

| Bridge Culvert Inspection | | | | |
|---------------------------|---|--|---------------------|---------------|
| Bridge File Number | 74324 -1 Bridge Culvert | | Form Type | CULE |
| Year Built | 1958 | | Lot No. | 4 |
| Bridge or Town Name | DEWINTON | | Inspector Name | Jason Rusu |
| Located Over | TRIBUTARY TO PINE CREEK, 2.13.29.1, WATERCRS-ST | | Inspector Class | BR CLS A |
| Located On | 2A:08 L1 2.671 | | Assistant Name | |
| Water Body Cl./Year | | | Assistant Class | |
| Navigabil. Cl./Year | | | Inspection Date | 11-Aug-2012 |
| Legal Land Location | NE SEC 36 TWP 21 RGE 1 W5M | | Data Entry By | Lauren Korte |
| Longitude, Latitude | -114:00:14, 50:49:48 | | Data Entry Date | 05-Sep-2012 |
| Road Authority | Alberta Transportation (AIT) | | Reviewer Name | Garry Roberts |
| Contract Main. Area | CMA27 | | Review Date | 19-Aug-2012 |
| Clear Roadway/Skew | 35 / 0 deg. | | Dept. Reviewer Name | Tim Davies |
| AADT/Year | 18,550 / 2011 (A) | | Dept. Review Date | 06-Sep-2012 |
| Road Classification | RFD-616.6-130 | | Follow-Up By | |
| Detour Length (km) | 1 | | | |

Bridge Culvert Information

| Number of Culverts | | 1 | | | | | | |
|--------------------------|--------|------|----------------|------|--------|---------------|--------------------|-----------|
| Pipe # | Barrel | Span | Rise (or Dia.) | Type | Length | Corr. Profile | Pl./Slab Thickness | Shape |
| 1 | MAIN | 1980 | 1980 | BP | 24.8 | | | RECTANGLE |
| 1 | D/S | - | 900 | MP | 27.4 | | | ROUND |
| Special Features | | | | | | | | |
| Special Features Comment | | | | | | | | |

Utilities (Located at)

| | | | | |
|---------------------|--------------------------|--|---------------|--------------------------|
| Utility Attachments | | | | |
| Telephone | East R/W. | | Gas | |
| Power | 1 wire @ West R/W. | | Municipal | Light standard to North. |
| Others | Fibre optics @ West R/W. | | Problem (Y/N) | No |
| Remarks | | | | |

Approach Road / Embankment

| | | Last | Now | Explanation of Condition |
|--|--------|----------|----------|---|
| Horizontal Alignment | | 7 | 7 | Grade to South. Intersection 750m North. |
| Vertical Alignment | | 7 | 7 | |
| Roadway Width (m) | 35.000 | | | |
| Embankment | | N | 7 | |
| Sideslope (__:1) | 3.0 | | | |
| (Height of Cover(m) : 1) | | | | |
| Guardrail (Y/N) | Yes | | | East side only. |
| Approach Road / Embankment General Rating | | 7 | 7 | |

Upstream End

| Culvert Component | | Last | Now | Explanation of Condition |
|---|--|-------|-----|--------------------------------|
| Direction | | W | | Inlet. 900 mm MP west side. |
| End Treatment (Concrete, Steel, Others, None) | | STEEL | | |
| Headwall | | N | X | |
| Collar | | N | X | |
| Wingwalls (Shape :) | | N | X | |

| Upstream End | | | | |
|---|-------------|----------|----------|---------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| Cutoff Wall | | N | X | |
| Bevel End | | N | 6 | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 100 | | | |
| Scour Protection | | N | 7 | |
| (Type : NATURAL) | | | | |
| (Avg. Rock Size(mm) :) | | | | |
| Scour/Erosion | | N | 7 | |
| Beavers (Y/N) | No | | | |
| Upstream End General Rating | | N | 6 | |
| Bridge Culvert Barrel | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1980, Rise (mm): 1980, Type: BP) | | | | |
| Barrel Last Accessible Date | 11-Aug-2012 | | | |
| Special Features | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | N | 7 | |
| Measured Rise (mm) | 1980 | | | |
| Measured At Ring No. | | | | |
| Sag (mm) | 0 | | | |
| Percent Sag | | | | |
| Sidewall | | N | 7 | |
| Measured Span (mm) | 1980 | | | |
| Measured At Ring No. | | | | |
| Deflection (mm) | 0 | | | |
| Percent Deflection | | | | |
| Floor | | N | N | 100mm of silt. |
| Bulge (mm) | 0 | | | |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | No | | | |
| Circumferential Seams | | N | N | Steelplate covering seam. |
| Separation (mm) | | | | |
| Longitudinal Seams | | N | 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 | | N | X | |
| Corrosion By Soil (Y/N) | | | | |
| Corrosion By Water (Y/N) | | | | |
| Camber POS/ZERO/NEG | ZERO | | | |

| Bridge Culvert Barrel | | | | |
|--|----|----------|----------|--------------------------|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 1980, Rise (mm): 1980, Type: BP) | | | | |
| Ponding (Y/N) | No | | | |
| Fish Passage Adequacy | | 5 | 5 | |
| Baffle | | N | X | |
| (Type :) | | | | |
| Waterway Adequacy | | N | 6 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | No | | | |
| Drift (Y/N) | No | | | |
| Barrel General Rating | | N | 7 | |

| Bridge Culvert Barrel | | | | |
|--|-------------|------|-----|--|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 900, Type: MP) | | | | |
| Barrel Last Accessible Date | 30-Nov-2007 | | | 900mm CSP. Not accessible- not bridge size. |
| Special Features | | | | |
| Special Feature | | | | Viewed from ends- shape appears good. |
| (Type :) | | | | |
| Special Feature | | | | |
| (Type :) | | | | |
| Roof | | N | N | |
| Measured Rise (mm) | 850 | | | |
| Measured At Ring No. | | | | |
| Sag (mm) | 50 | | | |
| Percent Sag | 5 | | | |
| Sidewall | | N | N | |
| Measured Span (mm) | 950 | | | |
| Measured At Ring No. | | | | |
| Deflection (mm) | 50 | | | |
| Percent Deflection | 5 | | | |
| Floor | | N | N | (100mm of silt @ u.s end, 300mm @ d/s end.) Nov 30, 2009 |
| Bulge (mm) | | | | BP has moderate silt accumulation also. |
| Measured At Ring No. | | | | |
| Abrasion (Y/N) | No | | | |
| Circumferential Seams | | N | N | |
| Separation (mm) | 40 | | | |
| Longitudinal Seams | | N | 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 | | N | N | |
| Corrosion By Soil (Y/N) | | | | |
| Corrosion By Water (Y/N) | | | | |
| Camber POS/ZERO/NEG | NEG | | | |

| Bridge Culvert Barrel | | | | |
|---|-----------|----------|----------|---|
| Culvert Component | | Last | Now | Explanation of Condition |
| (Pipe # : 1, Primary Span, Location Code: D/S, Span (mm): , Rise (mm): 900, Type: MP) | | | | |
| Ponding (Y/N) | No | | | |
| Fish Passage Adequacy | | 5 | 5 | |
| Baffle | | N | X | |
| (Type :) | | | | |
| Waterway Adequacy | | N | 6 | |
| Icing (Y/N) | No | | | |
| Silting (Y/N) | No | | | |
| Drift (Y/N) | No | | | |
| Barrel Extension General Rating | | N | N | |
| Downstream End | | | | |
| Culvert Component | | Last | Now | Explanation of Condition |
| Direction | | E | | East end. |
| End Treatment (Concrete, Steel, Others, None) | CONCRETE | | | |
| Headwall | | N | 6 | |
| Collar | | N | X | |
| Wingwalls | | N | 5 | 6mm wide diagonal crack in North. |
| (Shape : FLARE) | | | | |
| Cutoff Wall | | N | X | |
| Bevel End | | N | X | |
| Heaving (mm) | 0 | | | |
| Invert Above/Below Stream Bed | BELOW | | | |
| Above/Below (mm) | 300 | | | |
| Scour Protection | | N | 7 | |
| (Type : NATURAL) | | | | |
| (Avg. Rock Size(mm) :) | | | | |
| Scour/Erosion | | N | 7 | |
| Beavers (Y/N) | No | | | |
| Downstream End General Rating | | N | 5 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Channel (U/S and D/S) | | | | |
| Alignment | | 5 | 5 | Enters at 90 degrees from ditch into 900 mm. Exits at 90 deg. |
| Bank Stability | | N | 6 | |
| HWM (m below Top of Culvert) | | | | HWM not visible. |
| Drift (Y/N) | No | | | |
| Channel Bottom Degrading/Aggrading | AGGRADING | | | |
| Beavers (Y/N) | No | | | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 5 | 5 | |

| 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) (%) | 55.6/77.8 | Sufficiency Rating (Last/Now) (%) | 66.0/67.7 | 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 | | | | | | | |
| On 3-Year Program (Y/N) | | | | | | | |
| Proposed Action | | | | | | | |
| Previous Inspector's Name | Jason Rusu | | Previous Assistant's Name | | | | |
| Next Inspection Date | 11-May-2014 | | Previous Inspection Date | 10-Jan-2011 | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |