

| Bridge Inspection      |                                   |        |      |        |                     |                |   |  |  |
|------------------------|-----------------------------------|--------|------|--------|---------------------|----------------|---|--|--|
| Bridge File Number     | 78730 -1 Bridge                   |        |      |        | Form Type           | SG             |   |  |  |
| Year Built/Year Supstr | 1980/1980                         |        |      |        | Lot No.             | 3              |   |  |  |
| Bridge or Town Name    | CARDSTON                          |        |      |        | Inspector Name      | Jason Rusu     |   |  |  |
| Located Over           | LEE CREEK, 2.12.20.8, WATERCRS-ST |        |      |        | Inspector Class     | BR CLS A       |   |  |  |
| Located On             | 501:01 C1 0.551                   |        |      |        | Assistant Name      |                |   |  |  |
| Water Body Cl./Year    |                                   |        |      |        | Assistant Class     |                |   |  |  |
| Navigabil. Cl./Year    |                                   |        |      |        | Inspection Date     | 09-Jun-2012    |   |  |  |
| Legal Land Location    | NW SEC 10 TWP 3 RGE 25 W4M        |        |      |        | Data Entry By       | Kelsey Roberts |   |  |  |
| Longitude, Latitude    | -113:17:39, 49:12:08              |        |      |        | Data Entry Date     | 20-Jul-2012    |   |  |  |
| Road Authority         | Alberta Transportation (AIT)      |        |      |        | Reviewer Name       | Garry Roberts  |   |  |  |
| Contract Main. Area    | CMA25                             |        |      |        | Review Date         | 10-Jul-2012    |   |  |  |
| Clear Roadway/Skew     | 11 /                              |        |      |        | Dept. Reviewer Name | Tim Davies     |   |  |  |
| AADT/Year              | 980 / 2011 (A)                    |        |      |        | Dept. Review Date   | 30-Jul-2012    |   |  |  |
| Road Classification    | RCU-209-110                       |        |      |        | Follow-Up By        |                |   |  |  |
| Detour Length (km)     | 1                                 |        |      |        |                     |                |   |  |  |
| Allowable Load (t):    | Single                            | CS1 28 | Semi | CS2 49 | Train               | CS3 62         | ---> On Critical Spans<br>--->Critical Member |  |  |
| Design Loading:        | MS230                             |        |      |        |                     |                | ---> 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 req |    |                   |    |                  |    |                 |    |  |
| Hazard Marker At Bridge (Y/N) | No      |    |                   |    |                  |    |                 |    |  |
| Remarks                       |         |    |                   |    |                  |    |                 |    |  |
| Other Sign Types              |         |    |                   |    |                  |    |                 |    |  |

| Utilities (Located at) |                        |  |  |  |               |                   |  |  |  |
|------------------------|------------------------|--|--|--|---------------|-------------------|--|--|--|
| Utility Attachments    |                        |  |  |  |               |                   |  |  |  |
| Telephone              | north                  |  |  |  | Gas           |                   |  |  |  |
| Power                  | south & north, 3 line  |  |  |  | Municipal     | Manhole NE and NW |  |  |  |
| Others                 | sewer east, NORTH WEST |  |  |  | Problem (Y/N) | No                |  |  |  |
| Remarks                | Fibre optics @ S R/W   |  |  |  |               |                   |  |  |  |

| Approach Road                       |           |  |          |          |                          |  |  |  |  |
|-------------------------------------|-----------|--|----------|----------|--------------------------|--|--|--|--|
|                                     |           |  | Last     | Now      | Explanation of Condition |  |  |  |  |
| Horizontal Alignment                |           |  | 6        | 6        | ACCESS ROAD southside    |  |  |  |  |
| Vertical Alignment                  |           |  | 7        | 7        |                          |  |  |  |  |
| Roadway Width (m)                   | 11.900    |  |          |          |                          |  |  |  |  |
| Approach Bump                       |           |  | 6        | 6        |                          |  |  |  |  |
| Guardrail (Y/N)                     | Yes       |  |          |          | SE turnout-Type 6        |  |  |  |  |
| Guardrail                           |           |  | 6        | 6        | Not thriebeam            |  |  |  |  |
| Length (m)                          | 10.700    |  |          |          |                          |  |  |  |  |
| Current Standard (Y/N)              | No        |  |          |          |                          |  |  |  |  |
| Termination Type                    | TURN DOWN |  |          |          |                          |  |  |  |  |
| Drainage                            |           |  | 7        | 7        |                          |  |  |  |  |
| <b>Approach Road General Rating</b> |           |  | <b>6</b> | <b>6</b> |                          |  |  |  |  |

| Superstructure  |       |              |       |                          |   |  |
|---|-------|--------------|-------|--------------------------|---|--|
| Bridge Component  |       | Last         | Now   | Explanation of Condition |   |  |
| (Primary Span : <b>WG, 2 Spans, Lengths(m): 22-22, A-Ident Number: A0848-01</b> ) |       |              |       |                          |   |  |
| <b>Special Features</b>   |       |              |       |                          |   |  |
| Special Feature   |       |              | X     | Chip seal on concrete    |   |  |
| (Type : )   |       |              |       |                          |   |  |
| Special Feature   |       |              | X     |                          |   |  |
| (Type : )   |       |              |       |                          |   |  |
| Wearing Surface/Deck Top Detail Ratings   |       |              |       |                          |   |  |
|   | N (%) | 1 (%)        | 2 (%) | 3 (%)                    |   |  |
| <b>Last</b>   | 0     | 0            | 0     | 0                        |   |  |
| <b>Now</b>  | 0.0   | 0.0          | 0.0   | 0.0                      |   |  |
| Wearing Surface   |       |              | 5     | 5                        | chip seal coat on deck-driving lanes coming off @ W.end & E. end.   |  |
| (Material Type : <b>CONCRETE - CONVENTIONAL CHIP SEAL COAT</b> )                  |       |              |       |                          |   |  |
| (Thickness(mm) : <b>50</b> )  |       |              |       |                          |   |  |
| Deck Top  |       |              | N     | N                        |   |  |
| Deck Rideability  |       |              | 8     | 8                        |   |  |
| Deck Joints   |       |              | 8     | 8                        |   |  |
| Temperature (deg. C)  |       | 8            |       |                          |   |  |
| (Expansion Type : <b>GLAND (WABO-MAUER, TRANSFLEX, ETC)</b> )                     |       |              |       |                          |   |  |
| (Fixed Type : )   |       |              |       |                          |   |  |
| Gap Size (mm)   |       | Gap Location |       |                          |   |  |
| 40  |       | ABUT. #1     |       |                          |   |  |
| 45  |       | ABUT. #2     |       |                          |   |  |
|   |       |              |       |                          |   |  |
| Deck Drainage   |       |              | 7     | 7                        |   |  |
| Drains Clogged (Y/N)  |       | No           |       |                          |   |  |
| Curbs/Median  |       |              | 6     | 6                        | Transv. hairline cracks .4-.6m spacing<br>Leaching along curb linesesp. under side; spalled @ W.end-struck by plows |  |
| (Curb Type : <b>Standard</b> )  |       |              |       |                          |   |  |
| Scaling (Percent Area)  |       | 0            |       |                          |   |  |
| Bridge Rail   |       |              | 7     | 7                        | 2 A/B nuts missing NW and SW sides.   |  |
| (Type : <b>GALVANIZED STEEL FLEX BEAM</b> )                                       |       |              |       |                          |   |  |
| Bridge Rail Posts   |       |              | 4     | 4                        |   |  |
| (Type : <b>GALVANIZED POST STEEL;GALVANIZED POST STEEL</b> )                      |       |              |       |                          |   |  |
| Bridge Rail/Posts Coating   |       |              | 7     | 7                        |   |  |
| (Type : <b>GALVANIZED</b> )   |       |              |       |                          |   |  |
| Sidewalk  |       |              | X     | X                        | WIDE CURBS SERVE AS SIDEWALK. BASEBALL PARK TO E OF BRIDGE.   |  |
| <b>Girder/Beam</b>  |       |              |       |                          |   |  |
| Cover Plate   |       |              | X     | X                        |   |  |
| Flange  |       |              | 8     | 8                        |   |  |
| Web   |       |              | 8     | 8                        |   |  |
| Stiffeners  |       |              | 8     | 8                        |   |  |
| Splice  |       |              | 8     | 8                        |   |  |
| Weld  |       |              | 7     | 7                        |   |  |
| Diaphragms/Cross Frame  |       |              | 8     | 8                        |   |  |

| Superstructure  |     |          |          |  |
|---|-----|----------|----------|--|
| Bridge Component  |     | Last     | Now      | Explanation of Condition   |
| (Primary Span : <b>WG, 2 Spans, Lengths(m): 22-22, A-Ident Number: A0848-01</b> ) |     |          |          |  |
| Paint Condition   |     | X        | X        | Weathering steel   |
| (Colour Description : )   |     |          |          |  |
| (Colour Code : )  |     |          |          |  |
| Touchup Required (Y/N)  | No  |          |          |  |
| Bearings  |     | 8        | 8        | Rocker at Pier   |
| Temperature (deg. C)  | 8   |          |          |  |
| (Expansion Type : <b>ROCKER BEARING</b> )   |     |          |          |  |
| (Fixed Type : <b>REINFORCED PAD BEARING</b> )                                     |     |          |          |  |
| Coating Adequate (Y/N)  | Yes |          |          |  |
| Functioning (Y/N)   | Yes |          |          |  |
| Deck Underside  |     | 7        | 7        | HAIRLINE TRANSVERSE CRACKS 0.5 - 1.0 m<br>Some efflorescence @ transverse crks |
| Stains (Percent Area)   | 2   |          |          |  |
| <b>Span Alignment Problems</b>  |     |          |          |  |
| Vertical (Y/N)  | No  |          |          |  |
| Horizontal (Y/N)  | No  |          |          |  |
| <b>Superstructure General Rating</b>  |     | <b>7</b> | <b>7</b> |  |
| Substructure  |     |          |          |  |
| Bridge Component  |     | Last     | Now      | Explanation of Condition   |
| <b>Abutments</b>  |     |          |          |  |
| Bearing Seats/Caps  |     | 8        | 8        |  |
| (Type : <b>CONCRETE</b> )   |     |          |          |  |
| Backwalls/Breastwalls   |     | 8        | 8        |  |
| Wingwalls   |     | 8        | 8        |  |
| Piles   |     | N        | N        |  |
| Paint/Coating   |     | 6        | 6        |  |
| Abutment Stability  |     | 8        | 8        |  |
| Scour/Erosion   |     | 7        | 7        |  |
| <b>Piers/Bents</b>  |     |          |          |  |
| (Type : <b>PIER-COLUMN</b> )  |     |          |          |  |
| Bearing Seats/Caps  |     | 8        | 8        |  |
| (Type : <b>CONCRETE</b> )   |     |          |          |  |
| (Total Number of Bearing Piles : <b>0</b> )                                       |     |          |          | 6 piles  |
| Pier Shaft/Piles  |     | 8        | 8        |  |
| Bracing/Struts/Sheathing  |     | 8        | 8        |  |
| Nose Plate  |     | X        | X        |  |
| Paint/Coating   |     | 5        | 5        | Bottom 0.3 m of piles are corroded   |
| (Colour Description : )   |     |          |          |  |
| (Colour Code : )  |     |          |          |  |
| Pier Stability  |     | 8        | 8        |  |
| Scour   |     | 7        | 7        |  |
| Debris (Y/N)  | Yes |          |          | Drift at pier  |

| Substructure                                 |     |          |          |   |
|--|-----|----------|----------|---|
| Bridge Component                             |     | Last     | Now      | Explanation of Condition                                      |
| <b>Substructure General Rating</b>           |     | <b>8</b> | <b>8</b> |   |
| Structure Usage                              |     |          |          |   |
|  |     | Last     | Now      | Explanation of Condition                                      |
| <b>Channel</b>                               |     |          |          |   |
| (U/S Direction : <b>W</b> )                  |     |          |          | CHANNEL SKEWED, BRIDGE SQUARE - strikes east abut. headslope. |
| (D/S Direction : <b>E</b> )                  |     |          |          |   |
| Alignment                                    |     | 4        | 4        |   |
| Bank Stability                               |     | 5        | 5        |   |
| HWM (m below Top of Curb)                    | 3.4 |          |          | No visible HWM  |
| Drift (Y/N)                                  | No  |          |          |   |
| Slope Protection<br>(Type : )                |     | 7        | 7        | CLASS 2 AT EAST & SW BANK                                     |
| Guidebank/Spurs                              |     | X        | X        |   |
| Adequacy of Opening                          |     | 6        | 6        |   |
| (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> |   |

| Maintenance Recommendations                       |                  |  |                           |               |           |                   |     |
|---|------------------|--|---------------------------|---------------|-----------|-------------------|-----|
| Inspector Recommendations                         | Year             | Inspector Comments                       | Department Comments       | Target Year   | Est. Cost | Cat #             |     |
| REPAIR/REPLACE BRIDGE RAIL                        | 2012             | Install nut & washer @ SW & NW           |                           |               |           |                   |     |
| GALVANIZE/PAINT BRIDGE RAIL                       |                  |  |                           |               |           |                   |     |
| RETROFIT BRIDGE RAIL                              |                  |  |                           |               |           |                   |     |
| SEAL CURBS  |                  |  |                           |               |           |                   |     |
| PATCH DECK  |                  |  |                           |               |           |                   |     |
| SEAL DECK   |                  |  |                           |               |           |                   |     |
| OVERLAY DECK                                      |                  |  |                           |               |           |                   |     |
| REPAIR/REPLACE DECK JOINTS                        |                  |  |                           |               |           |                   |     |
| RESET/ PAINT BEARINGS                             |                  |  |                           |               |           |                   |     |
| REPAINT SUPERSTRUCTURE                            |                  |  |                           |               |           |                   |     |
| STRAIGHTEN/REPLACE MEMBERS                        |                  |  |                           |               |           |                   |     |
| WASHING   |                  |  |                           |               |           |                   |     |
| SHOTCRETE REPAIRS                                 |                  |  |                           |               |           |                   |     |
| REPAIR ABUTMENT SCOUR/EROSION                     |                  |  |                           |               |           |                   |     |
| PLACE ADDITIONAL RIP RAP                          |                  |  |                           |               |           |                   |     |
| REMOVE DRIFT ACCUMULATION                         | 2012             | At pier                                  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| OTHER ACTION                                      |                  |  |                           |               |           |                   |     |
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>83.3/83.3</b> | <b>Sufficiency Rating (Last/Now) (%)</b> | <b>69.0/71.0</b>          | Est. Repl. Yr | 2041      | Maint. Req. (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                         | Garry Roberts    |  | Previous Assistant's Name |               |           |                   |     |
| Next Inspection Date                              | 09-Sep-2015      |  | Previous Inspection Date  | 18-Jun-2009   |           |                   |     |
| Inspection Cycle (Default) (months)               | 39               |  |                           |               |           |                   |     |
| Comment   |                  |  |                           |               |           |                   |     |