

| Bridge Culvert Inspection | | | | |
|---------------------------|---|--|---------------------|--------------------|
| Bridge File Number | 74373 -1 Bridge Culvert | | Form Type | CUL1 |
| Year Built | 1994 | | Lot No. | 4 |
| Bridge or Town Name | COLINTON | | Inspector Name | Todd Warshawski |
| Located Over | LITTLE PINE CREEK, 8.11.68.11, WATERCRS-ST | | Inspector Class | BR CLS B |
| Located On | 827:04 C1 32.737 | | Assistant Name | |
| Water Body Cl./Year | | | Assistant Class | |
| Navigabil. Cl./Year | | | Inspection Date | 08-Mar-2010 |
| Legal Land Location | SW SEC 12 TWP 65 RGE 22 W4M | | Data Entry By | Theresa Lacusta |
| Longitude, Latitude | -113:12:27, 54:36:33 | | Data Entry Date | 25-Mar-2010 |
| Road Authority | Alberta Transportation (AIT) | | Reviewer Name | Arnold Assenheimer |
| Contract Main. Area | CMA10 | | Review Date | 11-Mar-2010 |
| Clear Roadway/Skew | 9.7 / | | Dept. Reviewer Name | Brent Herrick |
| AADT/Year | 220 / 2008 (A) | | Dept. Review Date | 25-Mar-2010 |
| Road Classification | RCU-209-110 | | Follow-Up By | |
| Detour Length (km) | 3 | | | |

Bridge Culvert Information

| Number of Culverts | | 1 | | | | | | |
|--------------------------|--------|----------------------------|----------------|------|--------|---------------|--------------------|-------|
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | - | 3670 | SP | 93.3 | 152X51 | 5.0,5.0,5.0 | ROUND |
| Special Features | | | | | | | | |
| Special Features Comment | | BF tag on top of headwall. | | | | | | |

Utilities (Located at)

| | | | | | | | |
|---------------------|--|---------------|--|--|--|--|--|
| Utility Attachments | | | | | | | |
| Telephone | | Gas | | | | | |
| Power | | Municipal | | | | | |
| Others | | Problem (Y/N) | | | | | |
| Remarks | | | | | | | |

Approach Road / Embankment

| | | Last | Now | Explanation of Condition |
|--|-------|----------|----------|--|
| Horizontal Alignment | | 7 | 7 | Land / residence access North & South. Bottom of sag curve. |
| Vertical Alignment | | 6 | 6 | |
| Roadway Width (m) | 9.700 | | | |
| Embankment | | N | 7 | 12.0m |
| Sideslope (:1) | 3.0 | | | |
| (Height of Cover (m) :) | | | | |
| Guardrail (Y/N) | No | | | |
| Approach Road / Embankment General Rating | | 6 | 6 | |

Upstream End

| Culvert Component | | Last | Now | Explanation of Condition |
|---|----------|------|-----|------------------------------|
| Direction | | E | | |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | | |
| Headwall | | 6 | 6 | Vertical cracks in headwall. |
| Collar | | N | N | Snow covered. |
| Wingwalls | | X | X | |
| (Shape :) | | | | |

| Upstream End | | | | |
|--|-------------|----------|----------|---|
| Culvert Component | | Last | Now | Explanation of Condition |
| Cutoff Wall | | N | N | Ice covered. |
| Bevel End | | N | N | |
| Heaving (mm) | 100 | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 600 | | | |
| Scour Protection | | N | 6 | (60% sandstone.) |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size (mm) : 1000) | | | | |
| Scour/Erosion | | N | 6 | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | 6 | N | |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 3670, Type: SP) | | | | |
| Barrel Last Accessible Date | 08-Mar-2010 | | | |
| Special Features | | | | |
| Special Feature | | | | Ice 0.8m from crown @ R14. |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | 6 | 6 | Flattening of roof ring 7-14 |
| Measured Rise (mm) | | | | |
| Measured At Ring No. | | | | 3% estimated. |
| Sag (mm) | | | | |
| Percent Sag | | | | |
| Sidewall | | 6 | N | Due to height of ice in pipe an accurate measurement could not be obtained. |
| Measured Span (mm) | 3790 | | | |
| Measured At Ring No. | 14 | | | |
| Deflection (mm) | 120 | | | (3.3% from 19/Sept/2003) |
| Percent Deflection | 3 | | | |
| Floor | | N | N | (1m silt. 19/Sept/2003) Ice covered. |
| Bulge (mm) | 0 | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | No | | | |
| Circumferential Seams | | 8 | 8 | Upper 1/3 inspected. |
| Separation (mm) | 0 | | | |
| Longitudinal Seams | | 7 | 7 | Upper seams inspected only. |
| Total No. of Cracked Rings | 0 | | | |
| Total No. of Rings with Two Cracked Seams | | | | |
| Min. Remaining Steel Between Cracks (mm) | | | | Stagger 1N |
| Proper Lap (Y/N) | Yes | | | |
| Longitudinal Stagger (Y/N) | Yes | | | |
| Coating | | 5 | 5 | Minor superficial rust bottom third.-29-Nov-2006 |
| Corrosion By Soil (Y/N) | No | | | |
| Corrosion By Water (Y/N) | Yes | | | |
| Camber POS/ZERO/NEG | NEG | | | |

| Bridge Culvert Barrel | | | | |
|--|-------|----------|----------|------------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 3670, Type: SP) | | | | |
| Ponding (Y/N) | No | | | |
| Fish Passage Adequacy | | X | 6 | |
| Baffle | | X | X | |
| (Type :) | | | | |
| Waterway Adequacy | | 8 | 8 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | Yes | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | 6 | 6 | |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | W | | |
| End Treatment (Concrete, Steel, Others, None) | STEEL | | | |
| Headwall | | X | X | |
| Collar | | X | X | |
| Wingwalls | | X | X | |
| (Shape :) | | | | |
| Cutoff Wall | | X | X | |
| Bevel End | | N | N | |
| Heaving (mm) | 200 | | | |
| Invert Above/Below Stream Bed | BELOW | | | Ice civered, |
| Above/Below (mm) | 300 | | | |
| Scour Protection | | N | 6 | 50% sandstone. |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size (mm) : 1000) | | | | |
| Scour/Erosion | | N | 6 | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | 6 | N | G.R. carried forward |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | 7 | 8 | |
| Bank Stability | | N | 8 | |
| HWM (m below Top of Culvert) | | | | HWM not visible. |
| Drift (Y/N) | No | | | Ice 0.8 from crow March,2010 |
| Channel Bottom Degrading/Aggrading | | | | |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 7 | 8 | |

| 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) (%) | 66.7/66.7 | Sufficiency Rating (Last/Now) (%) | 73.9/72.5 | Est. Repl. Yr | 2038 | Maint. Req. (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 | Jason Saly | | Previous Assistant's Name | | | | |
| Next Inspection Date | 08-Jun-2013 | | Previous Inspection Date | 29-Nov-2006 | | | |
| Inspection Cycle (Default) (months) | 39 | | | | | | |
| Comment | | | | | | | |