							Bridge I	nspe	ction							
Bridge File Number 77994 S-1 Bridge						Form Type			SG							
Year Built/Year Supstr		1977/1977						Lot				Made Newsigns				
Bridge or Town Name LEDUC								ector N			Wade Nanninga					
Located Over 2:32 R1 2.451;2:32 L1 2.437					137		Inspector C				BR CLS A					
Located On LOCAL ROAD;RAMP 67-1 A									Assistant Name							
Water Body CI./Year					1.7				istant (							
Navigabil. Cl./Ye									ection			25-Apr-2013				
		OF OF O	2 TMD 5	O DOE	DE \\/A\/			Data	a Entry	Ву		Lisa Fairhurs	st			
3									Data Entry Date		03-May-2013					
Longitude, Latitu	ide	-113:32:5			<b>-</b> \			Rev	Reviewer Name							
Road Authority		Alberta T	ransport	ation (Al	1)			Rev	iew Da	ite						
Contract Main. A		CMA11						Dep	t. Revi	ewer N	ame					
Clear Roadway/	Skew	7.6 / 40 0		F)				Dep	t. Revi	ew Dat	e					
AADT/Year		1,800 / 2	013 (E)					Follo	ow-Up	Ву						
Road Classificat																
Detour Length (k		1														
Allowable Load (	t): Sin	gle CS1	28		Semi	C	S2 49			Train	CS	3 62		> On Critic	al Spa ember	ns
Design Loading:		HS2	25											> Primary S	Span	
						Р	osting I	nforn	nation							
Required Vert. C	learan	ce Postin	g (m)	UNDER	R: 2 L1	5.4m	n, 2 R1 5	5.4m								
Posted Vertical (	Clearar	nce (Y/N)		Yes												
Posted: Lane	NB	On Bı	ridge (m)	5.5	In Adva	nce	(Y/N)	Yes	Lane	SB	С	n Bridge (m)	5.4	In Advance	(Y/N)	Yes
Remarks	Confir	m & chan	ge clear	ance sigi	ns to 10	0mn	n less th	an "re	equired	l".						
Required Load F	osting	(t)		Single					Semi		Truck	c Train				
Posted Loading				Single				Semi	emi			Truck Train				
Posted:	Lane	NB			ction (Y/	N)			In Advance (Y/N)				At Bridge (Y/N)			
Posted:	Lane	SB			ction (Y/		No	In Advance (Y/N)		No		idge (Y/N)	No			
Remarks		quired.			(1)	· ·/	1110			(	.,,	1110		10.90 (1711)		
Hazard Marker A			No													
Remarks		, , , , , ,														
Other Sign Type	S		Informa	ation, Wa	arnina. C	Off R	amp Sn	eed.								
					, ,		tilities (		ed at)							
Utility Attachmer	nts															
Telephone								Gas		1	Vorth	of West abut	ment			
Power									nicipal							
Others									olem (\	(/N)	No					
Remarks									( '	-, '						
							Approa	ch R	oad							
						_ast				on of C	ondi	tion				
Horizontal Alignr	ment					6	6	Explanation of Condition  Typical grade separation.								
Vertical Alignme						6	6	] .	•							
Roadway Width (m) 8.600						Slia	ht bum	р @ W	est e	nd.						
Approach Bump				6	5	Cra	cks /se	ttled @	app	roaches.						
Guardrail (Y/N) Yes						Miss	sina sn	lce holi	ts(x8)	@ SW trans	ition -r	ohoto				
Guardrail (1714)				4	4	2 sp	lit post	ts @ NI	E							
Length (m) 30.000				•												
Current Standard (Y/N) No																
71				3	3	Λ II 4	rougha	hrokor								
Drainage				3	3	All troughs broken. Drain trough @ NW & SW corners broken away from headslope - photo. Drain trough @ NE corner broken up - photo. Water drains under approach slab @ NW & NE cornerphoto				oe -						
Approach Road General Rating					6	6				• '						

					Supers	structure
Bridge Comp	onent			Last	Now	Explanation of Condition
		ns, Lengt	hs(m): 57.9-64-			umber: A0807-01)
Special Featu			• •			
Special Feature						
(Type:)						
Special Featu	ıre				X	
(Type:)						
	ace/Deck Top	Detail Rat	inas			
	N (%)	1 (%)	2 (%)	3 (%)		
Last	0	0	0		20	
Now	0.0	0.0	0.0		0.0	
Wearing Surfa				3	3	Chip seal wearing surface peeling on 20% - photo. Chip seal doesn't
		TE - CON	IVENTIONAL CI		_	extend to curbs, 300mm short. Transverse cracks @ 2m spacing.
COAT)						
(Thickness(	mm) : <b>50</b> )					
Deck Top				N	N	
Deck Rideabil	lity			6	6	
Deck Joints				4	4	Joint plumbing misses troughs @ NW & SE corners - photo. Joints
Temperature	e (deg. C)	5		7		draining onto curtain walls - photo.
·	Type : <b>FINGE</b>		<b>S</b> )			_
(Fixed Type		IN I LAIL	<b>O</b> )			_
Gap Size (m	•	G	an Location			-
79	Size (mm)  Gap Location  East abutment					
75						-
73		VV	est abutilient			-
						_
						_
						_
Darela Dareia a sa				4	4	A
Deck Drainag				4	4	Appears to be leaking through abutment joints & staining wingwalls @ SE & NW corners - photo.
Drains Clog		No		-	Ι.	
Curbs/Median				3	3	Staining outside face from corrosion of rail post anchors. Rust staining & cracking & delamination on inside vertical face 30% of
(Curb Type						South curb - photo.
Scaling (Per	rcent Area)	10				Several spalls on N & S curbphoto
Bridge Rail				8	8	Approx 50% insufficient threadsphoto
`	_VANIZED ST	EEL BRI	OGE TUBE)		1	- Typrox 30 % madmoont threads. photo
Bridge Rail Po				4	4	
(Type : GAL STEEL)	_VANIZED PC	ST STEE	L;GALVANIZE	POST		
Bridge Rail/Po	osts Coating			7	7	
(Type : GAL				1		-
Sidewalk	- VAINEED)			X	X	
SideWalk				^	^	
Girder/Beam						
Cover Plate				Х	X	Steel box girders
Flange				6	6	High load damage on NBL (scrapes) & SBL (dent), minor, no problem.
Web				8	8	- problem.
Stiffeners					8	
Splice				8	8	1
Weld				7	7	1
Diaphragms/C	Pross Frame			7	7	
Diaprilagilis/C	Jioss Fiallic				'	

			Sunars	tructure
Bridge Component				Explanation of Condition
(Primary Span : WG, 3 Spans,	 Lenaths(m): 57.9-64-4			· •
Paint Condition	<b>33</b>	5	4	Slight rust flange edges, pin holes visible.
(Colour Description : )			<u> </u>	Yellow.
(Colour Code : )				
Touchup Required (Y/N) No				
Bearings	1110	5	5	Piers viewed with binoculars, appears OK.
Temperature (deg. C)	5			There viewed with billocalars, appears on.
(Expansion Type : POT BEAF				(Coating on east abutment peeling. Corrosion on bearings visible
(Fixed Type : POT BEARING	· · · · · · · · · · · · · · · · · · ·			Jul/2011)
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside	1.00	4	4	Medium transverse cracks with efforescence in span 1 & 2. Corroded
Stains (Percent Area)	1			areas with delaminations along cracks - photos.
Span Alignment Problems	1			
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Ratin		4	4	
Superstructure General Nathi	9		7	
			Subst	ructure
Bridge Component		Last	Now	Explanation of Condition
Abutments			1	
Bearing Seats/Caps		7	7	
(Type : <b>CONCRETE</b> )			1	
Backwalls/Breastwalls		7	6	
Wingwalls		6	5	Spalls @ base corners of West curtain wallsphoto
Piles		N	N	
Paint/Coating		4	4	25% peeling/flaking on wingwalls.
Abutment Stability		8	8	
Scour/Erosion		X	X	
Piers/Bents				
(Type : <b>PIER-COLUMN</b> )				
Bearing Seats/Caps		X	7	
(Type : <b>CONCRETE</b> )				
(Total Number of Bearing Piles	: 0:0)		_	Concrete pillars. 2/pier.
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		8	8	
Nose Plate		Х	Х	
Paint/Coating			7	Beige.
(Colour Description : )				
(Colour Code : )				
Pier Stability			8	
Scour		Х	Х	
Debris (Y/N)	No			
Substructure General Rating		7	7	

Structure Usage									
		Last	Now	Explanation of Condition					
Grade Separation									
Road Alignment			8						
Traffic Safety Features			7						
Туре	Guardrail								
Slope Protection		4	4	Erosion between abutment & top of concrete slope protection					
(Type : CONCRETE; CONCRETE)				causing void underneath. Pulled away from abutments up to 440mm @ West - photos. Pulled away 260mm @ East - photo. Wide crack in West headslope.					
Bank Stability			6						
Drainage			6						
Grade Separation General R	ating	5	6						

Bridge Inspection & Maintenance System (Web 2005)

		Maintenance Recommen	dations				
Inspector Recommendations	Year	Inspector Comments	Department Comments	Tar	get Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013	Rehab curbs & seal.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK	2013	Repair chipseal.					
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2013	Fill/seal gap @ top of concrete slope protectio & abutment, both ends.	n				
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Confirm min required clearance, change existing clearance signs as necessary.					
OTHER ACTION	2013	Install missing GR splce bolts @ SW.					
OTHER ACTION	2013	Fill/grout gap at corners to prevent water goin under approach slab.	g				
OTHER ACTION	2013	Check abutment plumbing to confirm if leakage occuring onto abutment seats.	Э				
OTHER ACTION	2013	Recast broken concrete drain troughs and basins.					
OTHER ACTION	2013	Modify NE, NW & SE wingwall drain pipe so it drains into concrete down drain.					
OTHER ACTION	2013	Repair abutment plumbing to stop leakage onto wingwalls.					
OTHER ACTION	2013	Replace 2 posts @ NE.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	61.1/61	.1 Sufficiency Rating (Last/Now) (%)	<b>54.8/56.1</b> Est. Repl. Yr	2037	Maint. Red	qd. (Y/N)	Yes

Alberta Transportation		Bridge Inspection & Maintenance System (Web	77994 S-1 Bridge				
Special Comments for Next Inspection	Monitor cracks/dela	ms @ deck underside.		Department Comments			
Maintenance Revi	iewed By			Date		Estimated Total	0
Proposed Long-Te	erm Strategy						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name		Shane Hall	Previous A	Assistant's Name	е		
Next Inspection Date		25-Jan-2015	Previous I	nspection Date	14-Jul-2011		
Inspection Cycle (	Default) (months)	21					
Comment							