

Bridge Inspection										
Bridge File Number	77129 -1 Bridge					Form Type	PSR			
Year Built/Year Supstr	1974/1974					Lot No.	1			
Bridge or Town Name	DIDSBURY					Inspector Name	Owen Salava			
Located Over	2:20 R1 21.049;2:20 L1 21.048					Inspector Class	BR CLS A			
Located On	582:04 C1 0.012					Assistant Name				
Water Body Cl./Year						Assistant Class				
Navigabil. Cl./Year						Inspection Date	11-Mar-2013			
Legal Land Location	NW SEC 13 TWP 31 RGE 1 W5M					Data Entry By	Marcia Chavez			
Longitude, Latitude	-114:01:31, 51:39:50					Data Entry Date	27-Mar-2013			
Road Authority	Alberta Transportation (AIT)					Reviewer Name	John O'Brien			
Contract Main. Area	CMA29					Review Date	17-Mar-2013			
Clear Roadway/Skew	8.5 /					Dept. Reviewer Name	Chris Black			
AADT/Year	1,170 / 2011 (A)					Dept. Review Date	28-Mar-2013			
Road Classification	RCU-208-110					Follow-Up By				
Detour Length (km)	15									
Allowable Load (t):	Single	CS1 28		Semi	CS2 49		Train	CS3 62		----> On Critical Spans ---->Critical Member
Design Loading:	HS25									----> Primary Span

Posting Information												
Required Vert. Clearance Posting (m)			UNDER: 2 L1 5.4m, 2 R1 5.4m									
Posted Vertical Clearance (Y/N)			Yes									
Posted:	Lane	NB	On Bridge (m)	5.3	In Advance (Y/N)	Yes	Lane	SB	On Bridge (m)	5.3	In Advance (Y/N)	Yes
Remarks												
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	At Bridge (Y/N)	No		
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	At Bridge (Y/N)	No		
Remarks			Not required.									

Hazard Marker At Bridge (Y/N)	No											
Remarks	Not required.											
Other Sign Types	Route, Speed.											

Utilities (Located at)												
Utility Attachments												
Telephone	Throughout area.					Gas						
Power						Municipal						
Others	Light standards both ends. Fibre optics @ West abutment.					Problem (Y/N)	No					
Remarks												

Approach Road												
					Last	Now	Explanation of Condition					
Horizontal Alignment					8	8	Limited sight distance on both ends with ramp intersection.					
Vertical Alignment					6	6	Typical G/S interchange.					
Roadway Width (m)			9.000									
Approach Bump					6	6						
Guardrail (Y/N)			Yes				Minor damage both ends.					
Guardrail Length (m)			57.000		5	5						
Current Standard (Y/N)			No				Not standard spacing, insufficient posts, and not thriebeam transition.					
Termination Type			Turn Down									
Drainage					7	7	Cracked corner drains with uneven settlement.					
Approach Road General Rating					6	6						

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : VF, 2 Spans, Lengths(m): 36.6-36.6, A-Ident Number:)					
Special Features					
Special Feature		7	7		
(Type : EXT LATER POST TENS)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	5.0	0.0	0.0	0.0	
Wearing Surface		4	4	Random 0.3 to 0.4mm wide transverse & longitudinal cracks. Chipseal worn bare at localized area in wheelpath, worst in WBL & over pier (photo).	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	Yes				
Deck Top		N	N		
Deck Rideability		7	7		
Deck Joints		4	5	Fingers filled with ACP/concrete, still appears to move. Gap filled with ACP. Jnts dirt & gravel filled. A1 - finger P1 - gland A2 - gland	
Temperature (deg. C)		2			
(Expansion Type : FINGER PLATES;GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
110		West - A1			
40		Center - P1			
35		East - A2			
Deck Drainage		4	4	Retrofit drains. Some weep tube extensions missing. S1G1 diaphragm at A1 cracked due to finger joint leakage.	
Drains Clogged (Y/N)		No			
Curbs/Median		4	4	Spall behind post on S1. Some curb patches are spalling. Spot corrosion & local cracking - photo. Coating failed @ 15% curb exterior.	
(Curb Type : Standard)					
Scaling (Percent Area)		2			
Bridge Rail		8	8		
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		8	8		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		7	7		
(Type : GALVANIZED)					
Sidewalk		X	X		
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	2	
Now	0	0	0	3	
S1G1 & S2G6 vertical crack, spall at S2G1 not found on exceptions list; also HLD chip.					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : VF, 2 Spans, Lengths(m): 36.6-36.6, A-Ident Number:)				
Girders		3	3	Typical 0.4 to 0.5mm wide chamfer cracks at ends. S2G2,5 cracks patched but patch has shrinkage cracks - photos. S1G1 wide short crack in N leg divider, 1st interior diaphragm. Vertical crack to inside face with corrosion; similar S2G6 at E. S2G1 E end spalled (photo). 1 chamfer crack marked & dated at SW is 1.0mm wide. HLD chip at S2G1 over outside lane.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	0			
(Number Of Girders : 12)				
Diaphragms/Cross Frame		4	4	Wide crack at W abut diaphragm in G1 (photo); E abut diaphragm at G6. Corrosion stains at NE diaphragm, S2g6
Bearings		4	5	Some bearings are deformed laterally probably from lateral post-tensioning. Expansion: A1. Fixed: A2, P1. Shoes, ears & anchor bolts corroding.
Temperature (deg. C)	2			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		5	5	Some staining @ deck underside @ bottom of girder webs, unknown if from before or after overlay. Weep tube extension broke off at most locations on exterior girders (photos). Corrosion stains @ weep drains (ext).
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		4	4	Crack with corrosion stain at SE corner (photo). Ice on seat.
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		5	5	Efflorescence and rust stains at SE.
Piles		N	N	
Paint/Coating		3	3	SE wingwall no pigmented sealer left - photo.
Abutment Stability		8	8	
Scour/Erosion		3	N	(Concrete drain troughs cracked & settled causing erosion/undermining of concrete slope protection, typical both hspls (photo). 16Jul2011) - Snow & dirt covered.
Piers/Bents				
(Type : PIER-SOLID)				Delam at N end of cap (photos).
Bearing Seats/Caps		7	4	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Paint/Coating		4	4	Peeling at north end of pier.
(Colour Description :)				
(Colour Code :)				
Pier Stability		9	9	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		9	9	
Traffic Safety Features		7	7	
Type	Guardrail			
Slope Protection		3	4	Settled down & out 140mm @ top of East, sealed with cold mix & exp. foam. Cracked & undermining at both abuts caused by cracked concrete drain troughs & approach run-off (photo 5). West out 100mm - sealed.
(Type : CONCRETE; CONCRETE)				
Bank Stability		3	3	(Large voids under concrete slope protection. 16Jul2011) - Not visible; carry forward rating.
Drainage		4	4	Ponding at E side toe of concrete slope protection on HWY2 shoulder (photo).
Grade Separation General Rating		3	3	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2013	Seal & patch local cracks/spalls.					
PATCH DECK	2013	Chipseal bare spots.					
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING	2013						
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2013	Repair drain troughs, if not yet done. Fill voids & recast cracked concrete slope protection, if not yet done.					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Replace weep tube extensions where missing on exterior girders.					
OTHER ACTION	2013	Repair ponding on E shoulder HWY2.					
OTHER ACTION	2013	Seal SE wingwall, 5L capseal.					
OTHER ACTION	2013	Upgrade approach guardrail to meet standard.					
OTHER ACTION	2013	Lvl 2 girder inspection; assess then patch cracked S1G1 N girder & S2G1. Also patch crack & spalls on diaphragms.					
OTHER ACTION	2013	Patch S2G1 HLD chip, 0.1m3 OH-V.					
OTHER ACTION	2013	Patch & seal piers.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	41.0/41.0	Est. Repl. Yr	2020	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder cracking.		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	Dave Lam	Previous Assistant's Name	
Next Inspection Date	11-Dec-2014	Previous Inspection Date	16-Jul-2011
Inspection Cycle (Default) (months)	21		
Comment			