

| Bridge Culvert Inspection | | | |
|---------------------------|--|---------------------|-----------------|
| Bridge File Number | 01761 -2 Bridge Culvert | Form Type | CUL1 |
| Year Built | 2001 | Lot No. | 3 |
| Bridge or Town Name | LAVOY | Inspector Name | Jason Saly |
| Located Over | TRIBUTARY TO COTTONWOOD CK, 6.5.29.1, WATERCRS-ST | Inspector Class | BR CLS A |
| Located On | 36:20 C1 6.733 | Assistant Name | |
| Water Body Cl./Year | | Assistant Class | |
| Navigabil. Cl./Year | | Inspection Date | 09-Jan-2013 |
| Legal Land Location | NW SEC 13 TWP 52 RGE 13 W4M | Data Entry By | Marcia Chavez |
| Longitude, Latitude | -111:47:45, 53:29:34 | Data Entry Date | 12-Feb-2013 |
| Road Authority | Alberta Transportation (AIT) | Reviewer Name | John O'Brien |
| Contract Main. Area | CMA14 | Review Date | 19-Jan-2013 |
| Clear Roadway/Skew | 11 / | Dept. Reviewer Name | Darron Ahlstedt |
| AADT/Year | 730 / 2011 (A) | Dept. Review Date | 13-Feb-2013 |
| Road Classification | RAU-211.8-110 | Follow-Up By | |
| Detour Length (km) | 28 | | |

Bridge Culvert Information

| | | | | | | | | |
|--------------------------|--------|------|----------------|------|--------|---------------|--------------------|-------|
| Number of Culverts | 1 | | | | | | | |
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | - | 2400 | MP | 45 | 125X26 | 2.8 | ROUND |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

| | | | |
|---------------------|-----------------------------|---------------|----|
| Utility Attachments | | | |
| Telephone | East r/w. | Gas | |
| Power | 2 line to East, fence line. | Municipal | |
| Others | | Problem (Y/N) | No |
| Remarks | | | |

Approach Road / Embankment

| | Last | Now | Explanation of Condition |
|--|----------|----------|--|
| Horizontal Alignment | 7 | 7 | Farm residence NE. Hills each side. No passing both directions. |
| Vertical Alignment | 6 | 6 | |
| Roadway Width (m) | 11.200 | | Wide crack in ACP above pipe. |
| Embankment | 8 | N | (Silt fences on both embankments; in disrepair. 09Dec2010) - Snow covered, but no signs of problems. |
| Sideslope (__:1) | 3.0 | | |
| (Height of Cover(m) : 3.1) | | | |
| Guardrail (Y/N) | No | | |
| Approach Road / Embankment General Rating | 6 | 6 | |

Upstream 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 | |

| Upstream End | | | | |
|---|-------------|----------|----------|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| Bevel End | | 8 | 7 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 700 | | | |
| Scour Protection | | 7 | N | Snow covered, but no signs of problems. |
| (Type : RIP RAP) | | | | |
| (Avg. Rock Size(mm) : 400) | | | | |
| Scour/Erosion | | 7 | N | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | 7 | 7 | |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP) | | | | |
| Barrel Last Accessible Date | 09-Jan-2013 | | | Water at springline - appears to be at all times. Ice within 1.1m of crown at W end, 1.2m at E end. |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | 7 | 7 | Could not measure rise due to ice. |
| Measured Rise (mm) | 2380 | | | |
| Measured At Ring No. | | | | |
| Sag (mm) | 20 | | | (09Dec2010) |
| Percent Sag | 1 | | | |
| Sidewall | | 7 | 7 | Measurement taken midpipe at ice level. |
| Measured Span (mm) | 2420 | | | |
| Measured At Ring No. | | | | |
| Deflection (mm) | 20 | | | |
| Percent Deflection | 1 | | | |
| Floor | | N | N | (Silt on floor. 23/May/2006). |
| Bulge (mm) | 0 | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | No | | | |
| Circumferential Seams | | 8 | 6 | Minor creasing. |
| Separation (mm) | 15 | | | |
| 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 | | 7 | 7 | Minor |
| Corrosion By Soil (Y/N) | No | | | |
| Corrosion By Water (Y/N) | Yes | | | |
| Camber POS/ZERO/NEG | ZERO | | | |
| Ponding (Y/N) | No | | | |

| Bridge Culvert Barrel | | | | | |
|---|-------|----------|----------|--|--|
| Culvert Component | | Last | Now | Explanation of Condition | |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP) | | | | | |
| Fish Passage Adequacy | | 9 | 8 | | |
| Baffle | | X | X | | |
| (Type :) | | | | | |
| Waterway Adequacy | | 7 | 7 | (Silt will easily flush in flood. 23/May/2006) | |
| Icing (Y/N) | No | | | | |
| Silting (Y/N) | Yes | | | | |
| Drift (Y/N) | No | | | | |
| Barrel General Rating | | 7 | 7 | | |
| 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 | | 8 | 7 | | |
| Heaving (mm) | 0 | | | | |
| Invert Above/Below Stream Bed | BELOW | | | | |
| Above/Below (mm) | 700 | | | | |
| Scour Protection | | 7 | N | Snow covered, but no signs of problems. | |
| (Type : RIP RAP) | | | | | |
| (Avg. Rock Size(mm) : 400) | | | | | |
| Scour/Erosion | | 7 | N | | |
| Beavers (Y/N) | No | | | | |
| Downstream End General Rating | | 7 | 7 | | |
| Structure Usage | | | | | |
| | | Last | Now | Explanation of Condition | |
| Channel (U/S and D/S) | | | | | |
| Alignment | | 8 | 8 | | |
| Bank Stability | | 8 | N | Snow covered, but no signs of problems. | |
| HWM (m below Top of Culvert) | | | | HWM not visible. | |
| Drift (Y/N) | No | | | | |
| Channel Bottom Degrading/Aggrading | | | | Unknown. | |
| Beavers (Y/N) | No | | | | |
| (Fish Compensation Measure 1 : NONE) | | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | | |
| Channel General Rating | | 8 | 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 | 2013 | Remove silt fences at both embankments, if not yet done. | | | | | |
| OTHER ACTION | 2013 | Seal crack in asphalt. | | | | | |
| OTHER ACTION | | | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 77.8/77.8 | Sufficiency Rating (Last/Now) (%) | 75.5/75.5 | Est. Repl. Yr | 2054 | Maint. Req. (Y/N) | Yes |
| 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 | Dave Lam | | Previous Assistant's Name | | | | |
| Next Inspection Date | 09-Oct-2014 | | Previous Inspection Date | 09-Dec-2010 | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |