NAER INVENTORY

U.S. Department of the Interior
Heritage Conservation and Recreation Service

1. SITE I.D. NO

2. INDUSTRIAL CLASSIFICATION: Bridges, Trestles, and Aqueducts
ARCH: steel

3. PRIORITY: 1

5. DATE: 1911-12

4. DANGER OF DEMOLITION? (SPECIFY THREAT) ☐ YES ☐ NO ☒ UNKNOWN

6. GOVT SOURCE OF THREAT: OWNER ADMIN

7. OWNER/ADMIN: City of Seattle

8. NAME(S) OF STRUCTURE: 12th Avenue South over Dearborn Street

9. OWNER'S ADDRESS:
Engineering Department
Seattle Municipal Building, Room 704
Seattle, Washington 98104

10. STATE: WA (53) COUNTY: 033 COUNTY NAME: King CITY/VICINITY: Seattle CONG. DIST.: 03

STATE COUNTY COUNTY NAME CITY/VICINITY CONG. DIST.

11. SITE ADDRESS (STREET & NO)

12. EXISTING SURVEYS ☐ NR ☐ NHL ☐ HABS ☐ HAER—I ☐ HAER ☐ NPS ☐ CL6
☐ CONF ☐ STATE ☐ COUNTY ☐ LOCAL ☐ OTHER

13. SPECIAL FEATURES (DESCRIBE BELOW)
☐ INTERIOR INTACT ☐ EXTERIOR INTACT ☐ ENVIRONS INTACT

14. UTM ZONE 10 EASTING 551420 NORTHING 5271410 SIGN
SCALE ☒ 1:24 ☐ 1:62.5 ☐ OTHER QUAD NAME: Seattle South, Washington

UTM ZONE EASTING NORTHING SIGN
SCALE ☐ 1:24 ☐ 1:62.5 ☐ OTHER QUAD NAME

15. CONDITION: 70 ☐ EXCELLENT 71 ☐ GOOD 72 ☐ FAIR 73 ☐ DETERIORATED 74 ☐ RUINS 75 ☐ UNEXPOSED 76 ☐ ALTERED ☐ DESTROYED 85 ☐ DEMOLISHED

16. INVENTORIED BY: Lisa Soderberg AFFILIATION: HAER/Washington State Bridge Inventory DATE: October 1980

17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSIONS, MATERIALS, EXTANT EQUIPMENT, AND IMPORTANT BUILDERS, ENGINEERS, ETC.

In 1911, the Dearborn regrading project cut through Beacon Hill eliminating the barrier between the commercial and residential settlement on Puget Sound and the Ranier Valley dwellers in the vicinity of Lake Washington. The route to Ranier Valley cut away 112 feet at Twelfth Avenue South reducing the Dearborn Street grade from 19% to 3%. The long-sought "less than 5% thoroughfare from salt to fresh water" had been achieved.

A steel arch bridge was constructed in 1911 across the cut at Dearborn Street, 110 feet above the grade, reconnecting settlements on Beacon Hill that had been isolated by the regrading efforts. This spandrel braced arch was one of the first permanent steel structures to be built by the Seattle Engineering Department. It consists of a 171 foot arch with a rise of 60 feet, a 94 foot cantilever span at the south and a 96 foot cantilever span at the north. The web trussing in the steel structure is of the Pratt type. Originally, the arch was flanked by timber approach spans.

(CONT OVER)

18. ORIGINAL USE: vehicular PRESENT USE: vehicular ADAPTIVE USE:

19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER

Seattle Engineering Department files.
Elizabeth Shellin Atly, "Landmark Nomination Form: 12th Avenue South over Dearborn Street," 2 January 1980.
J.A.L. Waddell, Bridge Engineering, 2 Vols., (New York, 1916), pp. 620-625.
Myra L. Phelps, Public Works in Seattle, (Seattle, 1978), pp. 22, 36-39.

(CONT OVER)

20. URBAN AREA 50,000 POP. OR MORE? ☐ YES ☐ NO

21. N W

22. PUBLIC ACCESSIBILITY ☐ YES, LIMITED ☒ YES, UNLIMITED ☐ NO ☐ UNKNOWN

23. EDITOR INDEXER

24. LOCATED IN AN HISTORIC DISTRICT? ☐ YES ☒ NO NAME DISTRICT I.D. NO

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17. Description (continued)

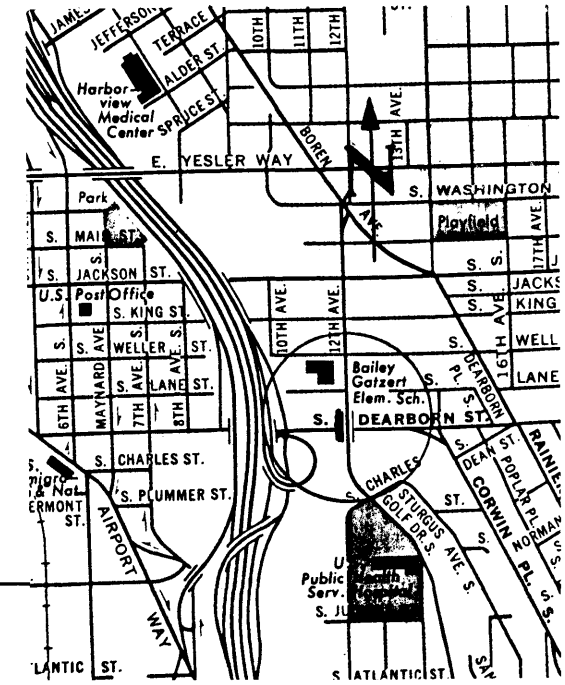
At the time that the bridge was constructed, the regrading work had not been completed. As a result, a temporary inclined timber trestle was erected over the deck of the bridge so that the elevation of the bridge deck would be aligned with the roadway. Trolley lines were laid on the trestle and remained in service until a mudslide obliterated the timber structure in 1917. In 1924, six concrete bent approach spans were constructed to replace the original timber piles. At this time the trolley lines were replaced, and a concrete floor was built providing a 42-foot wide roadway.

In 1966-67 the alignment of the south approach was altered to allow for the construction of the I-90 and State Route 5 interchange. Originally the structure was built on a north-south alignment. However in 1966, three bents at the south end were removed and replaced by concrete piers that supported a curved roadway.

The highway engineers duplicated the decorative steel railings on the new approach span. Though the steel components are welded rather than riveted, the duplication of the ornamental motifs exemplifies a noble effort to retain a continuity with the past, and to meld the new with the old.

The 12th Avenue South Bridge is the oldest extant steel arch within the State. Of the early steel arches within Washington, it is the only spandrel-braced arch.

25. Photos and Sketch Map of Location



REFERENCES (CONTINUED)

ABSTRACT

HAER NO | LC | TECH REPORT | HIST REPORT | CONTEMP PHOTO | HIST PHOTO | CONTEMP DRWG | HIST DRWG | COLOR PLATE | PHOTOGRAM | SW | FILM