

Minnesota Department of Transportation (Mn/DOT)

Local Historic Bridge Report

Historical Data

Bridge Number: 90608

SHPO Inventory Number HE-EXC-063

Common Name (if any)

Descriptive Information (or narrative as available)

Superstructure:

Substructure:

Floor/Deck:

Narrative:

metal-pipe/concrete-post railings with Art Deco detailing; sidewalk on west side; bridge plates on northwest and southwest railing endposts ("Hennepin County Minnesota Bridge No. 21 1941"), bridge plate on northeast railing endpost ("Works Projects Administration Project 1941")

Contractor WPA

Designer/Engineer

Significance Statement

Standing in a residential neighborhood in Excelsior, Bridge No. 90608 carries Minnetonka Boulevard, on a north-south alignment, over an inlet of Lake Minnetonka known as St. Albans Bay. The crossing consists of three, 36-foot, concrete, deck-girder spans on a concrete substructure. Seven lines of girders carry the bituminous-surfaced concrete deck, which accommodates a 27-foot roadway with a sidewalk on the west side. The fascia girders are slightly arched. The bridge railings are of metal-pipe/concrete-post construction. Metal plaques on the northwest and southwest endposts bear the inscription: "Hennepin County Minnesota Bridge 21 1941." A metal plaque on the northeast railing endposts identifies the bridge as a "Works Projects Administration Project 1941." The bridge's piers rise above the roadway and railings like pylons framing the center span. Their sides and tops are rounded and stepped back in the Art Deco fashion. Similar detailing displays itself on the concrete posts of the railings. Bridge 90608 does not appear to have experienced any significant modifications, and it retains its historical integrity.

Bridge No. 90608 was constructed by the WPA in 1941, under the sponsorship of the Hennepin County Board of Commissioners. As was typical on such projects, the sponsor supplied the engineering and the materials, while the WPA paid for the labor. Hennepin County Board minutes reveal that the following contractors were successful low bidders on the project: Century Washed Sand and Gravel Company (cement, \$1,774); Lampert Yards, Inc. (form lumber, \$1,596); Cowin and Company, Inc. (reinforcing steel, structural steel, pipe railings, \$2,668); Wheeler Lumber, Bridge and Supply Company (foundation piles, \$2,132). Although the county proceedings do not identify the bridge's designer, the Hennepin County Highway Department probably was responsible for preparing the plans. In the county highway system, the structure was known as Bridge No. 21; in the state system, it was designated as Bridge 90608. With its curved fascia girders and rounded, stepped-back piers and railing posts, Bridge No. 90608 is a well-detailed example of the Art Deco Style as applied to bridges. The structure is eligible for the National Register for its architectural design under Criterion C, within the historic context of "Reinforced-Concrete Highway Bridges in Minnesota, 1900-1945." The Multiple Property Documentation Form associated with this context states, in Registration Criterion 5, that a concrete highway bridge may be eligible under Criterion C if it displays notable aesthetics. Bridge No. 90608 satisfies this criterion.

Historic Context Reinforced-Concrete Highway Bridges in Minnesota

National Register Criteria C

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National Register Status Eligible

References

Minnesota Department of Transportation Bridge Database; Bridge No. 90608 File, in Minnesota Department of Transportation, Waters Edge Building, St. Paul; Bridge No. 90608 File, in Excelsior City Hall, Excelsior, Minnesota; Hennepin County Board of Commissioners, Proceedings, 3, 5 February 1941, in Hennepin County Government Center, Minneapolis; Robert M. Frame, "Reinforced-Concrete Highway Bridges in Minnesota," National Register of Historic Places Multiple Property Documentation Form, Sec. F, 8, in State Historic Preservation Office, Minnesota Historical Society, St. Paul; field inspection by Chad Perkins, 30 September 1996.

Minnesota Department of Transportation (Mn/DOT)

Local Historic Bridge Report

Engineering Data

Bridge Number: 90608

Date of Construction (remodel) 1941

Common Name (if any)

Location

Feature Carried: Minnetonka Avenue (56C)

Feature Crossed: St Albans Bay

County: Hennepin

Structure Data

Span Type: 103 Concrete girder and floorbeam system

Total Length: 329 meters

Roadway Function: Urban Collector

Ownership: City of Excelsior

Custodian/Maint. Agency: City

Inspection Date Jun 2009

Sufficiency Rating [1]

Operating Rating [1,2] 40.6 tons

Inventory Rating [1,2] 20.6 tons

(Inspection and inventory data in this section was provided for this project by Mn/DOT in April 2012)

Posted Load [1] No posting required

Design Load [1] 0

Deficiency Rating Status [1]

Current Condition Code

Deck: 5

Superstructure: 5

Substructure: 5

Channel and Prot.: 7

Culvert: N

Current Appraisal Rating

Struct. Eval.: 5

Deck Geometry: 3

Underclearances: N

Waterway Adequacy: 8

Appr. Alignment: 7

Smart Flag Data [1]

(A check indicates data items are listed on the Bridge Inspection Report)

Fracture Critical [1]

Last Inspection Date

Waterway Data

Scour Code [1]: I - LOW RISK

Roadway Data

ADT Total: 4400

Truck ADT Percentage

Bypass Detour Length [2]: 3

Minnesota Department of Transportation (Mn/DOT)

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Engineering Data

Bridge Number: 90608

Roadway Clearances

Roadway Width [2]: 8.2

Vert. Clearance Over Rdwy [2]:

Vert. Clearance Under Rdwy [2]

Lat. Under Clearance Right [2]:

Lat. Under Clearance Left [2]:

Geometry Characteristics

Skew:

Structure Flared:

[1] These items are defined in the glossary in Appendix A. [2] These items are provided in metric units.

Roadway Characteristics

Lane Widths:

Number of Lanes:

Shoulder Width:

Shoulders Paved or Unpaved:

Shoulders Comments:

Other Roadway Information:

Guardrail Length

Guardrail Comments

Vertical Curves:

Horizontal Curves:

Sight Distance:

Floodplain Data

Accident Data

Location of Plans

County

Additional Electronic Data

None

BRIDGE 90608 - RECENT NBI CONDITION CODE AND APPRAISAL VALUES

Inspection Year	Deck	Super structure	Sub structure	Culvert	Channel	Structure Evaluation	Deck Geometry	Under clearances	Waterway Adequacy	Approach Alignment
1994	5	5	5	N	7	5	3	N	8	7
1996	5	5	5	N	8	5	3	N	8	7
1997						5	3	N	8	7
1997	5	5	7	N	8	5	3	N	8	7
1999	5	5	6	N	7	5	3	N	8	7
2001	5	5	5	N	7	5	3	N	8	7
2003	5	5	5	N	7	5	3	N	8	7
2005	5	5	5	N	7	5	3	N	8	7
2007	5	5	5	N	7	5	3	N	8	7
2008	5	5	5	N	7	5	3	N	8	7
2009	5	5	5	N	7	5	3	N	8	7

2010 Pontis Elements

Pontis Element Number	Pontis Element Name	Component in a Less than Fair Pontis CS?
13	Bit. O/L (Conc Deck)	Yes
110	Concrete Girder	Yes
210	Concrete Pier Wall	Yes
215	Concrete Abutment	Yes
312	Enclosed Bearing	No
320	Conc Appr Slab-BitOL	No
333	Railing - Other	Yes
359	Conc Deck Underside	No
380	Secondary Elements	Yes
387	Concrete Wingwall	No
964	Critical Finding	No
981	Signing	No
982	Guardrail	No
984	Drainage	No
985	Slopes	Yes
986	Curb & Sidewalk	Yes
988	Miscellaneous	No