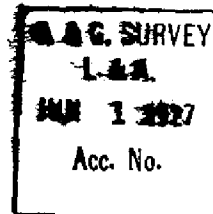


4270

Form 504	
DEPARTMENT OF COMMERCE	
U. S. COAST AND GEODETIC SURVEY	
....., Director	
<div></div>	
State: California	
DESCRIPTIVE REPORT	
Topographic <del>Hydrographic</del>	Sheet No. <sup>2</sup> 4270
LOCALITY	
Carquinez Strait	
Bridge from Crockett to South	
Vallejo and Approaches	
1927	
CHIEF OF PARTY	
P. C. Whitney	

GOVERNMENT PRINTING OFFICE

4270



DESCRIPTIVE REPORT TO ACCOMPANY SHEET No.2.

ORDERS:

The work done on Sheet No.2 is called for by Instructions from the Director dated February 10, and March 2, 1927.

GENERAL DESCRIPTION:

This work shows the location of the new highway bridge built across Carquinez Straits from Crockett to South Vallejo, together with the changes made in the roads on both sides of the straits in order to provide suitable approaches to the bridge. The survey also shows the changes that have taken place on the south shore of the straits where a considerable area just west of the south approach to the bridge has been filled, and a new track built. The bridge will take care of all the vehicular traffic that was formerly dependent on the Rodeo-Vallejo ferry for service in crossing Carquinez Straits.

LANDMARKS:

The bridge itself is the most important landmark shown on the sheet. In addition to the abutments at each end of the bridge, there are three large piers, the center one supporting the main tower of the bridge, and the other two supporting the secondary towers.

The two oil tanks shown on the sheet are on the bluff above the railway tracks. They are visible from the road and bridge, but not from along the high water mark on the south shore of the straits.

SURVEY METHODS:

The triangulation control for this work was very good, at least three triangulation stations being visible most of the time. Each end of the bridge was located by means of a three point fix, the approaches and other topographic features being located by the usual plane table methods, with the position of the table constantly checked by resection lines from one or more triangulation stations. The new road on the north side of the bridge was surveyed to a connection with the old road at point "A". Aside from the road, there are no other important changes in the topography along the north shore of the straits in the vicinity of the bridge. On the south side of the bridge the approach was surveyed to a connection to three State Highway road survey stations. These three stations are shown on the highway location blue prints ← attached to this report, and were used as the basis for transferring the location of the new road from the blue prints to the topographic sheet. A connection was made to point "D" shown on the section of chart No.5525 attached to this report. In the vicinity of the rail-road tracks shown on the south shore, a connection was made to points

*Ops. 21297 & 21300.*

"B" and "C", "B" being the intersection of the main line track with the extension of the centerline of Valley Street, and "C" being the intersection of the main line track with the extension of the centerline of Fourth Street. The wharf in ruins shown on Chart No. 5525 on the southshore of the straits, no longer exists. In this vicinity there is now a small wharf with a single track railroad spur on it, and a small wharf with a workshop on it. These were built for the purpose of assembling the steel used in building the Carquinez Straits Bridge.

REMARKS:

A description of the Carquinez Straits Bridge, together with a side elevation of the bridge is given on page 777 of the May, 12, 1927 issue of Engineering News-Record.

The piers supporting the bridge are actually cylindrical in shape, but have been shown as rectangular in accordance with the usual conventional sign.

A fender piling system to protect the central pier is under consideration, but has not yet been built. The dotted lines about the pier show the plan as approved by the U.S. Army Engineer. Its size is 450 ft. by 280 ft.

There is approximately 150 ft. of clearance between the under side of the bridge and the high water level.

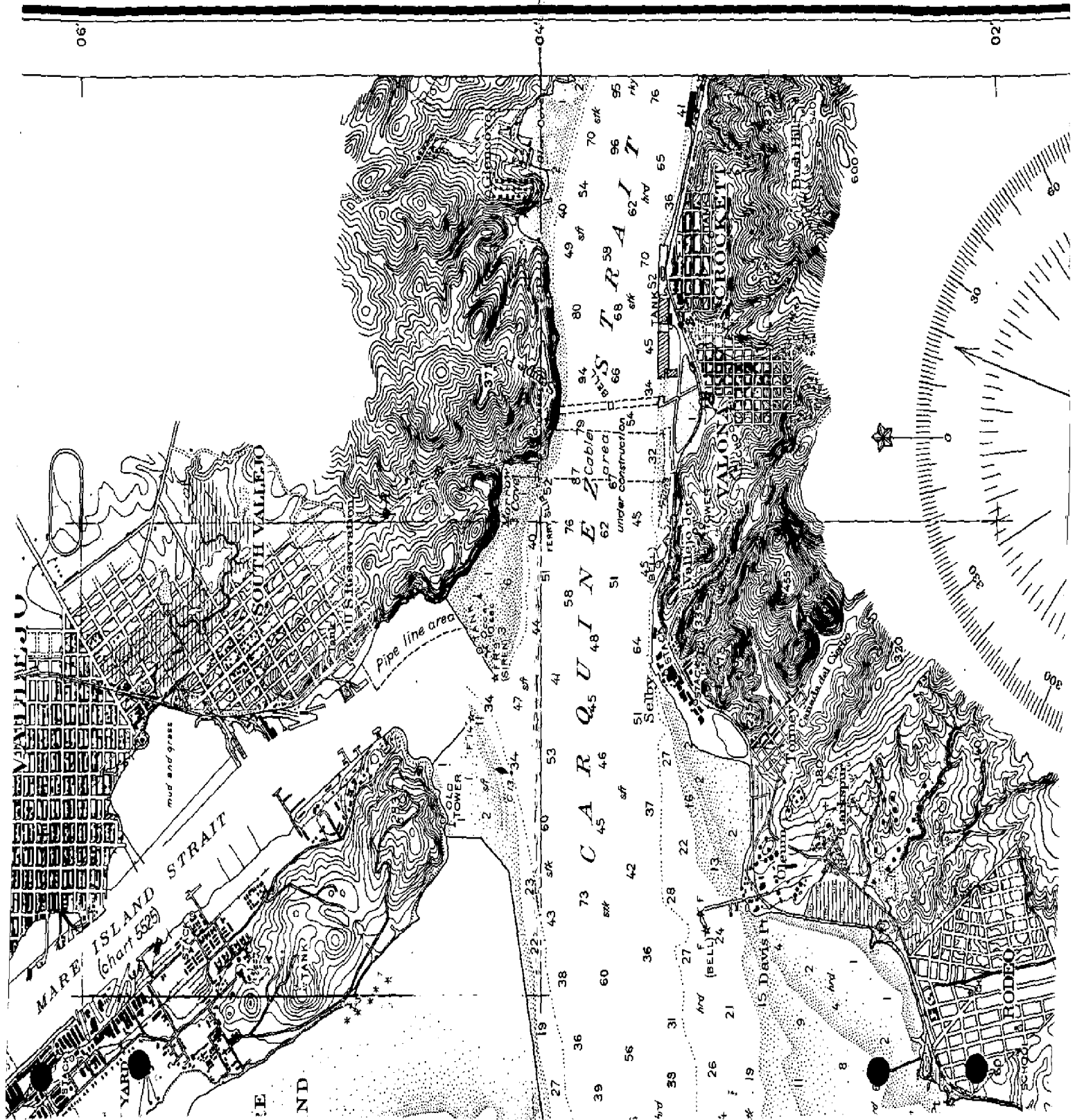
May 20, 1927.

Herman Odessy  
H. B. Enggr.

Paul P. Whitney  
Chief of Party

List of Geographic Positions, Sheet No.2.

Object	Lat.	D.M. meters	Long.	D.P. meters	Remarks
Center tower	38-03	1252	122-13	744	Directly over center pier , 324 ft. high
North tower	38-03	1611	122-13	769	Directly over north pier , 333 ft. high
South tower	38-03	896	122-13	722	Directly over south pier , 310 ft. high
East tank	38-03	631	122-13	1052	Oil tank
West tank	38-03	643	122-13	1143	Oil tank



06

04

02

ND

600

600

300

300

300

300

300

300

300

300

300



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4270

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 2

REGISTER NO. 4270

State California

General locality Carquinez Straits

Locality ~~Carquinez Straits~~ Bridge <sup>from Crockett to</sup> ~~at Crockett~~ South Vallejo, Calif. <sup>and Approaches</sup>

Scale 1-10000 Date of survey April 26-27, 1927

~~VESSEL~~ San Francisco Field Station

Chief of Party Paul C. Whitney

Surveyed by Herman Odessey

Inked by Herman Odessey

Heights in feet above ----- to ground to tops of trees

Contour, Approximate contour, Form line interval ----- feet

Instructions dated February 10, March 2, 1927

Remarks: See 4 Prints of State Highway Location  
filed with Mr. Storm