

Bridge Inspection									
Bridge File Number	85047 N-1 Bridge				Form Type	SG			
Year Built/Year Supstr	1998/1998				Lot No.	3			
Bridge or Town Name	ANTY HDY/YHT				Inspector Name	Wade Nanninga			
Located Over	16:16 R1 6.808;16:16 L1 6.808				Inspector Class	BR CLS A			
Located On	216:06 R1 24.474				Assistant Name				
Water Body Cl./Year					Assistant Class				
Navigabil. Cl./Year					Inspection Date	24-Jan-2013			
Legal Land Location	SW SEC 17 TWP 53 RGE 25 W4M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-113:39:41, 53:34:25				Data Entry Date	08-Feb-2013			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux			
Contract Main. Area	ANTHONY HENDAY DRIVE				Review Date	27-Jan-2013			
Clear Roadway/Skew	16.6 /				Dept. Reviewer Name	Brent Herrick			
AADT/Year	33,270 / 2011 (A)				Dept. Review Date	14-Feb-2013			
Road Classification	RFD-412.4-110				Follow-Up By				
Detour Length (km)	1								
Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	CS750						----> Primary Span		

Posting Information										
Required Vert. Clearance Posting (m)										
Posted Vertical Clearance (Y/N)					Yes					
Posted:	Lane	EB	On Bridge (m)	In Advance (Y/N)	No	Lane	WB	On Bridge (m)	In Advance (Y/N)	No
Remarks	Vertical clearance posted on sister bridges on either side.									
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)		In Advance (Y/N)		At Bridge (Y/N)			
Remarks	Not required.									
Hazard Marker At Bridge (Y/N)		No								
Remarks		Not required.								
Other Sign Types										

Utilities (Located at)									
Utility Attachments									
Telephone					Gas				
Power	Street lights above and below bridge.				Municipal				
Others					Problem (Y/N)	No			
Remarks									

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			7	7					
Vertical Alignment			7	7					
Roadway Width (m)		16.600			Both approaches settled creating a bump.-Crack at approach slab.				
Approach Bump			4	4	All 5 transition bolts have failed at the SE/SW corner.				
Guardrail (Y/N)		Yes							
Guardrail			3	3					
Length (m)		15.000							
Current Standard (Y/N)		Yes							
Termination Type		Attenuation							
Drainage			7	7					
Approach Road General Rating			7	7					

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : WG, 2 Spans, Lengths(m): 44-40, A-Ident Number:)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last				1		
Now	20.0	0.0	0.0	0.0		
Wearing Surface				3	N	(deteriorating along edges.-Apr-2012)
(Material Type : ACP)						
(Thickness(mm) : 50)						
Deck Top				N	N	
Deck Rideability				7	7	
Deck Joints				3	N	The North joint is being over topped at both ends allowing water onto bearing seat.-Apr-2012 Snow covered Old stains on backwall-N abut.
Temperature (deg. C)		-15				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
30		A1 - South abut - transflex				
15		A2 - North abut - transflex				
Deck Drainage				7	7	No drains.
Drains Clogged (Y/N)		No				
Curbs/Median				4	4	Numerous vertical shrinkage cracks every approx 600mm and some appear to be medium width.
(Curb Type : SINGLE SLOPE CONCRETE BARRIER)						
Scaling (Percent Area)		0				
Bridge Rail				X	X	
(Type :)						
Bridge Rail Posts		X	X			
(Type :)						
Bridge Rail/Posts Coating		X	X			
(Type :)						
Sidewalk				X	X	
Girder/Beam						
Cover Plate				X	X	
Flange				9	9	
Web				9	9	
Stiffeners				9	9	
Splice				9	9	
Weld				N	N	
Diaphragms/Cross Frame				9	9	

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : WG, 2 Spans, Lengths(m): 44-40, A-Ident Number:)				
Paint Condition		8	8	Weathering steel.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		8	8	Ladder required to view bearings. (North abutment: less than 4mm of expansion left at 24 degree C - photo. 17-Jul-2009) Fixed viewed from headslopes with binoculars, no issues apparent. (South abutment 2mm exp remaining @ 24 degree C. 17-Jul-2009)
Temperature (deg. C)	-15			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Narrow transverse & longitudinal cracks typical. Some with efflorescence. Transverse cracks become wide under curbs on deck underside, worst area on East side - photo. Soffit coating starting to peel off.
Stains (Percent Area)	2			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		6	6	Numerous vertical shrinkage cracks.
(Type : CONCRETE)				
Backwalls/Breastwalls		6	6	
Wingwalls		6	6	Only 1 non standard bridge plaque on inside barrier face at SW corner. Numerous shrinkage cracks on wingwalls. 2 minor concrete spalls SW corner.
Piles		N	N	
Paint/Coating		4	4	Coating cracked numerous locations due to concrete cracks.
Abutment Stability		7	7	
Scour/Erosion		X	X	
Piers/Bents				
(Type : PIER-COLUMN)				4 pier columns.
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0)				Numerous random shrinkage cracks on pier cap and columns.
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		4	4	Coating cracked numerous locations due to concrete cracks. Grey.
(Colour Description :)				
(Colour Code :)				
Pier Stability		8	8	
Scour		X	N	(Evidence that ditch drainage is pooling @ base of pier. 24/Oct/2007)

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Debris (Y/N)	No			
Substructure General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	
Traffic Safety Features		4	7	
Type	Lighting			
Slope Protection		6	5	100mm settlement top South headslope, 40mm at North.-20mm cracks
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	6	
Drainage		6	6	
Grade Separation General Rating		6	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2013	Repair transition bolts. SW/SE - connect to curb.					
GALVANIZE/PAINT BRIDGE RAIL							
RETROFIT BRIDGE RAIL							
SEAL CURBS	2013	Seal barriers every 2 years.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2013	Redesign joints so they don't get overtopped at ends, if not done.					
RESET/ PAINT BEARINGS							
REPAINT SUPERSTRUCTURE							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Investigate why deck is so porous.					
OTHER ACTION	2013	Repair approach settlement. Seal cracks.					
OTHER ACTION	2013	Install 2 bridge plaques as per standard.					
OTHER ACTION	2013	Install advance vertical clearance signs.					
OTHER ACTION	2013	Repair 2 spalls on outside wingwall at SW.					
OTHER ACTION	2013	Seal crack @ top of slope protection.					
OTHER ACTION	2013	Seal substructure and fascia.					
OTHER ACTION							
OTHER ACTION							
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OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	52.2/52.2	Est. Repl. Yr	2080	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Monitor for over expansion at bearins. Monitor slope protection settlement.		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	Randy Bredo	Previous Assistant's Name	
Next Inspection Date	24-Oct-2014	Previous Inspection Date	28-Apr-2012
Inspection Cycle (Default) (months)	21		
Comment			