Form 594
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: _______________________

DESRIPTIVE REPORT.

LOCALITY:

__________________________

191

CHIEF OF PARTY:
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

E. Lester Jones, Superintendent

DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET 3661.

REVISION of TOPOGRAPHY of SAN FRANCISCO BAY

SURVEYED UNDER THE DIRECTION
of
L.O. Colbert, Assistant.

by
H.Y. Kelsh, Assistant.

JANUARY
1917

Scale. .......... 1 : 10,000.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY.
E. Lester Jones, Superintendent.

Descriptive Report to accompany Topographic Sheet
Revision of the Topography of San Francisco Bay.
Surfeyed under the direction of L.O. Colbert, Ass't, by W.T. Kelsh, Ass't
JANUARY 1917.

Limits of Sheet:-

This sheet embraces the shoreline from Alameda pier south to San Leandro, on the Oakland shore, and from Hunters' Point to Mission Rock on the west side.

Control:-
The work was controlled by a few triangulation signals. Due to the scale, (1:10,000), and the fact that as the sheet embraced both sides of the bay, the signals were too far off to use, it was necessary to run most of the shoreline by traverse.

Party:-
The party consisted of one officer and two men. Transportation was by means of trolley cars to the different points of the shoreline, as most of the points could be reached in this manner the use of a boat was avoided.

Scale:- 1:10,000.

Detailed Description of Shoreline:-

Alameda Pier is the same as shown on the chart. The south shore of the mole is shown on the War Department chart as a slightly irregular line, but the chart is more correct in this respect.

San Antonio Creek was gone over with the War Department Chart as far as the first bridge on both sides, and the small changes are noted directly on that sheet, which is attached, listed as sheet #1.

A special report accompanies this sheet, attached to end of this report.

The shoreline from the mole to the Borax Works is still unimproved and was not rerun, but from examination while passing appeared to be unchanged. The Dock and Borax Works are as shown on the chart. The Main Building appears to be unchanged.
Detailed Description of the Shoreline—Continued.

The trolley line runs along the beach as shown on the chart. The sink behind it at the turn seems to be shorter, the lower end apparently being filled in.

About a half a mile south of the Borax Works the bathing beach commences with numerous small piers and wooden houses. To the east of these the shore is almost an unbroken line of concrete and stone walls. The streets are all paved, and the small detached houses on either side of the street form an unbroken line.

There are no prominent buildings or piers until we reach the Grand Boat Club. Directly inshore from this there is a white greek column about twenty feet high on the edge of the sea wall which is set as a decoration.

About a mile farther east there is another pier belonging to the Alameda Municipal Electric Light Plant, a gray building standing on shore at the end of the dock. It has three prominent black stacks.

There are no improvements in the immediate vicinity east of here.

Point Aviador, the outer end of Hunters Point, is now being changed somewhat. A larger dry dock is in process of construction, and the piers will be changed to conform with this. The excavation is practically completed so the dock should be finished very soon. The intended changes have been indicated on the topographic sheet.

On the north side of the point there is quite an area of log booms, and just to the east of them is an old hull. The water here is very shallow, so that its position is unimportant. The shoreline here was apparently unchanged, but was rerun so that no changes should be overlooked. The only data furnished was the old chart on a 1:40,000 scale, and on this, small changes were scarcely noticeable, so that it was necessary to rerun most of the shore to make sure that no changes were overlooked.

The Western Tallow Co. is the first large building and has a prominent, high black stack.

The shoreline at Butchertown has been changed somewhat. This area is built up solid with pens, sheds and buildings.
Detailed Description of the Shoreline—Continued.

At Army St. Wharf there is considerable change, the wharf itself having been changed and quite a large part of the flats behind the first street has been filled in, as shown on the topographic sheet. The regular 1:10,000 work was carried back as far as the railroad trestle; beyond that the work was gone over with the chart and the changes noted directly upon it. The creek no longer exists. A small drainage ditch carries off the surplus water. The ground is still swampy, however. The details were considered too indistinct to be shown directly on the chart, as a small insert has been made on a 1:40,000 scale on the topographic sheet, showing the vicinity as it is at present.

The shore to the southward of the railroad ferry slip is being used as a dump and is filling in. This section here has not been improved greatly and the small sinks remain as shown. These are unimportant as they will be gradually filled in.

Just north of Army St. Wharf is a large log boom, the south side of which is practically a breakwater, formed of closely driven piles. There is also a small boom in the right just north of the ferry slip.

The shore of Potrero Point and buildings show a few minor changes. The outer end of the shipyard at Central Basin was rerun, but the inner section it was necessary to sketch as the yard is very long and numerous boats and such were in the way of sight.

From Central Basin north, a sheet was secured from the Harbor Commission and checked with the shoreline by going over it in the field. This sheet covers the entire central waterfront from Central Basin to Pier 41. Reports for this and the San Antonio Creek sheet are attached herewith.

Respectfully submitted,

Approved

L.O. Rober[*]

Ass't, C. & G. Survey.
Compiler & Observer.

Ass't, C. & G. Survey.
Chief of Party
## LIST OF PLANE TABLE POSITIONS

<table>
<thead>
<tr>
<th>OBJECT</th>
<th>LATITUDE</th>
<th>D.M.</th>
<th>LONGITUDE</th>
<th>D.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Flagpole, outer end Alameda Bathhouse.</td>
<td>37 - 45</td>
<td>444</td>
<td>122 - 17</td>
<td>00</td>
</tr>
<tr>
<td>Outer Gable Club House. Grand Boat Club</td>
<td>37 - 45</td>
<td>1389</td>
<td>122 - 15</td>
<td>1064</td>
</tr>
<tr>
<td>Sm. Flagpole on house</td>
<td>37 - 45</td>
<td>1308</td>
<td>122 - 15</td>
<td>95</td>
</tr>
<tr>
<td>Outer Black Chimney on Alameda Municipal Elec. Lighting Plant</td>
<td>37 - 45</td>
<td>924</td>
<td>122 - 14</td>
<td>1216</td>
</tr>
<tr>
<td>&quot; Tree &quot; outer prominent tree on ridge Hunters Pt.</td>
<td>37 - 43</td>
<td>1106</td>
<td>122 - 21</td>
<td>1345</td>
</tr>
<tr>
<td>Prominent Tree, Hunters Pt.</td>
<td>37 - 43</td>
<td>1543</td>
<td>122 - 22</td>
<td>807</td>
</tr>
<tr>
<td>Small Iron Pipe on shed.</td>
<td>37 - 44</td>
<td>569</td>
<td>122 - 22</td>
<td>970</td>
</tr>
<tr>
<td>Small Red Water Tank on shed.</td>
<td>37 - 44</td>
<td>1062</td>
<td>122 - 23</td>
<td>232</td>
</tr>
<tr>
<td>Southeast corner of shed army Street Wharf.</td>
<td>37 - 44</td>
<td>1493</td>
<td>122 - 23</td>
<td>42</td>
</tr>
<tr>
<td>Center of Gas Tank.</td>
<td>37 - 45</td>
<td>728</td>
<td>122 - 23</td>
<td>142</td>
</tr>
</tbody>
</table>
DEPARTMENT OF COMMERCE

U.S. COAST AND GEODETIC SURVEY.

E. Lester Jones, Superintendent.

Special Report to accompany Map of San Francisco Bay Waterfront from Twenty-fourth Street to Laguna Street.

Limits and Method of work:

This map covers the central part of San Francisco Bay waterfront on both sides of the Ferry Building. It has just been made and the ground was gone over very carefully with the map along the waterfront street and any small changes noted directly upon that sheet.

In view of the fact that except for a few small changes, this section is as shown on the old chart, and that the scale of this map in 1:72,000 would reduce any error to a minimum in transfer to the chart, it was not considered necessary to rerun this portion of the waterfront with the plane table.

Detailed description:

At Central Basin there is apparently no change. Just inside Mission Rock there is a small stretch where the shoreline is irregular piled stone and not the straight line shown.

There is no building on the first long line north of Mission Rock.

The six piers from pier 24 to pier 14, shown dotted on the chart, have been constructed.

The Ferry slip is as shown on the map.

Piers 1 to 29 are at present as shown on the map, and show slight changes on the chart.

Piers 31 to 33 have not as yet been started. Pier 41 is an open dock.

Hachures have been shown to indicate buildings. Due to the fact that the work was done with a pen while in the field under poor conditions the hachures are rough, as are also the notes which were written on the sheet at the same time.
DEPARTMENT OF COMMERCE

U.S. COAST AND GEODETIC SURVEY.

E. Lester Jones, Superintendent.

Report for work on War Department Map.

San Antonio Creek, Oakland was not rerun on the topographic Revision sheet, but the ground was gone over on both sides of the creek as far as the first bridge with the War Department Map and the chart, and the changes noted directly on the War Department Map. The

The area inspected is enclosed by the dashed lines.

The Southern Pacific Yards are about the same.

The small ferry slip at the inner side of the Western Pacific mole has been changed slightly at the point marked with a blue cross.

The transmission tower and open pier to the east are the same.

Just behind and to the east of the next pier is a shipyard. This is fenced in and as these places are at present difficult to obtain entrance into, and as it was not considered important, the place marked with a blue cross was not surveyed. But from inspection from across the Creek the shore-line as given by the old chart appears to be more accurate.

There is a small ferry slip about 300 meters west of the first bridge. There is little change in the south shore.

The small square pier just east of the T shaped pier is gone, and is at present as shown. Directly in behind is a large concrete building, the Southern Pacific Car Shops.

There is accompanying this map a Harbor Commission Map of this vicinity. This, while not as accurate nor complete as the War Department Map, indicates the proposed waterfront in the neighborhood of the Oakland Ferries and shows the reason for such changes as have been made, and shown in the Topographic sheets.
LANDMARKS FOR CHARTS

Seattle Park

March 29, 1917

SUPERINTENDENT, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted:

L. O. Colbert
Chief of Party.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>Position</th>
<th>Method of determination</th>
<th>Charts affected</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Latitude</td>
<td>Longitude</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D, M, meters</td>
<td>D, P, meters</td>
<td>Datum</td>
</tr>
<tr>
<td>Pipe Works Chy</td>
<td>37.46</td>
<td>122.17 108.6</td>
<td>US Stand Triang</td>
</tr>
<tr>
<td>M Power Tower San</td>
<td>37.47</td>
<td>122.17 108.6</td>
<td>Already on chart</td>
</tr>
<tr>
<td>S Power Tower Creek</td>
<td>37.47</td>
<td>122.17 108.6</td>
<td>&quot;</td>
</tr>
<tr>
<td>Brick Stack</td>
<td>37.48</td>
<td>122.21 108.5</td>
<td>US Stand Triang</td>
</tr>
<tr>
<td>Outer Chy Alameda</td>
<td>37.45</td>
<td>122.24 121.9</td>
<td>&quot; P.Table</td>
</tr>
<tr>
<td>Elec. Light Plant</td>
<td>37.45</td>
<td>726 122.23 142.10</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance. The description of each object should be short, but such as will identify it: for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. 3661

State ........................................... California
General locality ............................................. San Francisco
Locality ........................................... Alameda Pier to San Leandro Bay, and Hunters Pt to Mission Rock
Chief of party ........................................... L.O. Colbert
Surveyed by ........................................... H.T.Kelsh
Date of survey ........................................... Jan 1917
Scale ........................................... 1/10000
Heights in feet above ........................................... none
Contour interval ........................................... none
Inked by ........................................... H.T.Kelsh
Lettered by ........................................... H.T.Kelsh

Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations,
Data from other sources affecting sheet ........................................... War Dept Map of San Antonio Creek, Oakland, and vicinity, Harbor Commission Map of same vicinity, Harbor Commission Map of San Francisco Waterfront

Remarks:
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

State: California

DESCRIPTIVE REPORT.

Type... Sheet No. 3661 a

LOCALITY:
San Francisco Bay,
Alameda Waterfront,

1920

CHIEF OF PARTY:
F. G. Engle, M. G. E.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U.S. Coast and Geodetic Survey.

REVISION

Register No. 3661

State ........ California .................

General locality ........ San Francisco Bay ............

Locality ........ Alameda waterfront ............

Chief of party ........ F.G. Engle ............

Surveyed by ........ R.F.A. Studde ............

Date of survey ........ November, 1919; January 1920.

Scale ........ 1 to 10,000 ............

Heights in feet above ........ .........

Contour interval ........ ......... feet.

Inked by ........ R.F.A.S. Lettered by ........ R.F.A.S. ............


Data from other sources affecting sheet ........ 4 prints .........

Remarks:
Descriptive Report

To accompany Topographic Sheet

San Francisco Bay - Alameda waterfront.

Revision under instructions dated July 25, 1919.

This sheet is a bromide copy and has no register number.

For a portion of the sheet, from the Municipal Electric Light Plant to the Borax Works, no traverses were run. The work between these limits consisted of examining the copy and making the necessary alterations with the aid of the planetable. A traverse was then run from S. Power Tower eastward, taking in everything that differed from the chart. This traverse was carried across Webster Street Bridge and westward along Oakland waterfront closing on N. Power Tower. A very small closing error was found. A stake, whose position had been determined on this traverse, was then adjusted and two traverses carried eastward, one along the Alameda shore bordering on San Antonio Creek, and the other along the Oakland shore. These traverses were run to the eastern extremity of the sheet closing on a stake. Two traverses were run on another sheet, "Topographic Sheet #2", which closed on these same stakes. The positions as determined on the latter sheet were transferred to this sheet, thereby showing the error of closure.

The working grounds were reached part of the time by carline and ferry from the ship which was berthed at Pier #36, San Francisco. The remainder of the time the party was quartered ashore in Alameda and Oakland. The party comprised R. F. A. Studd, then Deck Officer, and two men from the deck.

Three recoverable planetable positions were determined and are given in an attached list of plane table positions.

The Paragraph, given in the descriptive report of Topographic Sheet #2 concerning the name of San Antonio Creek, applies to this sheet also. There is a dredger working practically continually in this creek.

Four prints accompany this sheet; one showing the Bethlehem Iron Works in Alameda, another the Moore Shipbuilding Plant in Oakland, the remaining two cover the changes in streets and railroad tracks of Alameda, Oakland and Berkeley.
# Planetable Positions

To accompany Topographic bromide copy of Alameda waterfront.

<table>
<thead>
<tr>
<th>Object &amp; Description</th>
<th>Hyd.Name</th>
<th>Lat.</th>
<th>D.M. Meters</th>
<th>Long. D.M. Meters</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Tank, Bethlehem Steel Works</td>
<td>-</td>
<td>37°47'</td>
<td>507</td>
<td>123°16'</td>
<td>698</td>
</tr>
<tr>
<td>Moore Water Tank</td>
<td>-</td>
<td>37°47'</td>
<td>1498</td>
<td>122°17'</td>
<td>447</td>
</tr>
<tr>
<td>Spire on Golden Dome, Neptune Beach</td>
<td>Nep</td>
<td>37°48'</td>
<td>548</td>
<td>123°16'</td>
<td>827</td>
</tr>
</tbody>
</table>
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS.
REPORT ON TOPOGRAPHIC SHEETS 3661 a & b
Surveyed in 1919 & 1920.


Inked by R. F. A. Studds.

1. The plan and character of the work fulfill the requirements of the General Instructions. The changes should have been shown in color so that they might be easily distinguished from the old work.

2. The plan and extent of the work satisfy the specific instructions.

3. No further surveying is required within the area covered by the sheet.

4. The character and scope of the surveying and field drafting are good.

5. Reviewed by E. P. Ellis, October, 1921.
DESCRIPTIVE REPORT.

LOCALITY:
San Francisco waterfront.
front from Presidio to Mission Rock.

19120

CHIEF OF PARTY:
F. G. Enge, H. G. E.
Descriptive Report

To accompany Topographic Sheet #3661.

San Francisco waterfront, from Point Avisadero to Mission Rock.

Revision under instructions dated July 25, 1919.

This sheet is a bromide copy of Colbert's revision of 1917. The consisted of examining the copy for changes and making the alterations with the aid of the planetable. Mr. R. F. A. Studds, then Deck Officer, and two men from the deck comprised the party. They went to and from the working grounds each day, the ship being berthed at Pier 36, San Francisco.

No traverses were run, the topographer locating himself when necessary by the aid of contiguous topography, or such signals as could be used. No planetable positions were established.

The most important change which has occurred in the localities covered by this sheet, is at Army Street Wharf, latitude 37° 45', longitude 122° 23' approximately, where a channel has been dredged and a new concrete state wharf built. A double bascule bridge across Third Street admits to this wharf.

The large concrete dry dock at Hunters Point has been completed. This dock will accommodate any sized ship on the Pacific Coast.

No topographic sheet was made for the locality between Mission Rock and Pier 41. A municipal map of the San Francisco waterfront was obtained, examined and corrected. It is submitted with this topographic sheet. Another map showing a closer detail of the section around Pier 54 and China Basin also accompanies this sheet.

[Signature]

Approved.

[Signature]
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

REVISION

Register No. 3861

State ...... California ...

General locality ...... San Francisco waterfront ...

Locality ...... Point Aviadero to Mission Rock ...

Chief of party ...... F. G. Engle ...

Surveyed by ...... R. F. A. Studd ...

Date of survey ...... September 1919 ...

Scale ...... 1:10,000 ...

Heights in feet above .......

Contour interval .......

Inked by ...... R. F. A. S. Lettered by ...... R. F. A. S. ...

Records accompanying sheet (check those forwarded): Photographs, Descriptive report, Horizontal angle books, Field computations, Data from other sources affecting sheet .... 2 prints ...

Remarks: .......
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: California

DESCRIPTIVE REPORT

LOCALITY

South San Francisco
Hunters Point

1980

CHIEF OF PARTY

T. J. Maher
See Letter 742, 1929

in reference to this sheet.
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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 Letter

REGISTER NO. 3661 C

State California

General locality South San Francisco, Hunters Point.

Locality South San Francisco.

Scale 1:10,000 Date of survey December 1929, 19

Vessel San Francisco Field Station

Chief of Party T. J. Maher

Surveyed by Charles Pierce

Inked by Charles Pierce

Heights in feet above ground to tops of trees

Contour Approximate contour Form line interval None feet

Instructions dated Verbal Instructions from T. J. Maher, 19

Remarks This Topographic work was part of Shoreline Revision

South of Pier 30, San Francisco, Calif.

Signed 742, 1929

Reference to description form