

| Bridge Inspection | | | | | | | |
|------------------------|-------------------------------|---------------|------|---------------------|--------------------|---------------|---|
| Bridge File Number | 75651 N-1 Bridge | | | Form Type | SG | | |
| Year Built/Year Supstr | 1964/1964 | | | Lot No. | 2 | | |
| Bridge or Town Name | PONOKA | | | Inspector Name | Owen Salava | | |
| Located Over | 53:08 R1 0.004;53:08 L1 0.003 | | | Inspector Class | BR CLS A | | |
| Located On | 2:26 R1 45.171 | | | Assistant Name | | | |
| Water Body Cl./Year | | | | Assistant Class | | | |
| Navigabil. Cl./Year | | | | Inspection Date | 22-Feb-2013 | | |
| Legal Land Location | SW SEC 1 TWP 43 RGE 26 W4M | | | Data Entry By | Marcia Chavez | | |
| Longitude, Latitude | -113:39:05, 52:40:33 | | | Data Entry Date | 11-Mar-2013 | | |
| Road Authority | Alberta Transportation (AIT) | | | Reviewer Name | John O'Brien | | |
| Contract Main. Area | CMA17 | | | Review Date | 27-Feb-2013 | | |
| Clear Roadway/Skew | 15.9 / 15 deg. (RHF) | | | Dept. Reviewer Name | Chris Black | | |
| AADT/Year | 23,260 / 2011 (A) | | | Dept. Review Date | 14-Mar-2013 | | |
| Road Classification | RFD-412.4-130 | | | Follow-Up By | | | |
| Detour Length (km) | 1 | | | | | | |
| Allowable Load (t): | Single | CS1 60 GIRDER | Semi | CS2 76 GIRDER | Train | CS3 90 GIRDER | ----> On Critical Spans ---->Critical Member |
| Design Loading: | HS20 | | | | ----> Primary Span | | |

| Posting Information | | | | | | | | | | | | |
|--------------------------------------|------|-------------------------------|-------------------|------|------------------|-------------|-----------------|----|---------------|-----|------------------|----|
| Required Vert. Clearance Posting (m) | | UNDER: 53 L1 5.1m, 53 R1 5.1m | | | | | | | | | | |
| Posted Vertical Clearance (Y/N) | | | | | | | | | | | | |
| Posted: | Lane | EB | On Bridge (m) | | In Advance (Y/N) | | Lane | WB | On Bridge (m) | 5.1 | In Advance (Y/N) | No |
| Remarks | | | | | | | | | | | | |
| Required Load Posting (t) | | Single | | Semi | | Truck Train | | | | | | |
| Posted Loading (t) | | Single | | Semi | | Truck Train | | | | | | |
| Posted: | Lane | NB | At Junction (Y/N) | | In Advance (Y/N) | | At Bridge (Y/N) | | | | | |
| Posted: | Lane | SB | At Junction (Y/N) | | In Advance (Y/N) | | At Bridge (Y/N) | | | | | |
| Remarks | | | | | | | | | | | | |

| | | | | | | | | | | | |
|-------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| Hazard Marker At Bridge (Y/N) | | | | | | | | | | | |
| Remarks | | | | | | | | | | | |
| Other Sign Types | | | | | | | | | | | |

| Utilities (Located at) | | | | | | | |
|------------------------|---|--|--|---------------|----|--|--|
| Utility Attachments | | | | | | | |
| Telephone | SE | | | Gas | | | |
| Power | 3 wire 6m north of bridge, underground. | | | Municipal | | | |
| Others | | | | Problem (Y/N) | No | | |
| Remarks | | | | | | | |

| Approach Road | | | | |
|-------------------------------------|--------|-------------|----------|--------------------------|
| | | Last | Now | Explanation of Condition |
| Horizontal Alignment | | 9 | 9 | No rail at NW corner. |
| Vertical Alignment | | 7 | 7 | |
| Roadway Width (m) | 15.800 | | | |
| Approach Bump | | 7 | 7 | |
| Guardrail (Y/N) | Yes | | | |
| Guardrail | | 7 | 7 | |
| Length (m) | 80.000 | | | |
| Current Standard (Y/N) | Yes | | | |
| Termination Type | | TURNED DOWN | | |
| Drainage | | 5 | 5 | |
| Approach Road General Rating | | 7 | 7 | |

| Superstructure | | | | | |
|--|-------|--------------|-------|--|--|
| Bridge Component | | Last | Now | Explanation of Condition | |
| (Primary Span : RB, 3 Spans, Lengths(m): 13.1-26.5-13.1, A-Ident Number: A0429-01) | | | | | |
| Special Features | | | | | |
| Special Feature | | | X | | |
| (Type :) | | | | | |
| Special Feature | | | X | | |
| (Type :) | | | | | |
| Wearing Surface/Deck Top Detail Ratings | | | | | |
| | N (%) | 1 (%) | 2 (%) | 3 (%) | |
| Last | 0 | 0 | 0 | 0 | |
| Now | 5.0 | 0.0 | 0.0 | 0.0 | |
| Wearing Surface | | 6 | 6 | Chipseal worn off at A1 joint, not installed flush to curbs. | |
| (Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT) | | | | | |
| (Thickness(mm) : 50) | | | | | |
| Deck Top | | N | N | | |
| Deck Rideability | | 7 | 7 | | |
| Deck Joints | | 6 | 6 | Missing 4 plow deflectors @ N abut, 8 at S abut. | |
| Temperature (deg. C) | | 3 | | | |
| (Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC)) | | | | | |
| (Fixed Type :) | | | | | |
| Gap Size (mm) | | Gap Location | | | |
| 67 | | N. abut | | | |
| 75 | | S. abut | | | |
| | | | | | |
| Deck Drainage | | 6 | 6 | | |
| Drains Clogged (Y/N) | | No | | | |
| Curbs/Median | | 6 | 6 | 0.3 mm wide transverse cracks 1 to 2m. 1 m wide cracks in ext @ control jnts. Minor spalls to outside face. | |
| (Curb Type : Standard) | | | | | |
| Scaling (Percent Area) | | 0 | | | |
| Bridge Rail | | 5 | 5 | Panel 3 & 6 from N end. Retrofit rail installed. Corrosion @ 3 slats @ 6th from north east side. | |
| (Type : GALVANIZED STEEL VERTICAL BAR) | | | | | |
| Bridge Rail Posts | | 7 | 7 | | |
| (Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL) | | | | | |
| Bridge Rail/Posts Coating | | 6 | 6 | | |
| (Type : GALVANIZED) | | | | | |
| Sidewalk | | X | X | | |
| Girder/Beam | | | | | |
| Cover Plate | | 6 | 5 | Center span sagging 25mm; sprayed with hydraulic oil. HLD WBL denting flange, deflecting to W approx 10mm. HLD EBL denting flange G7, deflecting E 15mm. | |
| Flange | | 6 | 4 | | |
| Web | | 6 | 6 | | |
| Stiffeners | | 7 | 7 | | |
| Splice | | 7 | 7 | | |
| Weld | | 7 | 7 | | |
| Diaphragms/Cross Frame | | 5 | 5 | 1 bolt missing in diaphragm connection NW side. | |

| Superstructure | | | | |
|--|-----|----------|----------|--|
| Bridge Component | | Last | Now | Explanation of Condition |
| (Primary Span : RB, 3 Spans, Lengths(m): 13.1-26.5-13.1, A-Ident Number: A0429-01) | | | | |
| Paint Condition | | 6 | 6 | Blue. |
| (Colour Description :) | | | | |
| (Colour Code :) | | | | |
| Touchup Required (Y/N) | No | | | |
| Bearings | | 6 | 6 | Overexpanded 25 mm at SE. Pier 2 is fixed. 25% corrosion with some pitting @ abutments. |
| Temperature (deg. C) | 3 | | | |
| (Expansion Type : STEEL SLIDING PLATES WITH BRONZE PLATE IN BETWEEN) | | | | |
| (Fixed Type : PINNED BEARING) | | | | |
| Coating Adequate (Y/N) | No | | | |
| Functioning (Y/N) | Yes | | | |
| Deck Underside | | 5 | 5 | Corrosion stains @E side S2-3; sprayed with hydraulic oil. S1G7 has haunch spall at A1. Delamination of concrete at NE corner of deck. |
| Stains (Percent Area) | 5 | | | |
| Span Alignment Problems | | | | |
| Vertical (Y/N) | No | | | Skew pressures have jammed bridge at SE with spall at underside of curb. |
| Horizontal (Y/N) | Yes | | | |
| Superstructure General Rating | | 5 | 4 | |
| Substructure | | | | |
| Bridge Component | | Last | Now | Explanation of Condition |
| Abutments | | | | |
| Bearing Seats/Caps | | 8 | 8 | |
| (Type : CONCRETE) | | | | |
| Backwalls/Breastwalls | | 8 | 8 | |
| Wingwalls | | 7 | 7 | SE wingwall spalled due to jammed curb. |
| Piles | | N | N | |
| Paint/Coating | | 7 | 7 | |
| Abutment Stability | | 7 | 7 | |
| Scour/Erosion | | X | X | |
| Piers/Bents | | | | |
| (Type : PIER-COLUMN) | | | | |
| Bearing Seats/Caps | | 8 | 8 | |
| (Type : CONCRETE) | | | | |
| (Total Number of Bearing Piles : 0:0) | | | | |
| Pier Shaft/Piles | | 8 | 8 | |
| Bracing/Struts/Sheathing | | X | X | |
| Nose Plate | | X | X | |
| Paint/Coating | | 7 | 7 | |
| (Colour Description :) | | | | |
| (Colour Code :) | | | | |
| Pier Stability | | 8 | 8 | |
| Scour | | X | X | |
| Debris (Y/N) | No | | | |

| Substructure | | | | |
|--|-----------|----------|----------|---|
| Bridge Component | | Last | Now | Explanation of Condition |
| Substructure General Rating | | 7 | 7 | |
| Structure Usage | | | | |
| | | Last | Now | Explanation of Condition |
| Grade Separation | | | | |
| Road Alignment | | 9 | 9 | |
| Traffic Safety Features | | 7 | 7 | Steel post median rail. |
| Type | GUARDRAIL | | | |
| Slope Protection | | 4 | 4 | A1 100mm gap to abut cap. A2 150mm gap to abut cap, buckled at base (photo). |
| (Type : CONCRETE; CONCRETE) | | | | |
| Bank Stability | | 7 | 4 | Concrete slope jammed against prior columns. |
| Drainage | | 7 | 7 | |
| Grade Separation General Rating | | 7 | 4 | |

| Maintenance Recommendations | | | | | | | |
|---|------------------|---|---------------------|---------------|-----------|-------------------|-----|
| Inspector Recommendations | Year | Inspector Comments | Department Comments | Target Year | Est. Cost | Cat # | |
| REPAIR/REPLACE BRIDGE RAIL | | | | | | | |
| GALVANIZE/PAINT BRIDGE RAIL | | | | | | | |
| RETROFIT BRIDGE RAIL | | | | | | | |
| SEAL CURBS | | | | | | | |
| PATCH DECK | | | | | | | |
| SEAL DECK | | | | | | | |
| OVERLAY DECK | | | | | | | |
| REPAIR/REPLACE DECK JOINTS | | | | | | | |
| RESET/ PAINT BEARINGS | | | | | | | |
| REPAINT SUPERSTRUCTURE | | | | | | | |
| STRAIGHTEN/REPLACE MEMBERS | 2013 | Straighten S2G7 at 2 locations; grind smooth if required. | | | | | |
| WASHING | 2013 | Wash hydraulic oil from girders. | | | | | |
| SHOTCRETE REPAIRS | | | | | | | |
| REPAIR ABUTMENT SCOUR/EROSION | | | | | | | |
| PLACE ADDITIONAL RIP RAP | | | | | | | |
| REMOVE DRIFT ACCUMULATION | | | | | | | |
| OTHER ACTION | 2013 | Install missing bolt @ NW diaphragm connection. | | | | | |
| OTHER ACTION | 2013 | Replace 12 plow deflectors @ joints. | | | | | |
| OTHER ACTION | 2013 | Repair concrete hslp protection. | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 66.7/61.1 | Sufficiency Rating (Last/Now) (%) | 70.5/63.5 | Est. Repl. Yr | 2033 | 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 | Owen Salava | Previous Assistant's Name | | | | | |
| Next Inspection Date | 22-Nov-2014 | Previous Inspection Date | 13-Jul-2011 | | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |