| Bridge Inspection                   |                           |           |                  |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
|-------------------------------------|---------------------------|-----------|------------------|-----------|----------------------|--------------------|--|-----------------------------------|------------------|----------------|--------------|---------------------------------|--|---------------------|------------------|-----|
| Bridge File Number 76181 W-2 Bridge |                           |           |                  |           |                      |                    |  |                                   |                  | SG             |              |                                 |  |                     |                  |     |
| Year Built/Year 1967/1967           |                           |           |                  |           |                      |                    |  | Lot No.                           |                  |                | 2            |                                 |  |                     |                  |     |
| Supstr                              |                           |           |                  |           |                      |                    | Inspector Name                                   |                                   |                  | Garry Roberts  |              |                                 |  |                     |                  |     |
| Bridge or Town Name LETHBRIDGE      |                           |           |                  |           |                      |                    |  | Inspector Class                   |                  |                | BR CLS A     |                                 |  |                     |                  |     |
| Located Over RAMP 76-1 B;CPR        |                           |           |                  |           |                      |                    |  | Assistant Name                    |                  |                |              |                                 |  |                     |                  |     |
| Located On 3:08 L1 45.646           |                           |           |                  |           |                      |                    |  | Assistant Class                   |                  |                |              |                                 |  |                     |                  |     |
| Water Body Cl./Ye                   |                           |           |                  |           |                      |                    |  | Inspection Date                   |                  |                | 02-Dec-2011  |                                 |  |                     |                  |     |
| Navigabil. Cl./Yea                  |                           |           |                  |           |                      |                    |  | Data Entry By                     |                  |                | Anne Roberts |                                 |  |                     |                  |     |
| Legal Land Locati                   |                           | NW SEC    | 10 TWP           | 9 RGE     | 22 W4                | 4M                 |  |                                   | Data Entry Date  |                |              | 08-Jan-2012                     |  |                     |                  |     |
| Longitude, Latitud                  | le                        | -112:54:4 | 41, 49:43        | :18       |                      |                    |  |                                   | Reviewer Name    |                |              | Joel Wozney                     |  |                     |                  |     |
| Road Authority                      |                           | Alberta T | ransport         | ation (Al | Τ)                   |                    |  | Review Date                       |                  |                | 12-Dec-2011  |                                 |  |                     |                  |     |
| Contract Main. Are                  |                           | CMA25     |                  |           |                      |                    |  | De                                | pt. Revie        | ewer           | Name         | Tim Davies                      |  |                     |                  |     |
| Clear Roadway/SI                    | kew                       | 12.2 / 49 | deg. (RF         | łF)       |                      |                    |  |                                   | pt. Revie        |                |              | 10-Jan-2012                     |  |                     |                  |     |
| AADT/Year                           |                           | 15,020 /  | 2010 (A)         |           |                      |                    |  |                                   | low-Up           |                |              |                                 |  |                     |                  |     |
| Road Classificatio                  | n                         | RFD-412   | 2.4-130          |           |                      |                    |  |                                   | •                | ,              |              |                                 |  |                     |                  |     |
| Detour Length (km                   |                           | 1         |                  |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Allowable Load (t)                  | : Sin                     | gle CS1   | 41               |           | Semi                 |                    | S2 55  |                                   |                  | Train          |              | 3 71                            |  | > On Critical Spans |                  |     |
| Design Leadings                     |                           |           | DER              |           |                      | G                  | RDER   |                                   |                  |                | GIF          | RDER                            |  |                     | >Critical Member |     |
| Design Loading:                     |                           | HS2       | 20               |           |                      | De                 | osting I   | nfor                              | motion           |                |              |                                 |  | > Primary           | Span             |     |
| Required Vert. Cle                  | aaran                     | ce Postin | a (m)            | UNDEF     | )· 76 <sub>-</sub> 1 |                    |  | ШОЛ                               | HallOH           |                |              |                                 |  |                     |                  |     |
| Posted Vertical CI                  |                           |           | <u>g (111)</u>   | Yes       | . 10-1               | I-D 0.1            | 7 111  |                                   |                  |                |              |                                 |  |                     |                  |     |
|                                     | iearar<br>NB              |           | ridge (m)        |           | n Adv                | ance               | /V/NI\   | Yes                               | Lane             | SB             |              | n Bridge (m)                    |  | In Advance          | (V/NI)           | No  |
|                                     |                           |           |                  |           |                      |                    | , ,  |                                   |                  |                |              |                                 |  | III Advance         | (1/14)           | INO |
| Required Load Po                    |                           |           | e on w/L         | Single    | C- IVIC              | asure              | u v.c. i   | May 20/10. Posting of 6.1 Semi    |                  | is accurate.   | Truck Train  |                                 |  |                     |                  |     |
| -                                   |                           | (1)       |                  |           |                      |                    |  | Semi                              |                  |                |              | Truck Train                     |  |                     |                  |     |
|                                     | Posted Loading (t) Single |           |                  |           |                      |                    |  |                                   |                  |                | /\//\\I\     |                                 |  |                     |                  |     |
|                                     | ane                       | WB        | EB At Junction ( |           |                      | ` ,                |  | In Advance (Y/N) In Advance (Y/N) |                  | <u> </u>       | Na           | At Bridge (Y/N) At Bridge (Y/N) |  | Nia                 |                  |     |
|                                     |                           |           |                  | 1/IN)     | INO                  | III Advance (1/14) |  |                                   | No               | Al DI          | iage (1/N)   | No                              |  |                     |                  |     |
| Remarks Not req.                    |                           |           |                  |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Hazard Marker At Bridge (Y/N) No    |                           |           |                  |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Remarks Other Size Turner           |                           |           |                  |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Other Sign Types CURVE              |                           |           |                  |           | 114                  | ilities (l         | 000  | stad atl                          |                  |                |              |                                 |  |                     |                  |     |
| Utility Attachments                 |                           |           |                  |           |                      | Οί                 | illues (   | _0Ga                              | ileu al)         |                |              |                                 |  |                     |                  |     |
|                                     | North:                    | cido      |                  |           |                      |                    |  | Ga                                |                  |                | South        | 150 m                           |  |                     |                  |     |
| ·                                   | South                     | Side      |                  |           |                      |                    |  | Municipal                         |                  |                |              | outh 150 m                      |  |                     |                  |     |
| Others                              | Jouill                    |           |                  |           |                      |                    |  |                                   | Problem (Y/N) No |                |              |                                 |  |                     |                  |     |
| Remarks                             |                           |           |                  |           |                      |                    |  | Trobon (1/11) No                  |                  |                |              |                                 |  |                     |                  |     |
| I/CIIIaIN3                          |                           |           |                  |           |                      |                    | Angros   | ch F                              | Poad -           |                |              |                                 |  |                     |                  |     |
|                                     |                           |           |                  |           |                      |                    | Approach Road  Last Now Explanation of Condition |                                   |                  |                |              |                                 |  |                     |                  |     |
| Horizontal Alignmo                  | ent                       |           |                  |           |                      | 6                  | 6  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Vertical Alignment                  |                           |           |                  |           |                      | 6                  | 6  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Roadway Width (m) 12.200            |                           |           |                  |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Approach Bump                       |                           |           |                  |           |                      | 6                  | 6  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Guardrail (Y/N) Yes                 |                           |           |                  |           |                      | Po                 | or solice  | and                               | missin           | g 4 bolts at S | <br>Е.       |                                 |  |                     |                  |     |
| Guardrail (1714)                    |                           |           | 4                | 4         | Wr                   | ong lap            | at NE  | , SE, S                           | ŠW.              |                |              |                                 |  |                     |                  |     |
| Length (m) 23.000                   |                           |           |                  |           |                      | No                 | t thriebe  | am.                               |                  |                |              |                                 |  |                     |                  |     |
| Current Standard (Y/N) No           |                           |           |                  |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Termination Type TURNED DOWN        |                           |           | N                |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Drainage                            | ,,,,                      |           | TORNE            | الالات ال | •                    | 7                  | 7  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Dramago                             |                           |           |                  |           |                      |                    |  |                                   |                  |                |              |                                 |  |                     |                  |     |
| Approach Road                       | Gene                      | ral Ratin | g                |           |                      | 6                  | 6  |                                   |                  |                |              |                                 |  |                     |                  |     |
|                                     |                           |           |                  |           |                      |                    |  | 1                                 |                  |                |              |                                 |  |                     |                  |     |

|                      |   |  |       |               |       | Supers | tructure  |  |  |  |  |
|----------------------|---|--|-------|---------------|-------|--------|---|--|--|--|--|
| Bridge Com           | ponent                                  |  |       |               |       |        | Explanation of Condition  |  |  |  |  |
|                      | •                                       | ns, Lengt                              | ths(m | ): 18.9-23.8- |       |        | dent Number: A0559-02)  |  |  |  |  |
| Special Feat         |   | <u>*</u>                               | ,     |               |       | · ·    |   |  |  |  |  |
| Special Feat         |   |  |       |               |       | X      |   |  |  |  |  |
| (Type:)              |   |  |       |               |       |        |   |  |  |  |  |
| Special Feat         | ure                                     |  |       |               |       | X      |   |  |  |  |  |
| (Type:)              |   |  |       |               |       |        |   |  |  |  |  |
|                      | Wearing Surface/Deck Top Detail Ratings |  |       |               |       |        |   |  |  |  |  |
| Would go and         | N (%)                                   | 1 (%)                                  |       | 2 (%)         | 3 (%) |        |   |  |  |  |  |
| Last                 | 0                                       | 0                                      |       | 0             |       | 0      |   |  |  |  |  |
| Now                  | 0.0                                     | 0.0                                    |       | 0.0           |       | ).0    |   |  |  |  |  |
| Wearing Sur          | _                                       | 0.0                                    |       | 0.0           | 6     | 6      | NARROW LONGITUDINAL CRACKS & MAP CRACKS.  |  |  |  |  |
|                      | ype : <b>CONCRE</b>                     | ====================================== |       |               | 0     | 0      | wide spread   |  |  |  |  |
| (Thickness           | •                                       | -IE)                                   |       |               |       |        |   |  |  |  |  |
| _                    | (mm) . <b>50</b> )                      |  |       |               |       |        |   |  |  |  |  |
| Deck Top             |   |  |       |               | N     | N      |   |  |  |  |  |
| Deck Rideab          | ility                                   |  |       |               | 7     | 7      |   |  |  |  |  |
| Deck Joints          |   |  |       |               | 6     | 4      | Skew pressure has fingers tight on  |  |  |  |  |
| Temperatu            | re (deg. C)                             | -4                                     |       |               |       |        | joints. Curb plates 40% corrosion   |  |  |  |  |
|                      | Type : <b>FINGE</b>                     | R PLATE                                | ES)   |               |       |        | pitted. Open gap at SW finger 20 mm x 5 m long.   |  |  |  |  |
| (Fixed Typ           |   |  | ,     |               |       |        |   |  |  |  |  |
| Gap Size (           |   | G                                      | an Lo | cation        |       |        | 1   |  |  |  |  |
| 15                   |   |  | ast   | , oddioii     |       |        |   |  |  |  |  |
| 65                   |   |  | Vest  |               |       |        |   |  |  |  |  |
|                      |   |  | 1001  |               |       |        |   |  |  |  |  |
|                      |   |  |       |               |       |        |   |  |  |  |  |
|                      |   |  |       |               |       |        |   |  |  |  |  |
|                      |   |  |       |               |       |        | -   |  |  |  |  |
| Deck Draina          | <u></u>                                 |  |       |               | 4     | 5      |   |  |  |  |  |
| Drains Clo           |   | No                                     | `     |               |       |        |   |  |  |  |  |
| Curbs/Media          | <del> </del>                            | INO                                    | ,     |               | 7     | 7      | Transverse cracks at 1 to 2 m spacing and isolated corrosion stains   |  |  |  |  |
|                      | : Standard)                             |  |       |               |       |        | at curbs  |  |  |  |  |
|                      |   | 0                                      |       |               |       |        |   |  |  |  |  |
|                      | ercent Area)                            |  |       |               |       |        |   |  |  |  |  |
| Bridge Rail          |   |  |       |               | 4     | 3      | Missing 1 rail to post bolt and 2 others are loose  |  |  |  |  |
|                      | RTICAL BAR)                             |  |       |               | Τ.    |        | 4 post A/Bs are short and 1 other bent  |  |  |  |  |
| Bridge Rail F        |   |  |       |               | 4     | 3      | Bolt missing @ 10th from NW   |  |  |  |  |
| (Type : GA<br>STEEL) | LVANIZED PO                             | OST STE                                | EL;GA | ALVANIZED     | POST  |        | Accident damage Sp. 3 North rail with 2 damaged posts and 3 rail sections. Rail panels are 3240 - 670 high. |  |  |  |  |
|                      | Posts Coating                           |  |       |               | 5     | 5      | - 360tions. Nail paneis are 3240 - 070 mgm.   |  |  |  |  |
| (Type:)              |   |  |       |               |       |        |   |  |  |  |  |
| Sidewalk             |   |  |       |               | X     | Х      |   |  |  |  |  |
| Girder/Bean          | 1                                       |  |       |               |       |        |   |  |  |  |  |
| Cover Plate          |   |  |       |               | 4     | 4      | (G1 over P3 W end has 2 cracks on   |  |  |  |  |
| Flange               |   |  |       |               | 7     | 7      | cover plate return welds) from Level 2 inspection   |  |  |  |  |
| Web                  |   |  |       |               | 7     | 7      | -   |  |  |  |  |
| Stiffeners           |   |  |       |               | 7     | 7      | -   |  |  |  |  |
| Splice               |   |  |       |               | 7     | 7      | -   |  |  |  |  |
| Weld                 |   |  |       |               | 7     | 7      | -   |  |  |  |  |
|                      | Croos France                            |  |       |               |       |        |   |  |  |  |  |
| Diaphragms/          | Cross Frame                             |  |       |               | 7     | 7      |   |  |  |  |  |

| Superstructure                   |                        |      |       |   |  |  |  |  |  |
|----------------------------------|------------------------|------|-------|---|--|--|--|--|--|
| Bridge Component                 |                        |      |       | Explanation of Condition  |  |  |  |  |  |
| (Primary Span : RB, 4 Spans, L   | engths(m): 18.9-23.8-2 |      |       | •   |  |  |  |  |  |
| Paint Condition                  | •                      | 4    | 4     |   |  |  |  |  |  |
| (Colour Description : GREEN)     |                        | '    |       | Isolated paint area failed (exterior bottom flange) @ S ends of piers |  |  |  |  |  |
| (Colour Code : <b>14090</b> )    |                        |      |       | bottom hange) @ 3 ends of piers                                       |  |  |  |  |  |
| Touchup Required (Y/N)           | No                     |      |       |   |  |  |  |  |  |
| Bearings                         |                        | 4    | 4     | Neoprene @ W pier is sliding out, worst @ 4th bearing from south,     |  |  |  |  |  |
| Temperature (deg. C)             | -4                     |      |       | also displaced at most of East abut. bearings - worst is G1.          |  |  |  |  |  |
| (Expansion Type : REINFORC       |                        |      |       | P1 and P3 bearings are fully expanded.                                |  |  |  |  |  |
| (Fixed Type : REINFORCED F       |                        |      |       |   |  |  |  |  |  |
| Coating Adequate (Y/N)           | Yes                    |      |       |   |  |  |  |  |  |
| Functioning (Y/N)                | No                     |      |       |   |  |  |  |  |  |
| Deck Underside                   |                        | 6    | 6     | Random transverse cracks with   |  |  |  |  |  |
| Stains (Percent Area)            | 1                      |      |       | efflorescence.  |  |  |  |  |  |
| Span Alignment Problems          |                        |      |       |   |  |  |  |  |  |
| Vertical (Y/N)                   | No                     |      |       |   |  |  |  |  |  |
| Horizontal (Y/N)                 | No                     |      |       |   |  |  |  |  |  |
| Superstructure General Rating    |                        | 4    | 4     |   |  |  |  |  |  |
| Superstructure Seneral Rating    | 1                      | _    |       |   |  |  |  |  |  |
|                                  |                        |      | Subst | ructure   |  |  |  |  |  |
| Bridge Component                 |                        | Last | Now   | Explanation of Condition  |  |  |  |  |  |
| Abutments                        |                        | 1    |       |   |  |  |  |  |  |
| Bearing Seats/Caps               |                        | 6    | 6     |   |  |  |  |  |  |
| (Type : <b>CONCRETE</b> )        |                        | 1    |       |   |  |  |  |  |  |
| Backwalls/Breastwalls            |                        | 6    | 6     |   |  |  |  |  |  |
| Wingwalls                        |                        | 7    | 7     |   |  |  |  |  |  |
| Piles                            |                        | N    | N     | Buried  |  |  |  |  |  |
| Paint/Coating                    |                        | 4    | 4     | Tar coat peeling  |  |  |  |  |  |
| Abutment Stability               |                        | 6    | 6     |   |  |  |  |  |  |
| Scour/Erosion                    | Scour/Erosion          |      |       |   |  |  |  |  |  |
| Piers/Bents                      |                        |      |       |   |  |  |  |  |  |
| (Type : PIER-COLUMN)             |                        |      |       |   |  |  |  |  |  |
| Bearing Seats/Caps               |                        | 7    | 7     |   |  |  |  |  |  |
| (Type : CONCRETE)                |                        |      |       |   |  |  |  |  |  |
| (Total Number of Bearing Piles : | 0:0:0)                 |      |       |   |  |  |  |  |  |
| Pier Shaft/Piles                 |                        | 7    | 7     |   |  |  |  |  |  |
| Bracing/Struts/Sheathing         |                        | Х    | Х     |   |  |  |  |  |  |
| Nose Plate                       |                        | Х    | Х     |   |  |  |  |  |  |
| Paint/Coating                    |                        | 5    | 5     |   |  |  |  |  |  |
| (Colour Description : GREEN)     |                        |      |       |   |  |  |  |  |  |
| (Colour Code : <b>14090</b> )    |                        |      |       |   |  |  |  |  |  |
| Pier Stability                   |                        |      | 6     |   |  |  |  |  |  |
| Scour                            |                        | Х    | Х     |   |  |  |  |  |  |
| Debris (Y/N)                     | No                     |      |       |   |  |  |  |  |  |
| Substructure General Rating      |                        | 6    | 6     |   |  |  |  |  |  |

| Structure Usage               |           |      |     |                          |  |  |  |  |  |  |
|-------------------------------|-----------|------|-----|--------------------------|--|--|--|--|--|--|
|                               |           | Last | Now | Explanation of Condition |  |  |  |  |  |  |
| Grade Separation              |           |      |     |                          |  |  |  |  |  |  |
| Road Alignment                |           |      | 5   | Curve                    |  |  |  |  |  |  |
| Traffic Safety Features       |           |      | 4   | Wrong lap at NW          |  |  |  |  |  |  |
| Туре                          | GUARDRAIL |      |     |                          |  |  |  |  |  |  |
| Slope Protection              |           | 6    | 6   |                          |  |  |  |  |  |  |
| (Type : CONCRETE; CONCRE      | TE)       |      |     |                          |  |  |  |  |  |  |
| Bank Stability                |           | 5    | 5   |                          |  |  |  |  |  |  |
| Drainage                      |           |      | 6   |                          |  |  |  |  |  |  |
| Grade Separation General Rati | ng        | 5    | 4   |                          |  |  |  |  |  |  |

76181 W-2 Bridge

Bridge Inspection & Maintenance System (Web 2005)

|  |       |   | Maintenance Red                   | commend    | ations                      |               |             |                 |           |     |
|--|-------|---|-----------------------------------|------------|-----------------------------|---------------|-------------|-----------------|-----------|-----|
| Inspector Recommendations                  | ,     | Year                                    | Inspector Comments                |            | Department Comr             |               | Target Year | Est. Cost       | Cat #     |     |
| REPAIR/REPLACE BRIDGE RAIL                 |       |   |                                   |            |                             |               |             |                 |           |     |
| GALVANIZE/PAINT BRIDGE RAIL                |       |   |                                   |            |                             |               |             |                 |           |     |
| RETROFIT BRIDGE RAIL                       |       |   |                                   |            |                             |               |             |                 |           |     |
| SEAL CURBS                                 |       |   |                                   |            |                             |               |             |                 |           |     |
| PATCH DECK                                 |       |   |                                   |            |                             |               |             |                 |           |     |
| SEAL DECK                                  |       |   |                                   |            |                             |               |             |                 |           |     |
| OVERLAY DECK                               |       |   |                                   |            |                             |               |             |                 |           |     |
| REPAIR/REPLACE DECK JOINTS                 | 2     | 2013                                    | Reset or replace all bearing pads |            |                             |               |             |                 |           |     |
| RESET/ PAINT BEARINGS                      |       |   |                                   |            |                             |               |             |                 |           |     |
| REPAINT SUPERSTRUCTURE                     |       |   |                                   |            |                             |               |             |                 |           |     |
| STRAIGHTEN/REPLACE MEMBERS                 |       |   |                                   |            |                             |               |             |                 |           |     |
| WASHING                                    |       |   |                                   |            |                             |               |             |                 |           |     |
| SHOTCRETE REPAIRS                          |       |   |                                   |            |                             |               |             |                 |           |     |
| REPAIR ABUTMENT SCOUR/EROSI                | ON    |   |                                   |            |                             |               |             |                 |           |     |
| PLACE ADDITIONAL RIP RAP                   |       |   |                                   |            |                             |               |             |                 |           |     |
| REMOVE DRIFT ACCUMULATION                  |       |   |                                   |            |                             |               |             |                 |           |     |
| OTHER ACTION                               |       |   |                                   |            |                             |               |             |                 |           |     |
| OTHER ACTION                               |       |   |                                   |            |                             |               |             |                 |           |     |
| OTHER ACTION                               |       |   |                                   |            |                             |               |             |                 |           |     |
| OTHER ACTION                               |       |   |                                   |            |                             |               |             |                 |           |     |
| Structural Condition Rating (Last/N (%)    | ow) 5 | 55.6/55.6 Sufficiency Rating (Last/No.) |                                   |            | 57.9/56.4                   | Est. Repl. Yr | 2030        | Maint. Red      | qd. (Y/N) | Yes |
| Special<br>Comments for<br>Next Inspection |       |   |                                   |            | Department<br>Comments      |               |             |                 |           |     |
| Maintenance Reviewed By                    |       |   |                                   |            | Date                        |               | F           | 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            |               |             |                 |           |     |
|  |       | -2013                                   |                                   | Previous I | Inspection Date 20-May-2010 |               |             |                 |           |     |
| Inspection Cycle (Default) (months)        | 21    |   |                                   |            |                             |               |             |                 |           |     |
| Comment                                    |       |   |                                   |            |                             |               |             |                 |           |     |