

| Bridge Inspection | | | | | | | | | |
|-------------------------------------|---|---------------|-------------------|---------------|--|----------------|---|----|--|
| Bridge File Number | 09219 E-1 Bridge | | | | Form Type | PSR | | | |
| Year Built/Year Supstr | 1967/1967 | | | | Lot No. | 2 | | | |
| Bridge or Town Name | MAGNOLIA BRI | | | | Inspector Name | Wade Nanninga | | | |
| Located Over | TRIBUTARY TO STURGEON RIVER, 6.65.27, WATERCRS-ST | | | | Inspector Class | BR CLS A | | | |
| Located On | 16:12 R1 8.497 | | | | Assistant Name | | | | |
| Water Body Cl./Year | | | | | Assistant Class | | | | |
| Navigabil. Cl./Year | | | | | Inspection Date | 10-Aug-2012 | | | |
| Legal Land Location | SE SEC 19 TWP 53 RGE 6 W5M | | | | Data Entry By | Lisa Fairhurst | | | |
| Longitude, Latitude | -114:51:44, 53:35:18 | | | | Data Entry Date | 24-Aug-2012 | | | |
| Road Authority | Alberta Transportation (AIT) | | | | Reviewer Name | Eric Carcoux | | | |
| Contract Main. Area | CMA12 | | | | Review Date | 21-Aug-2012 | | | |
| Clear Roadway/Skew | 13.8 / | | | | Dept. Reviewer Name | Brent Herrick | | | |
| AADT/Year | 7,890 / 2011 (A) | | | | Dept. Review Date | 30-Aug-2012 | | | |
| Road Classification | RAD-412.4-120 | | | | Follow-Up By | | | | |
| Detour Length (km) | 1 | | | | | | | | |
| Allowable Load (t): | Single | CS1 44 GIRDER | Semi | CS2 60 GIRDER | Train | CS3 73 GIRDER | ----> On Critical Spans ---->Critical Member | | |
| Design Loading: | HS20 | | | | | | ----> Primary Span | | |
| Posting Information | | | | | | | | | |
| Required Load Posting (t) | Single | | | | Semi | | Truck Train | | |
| Posted Loading (t) | Single | | | | Semi | | Truck Train | | |
| Posted: | Lane | EB | At Junction (Y/N) | No | In Advance (Y/N) | No | At Bridge (Y/N) | No | |
| Posted: | Lane | WB | At Junction (Y/N) | | In Advance (Y/N) | | At Bridge (Y/N) | | |
| Remarks | Not required. | | | | | | | | |
| Hazard Marker At Bridge (Y/N) | Yes | | | | | | | | |
| Remarks | West end only. | | | | | | | | |
| Other Sign Types | Information, "Sturgeon River". Missing bridge plaque from NE. | | | | | | | | |
| Utilities (Located at) | | | | | | | | | |
| Utility Attachments | | | | | | | | | |
| Telephone | South r/w. | | | | Gas | | | | |
| Power | 4 wires North r/w. | | | | Municipal | | | | |
| Others | Street lights at intersection to East. | | | | Problem (Y/N) | No | | | |
| Remarks | | | | | | | | | |
| Approach Road | | | | | | | | | |
| | | | Last | Now | Explanation of Condition | | | | |
| Horizontal Alignment | | | 6 | 6 | Jct S757 to East. | | | | |
| Vertical Alignment | | | 7 | 7 | | | | | |
| Roadway Width (m) | 11.800 | | | | | | | | |
| Approach Bump | | | 7 | 7 | | | | | |
| Guardrail (Y/N) | Yes | | | | Insufficient posts, not thrie beam transition. One bent section @ SW - photo. First splice West of SW corner missing splice bolts - photo. | | | | |
| Guardrail | | | 4 | 4 | | | | | |
| Length (m) | 49.400 | | | | TD end at NW & SW; terminal end at NE & SE. | | | | |
| Current Standard (Y/N) | No | | | | | | | | |
| Termination Type | Turn Down/Bulb End | | | | | | | | |
| Drainage | | | 4 | 4 | Cracks in down drain troughs. | | | | |
| Approach Road General Rating | | | 6 | 6 | | | | | |

| Superstructure | | | | | |
|---|-----------|--------------|-----------|---|--|
| Bridge Component | | Last | Now | Explanation of Condition | |
| (Primary Span : PMO, 3 Spans, Lengths(m): 10.7-13.7-10.7, A-Ident Number:) | | | | | |
| Special Features | | | | | |
| Special Feature | | | X | | |
| (Type :) | | | | | |
| Special Feature | | | X | | |
| (Type :) | | | | | |
| Wearing Surface/Deck Top Detail Ratings | | | | | |
| | N (%) | 1 (%) | 2 (%) | 3 (%) | |
| Last | | | | | |
| Now | 0.0 | 0.0 | 0.0 | 0.0 | |
| Wearing Surface | | | 7 | 7 | |
| (Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT) | | | | | |
| (Thickness(mm) : 150) | | | | | |
| Lateral Connection Problem (Y/N) | | No | | | |
| Deck Top | | | N | N | |
| Deck Rideability | | | 7 | 7 | |
| Deck Joints | | | N | N | |
| Temperature (deg. C) | | 25 | | Paved over. Leaking evident staining backwall/seat, typical both abutments. | |
| (Expansion Type :) | | | | | |
| (Fixed Type : ASPHALTIC FIBRE BOARD) | | | | | |
| Gap Size (mm) | | Gap Location | | | |
| | | | | | |
| | | | | | |
| Deck Drainage | | | 4 | 4 | |
| Drains Clogged (Y/N) | | No | | Leaking between girders @ S1G15/G16; S2G14/G15; S2G15/G16 & S3G15/G16. NW deck drain is eroding headslope - photo. S3G2 water leaking onto abut. | |
| Curbs/Median | | | 5 | 5 | |
| (Curb Type : Standard) | | | | | |
| Scaling (Percent Area) | | 5 | | Curb tops cracked over piers. Rebar exposed ext South end P2, shallow cover. | |
| Bridge Rail | | | 7 | 7 | |
| (Type : GALVANIZED STEEL FLEX BEAM) | | | | | |
| Bridge Rail Posts | | | 7 | 7 | |
| (Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL) | | | | | |
| Bridge Rail/Posts Coating | | | 5 | 5 | |
| (Type : GALVANIZED) | | | | | |
| Sidewalk | | | X | X | |
| Girder Detail Ratings | | | | | |
| | N (count) | 1 (count) | 2 (count) | 3 (count) | |
| Last | | | | | |
| Now | 0 | 0 | 0 | 0 | |
| Girders | | | 5 | 5 | |
| Cracking (Y/N) | | Yes | | Rust spots on several girders near ends not associated with strand corrosion. Staining between G15/G16 S3, G14/G15/G16 S2, G14/G15/G16 S1. Hairline transverse cracking G15 c/l, 300mm o/c. G1SP1 25mm void along fence | |
| Spalling (Percent Area) | | 0 | | | |
| (Number Of Girders : 48) | | | | | |

| Superstructure | | | | |
|---|-----|----------|----------|---|
| Bridge Component | | Last | Now | Explanation of Condition |
| (Primary Span : PMO, 3 Spans, Lengths(m): 10.7-13.7-10.7, A-Ident Number:) | | | | |
| Diaphragms/Cross Frame | | X | X | |
| Bearings | | 5 | 5 | Neoprene strip all spans. |
| Temperature (deg. C) | 25 | | | |
| (Expansion Type : NEOPRENE STRIP BEARING) | | | | |
| (Fixed Type :) | | | | |
| Coating Adequate (Y/N) | Yes | | | |
| Functioning (Y/N) | Yes | | | |
| Deck Underside | | 5 | 5 | Small hole in girder U/S, S3G9. |
| Stains (Percent Area) | 0 | | | |
| Span Alignment Problems | | | | |
| Vertical (Y/N) | No | | | |
| Horizontal (Y/N) | No | | | |
| Superstructure General Rating | | 5 | 5 | |
| Substructure | | | | |
| Bridge Component | | Last | Now | Explanation of Condition |
| Abutments | | | | |
| Bearing Seats/Caps | | 7 | 7 | Bridge plaque fallen off NE. |
| (Type : CONCRETE) | | | | |
| Backwalls/Breastwalls | | 6 | 6 | Backwall covered by girders. |
| Wingwalls | | 6 | 6 | |
| Piles | | N | N | |
| Paint/Coating | | X | 4 | Stained from leaking joints, typical. |
| Abutment Stability | | 8 | 8 | |
| Scour/Erosion | | 4 | 4 | Both headslopes settled 100mm. 300mm wide x 200mm deep erosion scar originating from NW deck drain. |
| Piers/Bents | | | | |
| (Type : PIER-COLUMN) | | | | Minor scaling at ends. |
| Bearing Seats/Caps | | 6 | 6 | |
| (Type : CONCRETE) | | | | |
| (Total Number of Bearing Piles : 8:8) | | | | |
| Pier Shaft/Piles | | 7 | 7 | |
| Bracing/Struts/Sheathing | | X | X | |
| Nose Plate | | X | X | |
| Paint/Coating | | 5 | 5 | Paint is chalky. Corrosion at ground line with scaling rust. Blue. |
| (Colour Description :) | | | | |
| (Colour Code :) | | | | |
| Pier Stability | | 8 | 8 | |
| Scour | | 7 | 7 | |
| Debris (Y/N) | No | | | |
| Substructure General Rating | | 6 | 6 | |

| Structure Usage | | | | |
|--|-----|----------|----------|---|
| | | Last | Now | Explanation of Condition |
| Channel | | | | |
| (U/S Direction : S) | | | | |
| (D/S Direction : N) | | | | |
| Alignment | | 7 | 7 | |
| Bank Stability | | 5 | 5 | Vertical cut bank @ SE caused by flow impact. Not affecting bridge. |
| HWM (m below Top of Curb) | | | | Not visible. |
| Drift (Y/N) | Yes | | | |
| Slope Protection | | 6 | 6 | Concrete bags. |
| (Type : CONCRETE; CONCRETE) | | | | |
| Guidebank/Spurs | | X | X | |
| Adequacy of Opening | | 8 | 8 | |
| (Fish Compensation Measure 1 : NONE) | | | | |
| (Fish Compensation Measure 2 : NONE) | | | | |
| Channel General Rating | | 6 | 6 | |

| Maintenance Recommendations | | | | | | | |
|---|------------------|---|---------------------------|---------------|-----------|-------------------|-----|
| Inspector Recommendations | Year | Inspector Comments | Department Comments | Target Year | Est. Cost | Cat # | |
| REPAIR/REPLACE BRIDGE RAIL | | | | | | | |
| GALVANIZE/PAINT BRIDGE RAIL | | | | | | | |
| SEAL CURBS | | | | | | | |
| PATCH DECK | | | | | | | |
| SEAL DECK | | | | | | | |
| OVERLAY DECK | | | | | | | |
| REPAIR/REPLACE DECK JOINTS | | | | | | | |
| RESET/ PAINT BEARINGS | | | | | | | |
| WASHING | | | | | | | |
| SHOTCRETE REPAIRS | | | | | | | |
| REPAIR ABUTMENT SCOUR/EROSION | | | | | | | |
| PLACE ADDITIONAL RIP RAP | | | | | | | |
| REMOVE DRIFT ACCUMULATION | | | | | | | |
| OTHER ACTION | 2012 | Install missing splice bolts @ SW guardrail. | | | | | |
| OTHER ACTION | 2012 | Determine cause for leaking between girders & repair. | | | | | |
| OTHER ACTION | 2012 | Replace missing bridge plaque @ NE wingwall. | | | | | |
| OTHER ACTION | | | | | | | |
| Structural Condition Rating (Last/Now) (%) | 61.1/61.1 | Sufficiency Rating (Last/Now) (%) | 68.8/68.7 | Est. Repl. Yr | 2023 | 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 | Kris Bosters | | Previous Assistant's Name | | | | |
| Next Inspection Date | 10-May-2014 | | Previous Inspection Date | 06-Oct-2010 | | | |
| Inspection Cycle (Default) (months) | 21 | | | | | | |
| Comment | | | | | | | |