							Bridge lı	nsneo	ction						
Bridge File Num	ber	76034 -1	Bridge				Jilago		Form Type			DT SG			
Year Built/Year								Lot No.				2			
Supstr								Inspector Name			Wade Nanninga				
Bridge or Town I	Name	HONDO							Inspector Class			BR CLS A			
Located Over		ATHABA	SCA RIV	ER, 8.1	1, WAT	ERC	RS-ST		Assistant Name						
Located On		2:46 C1	6.352					Assi	istant C	lass					
Water Body Cl./	⁄ear							Insp	ection	Date		28-Mar-2013	3		
Navigabil. Cl./Ye	ar							Data	a Entry	By		Theresa Lac	usta		
Legal Land Loca	tion	SW SEC	21 TWP	70 RGE	1 W5N	М			a Entry	-		23-Apr-2013	}		
Longitude, Latitu	ide	-114:05:3	34, 55:04	:26					iewer N			Eric Carcoux			
Road Authority		Alberta T	ransport	ation (Al	T)			Rev	iew Da	te		17-Apr-2013	1		
Contract Main. A	rea	CMA10						Dep	t. Revie	ewer N	ame	Brent Herric			
Clear Roadway/	Skew	8.5 /							t. Revie			01-May-201			
AADT/Year		2,370 / 2	012 (A)					_	ow-Up I						
Road Classificat	ion	RAU-211	.8-110					_	•	,					
Detour Length (kg	m)	10												I	
Allowable Load (able Load (t): Single H 31				Semi	1	S 52 IRDER			Train		83 69 8U4		> On Critical Spans >Critical Member	
Design Loading:	Design Loading: HS20													> Primary	Span
Required Load F	octing	(t)		Single		P	osung II	1	nformation				Towards T		
Posted Loading		(1)		Single					Semi				Truck Train		
Posted:		NB		Single	tion (V	/N I)	No		Semi	(\	Z/N1\	No	Truck Train		No
	Lane			At June	•		No		In Adva					No	
Posted: Lane SB At Junction (\) Remarks Not required.				LIOIT (T	/IN)	INO		III Auva	ance (1	1/IN)	INU	ALD	nage (1/14)	INO	
Hazard Marker A			Yes												
Remarks	AL DIIUQ	je (T/N)	168												
Other Sign Type															
Other Sight Type	3					П	tilities (L	ocat	ed at)						
Utility Attachmer	nts Ti	ELEPHO	VE LITILI	TIES-PH	IONE I		ullues (I	_ocat	eu aij						
Telephone	110 11		12 0 1121		.0.12			Gas	<u> </u>						
Power	1 wire	North							nicipal						
Others		1101111							olem (Y	/N) N	No				
Remarks								1	0.0 (.	,, .					
rtomanto							Approa	ich R	oad						
						Last			lanatio	n of C	ondi	tion			
Horizontal Alignr	nent					8	8		In gradual sag curve with limited sight distance. Steep grade to					grade to	
Vertical Alignme	nt					5	5	Sou	th.						
Roadway Width			9.900					(Ga	p betwe	en app	proac	ch slab and cu	ırb @	NW corner al	lows water
Approach Bump						5	5		er slab. ht humr		nuth a	abutment.			
Guardrail (Y/N) Yes															
Guardrail					4	6	Minor dents with modified connections @ SE & NW corners. Standard connection @ NE & SW corners.						ners.		
Length (m)			45.600					(Ret	trofit tra						@ SE & NW
Current Standa	ard (Y/I	N)	No					Sep	-2011)						
Termination Ty	•		Turn Do	own											
Drainage						4	5	Culverts @ NE and NW corners.							
Approach Road	l Gene	ral Ratin	g			5	5								

				structure
Bridge Component				Explanation of Condition
(Primary Span : DT, 7 Spans, I 06;A0494-01;A0494-07)	_engths(m): 16.8-6	61-61-61-	-61-16.	8, A-Ident Number: A0494-02;A0494-03;A0494-04;A0494-05;A0494-
Special Features				
Special Feature			X	Ice guage.
(Type:)		'		At pier 2, access hatch open.
Catwalk Access		4	4	Gates @ both ends not locked.
(Type : UNLOCKED)		'		
Wearing Surface/Deck Top Det	ail Ratings			
N (%) 1 (3 (%)		
Last				
Now				
Wearing Surface		5	4	Epoxy overlay failed along edges of wide tranverse cracks, missing
(Material Type : CONCRETE COAT)	- CONVENTIONAL	CHIP SEA	\L	patches in center, potholes developing - photos. Chipseal over expoxy on concrete.
(Thickness(mm): 50)				
Deck Top		N	N	
Deck Rideability		7	6	
Deck Joints		5	4	Collector trough leaking under P3 & P4 joint, dripping onto catwalk
Temperature (deg. C)	0			below. photo-10-Sep-2009
(Expansion Type : FINGER P	PLATES)			
(Fixed Type : COMPRESSIO	N SEAL (ACME SE	EALS))		Curb coverplates removed pier 6.
Gap Size (mm)	Gap Location			
20	Pier 6 - FP			
65	Pier 5 - SS			
30	Pier 4 - FP			
25	Pier 3 - FP			
70	70 Pier 2 - SS			
15	Pier 1 - FP			
Deck Drainage		3	3	(Water splashing past collectors on finger plates. 2004/07/10.)
Drains Clogged (Y/N)	No			Water weeping through snow slotsJul-2011 Broken drain tube @ NE.
Curbs/Median		4	3	Wide crack under curb at several locations.
(Curb Type : Standard)				Deterioration on backside of numerous bolts.
Scaling (Percent Area)	2			Spalling at base of posts near pier 2photo
Bridge Rail		4	4	Bent & broken verts @ West railing.
(Type : GALVANIZED STEE)	VERTICAL BAR			Missing nut near pier 3.
Bridge Rail Posts		4	3	2 - 3 Insufficent threads on 30% of bolts. Accident damage at Pier 5photo
(Type : GALVANIZED POST STEEL)	STEEL;GALVANI	I		1 post twisted.
Bridge Rail/Posts Coating		6	5	
(Type : GALVANIZED)				
Sidewalk		Х	X	
Top Chord		7	7	See UT 2011 for details.
Diagonals		4	4	(Cracking under joint brackets. 18/Mar/2006) Other connections with corrosion blister - photo.
Verticals		7	7	Missing bracing hanger bolts @ some connections11-Dec-2007)Could not confirm
Connections		5	5	Section loss on floor beam ends due to rust.
Floor Beams		4	4	Connections squeaking.
Bottom Chord		7	7	Several stringers cracked. Several diagonals have rough holes.
Stringers		3	3	Stringers under snow slots corrodingJul, 2011
Diaphragms/Cross Frame		4	4	Corrosion & section loss in some members over piers.

						Supers	structure
Bridge Com	ponent						Explanation of Condition
(Primary Spa 06;A0494-01	n : DT, 7 Spa ; A0494-07)	ns, Len	gths(m	n): 16.8-61-6	61-61-61-	61-16.	8, A-Ident Number: A0494-02;A0494-03;A0494-04;A0494-05;A0494-
Paint Conditi	on				3	3	20% superficial rust especially in splash areas and under joints. Bird
(Colour De	scription : GR I	EEN)			'		excrement on bottom chord. Pitting & scaling rust @ joints & floor beam ends, some section loss.
(Colour Co	de : 14090;14	193)					beam ends, some section loss.
Touchup R	equired (Y/N)	, I	Yes				
Bearings	Bearings		4	4	A/B missing nut @ P3E & P4E. Bent A/B @ P1E.		
Temperatu	re (deg. C))				Loose AB nuts P1 P3 & P4.
(Expansion	Type : SLIDI I	NG PLA	ATE)				
(Fixed Type	e : PINNED B	EARING	3)				Plates are corroded.
Coating Ad	equate (Y/N)	1	No				
Functioning	g (Y/N)	\	Yes				
Deck Unders	ide				3	3	Typical wide tranverse cracks at 10m o-c (approx), some leaching
Stains (Per	cent Area)	1	1				with delam exposing corroding rebars - photo. Snow slots removed.
(Snow Slot	s Filled :)						
Span Alignm	nent Problem	s					
Vertical (Y/			No				
Horizontal	•	1	No				
Superstruct	ure General F	Rating			3	3	
·							
Dridge Com	n a m a m 4						tructure
Bridge Com					Last	Now	Explanation of Condition
(Secondary S							
Special Feat							
Special Feat	ure					X	
(Type:)						1 .,	
Special Feat	ure					X	
(Type:)							
Wearing Surf	ace/Deck Top		Ratings		- 4-11		
	N (%)	1 (%)		2 (%)	3 (%)		
Last	5.0						
Now	5.0						
	race ype : CONCR I	ETE - C	ONVE	NTIONAL C	HIP SEA	5 L	Epoxy wearing surface underneath failing along shoulders. Chip seal coat surface over expoxy & concrete. A few 200mm holes in chipseal.
COAT)	· \ \ ==\						-
(Thickness	(mm) : 50)					1	
Deck Top					N	N	
Deck Rideab	ility				7	6	
Deck Joints					5	4	Northt approach joint is leaking out corners causing corrosion on
Temperatu	re (deg. C)	C)				bearings and abutments. photo-10-Sep-2009
(Expansion	Type : FINGE	ER PLA	TES)				Broken cover plate @ SE.
(Fixed Type	e : COMPRES	SION S	EAL (A	ACME SEAL	LS))		
Gap Size (mm) Gap Location							
75 N. abut							
71 S. abut							
Deck Drainag					5	5	Leaking at North approach joint10-Sep-2009
Drains Clo	gged (Y/N)	1	No				

			Supers	tructure			
Bridge Component		Last		Explanation of Condition			
(Secondary Span : RB)							
Curbs/Median		5	5	Concrete on parapets is chipped at numerous locations. A few			
(Curb Type : Standard)			_	grader scrape marks.			
Scaling (Percent Area)	2						
Bridge Rail		7	7				
(Type : GALVANIZED STEEL	VERTICAL BAR)						
Bridge Rail Posts		4	4				
(Type : GALVANIZED POST S STEEL)	STEEL;GALVANIZED	-		About 30% of bolts hav3 2-3 insufficient threads.			
Bridge Rail/Posts Coating		5	5				
(Type : GALVANIZED)							
Sidewalk		Х	Х				
Oldowalik .							
Girder/Beam							
Cover Plate		X	X	Some corrosion evident in bottom flanges splash zone			
Flange		6	6				
Web		7	7				
Stiffeners		X	X				
Splice		Х	Х				
Weld		Х	6				
Diaphragms/Cross Frame		7	7				
Paint Condition		4	4	20% corrosion especially bottom flanges and under joints.			
(Colour Description : GREEN)		1					
(Colour Code : 14090;14193)							
Touchup Required (Y/N)	Yes						
Bearings		4	4	A2 A/B bent 30mm.			
Temperature (deg. C)	0		<u>'</u>	(Shear S7G2 bearing A/BSep 2011)			
(Expansion Type : SLIDING PL				Neoprene, split & collapsed. Bearings pitting/rusting.			
(Fixed Type : PINNED BEARIN	·			Bearings @ base of P1 & P5 suspect not functioning due to			
	No			corrosion. Other bearings appear functioning.			
Functioning (Y/N)	No						
Deck Underside	INO	4	4	Longitudinal medium cracks following end of snow slot anchor under			
Stains (Percent Area)	0	7	1 4	both gutters.			
	0						
Span Alignment Problems Vertical (Y/N)	No						
Horizontal (Y/N)	No						
Superstructure General Rating		4	4				
			0 1 1				
Bridge Component		Last	Now	ructure Explanation of Condition			
Abutments		Lasi	INOW	Explanation of continuon			
Bearing Seats/Caps		5	5				
(Type : CONCRETE)				1			
Backwalls/Breastwalls		6	6				
Wingwalls			4	Spalling parapet walls			
Piles			N				
Paint/Coating		Х	Х				
Abutment Stability		7	6				

Substructure										
Bridge Component		Last	Now	Explanation of Condition						
Scour/Erosion		5	5	300mm gullies along all 4 cornersstabilized						
Piers/Bents										
(Type : PIER-SOLID)				Massive concrete & steel piers.						
Bearing Seats/Caps		5	5	P2N surface delam; P2E cracking under bearing. Wide vertical cracks under bearing on P3 & P4.						
(Type : CONCRETE)				P1N bearings @ base of steel piers, P1 & P6 are corroded and suspect not functioning - photo.						
(Total Number of Bearing Piles :	0:0:0:0:0:0)			P2N 300mm x 300mm deteminations on side of pier.						
Pier Shaft/Piles		5	5							
Bracing/Struts/Sheathing		Х	X							
Nose Plate		7	7							
Paint/Coating		4	4	Nose plates are rusted.						
(Colour Description :)										
(Colour Code :)										
Pier Stability			7							
Scour			N							
Debris (Y/N)	No									
Substructure General Rating	Substructure General Rating									
		S	Structu	re Usage						
		Last	Now	Explanation of Condition						
Channel										
(U/S Direction : W)										
(D/S Direction : E)										
Alignment		9	9							
Bank Stability		7	7							
HWM (m below Top of Curb)				HWM not visible.						
Drift (Y/N)	Yes									
Slope Protection			5							
(Type: NATURAL; NATURAL)										
Guidebank/Spurs			Х							
Adequacy of Opening			7							
(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	2013	Repair bent/broken verts & damaged post and missing AB nut.									
GALVANIZE/PAINT BRIDGE RAIL											
RETROFIT BRIDGE RAIL											
SEAL CURBS											
PATCH DECK	2013										
SEAL DECK											
OVERLAY DECK											
REPAIR/REPLACE DECK JOINTS											
RESET/ PAINT BEARINGS	2013	At next rehab, replace missing A/B nuts @ piers, repair sheared A/B @ S7G2. Recondition steel pier bearings, if not done.									
REPAINT SUPERSTRUCTURE	2013	Repaint RB girder, under leaking joint and under snow slots at next rehab.									
STRAIGHTEN/REPLACE MEMBERS											
WASHING											
SHOTCRETE REPAIRS											
REPAIR ABUTMENT SCOUR/EROSION											
PLACE ADDITIONAL RIP RAP											
REMOVE DRIFT ACCUMULATION											
OTHER ACTION	2013	Stop drill stringer cracks, if not done.									
OTHER ACTION	2013	Replace cracked clip angles, if not done.									
OTHER ACTION	2013	Patch deck underside where spalled/delam.									
OTHER ACTION	2013	Replace broken cover plate on curb at P6 & at SE.									
OTHER ACTION	2013	Repair/replace down drain connections @ P1 & P2.									
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
Structural Condition Rating (Last/Now) (%)	44.4/44	Sufficiency Rating (Last/Now) (%)	43.1/43.9 Est. Repl. Y	r 2024	Maint. Re	qd. (Y/N)	Yes				

Alberta Transportation		Bridge Inspection & Maintenance	System (Web 2005)	76034 -1 Bridge			
Special Comments for Next Inspection	Monitor erosion on	West headslope.		Department Comments			
Maintenance Rev	riewed By			Date		Estimated Total	0
Proposed Long-T	erm Strategy						
On 3-Year Progra	am (Y/N)						
Proposed Action							
Previous Inspector's Name		Randy Bredo	Previous A	Assistant's Nam	е		
Next Inspection Date		28-Dec-2014	Previous I	nspection Date	21-Sep-2011		
Inspection Cycle	(Default) (months)	21					
Comment							