

1. SITE I.D. NO

HAER INVENTORY

Historic American Engineering Record
Department of the Interior, Washington, D.C. 20240

2. INDUSTRIAL CLASSIFICATION

Bridges, Trestles, and Aqueducts

3. PRIORITY

1

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

BEAM: concrete

7 5 8 5

5. DATE

1935-36

6. GOVT SOURCE OF THREAT

OWNER ADMIN

City Number: 13

7. OWNER/ADMIN

City of Seattle

8. NAME(S) OF STRUCTURE

Schmitz Park Bridge

9. OWNER'S ADDRESS

Engineering Department
Seattle Municipal Building, Room 704
Seattle, Washington 98104

10. STATE

WA

COUNTY NAME

King

CITY/VICINITY

Seattle

CONG.
DIST.

03

STATE

COUNTY NAME

CITY/VICINITY

COUNTY

CONG.
DIST.

11. SITE ADDRESS (STREET & NO)

Crossing: Schmitz Park Ravine

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

S.T.R.: 10 24N 3E

13. SPECIAL FEATURES (DESCRIBE BELOW)

 INTERIOR INTACT EXTERIOR INTACT ENVIRONS INTACT

14. UTM ZONE

EASTING

NORTHING

SIGN

SCALE

 1:24 1:62.5QUAD
NAME

Duwamish Head, Washington

UTM ZONE

EASTING

NORTHING

SIGN

SCALE

 1:24 1:62.5QUAD
NAME

15. CONDITION

70 EXCELLENT71 GOOD72 FAIR73 DETERIORATED74 RUINS75 UNEXPOSED76 ALTERED82 DESTROYED85 DEMOLISHED

16. INVENTORIED BY

Lisa Soderberg

AFFILIATION

HAER/Washington State Bridge Inventory

DATE

August 1980

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

In 1935, the City of Seattle replaced a decaying timber structure across a deep, narrow ravine in Schmitz Park with a forceful, distilled concrete form. Designed by C.H. Eldridge of the City Engineering Department, the 175 foot concrete bridge gained international acclaim as the longest rigid frame bridge ever to be constructed. It was the use of hollow box or cellular construction in the structural members of the frame that caused a substantial reduction in dead load, and enabled the engineers to build a rigid frame bridge that was 60% longer than any previously built.

The structural members of the bridge consist of four parallel hollow horizontal ribs that are 8 feet in width and vary in depth from 5½ feet at the crown to 18½ feet at the haunches. At the haunch or knee, the four horizontal ribs intersect with the four legs which are also of cellular construction. The legs taper from their maximum width at the haunch, to 8 x 8 feet at the top of the footings. The horizontal girder rises to a height of 21 feet above the roadway at the haunch, and gradually increases to a height of 34 feet at its center. The frames support a 54 foot

18. ORIGINAL USE

vehicular

PRESENT USE

vehicular

ADAPTIVE USE

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

City Engineering Department files.

Carl Condit, American Building Art, 2 Vols., (New York, 1961), 2:213-215.J.A. Dunford, "Record Rigid-Frame Bridge," Engineering News-Record, 24 June 1937, pp. 939-942.

(CONT OVER)

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

21. NPS REGION

NW

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

