

| Bridge Inspection | | | | | | | | | |
|------------------------|--|--------|------|--------|---------------------|-----------------|---|--|--|
| Bridge File Number | 85014 E-1 Bridge | | | | Form Type | SG | | | |
| Year Built/Year Supstr | 2005/2005 | | | | Lot No. | 3 | | | |
| Bridge or Town Name | ANTHONY HENDAY DRIVE OVER NORTH SASKATCHEWAN RIVER | | | | Inspector Name | Wade Nanninga | | | |
| | | | | | Inspector Class | BR CLS A | | | |
| Located Over | NORTH SASKATCHEWAN RIVER, 6, WATERCRS-ST | | | | Assistant Name | | | | |
| | | | | | Assistant Class | | | | |
| Located On | 216:06 L1 10.332 | | | | Inspection Date | 26-Jan-2013 | | | |
| Water Body Cl./Year | | | | | Data Entry By | Theresa Lacusta | | | |
| Navigabil. Cl./Year | | | | | Data Entry Date | 08-Feb-2013 | | | |
| Legal Land Location | SE SEC 4 TWP 52 RGE 25 W4M | | | | Reviewer Name | Eric Carcoux | | | |
| Longitude, Latitude | -113:36:56, 53:27:35 | | | | Review Date | 27-Jan-2013 | | | |
| Road Authority | Alberta Transportation (AIT) | | | | Dept. Reviewer Name | Brent Herrick | | | |
| Contract Main. Area | ANTHONY HENDAY DRIVE | | | | Dept. Review Date | 14-Feb-2013 | | | |
| Clear Roadway/Skew | 12.9 / | | | | Follow-Up By | | | | |
| AADT/Year | 40,710 / 2011 (A) | | | | | | | | |
| Road Classification | RFD-412.4-110 | | | | | | | | |
| Detour Length (km) | 1 | | | | | | | | |
| Allowable Load (t): | Single | CS1 28 | Semi | CS2 49 | Train | CS3 62 | ----> On Critical Spans ---->Critical Member | | |
| Design Loading: | | | | | | | ----> Primary Span | | |

| Posting Information | | | | | | | | | | |
|-------------------------------|---------------|----|-------------------|--|------------------|------------------|-----------------|----|-----------------|----|
| Required Load Posting (t) | Single | | Semi | | Truck Train | | | | | |
| Posted Loading (t) | Single | | Semi | | Truck Train | | | | | |
| Posted: | Lane | WB | At Junction (Y/N) | | In Advance (Y/N) | | At Bridge (Y/N) | | | |
| 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) | Yes | | | | | | | | | |
| Remarks | | | | | | | | | | |
| Other Sign Types | | | | | | | | | | |

| Utilities (Located at) | | | | | | | | | |
|------------------------|---|--|--|--|---------------|----|--|--|--|
| Utility Attachments | | | | | | | | | |
| Telephone | | | | | Gas | | | | |
| Power | Conduit in 1st U/S bay, attached to deck underside. Transalta 240kv lines x2. | | | | Municipal | | | | |
| Others | F.A.S.T de-icing system mounted in U/S parapet. Edmonton power 13.8kv cross over west approach. | | | | Problem (Y/N) | No | | | |
| Remarks | | | | | | | | | |

| Approach Road | | | | | | | | | |
|-------------------------------------|-----------|--|-------------|------------|---------------------------------|--|--|--|--|
| | | | Last | Now | Explanation of Condition | | | | |
| Horizontal Alignment | | | 8 | 8 | Settled approach, cracking. | | | | |
| Vertical Alignment | | | 8 | 8 | | | | | |
| Roadway Width (m) | 12.900 | | | | | | | | |
| Approach Bump | | | 6 | 4 | | | | | |
| Guardrail (Y/N) | Yes | | | | | | | | |
| Guardrail | | | 4 | 7 | | | | | |
| Length (m) | 76.000 | | | | | | | | |
| Current Standard (Y/N) | Yes | | | | | | | | |
| Termination Type | Turn Down | | | | | | | | |
| Drainage | | | 6 | 4 | | | | | |
| Approach Road General Rating | | | 8 | 8 | | | | | |

| Superstructure | | | | | |
|--|-------|-------------------|-------|---|--|
| Bridge Component | | Last | Now | Explanation of Condition | |
| (Primary Span : WG, 4 Spans, Lengths(m): 80-100-100-80, A-Ident Number: A1466-01;A1466-02;A1466-03;A1466-04;A1467-01;A1467-02;A1467-03;A1467-04) | | | | | |
| Special Features | | | | | |
| Special Feature | | N | N | Mounted in U/S parapet. | |
| (SType : DK DEICING SYS) | | | | | |
| Special Feature | | | X | | |
| (Type :) | | | | | |
| Wearing Surface/Deck Top Detail Ratings | | | | | |
| | N (%) | 1 (%) | 2 (%) | 3 (%) | |
| Last | | | | | |
| Now | 10.0 | 0.0 | 0.0 | 0.0 | |
| Wearing Surface | | 4 | 4 | Longitudinal crack down c/l and transverse cracks every 5m about 1/2 of cracks are sealed. Losing aggregate along wheelpaths - photo. ACP is ravelling along joint paving lips.-photo 200mm dia. pothole 50m from East abutment.-photo | |
| (Material Type : ACP) | | | | | |
| (Thickness(mm) : 90) | | | | | |
| Deck Top | | N | N | | |
| Deck Rideability | | 7 | 7 | | |
| Deck Joints | | 6 | 5 | Paving lips cracking. | |
| Temperature (deg. C) | | -10 | | | |
| (Expansion Type : FINGER PLATES) | | | | | |
| (Fixed Type :) | | | | | |
| Gap Size (mm) | | Gap Location | | | |
| 290 | | Abutment 1 - West | | | |
| 290 | | Abutment 2 - East | | | |
| Deck Drainage | | 9 | 9 | Deck drains from west to east 1.7% grade 2% cross slope. Intermediate FVC weep drains @ U/S girder (8x). | |
| Drains Clogged (Y/N) | | No | | | |
| Curbs/Median | | 5 | 4 | Narrow vertical shrinkage cracks, typical. Equipment has rubbed lower joints pulling the caulking loose and spalling the edges on several joints. Cip along N side 50m from E abut. photo Curb at SE settled 75mm at joint.-photo | |
| (Curb Type : JERSEY/F SHAPE) | | | | | |
| 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 | Interior girders difficult to view due to height of bridge. | |
| Flange | | 9 | 9 | | |
| Web | | 9 | 9 | | |
| Stiffeners | | 9 | 9 | | |
| Splice | | 9 | 9 | | |
| Weld | | 9 | 9 | | |
| Diaphragms/Cross Frame | | 9 | 9 | | |

| Superstructure | | | | |
|--|-----|----------|----------|--|
| Bridge Component | | Last | Now | Explanation of Condition |
| (Primary Span : WG, 4 Spans, Lengths(m): 80-100-100-80, A-Ident Number: A1466-01;A1466-02;A1466-03;A1466-04;A1467-01;A1467-02;A1467-03;A1467-04) | | | | |
| Paint Condition | | 8 | 8 | Girder ends are painted with wasser 3-cont system. Dark brown. |
| (Colour Description :) | | | | |
| (Colour Code :) | | | | |
| Touchup Required (Y/N) | No | | | |
| Bearings | | 4 | 4 | Loose bolts on keeper assembly East abutment - photo. |
| Temperature (deg. C) | -10 | | | |
| (Expansion Type : POT BEARING) | | | | |
| (Fixed Type : REINFORCED PAD BEARING) | | | | |
| Coating Adequate (Y/N) | Yes | | | |
| Functioning (Y/N) | Yes | | | |
| Deck Underside | | 6 | 6 | The deck underside has stained (white) transverse cracks near transition of top flange from 500mm to 1100mm length. 500-1000mm long wide cracks with white stains under curb joints. |
| Stains (Percent Area) | 1 | | | |
| Span Alignment Problems | | | | |
| Vertical (Y/N) | No | | | |
| Horizontal (Y/N) | No | | | |
| Superstructure General Rating | | 6 | 6 | |
| Substructure | | | | |
| Bridge Component | | Last | Now | Explanation of Condition |
| Abutments | | | | |
| Bearing Seats/Caps | | 9 | 9 | |
| (Type : CONCRETE) | | | | |
| Backwalls/Breastwalls | | 9 | 9 | Roof slab access hatch is not locked. |
| Wingwalls | | 6 | 6 | Stained from leakage of joint at SW. Narrow vertical cracks with white stains below joints in curb SE. |
| Piles | | 9 | N | |
| Paint/Coating | | 7 | 7 | |
| Abutment Stability | | 9 | 9 | |
| Scour/Erosion | | 7 | 7 | |
| Piers/Bents | | | | |
| (Type : PIER-COLUMN) | | | | Caps have hairline map cracking. A few spots at form tie locations. |
| Bearing Seats/Caps | | 7 | 7 | |
| (Type : CONCRETE) | | | | Piers have hairline map cracking. |
| (Total Number of Bearing Piles : 2:2:2) | | | | |
| Pier Shaft/Piles | | 7 | 7 | |
| Bracing/Struts/Sheathing | | 8 | 8 | |
| Nose Plate | | 9 | 9 | Pier 2 only. |
| Paint/Coating | | X | X | |
| (Colour Description :) | | | | |
| (Colour Code :) | | | | |
| Pier Stability | | 8 | 8 | |
| Scour | | N | N | |
| Debris (Y/N) | No | | | |

| Substructure | | | | |
|--|------|----------|----------|--|
| Bridge Component | | Last | Now | Explanation of Condition |
| Substructure General Rating | | 7 | 7 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel | | | | |
| (U/S Direction : S) | | | | |
| (D/S Direction : N) | | | | |
| Alignment | | 9 | 9 | |
| Bank Stability | | 7 | 7 | Cut banks downstream. |
| HWM (m below Top of Curb) | 27.3 | | | (Recorded HWM during construction. ELG24.0m-2005. 07/Nov/2005) |
| Drift (Y/N) | No | | | |
| Slope Protection | | 7 | 7 | Small smooth rock at top of headslopes. |
| (Type : RIP RAP) | | | | |
| Guidebank/Spurs | | 8 | 8 | Guidebank at P3. |
| Adequacy of Opening | | 9 | 9 | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel 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 | | | | | | | |
| RETROFIT BRIDGE RAIL | | | | | | | |
| SEAL CURBS | | | | | | | |
| PATCH DECK | 2013 | Patch ACP and seal cracks. | | | | | |
| SEAL DECK | | | | | | | |
| OVERLAY DECK | | | | | | | |
| REPAIR/REPLACE DECK JOINTS | | | | | | | |
| RESET/ PAINT BEARINGS | 2013 | Tighten bolts on keeper assembly East abutment. | | | | | |
| REPAINT SUPERSTRUCTURE | | | | | | | |
| STRAIGHTEN/REPLACE MEMBERS | | | | | | | |
| WASHING | | | | | | | |
| SHOTCRETE REPAIRS | | | | | | | |
| REPAIR ABUTMENT SCOUR/EROSION | | | | | | | |
| PLACE ADDITIONAL RIP RAP | | | | | | | |
| REMOVE DRIFT ACCUMULATION | | | | | | | |
| OTHER ACTION | 2013 | Patch curb along N side and @ SE. | | | | | |
| OTHER ACTION | 2013 | Seal cracks and patch ACP @ W approach. | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 72.2/72.2 | Sufficiency Rating (Last/Now) (%) | 67.4/67.4 | Est. Repl. Yr | 2080 | Maint. Req'd. (Y/N) | Yes |
| Special Comments for Next Inspection | | | 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 | Kris Bosters | | Previous Assistant's Name | | | | |
| Next Inspection Date | 26-Oct-2014 | | Previous Inspection Date | 29-Apr-2011 | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |