bridge along center of channel.
Piers/Bents						
(Type :)						
(Total Number of Caps/Corbels :)						
Bearing Seats/Caps/Corbels Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Bearing Seats/Caps/Corbels				X	X	
(Type :)						
(Depth(mm) :)						
(Width(mm) :)						
(Total Number of Bearing Piles :)						
Piles Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Pier Shaft/Piles				X	X	
Greatest Height (m)						
Bracing/Struts/Sheathing				X	X	
Nose Plate				X	X	
Paint/Coating				X	X	
(Colour Description :)						
(Colour Code :)						

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Pier Stability		X	X	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		**6**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **W**)				
(D/S Direction : **E**)				
Alignment		7	7	
Bank Stability		N	7	Poorly defined channel.
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		6	6	Class I riprap @ bridge.
(Type : **RIP RAP; RIP RAP**)				
Guidebank/Spurs		X	X	
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**6**	**6**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL	2016	Double rail, replace non-standard post bolts.				
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	Repair or replace r=2 girders.				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**50.0/44.4**	**Sufficiency Rating (Last/Now) (%)**	**60.5/58.7**	Est. Repl. Yr	2025	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Continue to monitor G7 crack & diagonal cracks at curbs. LRA emailed to Donald Saunders 31Jul2012.	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	19-Apr-2014	Previous Inspection Date	08-Mar-2011		
Inspection Cycle (Default) (months)	21				
Comment					