|  |          |           |              |             | Dride    | o Culve                        | art Inon                      | action                  |               |                       |           |  |  |
|--|----------|-----------|--------------|-------------|----------|--------------------------------|-------------------------------|-------------------------|---------------|-----------------------|-----------|--|--|
| Bridge Eile Nur  | mhor     | 90427     | 1 Bridge Cu  | vort        | DHQQ     | Bridge Culvert Inspection      |                               | CUI 1                   | CUL1          |                       |           |  |  |
| Bridge File Number 80427 -1 Bridge Culvert Year Built 1983 |          |           |              |             |          | Form Type                      |                               | 4                       |               |                       |           |  |  |
| Bridge or Town Name PINCHER CREE                           |          |           |              |             |          |                                | Lot No. Inspector Name        |                         |               | <u> </u>              |           |  |  |
| Located Over TRAIL-ANIMAL, OVER                            |          |           |              | ED CD       | CD       |                                |                               |                         |               | Calvin Roberts        |           |  |  |
|  |          |           |              |             |          | Inspector Class Assistant Name |                               | DR CLS B                | BR CLS B      |                       |           |  |  |
| Located On 507:02 C1 30.859                                |          |           |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Water Body Cl  |          |           |              |             |          | Assistant Class                |                               |                         | 00 Nov. 0040  |                       |           |  |  |
| Navigabil. Cl./Y   |          | NE 050    |              | 505.00.14/4 |          | Inspection Da                  |                               |                         |               | 09-Nov-2012           |           |  |  |
| Legal Land Location NE SEC 21 TWP 6 RGE 30 W4N             |          |           |              |             | ·IVI     |                                | Data Entry By                 |                         |               | Lauren Korte          |           |  |  |
| Longitude, Latitude -113:58:30, 49:29:                     |          |           |              |             |          |                                | Data Entry Date Reviewer Name |                         |               | 13-Dec-2012           |           |  |  |
| Road Authority Alberta Transpo                             |          |           |              |             |          |                                |                               |                         |               | Garry Roberts         |           |  |  |
| Contract Main. Area CMA26                                  |          |           |              |             |          |                                |                               | Date                    |               | 14-Nov-2012           |           |  |  |
| Clear Roadway  | //Skew   |           | deg. (RHF)   |             |          |                                | Dept. Reviewer Name           |                         |               |                       |           |  |  |
| AADT/Year  |          | 1,270 / 2 |              |             |          |                                | Dept. Review Date             |                         | 27-Dec-2012   |                       |           |  |  |
| Road Classifica  |          | RCU-20    | 8-110        |             |          |                                | Follow-Up By                  |                         |               |                       |           |  |  |
| Detour Length  |          | 13        |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Bridge Culver  |          |           |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Number of Cul  |          |           | 1            |             | 5. \  -  |                                |                               |                         | 0 - "         | DI (OL :              |           |  |  |
| Pipe #   | Barrel   | ,         | Span         | Rise (or    | Dia.)    | Туре                           |                               | Length                  | Corr. Profile | PI./Slab<br>Thickness | Shape     |  |  |
| 1  | MAIN     |           | -            | 2200        |          | MP                             |                               | 22                      |               |                       | ROUND     |  |  |
| Special Feature  | es       |           |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Special Feature  | es Comi  | ment      |              |             |          |                                |                               |                         |               |                       |           |  |  |
|  |          |           |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Degratined \/ent   | Classes  | aa Daatii | - c: (m)     |             | Po       | sting ii                       | nformat                       | on                      |               |                       |           |  |  |
| Required Vert.   |          |           |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Posted Vertica   |          |           |              | La A ala    | /        | () ( ( ) 1 )                   | 1.                            | OD                      | O D-i-l ()    | La Aahaa              | ()//NI)   |  |  |
| Posted: Lane   |          |           | Bridge (m)   | In Aav      | vance (  | (Y/IN)                         | L                             | ane SB                  | On Bridge (m) | In Adva               | nce (Y/N) |  |  |
| Remarks  | Not re   | equired.  |              |             | 11/1     | :::::: /!                      | (                             | -1)                     |               |                       |           |  |  |
| Litility Attachma  | noto     |           |              |             | Ut       | llities (L                     | _ocated                       | at)                     |               |                       |           |  |  |
| Utility Attachme   |          | ditch.    |              |             |          |                                | Gas                           |                         |               |                       |           |  |  |
| Telephone<br>Power   | South    | ulteri.   |              |             |          |                                | Municipal                     |                         |               |                       |           |  |  |
|  |          |           |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Others<br>Remarks  |          |           |              |             |          |                                | Proble                        | n (Y/N) No              |               |                       |           |  |  |
| Remarks  |          |           |              | Λ           | DD # 0.0 | ah Daa                         | d / Emb                       | n km on t               |               |                       |           |  |  |
|  |          |           |              | A           | Last     | Now                            |                               | ankment<br>ation of Cor | dition        |                       |           |  |  |
| Harizantal Alia  | omont    |           |              |             | 7        | 7                              | Ехріаі                        | ation of Cor            | idition       |                       |           |  |  |
| Horizontal Align<br>Vertical Alignm                        |          |           |              |             | 7        | 7                              | -                             |                         |               |                       |           |  |  |
| Roadway Widtl  |          |           | 9.400        |             | /        |                                |                               |                         |               |                       |           |  |  |
|  | (111)    |           | 3.400        |             |          |                                |                               |                         |               |                       |           |  |  |
| Embankment   |          |           | 7            | 7           |          |                                |                               |                         |               |                       |           |  |  |
| Sideslope (:1)   |          | 4.0       |              |             |          |                                |                               |                         |               |                       |           |  |  |
| (Height of Cover(m) : 1.1)                                 |          |           |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Guardrail (Y/N)  |          | No        |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Approach Roa   | d / Eml  | bankmer   | nt General F | Rating      | 7        | 7                              |                               |                         |               |                       |           |  |  |
|  |          |           |              |             |          | Unstre                         | am End                        |                         |               |                       |           |  |  |
| Culvert Comp   | onent    |           |              |             |          | Now                            |                               | ation of Cor            | ndition       |                       |           |  |  |
| Direction  | - I OIII |           |              |             | Lust     | 110 44                         | North.                        | <u></u>                 |               |                       |           |  |  |
| End Treatment (Concrete, Steel,                            |          | I, STEEL  |              |             |          | 1.101111.                      |                               |                         |               |                       |           |  |  |
| Others, None) Headwall                                     |          |           |              | X           | X        |                                |                               |                         |               |                       |           |  |  |
|  |          |           |              |             |          |                                |                               |                         |               |                       |           |  |  |
| Collar   |          |           | X            | X           |          |                                |                               |                         |               |                       |           |  |  |

80427 -1 Bridge Culvert

| Upstream End                                |                      |       |        |                                       |  |  |  |  |  |
|---|----------------------|-------|--------|---------------------------------------|--|--|--|--|--|
| Culvert Component                           |                      | Last  | Now    | Explanation of Condition              |  |  |  |  |  |
| Wingwalls                                   |                      | Х     | X      |                                       |  |  |  |  |  |
| (Shape: )                                   |                      |       |        |                                       |  |  |  |  |  |
| Cutoff Wall                                 |                      | X     | X      |                                       |  |  |  |  |  |
| Bevel End                                   |                      | 7     | 6      | Minor damage to lip of bevel.         |  |  |  |  |  |
| Heaving (mm)                                | 0                    |       |        |                                       |  |  |  |  |  |
| Invert Above/Below Stream Bed               | BELOW                |       |        |                                       |  |  |  |  |  |
| Above/Below (mm)                            | 300                  |       |        |                                       |  |  |  |  |  |
| Scour Protection                            |                      | 5     | 5      | Some minor erosion around the bevel.  |  |  |  |  |  |
| (Type: <b>NATURAL</b> )                     |                      |       |        |                                       |  |  |  |  |  |
| (Avg. Rock Size(mm):)                       |                      |       |        |                                       |  |  |  |  |  |
| Scour/Erosion                               |                      | 5     | 5      |                                       |  |  |  |  |  |
| Beavers (Y/N)                               | No                   |       |        |                                       |  |  |  |  |  |
| Upstream End General Rating                 |                      | 7     | 5      |                                       |  |  |  |  |  |
|   |                      | Brid  | dge Cu | Ivert Barrel                          |  |  |  |  |  |
| <b>Culvert Component</b>                    |                      | Last  | Now    | Explanation of Condition              |  |  |  |  |  |
| (Pipe # : 1, Primary Span, Loca             | tion Code: MAIN, Spa | n (mm | ı):    | , Rise (mm): 2200, Type: MP)          |  |  |  |  |  |
| Barrel Last Accessible Date                 | 09-Nov-2012          |       |        |                                       |  |  |  |  |  |
| Special Features                            |                      |       |        |                                       |  |  |  |  |  |
| Special Feature                             |                      |       |        |                                       |  |  |  |  |  |
| (Type:)                                     |                      |       |        |                                       |  |  |  |  |  |
| Special Feature                             |                      |       |        |                                       |  |  |  |  |  |
| (Type:)                                     |                      |       |        |                                       |  |  |  |  |  |
| Roof  |                      | 8     | 8      |                                       |  |  |  |  |  |
| Measured Rise (mm)                          | 2200                 |       |        |                                       |  |  |  |  |  |
| Measured At Ring No.                        | 2                    |       |        |                                       |  |  |  |  |  |
| Sag (mm)                                    | 0                    |       |        |                                       |  |  |  |  |  |
| Percent Sag                                 |                      |       |        |                                       |  |  |  |  |  |
| Sidewall                                    |                      | 8     | 8      |                                       |  |  |  |  |  |
| Measured Span (mm)                          | 2200                 |       |        |                                       |  |  |  |  |  |
| Measured At Ring No.                        | 2                    |       |        |                                       |  |  |  |  |  |
| Deflection (mm)                             | 0                    |       |        |                                       |  |  |  |  |  |
| Percent Deflection                          |                      |       |        |                                       |  |  |  |  |  |
| Floor                                       |                      | 7     | 7      |                                       |  |  |  |  |  |
| Bulge (mm)                                  | 0                    |       |        |                                       |  |  |  |  |  |
| Measured At Ring No.                        |                      |       |        |                                       |  |  |  |  |  |
| Abrasion (Y/N)                              | No                   |       |        |                                       |  |  |  |  |  |
| Circumferential Seams                       |                      | 7     | 7      |                                       |  |  |  |  |  |
| Separation (mm) 30                          |                      |       |        |                                       |  |  |  |  |  |
| Longitudinal Seams                          |                      | X     | X      |                                       |  |  |  |  |  |
| Total No. of Cracked Rings                  |                      |       |        |                                       |  |  |  |  |  |
| Total No. of Rings with Two Cracked Seams   |                      |       |        |                                       |  |  |  |  |  |
| Min. Remaining Steel<br>Between Cracks (mm) |                      |       |        |                                       |  |  |  |  |  |
| Proper Lap (Y/N)                            |                      |       |        |                                       |  |  |  |  |  |
| Longitudinal Stagger (Y/N)                  |                      |       |        |                                       |  |  |  |  |  |
| Coating                                     |                      | 7     | 6      |                                       |  |  |  |  |  |
| Corrosion By Soil (Y/N)                     | No                   |       |        | Minor superficial corrosion at floor. |  |  |  |  |  |
| Corrosion By Water (Y/N)                    | Yes                  |       |        |                                       |  |  |  |  |  |

|   |                      | Bri   | dge Cu  | Ivert Barrel                                |
|---|----------------------|-------|---------|---|
| Culvert Component                             |                      | Last  | Now     | Explanation of Condition                    |
| (Pipe #: 1, Primary Span, Loca                | tion Code: MAIN, Spa | n (mm | 1):     | , Rise (mm): 2200, Type: MP)                |
| Camber POS/ZERO/NEG                           | ZERO                 |       |         |   |
| Ponding (Y/N) No                              |                      |       |         |   |
| Fish Passage Adequacy                         |                      |       | X       |   |
| Baffle  |                      | Х     | X       |   |
| (Type:)                                       |                      |       |         |   |
| Waterway Adequacy                             |                      | 7     | 7       | Handles drainage.                           |
| Icing (Y/N)                                   | No                   |       |         |   |
| Silting (Y/N)                                 | No                   |       |         |   |
| Drift (Y/N) No                                |                      |       |         |   |
| Barrel General Rating                         |                      | 8     | 8       |   |
|   |                      |       |         | ream End                                    |
| Culvert Component                             |                      | Last  | Now     | Explanation of Condition                    |
| End Treatment (Concrete, Steel, Others, None) | STEEL                |       |         |   |
| Headwall                                      |                      | Х     | X       |   |
| Collar  |                      | Х     | Х       |   |
| Wingwalls                                     |                      | Х     | X       |   |
| (Shape: )                                     |                      |       |         |   |
| Cutoff Wall                                   |                      | Х     | X       |   |
| Bevel End                                     |                      | 7     | 7       |   |
| Heaving (mm)                                  | 0                    |       |         |   |
| Invert Above/Below Stream Bed                 | ABOVE                |       |         |   |
| Above/Below (mm)                              | 100                  |       |         |   |
| Scour Protection                              |                      | 5     | 5       |   |
| (Type : <b>NATURAL</b> )                      |                      |       |         |   |
| (Avg. Rock Size(mm):)                         |                      |       |         |   |
| Scour/Erosion                                 |                      | 5     | 5       | Some minor erosion at the end of the bevel. |
| Beavers (Y/N)                                 | No                   |       |         |   |
| Downstream End General Ratio                  | ng                   | 7     | 5       |   |
|   |                      | Ş     | Structu | re Usage                                    |
|   |                      | Last  | Now     | Explanation of Condition                    |
| Grade Separation                              |                      |       |         |   |
| Road Alignment                                |                      | 7     | 7       | Just used for drainage.                     |
| Roadway Surface                               |                      | X     | X       | oust used for drainage.                     |
| (Type:)                                       |                      |       |         |   |
| Icing (Y/N)                                   | No                   |       |         |   |
| Traffic Safety Features                       |                      | X     | X       |   |
| Type NONE                                     |                      |       |         |   |
| Lighting                                      |                      | Х     | X       |   |
| Barrel Leakage (Y/N)                          | No                   |       |         |   |

| Structure Usage                 |  |      |     |                          |  |  |  |  |  |
|---------------------------------|--|------|-----|--------------------------|--|--|--|--|--|
| L                               |  | Last | Now | Explanation of Condition |  |  |  |  |  |
| Drainage                        |  | 6    | 6   |                          |  |  |  |  |  |
| Structure In Use (Y/N) No       |  |      |     |                          |  |  |  |  |  |
| Grade Separation General Rating |  |      | 6   |                          |  |  |  |  |  |

|  |             |                         | Maintena               | nce Recommen                        | dations                |               |               |                |           |    |
|--|-------------|-------------------------|------------------------|-------------------------------------|------------------------|---------------|---------------|----------------|-----------|----|
| Inspector Recommendations                  | Year        | Year Inspector Comments |                        |                                     | Department Com         | ments         | Target Year   | Est. Cost      | Cat #     |    |
| SHOTCRETE REPAIRS                          |             |                         |                        |                                     |                        |               |               |                |           |    |
| PLACE ADDITIONAL RIP RAP                   |             |                         |                        |                                     |                        |               |               |                |           |    |
| REMOVE DRIFT ACCUMULATION                  |             |                         |                        |                                     |                        |               |               |                |           |    |
| INSTALL CONCRETE/STEEL LINING              | 3           |                         |                        |                                     |                        |               |               |                |           |    |
| INSTALL STRUTS                             |             |                         |                        |                                     |                        |               |               |                |           |    |
| INSTALL CONCRETE COLLAR/CUTOFF             |             |                         |                        |                                     |                        |               |               |                |           |    |
| REPAIR SEAMS                               |             |                         |                        |                                     |                        |               |               |                |           |    |
| OTHER ACTION                               |             |                         |                        |                                     |                        |               |               |                |           |    |
| OTHER ACTION                               |             |                         |                        |                                     |                        |               |               |                |           |    |
| OTHER ACTION                               |             |                         |                        |                                     |                        |               |               |                |           |    |
| OTHER ACTION                               |             |                         |                        |                                     |                        |               |               |                |           |    |
| Structural Condition Rating (Last/N (%)    | ow) 88.9/   | 88.9                    | Sufficiency Rating (%) | Sufficiency Rating (Last/Now)<br>%) |                        | Est. Repl. Yr | 2033 Maint. I |                | qd. (Y/N) | No |
| Special<br>Comments for<br>Next Inspection |             |                         |                        |                                     | Department<br>Comments |               |               |                |           |    |
| Maintenance Reviewed By                    |             |                         |                        |                                     | Date                   |               | 1             | Estimated Tota | 1 0       |    |
| Proposed Long-Term Strategy                |             |                         |                        |                                     |                        |               |               |                | '         |    |
| On 3-Year Program (Y/N)                    |             |                         |                        |                                     |                        |               |               |                |           |    |
| Proposed Action                            |             |                         |                        |                                     |                        |               |               |                |           |    |
| Previous Inspector's Name                  | Garry Rober | S                       |                        | Previous                            | s Assistant's Name     |               |               |                |           |    |
| Next Inspection Date                       | 09-Feb-2016 |                         |                        | Previous                            | Inspection Date        | 12-Sep-2009   |               |                |           |    |
| Inspection Cycle (Default) (months)        | 39          |                         |                        |                                     |                        |               |               |                |           |    |
| Comment                                    |             |                         |                        |                                     |                        |               |               |                |           |    |