

Bridge Inspection									
Bridge File Number	76094 -1 Bridge				Form Type	PSR			
Year Built/Year Supstr	1968/1968				Lot No.	1			
Bridge or Town Name	EDMONTON				Inspector Name	Wade Nanninga			
Located Over	SHERWOOD PARK FREEWAY:02 R1 0.003;SHERWOOD PARK FREEWAY:02 L1 0.002				Inspector Class	BR CLS A			
Located On	25107:02 C1 0.122				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	10-Jan-2013			
Legal Land Location	SW SEC 30 TWP 52 RGE 23 W4M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-113:23:38, 53:31:02				Data Entry Date	05-Feb-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	ANTHONY HENDAY DRIVE				Review Date	17-Jan-2013			
Clear Roadway/Skew	13.7 / 3 deg. (RHF)				Dept. Reviewer Name	Brent Herrick			
AADT/Year	10,000 / 2013 (E)				Dept. Review Date	14-Feb-2013			
Road Classification	RLU-208-100				Follow-Up By				
Detour Length (km)	1								
Allowable Load (t):	Single	CS1 42 GIRDER	Semi	CS2 49 GIRDER	Train	CS3 62 GIRDER	----> On Critical Spans ---->Critical Member		
Design Loading:	HS20				----> Primary Span				

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: SHERWOOD PARK FREEWAY L1 5.1m, SHERWOOD PARK FREEWAY R1 5.1m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	EB	On Bridge (m)	5.1	In Advance (Y/N)	Yes	Lane	WB	On Bridge (m)	5.2	In Advance (Y/N)	Yes
Remarks		Actual minimum VCM is 5.34 m over W/B lanes.										
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		Not required.										
Hazard Marker At Bridge (Y/N)		No										
Remarks		Not required.										
Other Sign Types		Information, Speed, Directions, Traffic Lights.										

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	5m West, 100m West & 10m East.
Power	7 lines 5m west.	Municipal	
Others	Pipeline East. Street lighting, 6 conduits & lighting under bridge.	Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Ramps at all 4 corners.
Vertical Alignment		6	6	Bridge on crest curve.
Roadway Width (m)	9.300			
Approach Bump		7	4	
Guardrail (Y/N)	Yes			Pothole @ SW, cracking @ approach slab.
Guardrail		4	7	
Length (m)	99.000			
Current Standard (Y/N)	No			
Termination Type	Turned Down			
Drainage		6	6	

Approach Road				
		Last	Now	Explanation of Condition
Approach Road General Rating		6	6	
Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : FC, 3 Spans, Lengths(m): 27.4-16.2-27.4, A-Ident Number:)				
Special Features				
Special Feature		7	7	3 conduits under G3 & G4 length of bridge. Rust stains @ all hangers, old stains. Conduit for G/S lighting attached to leg of G3 & G7 length of bridge to lights.
(Type : EXT LONGIT POST TENS)				
Special Feature		7	7	Spalling of ext girders at West side span 3. Spalling of ext girders at span 1.
(Type : UNDERSLUNG DIAPHR)				
Hinge		4	4	
(Hinge Type : CONC)				
Wearing Surface/Deck Top Detail Ratings				
	N (%)	1 (%)	2 (%)	3 (%)
Last	20	0	0	0
Now	20.0	0.0	0.0	0.0
Wearing Surface		7	7	Fiber reinforced concrete overlay.
(Material Type : CONCRETE)				Random narrow transverse & longitudinal cracks.
(Thickness(mm) : 50)				
Lateral Connection Problem (Y/N)	Yes			
Deck Top		N	N	
Deck Rideability		6	6	
Deck Joints		6	6	
Temperature (deg. C)		-15		
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))				
(Fixed Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))				
Gap Size (mm)		Gap Location		
65		South abutment- expansion		
70		North abutment - expansion		
65		Pier 1 - fixed		
60		Pier 2 - fixed		
Deck Drainage		6	6	No drains on bridge.
Drains Clogged (Y/N)		No		
Curbs/Median		N	N	(2 - 150 x 100mm spalls on bottom of East jersey barrier. 2-Jun-09) Snow covered.
(Curb Type : NEW JERSEY)				
Scaling (Percent Area)		0		
Bridge Rail		7	7	
(Type : GALVANIZED STEEL BRIDGE TUBE)				
Bridge Rail Posts		7	7	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)				
Bridge Rail/Posts Coating		7	7	
(Type : GALVANIZED)				
Sidewalk		X	X	

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Primary Span : FC, 3 Spans, Lengths(m): 27.4-16.2-27.4, A-Ident Number:)						
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)	West girder leg of G5 @ A2 has delam cracks. Underside of G6 @ A2 cracking with rust stains. Vertical crack SP3G1 @ abutment.	
Last	0	0	0	8		
Now	0	0	6	1		
Girders				3	2	Rust spots on girder legs at hinge joints. Typical FC chamfer cracks. Vertical crack ext girders @ A1 - photo. East leg of G7 @ A1 has diagonal delam crack - photo. Spalling of ext girders @ H1. Same @ H2 span 3. Failure critical element.
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
(Number Of Girders : 27)						
Diaphragms/Cross Frame				4	4	Several cracked diaphragms under hinge joints, South & North abutments at conduits. 2 spalls in diaphragm @ A2G9. Cracking @ ends of S2 girders.
Bearings				6	4	NE/NW corner slid off grout pad 25mm.
Temperature (deg. C)		-15				
(Expansion Type : REINFORCED PAD BEARING)						
(Fixed Type : REINFORCED PAD BEARING)						
Coating Adequate (Y/N)		Yes				
Functioning (Y/N)		Yes				
Deck Underside				6	6	Minor staining around some weep holes (old). Rust staining @ S1G6.
Stains (Percent Area)		1				
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						
Bearing Seats/Caps				4	4	Front face of A2 abutment seat has wide delam crack.
(Type : CONCRETE)						
Backwalls/Breastwalls				5	5	
Wingwalls				7	7	
Piles				N	N	
Paint/Coating				5	5	
Abutment Stability				8	8	
Scour/Erosion				X	X	
Piers/Bents						
(Type : PIER-SOLID)						
Bearing Seats/Caps				7	7	
(Type : CONCRETE)						
(Total Number of Bearing Piles : 3:3)						
Pier Shaft/Piles				7	7	
Bracing/Struts/Sheathing				X	X	
Nose Plate				X	X	
Paint/Coating				4	4	Paint peeling at bottom 5% failure. Pigmented sealer.
(Colour Description :)						
(Colour Code :)						

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	
Traffic Safety Features		4	7	
Type	Flexbeam/Lighting			
Slope Protection		6	6	
(Type : CONCRETE; CONCRETE)				
Bank Stability		5	5	
Drainage		5	5	
Grade Separation General Rating		4	5	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Patch girder ends at hinge locations.					
OTHER ACTION	2013	Patch pothole @ SW.					
OTHER ACTION	2013	Perform detailed inspection and review of girder cracks at hinge locations.					
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	38.9/33.3	Sufficiency Rating (Last/Now) (%)	45.4/44.2	Est. Repl. Yr	2040	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor hinge connection. Monitor girder cracking, & bearing pad movement. Low rating advisory sent to Rizwan Hussain and Brent Herrick 21-Jan-2013.		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	Arnold Assenheimer		Previous Assistant's Name	Wade Nanninga			
Next Inspection Date	10-Apr-2016		Previous Inspection Date	07-Mar-2011			
Inspection Cycle (Default) (months)	39						
Comment							