

| Bridge Inspection                   |   |               |                   |               |  |                         |   |    |  |
|-------------------------------------|---|---------------|-------------------|---------------|--|-------------------------|---|----|--|
| Bridge File Number                  | 08036 -1 Bridge   |               |                   |               | Form Type  | SG                      |   |    |  |
| Year Built/Year Supstr              | 1959/1959   |               |                   |               | Lot No.  | 1                       |   |    |  |
| Bridge or Town Name                 | HINTON TRAIL  |               |                   |               | Inspector Name   | Brian Pientsch          |   |    |  |
| Located Over                        | REDWILLOW RIVER, 8.10.58.18.8, WATERCRS-ST  |               |                   |               | Inspector Class  | BR CLS A                |   |    |  |
| Located On                          | 722:02 C1 14.443  |               |                   |               | Assistant Name   | Russel Vanderschaaf     |   |    |  |
| Water Body Cl./Year                 |   |               |                   |               | Assistant Class  | BR CLS B                |   |    |  |
| Navigabil. Cl./Year                 |   |               |                   |               | Inspection Date  | 14-Dec-2012             |   |    |  |
| Legal Land Location                 | NE SEC 24 TWP 70 RGE 11 W6M   |               |                   |               | Data Entry By  | Theresa Lacusta         |   |    |  |
| Longitude, Latitude                 | -119:31:35, 55:04:54  |               |                   |               | Data Entry Date  | 02-Jan-2013             |   |    |  |
| Road Authority                      | Alberta Transportation (AIT)  |               |                   |               | Reviewer Name  | Eric Carcoux            |   |    |  |
| Contract Main. Area                 | CMA05   |               |                   |               | Review Date  | 19-Dec-2012             |   |    |  |
| Clear Roadway/Skew                  | 7.3 /   |               |                   |               | Dept. Reviewer Name  | David Morrison          |   |    |  |
| AADT/Year                           | 1,080 / 2011 (A)  |               |                   |               | Dept. Review Date  | 20-Feb-2013             |   |    |  |
| Road Classification                 | RCU-209-110   |               |                   |               | Follow-Up By   |                         |   |    |  |
| Detour Length (km)                  | 999   |               |                   |               |  |                         |   |    |  |
| Allowable Load (t):                 | Single  | CS1 48 GIRDER | Semi              | CS2 64 GIRDER | Train  | CS3 80 GIRDER           | ---> On Critical Spans<br>--->Critical Member |    |  |
| Design Loading:                     | HS20  |               |                   |               |  |                         | ---> Primary Span                             |    |  |
| Posting Information                 |   |               |                   |               |  |                         |   |    |  |
| 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)       | Yes   |               |                   |               |  |                         |   |    |  |
| Remarks                             | Missing northwest hazard markers, south hazard marker not attached to approach rail and too high. |               |                   |               |  |                         |   |    |  |
| Other Sign Types                    | Narrow Bridge, Curve, Deer, School Bus Stop 300m.   |               |                   |               |  |                         |   |    |  |
| Utilities (Located at)              |   |               |                   |               |  |                         |   |    |  |
| Utility Attachments                 |   |               |                   |               |  |                         |   |    |  |
| Telephone                           | Along West curb & South abutment.   |               |                   |               | Gas  | 20m South crosses road. |   |    |  |
| Power                               | 1 wire edge of east r/w. Power crosses at south abutment.   |               |                   |               | Municipal  |                         |   |    |  |
| Others                              |   |               |                   |               | Problem (Y/N)  | Yes                     |   |    |  |
| Remarks                             | Phone line exposed along south abutment. Conduit detached @ SW corner.                            |               |                   |               |  |                         |   |    |  |
| Approach Road                       |   |               |                   |               |  |                         |   |    |  |
|                                     |   |               | Last              | Now           | Explanation of Condition   |                         |   |    |  |
| Horizontal Alignment                |   |               | 5                 | 5             | Curves both ends. Vertical curve, bridge on grade, limited sight distance both sides.  |                         |   |    |  |
| Vertical Alignment                  |   |               | 5                 | 5             |  |                         |   |    |  |
| Roadway Width (m)                   | 8.600   |               |                   |               | SE rail too low, extensive damage. Not attached to bridgerail. None at NE corner.-01-Jun-2012  |                         |   |    |  |
| Approach Bump                       |   |               | 5                 | 5             |  |                         |   |    |  |
| Guardrail (Y/N)                     | Yes   |               |                   |               |  |                         |   |    |  |
| Guardrail                           |   |               | 3                 | N             | Snow covered   |                         |   |    |  |
| Length (m)                          | 11.400  |               |                   |               |  |                         |   |    |  |
| Current Standard (Y/N)              | No  |               |                   |               |  |                         |   |    |  |
| Termination Type                    | Turn Down   |               |                   |               |  |                         |   |    |  |
| Drainage                            |   |               | 4                 | N             | South end approach drainage drains onto bridge. Ponding in potholes and slab may be broken. 5mWx3mLx6mD scour SW embankment.-01-Jun-2012 |                         |   |    |  |
| <b>Approach Road General Rating</b> |   |               | <b>5</b>          | <b>5</b>      |  |                         |   |    |  |

| Superstructure   |       |                     |       |                          |   |  |
|--|-------|---------------------|-------|--------------------------|---|--|
| Bridge Component   |       | Last                | Now   | Explanation of Condition |   |  |
| (Primary Span : <b>RB, 3 Spans, Lengths(m): 19.5-24.4-19.5, A-Ident Number: A0296-01</b> ) |       |                     |       |                          |   |  |
| <b>Special Features</b>  |       |                     |       |                          |   |  |
| Special Feature  |       |                     | X     |                          |   |  |
| (Type : )  |       |                     |       |                          |   |  |
| Special Feature  |       |                     | X     |                          |   |  |
| (Type : )  |       |                     |       |                          |   |  |
| Wearing Surface/Deck Top Detail Ratings  |       |                     |       |                          |   |  |
|  | N (%) | 1 (%)               | 2 (%) | 3 (%)                    |   |  |
| <b>Last</b>  |       |                     | 15    | 10                       |   |  |
| <b>Now</b>   | 90.0  | 0.0                 | 5.0   | 5.0                      |   |  |
| Wearing Surface  |       |                     | 2     | 2                        | Random wide cracks. 10% loss of chip coat. Several patched areas. Concrete spalls under chip seal.-photo<br>Large delam area with large wide cracks over pier 1 near old repair @ 300mm spacing, cracks open with traffic. - photo<br>Spalling around rebar and loose concrete present. |  |
| (Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )                           |       |                     |       |                          |   |  |
| (Thickness(mm) : <b>50</b> )   |       |                     |       |                          |   |  |
| Deck Top   |       |                     | N     | N                        |   |  |
| Deck Rideability   |       |                     | 7     | 7                        |   |  |
| Deck Joints  |       |                     | 3     | 3                        | North gland pushed down and broken near c/l. - 01-Jun-2012<br>Snow/ice/sand covered.<br>A2 shows signs of water leaking through gland.-photo  |  |
| Temperature (deg. C)   |       | -1                  |       |                          |   |  |
| (Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )                              |       |                     |       |                          |   |  |
| (Fixed Type : )  |       |                     |       |                          |   |  |
| Gap Size (mm)  |       | Gap Location        |       |                          |   |  |
| 60   |       | North abutment - A2 |       |                          |   |  |
| 35   |       | South abutment - A1 |       |                          |   |  |
| Deck Drainage  |       |                     | 4     | 4                        | Exterior seepage around drains.   |  |
| Drains Clogged (Y/N)   |       | No                  |       |                          |   |  |
| Curbs/Median   |       |                     | 4     | N                        | Some grader scrapes along fascia. Some transverse deck cracks extend through curb. 1 missing cover plate bolt on NE corner. - 01-Jun-2012<br>Snow covered   |  |
| Scaling (Percent Area)   |       | 3                   |       |                          |   |  |
| Bridge Rail  |       |                     | 3     | 3                        | Missing 3 splice bolts.-01-Jun-2012<br>Minor tear at NW corner.-photo<br>Snow covered<br>5% of AB's have insufficient thread.<br>Spalling grout pads SE conrer.   |  |
| (Type : <b>GALVANIZED STEEL BRIDGE TUBE</b> )  |       |                     |       |                          |   |  |
| Bridge Rail Posts  |       | 3                   | N     |                          |   |  |
| (Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )                               |       |                     |       |                          |   |  |
| Bridge Rail/Posts Coating  |       |                     | 7     | 7                        |   |  |
| (Type : <b>GALVANIZED</b> )  |       |                     |       |                          |   |  |
| Sidewalk   |       |                     | X     | X                        |   |  |
| <b>Girder/Beam</b>   |       |                     |       |                          |   |  |
| Cover Plate  |       |                     | 3     | 3                        | (1 cover plate end weld cracked S2G3. 22 May 2009) Could not confirm.<br><br><br><br><br>(1 weld cracked. 22 May 2009) Could not confirm.   |  |
| Flange   |       |                     | 7     | 7                        |   |  |
| Web  |       |                     | 7     | 7                        |   |  |
| Stiffeners   |       |                     | 7     | 7                        |   |  |
| Splice   |       |                     | 7     | 7                        |   |  |
| Weld   |       |                     | 3     | 3                        |   |  |

| Superstructure   |     |          |          |   |
|--|-----|----------|----------|---|
| Bridge Component   |     | Last     | Now      | Explanation of Condition  |
| (Primary Span : <b>RB, 3 Spans, Lengths(m): 19.5-24.4-19.5, A-Ident Number: A0296-01</b> ) |     |          |          |   |
| Diaphragms/Cross Frame   |     | 7        | 7        |   |
| Paint Condition  |     | 3        | 3        | Scaling rust at porous deck locations S2 & S1.-photo  |
| (Colour Description : <b>GREEN</b> )   |     |          |          |   |
| (Colour Code : <b>14090</b> )  |     |          |          |   |
| Touchup Required (Y/N)   | No  |          |          |   |
| Bearings   |     | 3        | 3        | Girder 4 bearing over pier 2 hinge bolt pulled out 30mm. Anchor nuts too tight at pier #2.-25-Jun-2010<br>Could not confirm       |
| Temperature (deg. C)   | -1  |          |          |   |
| (Expansion Type : <b>ROCKER BEARING</b> )  |     |          |          |   |
| (Fixed Type : <b>PINNED BEARING</b> )  |     |          |          |   |
| Coating Adequate (Y/N)   | Yes |          |          |   |
| Functioning (Y/N)  | Yes |          |          |   |
| Deck Underside   |     | 3        | 2        | Estimate 40m2 of debonded / deteriorated concrete, rebar exposed in multiple locations.-photo<br><br>Previous repair in Dec 2011. |
| Stains (Percent Area)  | 20  |          |          |   |
| <b>Span Alignment Problems</b>   |     |          |          |   |
| Vertical (Y/N)   | No  |          |          | Heavy loads cause movement between deck and girders. Corrosion buildup between deck and girders approx 3mm.                       |
| Horizontal (Y/N)   | No  |          |          |   |
| <b>Superstructure General Rating</b>   |     | <b>2</b> | <b>2</b> |   |
| Substructure   |     |          |          |   |
| Bridge Component   |     | Last     | Now      | Explanation of Condition  |
| <b>Abutments</b>   |     |          |          |   |
| Bearing Seats/Caps   |     | 3        | 3        | Concrete spalling & delaminations from salt deterioration at A2<br>Cracking under G3 A1.-photo                                    |
| (Type : <b>CONCRETE</b> )  |     |          |          |   |
| Backwalls/Breastwalls  |     | 4        | 4        | Efflorescent staining indicating deteriorating concrete.  |
| Wingwalls  |     | 3        | 3        | NW & SW wingwalls have wide cracks & delam.-photo   |
| Piles  |     | N        | N        |   |
| Paint/Coating  |     | X        | X        |   |
| Abutment Stability   |     | 5        | 5        |   |
| Scour/Erosion  |     | 5        | 5        |   |
| <b>Piers/Bents</b>   |     |          |          |   |
| (Type : <b>PIER-SOLID</b> )  |     |          |          |   |
| Bearing Seats/Caps   |     | 7        | 7        | Concrete scaling @ D/S base of North pier shaft, 1.3m x 600mm   |
| (Type : <b>CONCRETE</b> )  |     |          |          |   |
| (Total Number of Bearing Piles : <b>0:0</b> )  |     |          |          |   |
| Pier Shaft/Piles   |     | 4        | 4        |   |
| Bracing/Struts/Sheathing   |     | X        | X        |   |
| Nose Plate   |     | 4        | 4        | P2 nose plate appears loose on South face.  |
| Paint/Coating  |     | X        | X        | No paint on nose plates. Minor rust.  |
| (Colour Description : )  |     |          |          |   |
| (Colour Code : )   |     |          |          |   |
| Pier Stability   |     | 7        | 7        |   |
| Scour  |     | 5        | 5        |   |

| Substructure                                 |     |          |          |  |
|--|-----|----------|----------|--|
| Bridge Component                             |     | Last     | Now      | Explanation of Condition                                     |
| Debris (Y/N)                                 | Yes |          |          | Drift buildup on South pier.-photo                           |
| <b>Substructure General Rating</b>           |     | <b>3</b> | <b>3</b> |  |
| Structure Usage                              |     |          |          |  |
|  |     | Last     | Now      | Explanation of Condition                                     |
| <b>Channel</b>                               |     |          |          |  |
| (U/S Direction : <b>W</b> )                  |     |          |          |  |
| (D/S Direction : <b>E</b> )                  |     |          |          |  |
| Alignment                                    |     | 4        | 4        |  |
| Bank Stability                               |     | 4        | 4        | Vertical banks 10m West of South abutment.                   |
| HWM (m below Top of Curb)                    |     |          |          | HWM not visible.   |
| Drift (Y/N)                                  | Yes |          |          | Large jam between P2 and bank.                               |
| Slope Protection                             |     | 5        | 5        |  |
| (Type : <b>RIP RAP; RIP RAP</b> )            |     |          |          |  |
| Guidebank/Spurs                              |     | X        | X        |  |
| Adequacy of Opening                          |     | 7        | 7        | (At high water, channel impinges on South banks. 2003/12/11) |
| (Fish Compensation Measure 1 : <b>NONE</b> ) |     |          |          |  |
| (Fish Compensation Measure 2 : <b>NONE</b> ) |     |          |          |  |
| <b>Channel General Rating</b>                |     | <b>4</b> | <b>4</b> |  |



|                                      |                |                           |                     |
|--------------------------------------|----------------|---------------------------|---------------------|
| Proposed Long-Term Strategy          |                |                           |                     |
| On 3-Year Program (Y/N)              |                |                           |                     |
| Proposed Action                      |                |                           |                     |
| Previous Inspector's Name            | Brian Pientsch | Previous Assistant's Name | Russel Vanderschaaf |
| Next Inspection Date                 | 14-Jun-2013    | Previous Inspection Date  | 01-Jun-2012         |
| Inspection Cycle (Modified) (months) | 6              |                           |                     |
| Comment                              |                |                           |                     |



|                                      |  |                           |                     |                 |   |
|--------------------------------------|--|---------------------------|---------------------|-----------------|---|
| Special Comments for Next Inspection | Low level rating advisory sent to Alan Saunders with AT Peace.-14-Dec-2012<br>Deck on monthly inspection cycle.<br>Focus working on rehab contract.<br>Neck near pier 1 should be repaired ASAP. | 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            | Brian Pientsch   | Previous Assistant's Name | Russel Vanderschaaf |                 |   |
| Next Inspection Date                 | 14-Jun-2013  | Previous Inspection Date  | 01-Jun-2012         |                 |   |
| Inspection Cycle (Modified) (months) | 6  |                           |                     |                 |   |
| Comment                              |  |                           |                     |                 |   |