

| Bridge Inspection                   |   |        |                   |          |  |                    |   |    |  |
|-------------------------------------|---|--------|-------------------|----------|--|--------------------|---|----|--|
| Bridge File Number                  | 75828 -1 Bridge                                     |        |                   |          | Form Type  | PCS                |   |    |  |
| Year Built/Year Supstr              | 1974/1974   |        |                   |          | Lot No.  | 3                  |   |    |  |
| Bridge or Town Name                 | LINARIA   |        |                   |          | Inspector Name   | Todd Warshawski    |   |    |  |
| Located Over                        | TRIBUTARY TO SHOAL CREEK, 8.11.84.12.2, WATERCRS-ST |        |                   |          | Inspector Class  | BR CLS B           |   |    |  |
| Located On                          | 661:04 C1 12.191                                    |        |                   |          | Assistant Name   |                    |   |    |  |
| Water Body Cl./Year                 |   |        |                   |          | Assistant Class  |                    |   |    |  |
| Navigabil. Cl./Year                 |   |        |                   |          | Inspection Date  | 27-May-2010        |   |    |  |
| Legal Land Location                 | SE SEC 14 TWP 62 RGE 2 W5M                          |        |                   |          | Data Entry By  | Theresa Lacusta    |   |    |  |
| Longitude, Latitude                 | -114:11:22, 54:21:21                                |        |                   |          | Data Entry Date  | 21-Jun-2010        |   |    |  |
| Road Authority                      | Alberta Transportation (AIT)                        |        |                   |          | Reviewer Name  | Arnold Assenheimer |   |    |  |
| Contract Main. Area                 | CMA10   |        |                   |          | Review Date  | 03-Jun-2010        |   |    |  |
| Clear Roadway/Skew                  | 8.2 /   |        |                   |          | Dept. Reviewer Name  | Brent Herrick      |   |    |  |
| AADT/Year                           | 160 / 2009 (A)                                      |        |                   |          | Dept. Review Date  | 29-Jun-2010        |   |    |  |
| Road Classification                 | RCU-209G-90   |        |                   |          | Follow-Up By   |                    |   |    |  |
| Detour Length (km)                  | 13  |        |                   |          |  |                    |   |    |  |
| Allowable Load (t):                 | Single  | CS1 28 | Semi              | CS2 49   | Train  | CS3 62             | ----> On Critical Spans<br>---->Critical Member |    |  |
| Design Loading:                     | HS25  |        |                   |          |  |                    | ----> Primary Span                              |    |  |
| Posting Information                 |   |        |                   |          |  |                    |   |    |  |
| Required Load Posting (t)           | Single  |        |                   |          | Semi   |                    | Truck Train                                     |    |  |
| Posted Loading (t)                  | Single  |        |                   |          | Semi   |                    | Truck Train                                     |    |  |
| Posted:                             | Lane  | EB     | At Junction (Y/N) | No       | In Advance (Y/N)   | No                 | At Bridge (Y/N)                                 | No |  |
| Posted:                             | Lane  | WB     | 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                             | Not to standard height, 300mm low.                  |        |                   |          |  |                    |   |    |  |
| Other Sign Types                    | "Rough Road"-200m each direction                    |        |                   |          |  |                    |   |    |  |
| Utilities (Located at)              |   |        |                   |          |  |                    |   |    |  |
| Utility Attachments                 |   |        |                   |          |  |                    |   |    |  |
| Telephone                           | South ditch.  |        |                   |          | Gas  |                    |   |    |  |
| Power                               | 3 lines north r/w.                                  |        |                   |          | Municipal  |                    |   |    |  |
| Others                              |   |        |                   |          | Problem (Y/N)  | No                 |   |    |  |
| Remarks                             |   |        |                   |          |  |                    |   |    |  |
| Approach Road                       |   |        |                   |          |  |                    |   |    |  |
|                                     |   |        | Last              | Now      | Explanation of Condition   |                    |   |    |  |
| Horizontal Alignment                |   |        | 7                 | 7        | Brush on South side encroaching onto shoulder of EBL.                                |                    |   |    |  |
| Vertical Alignment                  |   |        | 8                 | 8        |  |                    |   |    |  |
| Roadway Width (m)                   | 10.500  |        |                   |          |  |                    |   |    |  |
| Approach Bump                       |   |        | 8                 | 6        |  |                    |   |    |  |
| Guardrail (Y/N)                     | Yes   |        |                   |          | Minor scrapes & dents - no problem. Post spacing and length not to current standard. |                    |   |    |  |
| Guardrail                           |   |        | N                 | 5        |  |                    |   |    |  |
| Length (m)                          | 11.400  |        |                   |          |  |                    |   |    |  |
| Current Standard (Y/N)              | No  |        |                   |          |  |                    |   |    |  |
| Termination Type                    | Turned Down   |        |                   |          |  |                    |   |    |  |
| Drainage                            |   |        | N                 | 4        | Windrow buildup on all corners.  |                    |   |    |  |
| <b>Approach Road General Rating</b> |   |        | <b>7</b>          | <b>7</b> |  |                    |   |    |  |

| Superstructure   |           |             |           |                          |  |  |
|--|-----------|-------------|-----------|--------------------------|--|--|
| Bridge Component   |           | Last        | Now       | Explanation of Condition |  |  |
| (Primary Span : <b>VH, 2 Spans, Lengths(m): 10.1-10.1, A-Ident Number: )</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>  |           |             |           |                          |  |  |
| <b>Now</b>   |           |             |           |                          |  |  |
| Wearing Surface  |           |             | X         | X                        |  |  |
| (Material Type : )   |           |             |           |                          |  |  |
| (Thickness(mm) : )   |           |             |           |                          |  |  |
| Lateral Connection Problem (Y/N)   |           |             |           |                          |  |  |
| Deck Top   |           |             | N         | 6                        |  |  |
| Deck Rideability   |           |             | 7         | 7                        |  |  |
| Deck Joints  |           |             | N         | 6                        | Buffer angles.   |  |
| Bump (Y/N)   |           | No          |           |                          |  |  |
| Deck Drainage  |           |             | N         | 7                        |  |  |
| Drains Clogged (Y/N)   |           | No          |           |                          |  |  |
| Curbs/Median   |           |             | N         | 6                        |  |  |
| (Curb Type : <b>Standard</b> )   |           |             |           |                          |  |  |
| Scaling (Percent Area)   |           | 0           |           |                          |  |  |
| Bridge Rail  |           |             | N         | 4                        | (Double layer flexbeam.<br>Missing 4 splice bolts @ every splice location, incorrectly lapped.<br>1 nut missing on 2 posts.  |  |
| (Type : <b>GALVANIZED STEEL FLEX BEAM</b> )                                  |           |             |           |                          |  |  |
| Bridge Rail Posts  |           |             | N         | 3                        |  |  |
| (Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )                 |           |             |           |                          |  |  |
| Bridge Rail/Posts Coating  |           |             | N         | 6                        |  |  |
| (Type : <b>GALVANIZED</b> )  |           |             |           |                          |  |  |
| Sidewalk   |           |             | X         | X                        |  |  |
| Girder Detail Ratings  |           |             |           |                          |  |  |
|  | N (count) | 1 (count)   | 2 (count) | 3 (count)                |  |  |
| <b>Last</b>  |           |             |           |                          |  |  |
| <b>Now</b>   |           |             |           |                          |  |  |
| Girders  |           |             | 4         | 4                        | Span 1-25mm gap between G5 & G6.<br>Span2-Wide crack in AZ- 1 leg-G10.<br>Wide cracks/spalls d/s of A on 2 legs G3,5,6,9<br>Sound concrete at cracks, top 1/2 of rebar embedded in concrete. |  |
| Last Complete Inspection Date  |           | 27-May-2010 |           |                          |  |  |
| Cracking (Y/N)   |           | Yes         |           |                          |  |  |
| Spalling (Percent Area)  |           | 1           |           |                          |  |  |
| Lift or Connector Pocket Grouted (Y/N)                                       |           | Yes         |           |                          |  |  |
| (Number Of Girders : <b>20</b> )   |           |             |           |                          |  |  |
| <b>Span Alignment Problems</b>   |           |             |           |                          |  |  |
| Vertical (Y/N)   |           | No          |           |                          |  |  |
| Horizontal (Y/N)   |           | No          |           |                          |  |  |
| <b>Superstructure General Rating</b>   |           |             | <b>4</b>  | <b>4</b>                 |  |  |

| Substructure                                 |           |           |           |                          |   |   |  |
|--|-----------|-----------|-----------|--------------------------|---|---|--|
| Bridge Component                             |           | Last      | Now       | Explanation of Condition |   |   |  |
| <b>Abutments</b>                             |           |           |           |                          |   |   |  |
| (Extended Backwall Piles (Y/N) : Y)          |           |           |           |                          |   |   |  |
| (Extended Backwall Piles Spacing(mm) : 1500) |           |           |           |                          |   |   |  |
| (Total Number of Caps/Corbels : 5:5)         |           |           |           |                          |   |   |  |
| Bearing Seats/Caps/Corbels Detail Ratings    |           |           |           |                          |   |   |  |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)                |   |   |  |
| <b>Last</b>                                  |           |           |           |                          |   |   |  |
| <b>Now</b>                                   |           |           |           |                          |   |   |  |
| Bearing Seats/Caps/Corbels                   |           |           |           | 7                        | 6 | Double cap with 100m plank in between + subcap.   |  |
| (Type : TREATED TIMBER)                      |           |           |           |                          |   |   |  |
| (Depth(mm) : 350)                            |           |           |           |                          |   |   |  |
| (Width(mm) : 300)                            |           |           |           |                          |   |   |  |
| Backwalls/Breastwalls                        |           |           |           | 7                        | 6 |   |  |
| Greatest Height (m)                          |           | 2.00      |           |                          |   |   |  |
| Wingwalls                                    |           |           |           | 7                        | 6 |   |  |
| (Total Number of Bearing Piles : 8:8)        |           |           |           |                          |   |   |  |
| Piles Detail Ratings                         |           |           |           |                          |   |   |  |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)                |   |   |  |
| <b>Last</b>                                  |           |           |           |                          |   |   |  |
| <b>Now</b>                                   |           |           |           |                          |   |   |  |
| Piles  |           |           |           | 7                        | 6 |   |  |
| Paint/Coating                                |           |           |           | X                        | X |   |  |
| Abutment Stability                           |           |           |           | 8                        | 7 |   |  |
| Scour/Erosion                                |           |           |           | 7                        | 7 |   |  |
| <b>Piers/Bents</b>                           |           |           |           |                          |   |   |  |
| (Type : PIER-COLUMN)                         |           |           |           |                          |   |   |  |
| (Total Number of Caps/Corbels : 7)           |           |           |           |                          |   |   |  |
| Bearing Seats/Caps/Corbels Detail Ratings    |           |           |           |                          |   |   |  |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)                |   |   |  |
| <b>Last</b>                                  |           |           |           |                          |   |   |  |
| <b>Now</b>                                   |           |           |           |                          |   |   |  |
| Bearing Seats/Caps/Corbels                   |           |           |           | 7                        | 6 | 4 - 350 x 300 & 2 300 x 150 and subcap. + 75mm spacers.                                       |  |
| (Type : TREATED TIMBER)                      |           |           |           |                          |   |   |  |
| (Depth(mm) : 300)                            |           |           |           |                          |   |   |  |
| (Width(mm) : 350)                            |           |           |           |                          |   |   |  |
| (Total Number of Bearing Piles : 0)          |           |           |           |                          |   |   |  |
| Piles Detail Ratings                         |           |           |           |                          |   |   |  |
|  | N (count) | 1 (count) | 2 (count) | 3 (count)                |   |   |  |
| <b>Last</b>                                  |           |           |           |                          |   |   |  |
| <b>Now</b>                                   |           |           |           |                          |   |   |  |
| Pier Shaft/Piles                             |           |           |           | 6                        | 6 |   |  |
| Greatest Height (m)                          |           | 3.20      |           |                          |   |   |  |
| Bracing/Struts/Sheathing                     |           |           |           | 4                        | 4 | 3 braces are split.<br>4 struts per span, not effective.<br>Struts made from 2-75x250 planks. |  |
| Nose Plate                                   |           |           |           | X                        | X |   |  |
| Paint/Coating                                |           |           |           | X                        | X |   |  |
| (Colour Description : )                      |           |           |           |                          |   |   |  |
| (Colour Code : )                             |           |           |           |                          |   |   |  |

| Substructure                                 |    |          |          |                               |
|--|----|----------|----------|-------------------------------|
| Bridge Component                             |    | Last     | Now      | Explanation of Condition      |
| Pier Stability                               |    | 8        | 7        |                               |
| Scour  |    | N        | 7        |                               |
| Debris (Y/N)                                 | No |          |          |                               |
| <b>Substructure General Rating</b>           |    | <b>6</b> | <b>6</b> |                               |
| Structure Usage                              |    |          |          |                               |
|  |    | Last     | Now      | Explanation of Condition      |
| <b>Channel</b>                               |    |          |          |                               |
| (U/S Direction : )                           |    |          |          |                               |
| (D/S Direction : )                           |    |          |          |                               |
| Alignment                                    |    | 8        | 8        |                               |
| Bank Stability                               |    | 8        | 5        | NW DITCH IS ERODED 3MMX10MX2M |
| HWM (m below Top of Curb)                    |    |          |          | HWM not visible.              |
| Drift (Y/N)                                  | No |          |          |                               |
| Slope Protection                             |    | 7        | 6        |                               |
| (Type : <b>RIP RAP; RIP RAP</b> )            |    |          |          |                               |
| Guidebank/Spurs                              |    | X        | X        |                               |
| Adequacy of Opening                          |    | 7        | 7        |                               |
| (Fish Compensation Measure 1 : <b>NONE</b> ) |    |          |          |                               |
| (Fish Compensation Measure 2 : <b>NONE</b> ) |    |          |          |                               |
| <b>Channel General Rating</b>                |    | <b>7</b> | <b>5</b> |                               |

| Maintenance Recommendations                       |  |  |                           |               |           |                   |     |
|---|--|--|---------------------------|---------------|-----------|-------------------|-----|
| Inspector Recommendations                         | Year                                       | Inspector Comments   | Department Comments       | Target Year   | Est. Cost | Cat #             |     |
| REPAIR/REPLACE BRIDGE RAIL                        | 2010                                       | Correct lapping, add 90 splice bolts and 2 post nuts.          |                           |               |           |                   |     |
| SEAL CURBS  |  |  |                           |               |           |                   |     |
| PATCH DECK  |  |  |                           |               |           |                   |     |
| OVERLAY DECK                                      |  |  |                           |               |           |                   |     |
| STRAIGHTEN/REPLACE MEMBERS                        |  |  |                           |               |           |                   |     |
| WASHING   | 2010                                       | Remove windrow buildup.  |                           |               |           |                   |     |
| SHOTCRETE REPAIRS                                 |  |  |                           |               |           |                   |     |
| CORE TIMBER CAPS/CORBELS                          |  |  |                           |               |           |                   |     |
| REPAIR/REPLACE TIMBER CAPS                        |  |  |                           |               |           |                   |     |
| REPAIR ABUTMENT SCOUR/EROSION                     |  |  |                           |               |           |                   |     |
| PLACE ADDITIONAL RIP RAP                          |  |  |                           |               |           |                   |     |
| REMOVE DRIFT ACCUMULATION                         |  |  |                           |               |           |                   |     |
| INSTALL STRUTS                                    | 2010                                       | Install sufficient struts or replace with backwall scab/clamp. |                           |               |           |                   |     |
| OTHER ACTION                                      | 2010                                       | Replace braces-4m long   |                           |               |           |                   |     |
| OTHER ACTION                                      | 2010                                       | Fill in scour in NW ditch(60m3)                                |                           |               |           |                   |     |
| OTHER ACTION                                      |  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |  |  |                           |               |           |                   |     |
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>55.6/55.6</b>                           | <b>Sufficiency Rating (Last/Now) (%)</b>                       | <b>60.1/57.6</b>          | Est. Repl. Yr | 2019      | Maint. Req. (Y/N) | Yes |
| Special Comments for Next Inspection              | Monitor girder cracking and ditch erosion. |  | 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                              | 27-Aug-2013                                |  | Previous Inspection Date  | 02-Mar-2007   |           |                   |     |
| Inspection Cycle (Default) (months)               | 39   |  |                           |               |           |                   |     |
| Comment   |  |  |                           |               |           |                   |     |