

Bridge Inspection							
Bridge File Number	74233 -1 Bridge			Form Type	SG		
Year Built/Year Supstr	1967/1967			Lot No.	2		
Bridge or Town Name	VINCA BRIDGE			Inspector Name	Jason Saly		
Located Over	NORTH SASKATCHEWAN RIVER, 6, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	38:10 C1 18.142			Assistant Name			
Water Body Cl./Year				Assistant Class			
Navigabil. Cl./Year				Inspection Date	24-Jan-2013		
Legal Land Location	NW SEC 31 TWP 56 RGE 20 W4M			Data Entry By	Marcia Chavez		
Longitude, Latitude	-112:58:30, 53:53:18			Data Entry Date	07-Mar-2013		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	John O'Brien		
Contract Main. Area	CMA14			Review Date	13-Feb-2013		
Clear Roadway/Skew	8.5 /			Dept. Reviewer Name	Brent Herrick		
AADT/Year	1,380 / 2011 (A)			Dept. Review Date	13-Mar-2013		
Road Classification	RAU-209-110			Follow-Up By			
Detour Length (km)	83						
Allowable Load (t):	Single	CS1 61 GIRDER	Semi	CS2 67 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	HMs are spring loaded, not standing straight at E end.							
Other Sign Types	North Sask River, Vinca bridge							

Utilities (Located at)			
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE		
Telephone	Conduit along catwalk		Gas
Power			Municipal
Others	Fiber optics U/S in South r/w.		Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	6	Curves to bridge both ends. No passing on East end. Jct with SH830 200m East.
Vertical Alignment		7	7	
Roadway Width (m)	10.800			Pothole @ SE.
Approach Bump		5	5	
Guardrail (Y/N)	Yes			99.0m @ NE. Insufficient posts @ 1.6m spacing. Not thrie beam transition. (SE rail too low, 400mm top of ACP to rail c/l. 06Dec2010).
Guardrail		6	6	
Length (m)	43.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		7	N	(Hole @ NW has been repaired. Verified with Chris Black. 18Feb2012).
Approach Road General Rating		5	5	

Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Primary Span : WG, 5 Spans, Lengths(m): 49.7-62.5-62.5-62.5-49.7, A-Ident Number: A0555-01)							
Special Features							
Special Feature			X				
(Type :)							
Special Feature			X				
(Type :)							
Wearing Surface/Deck Top Detail Ratings							
	N (%)	1 (%)	2 (%)	3 (%)	Snow covered.		
Last	2	0	0	15			
Now	5.0	0.0	0.0	5.0			
Wearing Surface			3	3	Chipseal on epoxy on HDOL. 152m2 of lost seal coat (2012 Lvl 2 deck inspection). 1815m2 of debond or lost epoxy. 63m2 fo debonded HDOL. Significant o/l patching,78m2 (2012 Lvl2 deck inspection).		
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)							
(Thickness(mm) : 50)							
Deck Top			N	N			
Deck Rideability			4	5			
Deck Joints			7	5			
Temperature (deg. C)		-10					
(Expansion Type : FINGER PLATES)							
(Fixed Type :)							
Gap Size (mm)		Gap Location					
99		East Abutment					
85		West Abutment					
Deck Drainage			5	4	(Ponding 2 gutters at south S2,4,5 & north S3. 16Jul2008) - Not visible ths inspection. Heavy accumulations of road sands in gutters. 18Feb2012). Staining at underside near abut deck drains; scuppers look new so no action.		
Drains Clogged (Y/N)		No					
Curbs/Median			4	N	(Curb delam @ construction joint near mid span exposing water stop, North curb - photo. Accident damage @ both posts from SW repaired rail but not curb, affecting post anchorage - photo. 13Aug2009). (50% Covered in roads sands. 18Feb2012). Spall at curb exterior near post.		
(Curb Type : Standard)							
Scaling (Percent Area)		2					
Bridge Rail			4	4	(Numerous areas of minor bends in vertical. 13th post from SW bent 40mm, similar @ 21st post from SW) - temporary repair done with 2 parallel sections of flexbeam. (Minor bends. 18Feb2012).		
(Type : GALVANIZED STEEL VERTICAL BAR)							
Bridge Rail Posts			4	N			
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)							
Bridge Rail/Posts Coating			7	7			
(Type : GALVANIZED)							
Sidewalk			X	X			
Girder/Beam							
Cover Plate			X	X	Catwalk inaccessible security gate and access have been compromised, blocked with steel sheeting and barb wire. (Crack in Web/Flg weld @ West Abut Numerous cracks on Stiff Termination welds. Long. Stiff Splices with cracks Girder bolted splices have corrosion damage from bird droppings. 18Feb2012) - Crack repairs complete Summer 2012. Only end spans seen up close.		
Flange			3	3			
Web			7	7			
Stiffeners			3	3			
Splice			4	4			
Weld			3	3			

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 5 Spans, Lengths(m): 49.7-62.5-62.5-62.5-49.7, A-Ident Number: A0555-01)				
Diaphragms/Cross Frame		3	3	(Cracks in Flg Plates and Flange Gusset Plates. 18Feb2012).
Paint Condition		3	4	A lot of graffiti on both sides of exterior girders. Approx 5% paint failure, primarily bottom flanges - monitor, no action required. Green.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		5	5	West bearings expanded 30mm over 0. Grout pad corner cracked at W abut, N bearing (photo). Abutment brgs have onset of coating failure.
Temperature (deg. C)	-4			
(Expansion Type : ROCKER BEARING)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		4	5	Leaching through curb joints resulting in delams and occasional spalls on soffits. Transverse cracks & leaching under travel lanes. (Corrosion stains. 18Feb2012).
Stains (Percent Area)	4			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	3	Crack repair crews on-site at time of inspection.
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	Narrow cracks.
Wingwalls		6	6	Coating is blistering, scaling.
Piles		N	N	
Paint/Coating		4	4	Pigment sealer peeling; minor light scaling - no action required.
Abutment Stability		5	5	
Scour/Erosion		4	4	(Erosion @ NE Headslope. 18Feb2012) - Snow covered.
Piers/Bents				
(Type : PIER-SOLID)				
Bearing Seats/Caps		7	6	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0:0)				
Pier Shaft/Piles		7	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		5	6	Rust nose plates.
Paint/Coating		5	4	Graffiti at P1 & P4. Nose plates corroding, no action.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		N	N	Iced over.
Debris (Y/N)	Yes			Minor drift at E pier.

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : S)				
(D/S Direction : N)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)	9.0			(16/July/2008) @ Pier 4.
Drift (Y/N)	Yes			
Slope Protection		5	6	
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Straighten slats, discretionary, and complete permanent repairs.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013	Patch spalls after full inspection.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2013	Remove minor drift.					
OTHER ACTION	2013	Reset E HMs.					
OTHER ACTION	2013	Install retro-fit drain, if not yet done.					
OTHER ACTION	2013	Upgrade approach guardrail to meet standard.					
OTHER ACTION	2013	Consider chipcoat overlay on deck.					
OTHER ACTION	2013	Repair hole in NW corner fo approach slab, if not yet done.					
OTHER ACTION	2013	Fill NE erosion gully.					
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	49.2/48.9	Est. Repl. Yr	2034	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor paint condition.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	Consider widening with the deck replacement. RS						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Ed Kowal		Previous Assistant's Name				
Next Inspection Date	24-Oct-2014		Previous Inspection Date	18-Feb-2012			
Inspection Cycle (Default) (months)	21						
Comment							