

| Bridge Culvert Inspection | | | |
|---------------------------|--|---------------------|---------------|
| Bridge File Number | 72288 -1 Bridge Culvert | Form Type | CUL1 |
| Year Built | 1986 | Lot No. | 4 |
| Bridge or Town Name | NIGHTINGALE | Inspector Name | Garry Roberts |
| Located Over | TRIBUTARY TO SERVICEBERRY CREEK, 3.33.9.10, WATERCRS-ST | Inspector Class | BR CLS A |
| Located On | 564:06 C1 21.099 | Assistant Name | |
| Water Body Cl./Year | | Assistant Class | |
| Navigabil. Cl./Year | | Inspection Date | 12-Jan-2012 |
| Legal Land Location | SE SEC 26 TWP 25 RGE 25 W4M | Data Entry By | Erin Roberts |
| Longitude, Latitude | -113:22:40, 51:09:15 | Data Entry Date | 07-Feb-2012 |
| Road Authority | Alberta Transportation (AIT) | Reviewer Name | Tom Carey |
| Contract Main. Area | CMA30 | Review Date | 18-Jan-2012 |
| Clear Roadway/Skew | 9.1 / | Dept. Reviewer Name | Tim Davies |
| AADT/Year | 1,010 / 2010 (A) | Dept. Review Date | 09-Feb-2012 |
| Road Classification | RLU-208-100 | Follow-Up By | |
| Detour Length (km) | 6 | | |

Bridge Culvert Information

| | | | | | | | | |
|--------------------------|--------|------|----------------|------|--------|---------------|--------------------|-------|
| Number of Culverts | 1 | | | | | | | |
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | - | 1800 | MP | 21 | 125X26 | 2.8 | ROUND |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

| | | | |
|---------------------|---------------------------|---------------|----|
| Utility Attachments | | | |
| Telephone | ALONG SOUTH DITCH | Gas | |
| Power | 3 WIRE O/H IN NORTH DITCH | Municipal | |
| Others | | Problem (Y/N) | No |
| Remarks | | | |

Approach Road / Embankment

| | Last | Now | Explanation of Condition |
|--|----------|----------|-----------------------------|
| Horizontal Alignment | 7 | 7 | RR 251 50m East. |
| Vertical Alignment | 7 | 7 | Hills East & West |
| Roadway Width (m) | 9.100 | | Culvert short for roadway - |
| Embankment | 5 | 5 | |
| Sideslope (:1) | 2.5 | | |
| (Height of Cover(m) : 0.6) | | | |
| Guardrail (Y/N) | No | | |
| Approach Road / Embankment General Rating | 7 | 7 | |

Upstream End

| Culvert Component | Last | Now | Explanation of Condition |
|---|-------|-----|--------------------------|
| Direction | N | | North |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | |
| Headwall | X | X | |
| Collar | X | X | |
| Wingwalls | X | X | |
| (Shape :) | | | |

| Upstream End | | | | |
|---|-------------|----------|----------|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| Cutoff Wall | | X | X | |
| Bevel End | | 6 | 6 | |
| Heaving (mm) | 75 | | | |
| Invert Above/Below Stream Bed | ABOVE | | | |
| Above/Below (mm) | 75 | | | |
| Scour Protection | | 5 | 5 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 250) | | | | |
| Scour/Erosion | | 5 | 5 | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | 5 | 5 | |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP) | | | | |
| Barrel Last Accessible Date | 12-Jan-2012 | | | |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | 4 | 5 | Localized 70mm construction dent in R1 roof 1m from end. |
| Measured Rise (mm) | 1670 | | | |
| Measured At Ring No. | 2 | | | |
| Sag (mm) | 130 | | | |
| Percent Sag | 7 | | | |
| Sidewall | | 5 | 5 | |
| Measured Span (mm) | 1930 | | | |
| Measured At Ring No. | 3 | | | |
| Deflection (mm) | 130 | | | |
| Percent Deflection | 7 | | | |
| Floor | | 4 | 5 | |
| Bulge (mm) | 0 | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | No | | | |
| Circumferential Seams | | 6 | 6 | BOLTED |
| Separation (mm) | 50 | | | |
| Longitudinal Seams | | X | X | |
| 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 | | 4 | 4 | Some pitting-no perforations |
| Corrosion By Soil (Y/N) | No | | | |
| Corrosion By Water (Y/N) | Yes | | | |
| Camber POS/ZERO/NEG | ZERO | | | |

| Bridge Culvert Barrel | | | | |
|---|-----------|----------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP) | | | | |
| Ponding (Y/N) | No | | | |
| Fish Passage Adequacy | | 5 | 5 | |
| Baffle | | X | X | |
| (Type :) | | | | |
| Waterway Adequacy | | 5 | 7 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | No | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | 4 | 5 | |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | S | | |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | X | X | |
| Collar | | X | X | |
| Wingwalls | | X | X | |
| (Shape :) | | | | |
| Cutoff Wall | | X | X | |
| Bevel End | | 6 | 7 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | ABOVE | | | |
| Above/Below (mm) | 200 | | | |
| Scour Protection | | 5 | 7 | |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 300) | | | | |
| Scour/Erosion | | 5 | 7 | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | 5 | 7 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | 8 | 6 | Meandering channel. |
| Bank Stability | | 7 | 8 | |
| HWM (m below Top of Culvert) | | | | Not visible |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | DEGRADING | | | |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 8 | 6 | |

| 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 | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 44.4/55.6 | Sufficiency Rating (Last/Now) (%) | 51.3/63.2 | Est. Repl. Yr | 2025 | Maint. Req'd. (Y/N) | No |
| 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 | William Reardon | | Previous Assistant's Name | | | | |
| Next Inspection Date | 12-Apr-2015 | | Previous Inspection Date | 04-Dec-2008 | | | |
| Inspection Cycle (Default) (months) | 39 | | | | | | |
| Comment | | | | | | | |