

Bridge Inspection										
Bridge File Number	06825 E-2 Bridge				Form Type	PSR				
Year Built/Year Supstr	1982/1982				Lot No.	2				
Bridge or Town Name	LEGISLATURE TUNNEL EAST				Inspector Name	Kris Bosters				
Located Over	LOCAL ROAD				Inspector Class	BR CLS A				
Located On	LOCAL ROAD				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	19-Oct-2012				
Legal Land Location	NW SEC 32 TWP 52 RGE 24 W4M				Data Entry By	Theresa Lacusta				
Longitude, Latitude	-113:30:27, 53:32:03				Data Entry Date	24-Oct-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux				
Contract Main. Area	UNDEFINED CMA				Review Date	22-Oct-2012				
Clear Roadway/Skew	20 /				Dept. Reviewer Name	Brent Herrick				
AADT/Year					Dept. Review Date	13-Nov-2012				
Road Classification					Follow-Up By					
Detour Length (km)	0									
Allowable Load (t):	Single		Semi		Train		----> On Critical Spans ---->Critical Member			
Design Loading:								----> Primary Span		

Posting Information											
Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)		Yes									
Posted:	Lane	WB	On Bridge (m)	3.9	In Advance (Y/N)	No	Lane	EB	On Bridge (m)	In Advance (Y/N)	No
Remarks		VC sign installed on roadway approaching tunnel, no VC sign on East headwall.									
Required Load Posting (t)		Single			Semi			Truck Train			
Posted Loading (t)		Single			Semi			Truck Train			
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No			
Posted:	Lane	EB	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, Traffic Light, Speed.									

Utilities (Located at)			
Utility Attachments			
Telephone	Buried underground.	Gas	Buried underground.
Power	Conduits underground all around.	Municipal	City storm system.
Others	Street lights at East approach. Pedestal @ SE corner. Traffic light inside tunnel.	Problem (Y/N)	No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	On legislature grounds, for pedestrian, bicycle & vehicle traffic. Areas with ramps & slopes.
Vertical Alignment		9	9	
Roadway Width (m)	12.600			2 lanes on East side.
Approach Bump		7	7	
Guardrail (Y/N)	No			
Guardrail		X	X	
Length (m)				
Current Standard (Y/N)				
Termination Type	None			
Drainage		7	7	Drains into City storm system.
Approach Road General Rating		7	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PB, 3 Spans, Lengths(m): 12.38-31.25-12.35, A-Ident Number:)					
Special Features					
Special Feature			7	Local road is located on East side on top of tunnel. "Exhaust Fans"	
(Type :)				No evident problems as viewed from ground.	
Special Feature			7	Attached to underside of girders near both abutments. "Ponds & Fountains"	
(Type :)				Constructed throughout on grounds. No evident problems. Shutoff for winter.	
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last					
Now					
Wearing Surface			4	4	Exposed aggregate concrete. Areas of spalling.
(Material Type : CONCRETE)					
(Thickness(mm) : 100)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			7	7	Pedestrian, bicycle & vehicle traffic.
Deck Joints			N	N	Cast-in-place, cracked/failed blockout in deck over tunnel/pedestrian concourse.
Temperature (deg. C)		11			
(Expansion Type : OTHER)					
(Fixed Type : OTHER)					
Gap Size (mm)		Gap Location			
Deck Drainage			7	5	Drains into City storm system. Leakage & staining N backwall & N pier.-photos
Drains Clogged (Y/N)		No			
Curbs/Median			6	6	Concrete fascia East side with random cracks.
(Curb Type : Standard)					
Scaling (Percent Area)					
Bridge Rail			7	7	Steel tube on concrete SE and steel tube in front of concrete parapet NE.
(Type : CONCRETE NON-STANDARD RAIL)					
Bridge Rail Posts			7	7	
(Type :)					
Bridge Rail/Posts Coating			7	7	(Type : PAINT)
(Type : PAINT)					
Sidewalk			6	6	On both sides of local road over East side of tunnel along 2 lane roadway.
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					
Girders			7	7	Visually inspected from ground but poor lighting & height of girders prevent detailed inspection to confirm condition. Need manlift & traffic accommodation for detailed inspection. Efflorescence & stains G37/SP2 .
Cracking (Y/N)		No			
Spalling (Percent Area)		0			
(Number Of Girders : 107)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PB, 3 Spans, Lengths(m): 12.38-31.25-12.35, A-Ident Number:)				
Diaphragms/Cross Frame		X	X	
Bearings		N	N	Too high & some bearings covered. Viewed from ground with binoculars, looks OK. Staining on N abut. bearings.
Temperature (deg. C)	3			
(Expansion Type :)				
(Fixed Type :)				
Coating Adequate (Y/N)				
Functioning (Y/N)				
Deck Underside		7	7	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		7	7	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	Efflorescence & staining North backwall - photo.
Wingwalls		6	6	Random cracks.
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		8	8	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-COLUMN)				Medium random map cracks on cap face. Localized efflorescence staining under both pier caps - photos. 6 @ P2; 4 @ P1 - concrete columns.
Bearing Seats/Caps		6	6	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 10:0)				P2C5, P1C4 & P1C1 with wide cracks in base. Concrete collar poured around column.
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	97 Ave with horizontal curve through tunnel and uphill grade to West.
Traffic Safety Features		3	5	1 light burnt out attached to girder u/s. Concrete curb/median in good condition.
Type	Lighting			
Slope Protection		X	X	(Type :)
Bank Stability		X	X	
Drainage		9	9	Drains into City storm system.
Grade Separation General Rating		7	7	

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	2012	Investigate cause of leak @ North abutment over loading zone.					
OTHER ACTION	2012	Replace burnt out lights.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	59.0/69.0	Est. Repl. Yr	2048	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Need ladder or manlift and traffic accomodation to perform detailed visual inspection on girders and bearings.		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				
Next Inspection Date	19-Jan-2016		Previous Inspection Date	02-Jun-2009			
Inspection Cycle (Default) (months)	39						
Comment							