Descriptive Summary

Languages: English

Contributing Institution: Special Collections & Archives, UC San Diego
9500 Gilman Drive
La Jolla 92093-0175

Title: San Francisco-Oakland Bay Bridge Construction Collection

Identifier/Call Number: MSS 0722

Physical Description: 0.8 Linear feet (2 archives boxes)

Date (inclusive): 1930-1968 (bulk 1932-1936)

Abstract: The collection documents the planning and structural engineering of the San Francisco-Oakland Bay Bridge from the project binders of junior bridge engineer, Nathan Davis Whitman, Jr., who worked for the State of California Department of Public Works, Division of Highways from 1932 until 1935. Materials range in date from 1930-1968, with the bulk of the materials from 1932-1936, and include blueprints, calculations, design specifications, plans and elevations, reports, and articles about the bridge.

Scope and Contents of Collection

Materials from the San Francisco-Oakland Bay Bridge Construction Collection include primarily structural design blueprints, handwritten calculations on tracing paper and graph paper, State of California Department of Public Works design specifications and reports, and historical background on the plans and construction of the San Francisco-Oakland Bay Bridge. The bulk of the materials are from the project binders of junior bridge engineer on the project, Nathan Davis Whitman, Jr. and range in date from 1932-1936. Also included are two photographs showing an incomplete bridge with pylons and suspension cables before roadway construction (dated Oct. 7, 1935), a list of contractors awarded for construction, graphs of other bridges for comparison, and biographical information on Nathan Davis Whitman, Jr.

Historical Background

Construction of the San Francisco-Oakland Bay Bridge began in 1933 and the bridge opened to traffic on November 12, 1936, six months before the Golden Gate Bridge opening, and prior to San Francisco's hosting of the World's Fair in 1939. The bridge was an engineering marvel as well as a political achievement. Several design and structural elements were used in the plans to help span the deep waters of the Bay and the distance between the two cities. The design was a double decked suspension, cantilever bridge with truss causeway and tunnel. The bridge had the deepest bridge pier of its time on the existing East Span and still holds the world record for the widest single-bore tunnel, which passes through Yerba Buena Island.

Acquisition Information

Acquired 2010.

Preferred Citation

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Publication Rights

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Subjects and Indexing Terms

Bridges -- California -- San Francisco -- Design and Construction
San Francisco-Oakland Bay Bridge (Oakland and San Francisco, Calif.)
Structural engineering -- California -- San Francisco
Bridges -- Design and Construction

COLLECTION

Box 1, Folder 1 - Magazine articles, historic background information, photographs 1932-1940
Box 1, Folder 2-3, Oversize FB-490-04 - Blueprints, calculations, design specifications 1932-1936
Box 1, Folder 4-7
Box 2, Folder 1 - "Effect of earthquake on the San Francisco-Oakland Bay Bridge" - Report ca. 1933
Box 2, Folder 2  "Specifications, proposal and contract - Contract No. 15 & No. 15A - San Francisco section and approaches" - Report 1934
Box 2, Folder 3  Whitman, Nathan Davis, Jr. (structural engineer) - Biographical information 1957-1968
Box 2, Folder 4  First Annual Progress Report San Francisco Oakland Bay Bridge, 1934-1938