

| Bridge Culvert Inspection |                              |  |                     |                |
|---------------------------|------------------------------|--|---------------------|----------------|
| Bridge File Number        | 81067 -1 Bridge Culvert      |  | Form Type           | CUL1           |
| Year Built                | 1984                         |  | Lot No.             | 4              |
| Bridge or Town Name       | JENNER                       |  | Inspector Name      | Jason Saly     |
| Located Over              | TRAIL-ANIMAL, OVER SP        |  | Inspector Class     | BR CLS A       |
| Located On                | 884:06 C1 13.102             |  | Assistant Name      |                |
| Water Body Cl./Year       |                              |  | Assistant Class     |                |
| Navigabil. Cl./Year       |                              |  | Inspection Date     | 18-Oct-2012    |
| Legal Land Location       | NW SEC 10 TWP 24 RGE 9 W4M   |  | Data Entry By       | Marcia Chavez  |
| Longitude, Latitude       | -111:11:28, 51:02:02         |  | Data Entry Date     | 02-Nov-2012    |
| Road Authority            | Alberta Transportation (AIT) |  | Reviewer Name       | John O'Brien   |
| Contract Main. Area       | CMA22                        |  | Review Date         | 25-Oct-2012    |
| Clear Roadway/Skew        | 9.3 /                        |  | Dept. Reviewer Name | Andrew Smikles |
| AADT/Year                 | 260 / 2011 (A)               |  | Dept. Review Date   | 05-Nov-2012    |
| Road Classification       | RCU-210-110                  |  | Follow-Up By        |                |
| Detour Length (km)        | 100                          |  |                     |                |

| Bridge Culvert Information |        |      |                |      |        |               |                    |       |
|----------------------------|--------|------|----------------|------|--------|---------------|--------------------|-------|
| Number of Culverts         |        | 1    |                |      |        |               |                    |       |
| Pipe #                     | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1                          | MAIN   | -    | 2200           | MP   | 29.7   | 68X13         | 2.8                | ROUND |
| Special Features           |        |      |                |      |        |               |                    |       |
| Special Features Comment   |        |      |                |      |        |               |                    |       |

| Posting Information                  |      |              |               |  |                  |    |      |    |               |  |                  |    |
|--------------------------------------|------|--------------|---------------|--|------------------|----|------|----|---------------|--|------------------|----|
| Required Vert. Clearance Posting (m) |      |              |               |  |                  |    |      |    |               |  |                  |    |
| Posted Vertical Clearance (Y/N)      |      |              | No            |  |                  |    |      |    |               |  |                  |    |
| Posted:                              | Lane | NB           | On Bridge (m) |  | In Advance (Y/N) | No | Lane | SB | On Bridge (m) |  | In Advance (Y/N) | No |
| Remarks                              |      | Not Required |               |  |                  |    |      |    |               |  |                  |    |

| Utilities (Located at) |  |  |               |    |
|------------------------|--|--|---------------|----|
| Utility Attachments    |  |  |               |    |
| Telephone              |  |  | Gas           |    |
| Power                  |  |  | Municipal     |    |
| Others                 |  |  | Problem (Y/N) | No |
| Remarks                |  |  |               |    |

| Approach Road / Embankment                       |       |          |          |                          |  |
|--|-------|----------|----------|--------------------------|--|
|  |       | Last     | Now      | Explanation of Condition |  |
| Horizontal Alignment                             |       | 9        | 8        | In sag.                  |  |
| Vertical Alignment                               |       | 7        | 7        |                          |  |
| Roadway Width (m)                                | 9.300 |          |          |                          |  |
| Embankment                                       |       | 8        | 8        |                          |  |
| Sideslope (___:1)                                | 3.0   |          |          |                          |  |
| (Height of Cover(m) : 1.2)                       |       |          |          |                          |  |
| Guardrail (Y/N)                                  | No    |          |          |                          |  |
| <b>Approach Road / Embankment General Rating</b> |       | <b>7</b> | <b>7</b> |                          |  |

| Upstream End                                  |  |             |            |                                 |  |
|---|--|-------------|------------|---------------------------------|--|
| <b>Culvert Component</b>                      |  | <b>Last</b> | <b>Now</b> | <b>Explanation of Condition</b> |  |
| Direction                                     |  | W           |            |                                 |  |
| End Treatment (Concrete, Steel, Others, None) |  | STEEL       |            |                                 |  |
| Headwall                                      |  | X           | X          |                                 |  |
| Collar  |  | X           | X          |                                 |  |

| Upstream End  |             |          |          |  |
|---|-------------|----------|----------|--|
| Culvert Component   |             | Last     | Now      | Explanation of Condition   |
| Wingwalls   |             | X        | X        |  |
| (Shape : )  |             |          |          |  |
| Cutoff Wall   |             | X        | X        |  |
| Bevel End   |             | 6        | 6        |  |
| Heaving (mm)  | 0           |          |          |  |
| Invert Above/Below Stream Bed   | ABOVE       |          |          |  |
| Above/Below (mm)  | 0           |          |          |  |
| Scour Protection  |             | 6        | 6        |  |
| (Type : <b>NATURAL</b> )  |             |          |          |  |
| (Avg. Rock Size(mm) : )   |             |          |          |  |
| Scour/Erosion   |             | 6        | 6        |  |
| Beavers (Y/N)   | No          |          |          |  |
| <b>Upstream End General Rating</b>  |             | <b>6</b> | <b>6</b> |  |
| Bridge Culvert Barrel   |             |          |          |  |
| Culvert Component   |             | Last     | Now      | Explanation of Condition   |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP) |             |          |          |  |
| Barrel Last Accessible Date   | 18-Oct-2012 |          |          |  |
| <b>Special Features</b>   |             |          |          |  |
| Special Feature   |             |          |          |  |
| (Type : )   |             |          |          |  |
| Special Feature   |             |          |          |  |
| (Type : )   |             |          |          |  |
| Roof  |             | 6        | 6        | Rise at W end =2176=24mm<br>Rise at Midpt=2095=105mm=4.8% inwards<br>Rise at E end=2110=90mm |
| Measured Rise (mm)  | 2095        |          |          |  |
| Measured At Ring No.  |             |          |          |  |
| Sag (mm)  | 105         |          |          |  |
| Percent Sag   | 5           |          |          |  |
| Sidewall  |             | 7        | 6        | Span at W end=2224=24mm<br>Span at Midpt=2299=99mm=4.5%<br>Span at E end=2220=20mm           |
| Measured Span (mm)  | 2299        |          |          |  |
| Measured At Ring No.  |             |          |          |  |
| Deflection (mm)   | 99          |          |          |  |
| Percent Deflection  | 5           |          |          |  |
| Floor   |             | N        | N        |  |
| Bulge (mm)  |             |          |          |  |
| Measured At Ring No.  |             |          |          |  |
| Abrasion (Y/N)  |             |          |          |  |
| Circumferential Seams   |             | 6        | 6        | R2   |
| Separation (mm)   | 60          |          |          |  |
| Longitudinal Seams  |             | X        | N        |  |
| Total No. of Cracked Rings  |             |          |          |  |
| Total No. of Rings with Two Cracked Seams   |             |          |          |  |
| Min. Remaining Steel Between Cracks (mm)  |             |          |          |  |
| Proper Lap (Y/N)  |             |          |          |  |
| Longitudinal Stagger (Y/N)  |             |          |          |  |
| Coating   |             | 6        | 6        | Superficial corrosion from alkali soil.  |
| Corrosion By Soil (Y/N)   | Yes         |          |          |  |
| Corrosion By Water (Y/N)  | No          |          |          |  |

| Bridge Culvert Barrel   |      |          |          |                          |
|---|------|----------|----------|--------------------------|
| Culvert Component   |      | Last     | Now      | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP) |      |          |          |                          |
| Camber POS/ZERO/NEG   | ZERO |          |          |                          |
| Ponding (Y/N)   | No   |          |          |                          |
| Fish Passage Adequacy   |      | X        | X        |                          |
| Baffle  |      | X        | X        |                          |
| (Type : )   |      |          |          |                          |
| Waterway Adequacy   |      | 6        | 6        |                          |
| Icing (Y/N)   | No   |          |          |                          |
| Silting (Y/N)   | No   |          |          |                          |
| Drift (Y/N)   | No   |          |          |                          |
| <b>Barrel General Rating</b>  |      | <b>6</b> | <b>6</b> |                          |

| Downstream End                                |       |          |          |                          |
|---|-------|----------|----------|--------------------------|
| Culvert Component                             |       | Last     | Now      | Explanation of Condition |
| Direction                                     |       | E        |          |                          |
| End Treatment (Concrete, Steel, Others, None) | STEEL |          |          |                          |
| Headwall                                      |       | X        | X        |                          |
| Collar  |       | X        | X        |                          |
| Wingwalls                                     |       | X        | X        |                          |
| (Shape : )                                    |       |          |          |                          |
| Cutoff Wall                                   |       | X        | X        |                          |
| Bevel End                                     |       | 7        | 7        |                          |
| Heaving (mm)                                  | 0     |          |          |                          |
| Invert Above/Below Stream Bed                 | ABOVE |          |          |                          |
| Above/Below (mm)                              | 0     |          |          |                          |
| Scour Protection                              |       | 7        | 6        |                          |
| (Type : <b>NATURAL</b> )                      |       |          |          |                          |
| (Avg. Rock Size(mm) : )                       |       |          |          |                          |
| Scour/Erosion                                 |       | 7        | 6        |                          |
| Beavers (Y/N)                                 | No    |          |          |                          |
| <b>Downstream End General Rating</b>          |       | <b>7</b> | <b>6</b> |                          |

| Structure Usage         |    |      |     |                          |
|-------------------------|----|------|-----|--------------------------|
|                         |    | Last | Now | Explanation of Condition |
| <b>Grade Separation</b> |    |      |     |                          |
| Road Alignment          |    | 7    | 7   | Grass                    |
| Roadway Surface         |    | 7    | 7   |                          |
| (Type : <b>SOIL</b> )   |    |      |     |                          |
| Icing (Y/N)             | No |      |     |                          |
| Traffic Safety Features |    | X    | X   |                          |
| Type                    |    |      |     |                          |
| Lighting                |    | X    | X   |                          |
| Barrel Leakage (Y/N)    | No |      |     |                          |

| <b>Structure Usage</b>                 |    |             |            |                                 |
|--|----|-------------|------------|---------------------------------|
|  |    | <b>Last</b> | <b>Now</b> | <b>Explanation of Condition</b> |
| Drainage                               |    | 7           | 7          |                                 |
| Structure In Use (Y/N)                 | No |             |            |                                 |
| <b>Grade Separation General Rating</b> |    | <b>7</b>    | <b>7</b>   |                                 |

| Maintenance Recommendations                       |  |  |                           |               |           |                   |    |
|---|--|--|---------------------------|---------------|-----------|-------------------|----|
| Inspector Recommendations                         | Year   | Inspector Comments                       | Department Comments       | Target Year   | Est. Cost | Cat #             |    |
| SHOTCRETE REPAIRS                                 |  |  |                           |               |           |                   |    |
| PLACE ADDITIONAL RIP RAP                          |  |  |                           |               |           |                   |    |
| REMOVE DRIFT ACCUMULATION                         |  |  |                           |               |           |                   |    |
| INSTALL CONCRETE/STEEL LINING                     |  |  |                           |               |           |                   |    |
| INSTALL STRUTS                                    |  |  |                           |               |           |                   |    |
| INSTALL CONCRETE COLLAR/CUTOFF                    |  |  |                           |               |           |                   |    |
| REPAIR SEAMS                                      |  |  |                           |               |           |                   |    |
| OTHER ACTION                                      |  |  |                           |               |           |                   |    |
| OTHER ACTION                                      |  |  |                           |               |           |                   |    |
| OTHER ACTION                                      |  |  |                           |               |           |                   |    |
| OTHER ACTION                                      |  |  |                           |               |           |                   |    |
| <b>Structural Condition Rating (Last/Now) (%)</b> | <b>66.7/66.7</b>   | <b>Sufficiency Rating (Last/Now) (%)</b> | <b>65.4/64.4</b>          | Est. Repl. Yr | 2025      | Maint. Req. (Y/N) | No |
| Special Comments for Next Inspection              |  |  | Department Comments       |               |           |                   |    |
| Maintenance Reviewed By                           |  |  | Date                      |               |           | Estimated Total   | 0  |
| Proposed Long-Term Strategy                       | 2007.05.21 Remove or remediate the structure when convenient, or remove it from cattlepass listing and reclassify it as a culvert. |  |                           |               |           |                   |    |
| On 3-Year Program (Y/N)                           |  |  |                           |               |           |                   |    |
| Proposed Action                                   |  |  |                           |               |           |                   |    |
| Previous Inspector's Name                         | Garry Roberts  |  | Previous Assistant's Name |               |           |                   |    |
| Next Inspection Date                              | 18-Jan-2016  |  | Previous Inspection Date  | 30-Jan-2009   |           |                   |    |
| Inspection Cycle (Default) (months)               | 39   |  |                           |               |           |                   |    |
| Comment   |  |  |                           |               |           |                   |    |