DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Washington

DESCRIPTIVE REPORT

Topographic

Hydrographic

Sheet No. "M"

LOCALITY

North Shore of Elliott Bay

Pudget Sound, Washington

1934

CHIEF OF PARTY

Jack Senior.
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 .. "M"

REGISTER NO. 6330

State: Washington
General locality: Puget Sound
Locality: North Shore of Puget Sound

Scale: 1:15,000 Date of survey: October 29, 1934 to March 26, 1935.

Vessel: U.S.C.S.S. EXPLORER
Chief of Party: Jack Senior
Surveyed by: William F. Malnate and Harry F. Garber
Inked by: William F. Malnate

Heights in feet above M.N.W. to ground to top of trees

Contour: Approximate contour line interval 20 feet

Instructions dated: March 29, 1935.

Remarks:
DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "M"

NORTH SHORE OF ELLIOTT BAY

PUGET SOUND

WASHINGTON

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JACK SENIOR, CHIEF OF PARTY,

1934.
DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET "M",
NORTH SHORE OF ELLIOTT BAY
PUGET SOUND, WASHINGTON.

INSTRUCTIONS:

The survey was made in accordance with the Director's Instructions for Project No. HT-171, dated March 29, 1934.

LIMITS:

The north shore of Elliott Bay between Longitude 122° 24.6' west and Longitude 122°21.8 west.


METHODS:

The standard survey methods outlined in the "Topographic Manual, Special Publication No. 144", were used throughout.

CONTROL:

The topography was controlled by first and second order triangulation established in 1934.

TRAVERSE CLOSURES:

There were no closing errors of traverse.

CONTOURS:

The elevations on the west side of Smith Cove were determined by vertical angles observed with an alidade. Because of the limitation of the vertical circle on the standard alidade it was necessary to determine the elevations along Magnolia Bluff by vertical angles observed with a sextant.

MAGNETIC OBSERVATIONS:

Observations with a magnetic declinatoire were made at
triangulation station "END - 1915-1934".

GENERAL DESCRIPTION:

From Four Mile Rock east to Smith Cove the land rises abruptly from the high water line to an average elevation of over one hundred feet, forming a conspicuous bluff known locally as Magnolia Bluff.

At Smith Cove a low water flat extends to the northward for about three quarters of a mile and is closed to navigation, except to the smallest power boats, by a triple decked trestle having a clearance of about five feet above mean high water for the lower level of the trestle and also by closely driven supporting piles.

East of Smith Cove are located the Smith Cove Terminal Piers, which extend out from the highwater line for a distance of about a half mile.

Beyond the piers the coastline turns sharply to the southwest and the highwater line is sharply defined by a granite retaining wall for a railroad fill.

COMPARISON WITH EXISTING CHARTS:

Compared with Charts Nos. 6447 and 6449.

The present survey agrees with the published charts very well.

Southeast of the Smith Cove Terminal Piers the highwater line now extends only to the railroad retaining wall. The area back of this wall has been filled in leaving only a small lagoon north of the piers. There are no surface openings to this lagoon, the water level apparently remains constant.

A highway has been constructed inshore of the railroad and several large buildings or warehouses are located between the highway and the railroad on the filled area.

North of Piers 40 and 41 are located the storage tanks of the Texas Company.

A third level has been added to the trestle over Smith Cove and crosses due west to connect Magnolia Bluff. This third trestle or bridge is constructed of reinforced concrete and is conspicuous by contrast with the other two trestles.
beneath it, which are built of timber.

The marshy area about one thousand meters north of the piers is gradually being filled in and is at present defined as shown.

The other minor discrepancies which may be noted are due to construction which has taken place since the previous survey.

Respectfully submitted,

William F. Malnate,
Jr. H. & G. Engr., C. & G. S.,
U.S.C. & G.S.S. EXPLORER.

APPROVED AND FORWARDED:

Jack Senior,
Chief of Party, C. & G. S.,
Comdg., U.S.C. & G.S.S. EXPLORER.
STATISTICS

TOPOGRAPHIC SHEET "M".

Statute miles of shoreline ........................................ 6.9
Statute miles of highway ........................................... 4.5
Statute miles of railroad ........................................... 8.0
Statute miles of street railway ................................... 1.7
Area in square statute miles ....................................... 3.0
Number of hydrographic stations located ......................... 69
<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
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<td>Fourmile Rock √</td>
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<tr>
<td></td>
<td>Magnolia Bluff √</td>
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<tr>
<td></td>
<td>Elliott Bar √</td>
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Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Name approved 9/26/5

K.T. Adams
REVIEW OF TOPOGRAPHIC SURVEY No. 6330 (1934-5) "M"

Title (Par. 56) North Shore of Elliott Bay, Puget Sound, Washington

Chief of Party: Jack Senior
Surveyed by W.F. Malnutt
Inked by W.F. Malnutt

Ship: Explorer
Instructions dated Mar. 29, 1934
Surveyed in Oct. 1934, Mar. 1935

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.)

4. The amount of vertical control that the Manual specifies for contours in the Manual specifies for -contours-formlines- was accomplished. (Par. 16, 19, 20, 21, 22, 23.)

5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) None submitted.

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 45, 44.)

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.)

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

   examined in connection with review J-5846 (1935) and balance of sheet compared with J-5724 (1934). [Note: March 3, 1935]

10. The span, draw and clearance of bridges are shown. (Par. 16c.)

11. Locations and elevations of summits are given. (Par. 19, 51.)

12. The tree line was shown on mountains. (Par. 16g.)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.
The rock charted on 6449 and 6450 is a bare rock about 200 miles southeast of Fourmile Rock as described in the Dec. Rep. of T-2422 (1899) as "bare at low tide." It has been located and is shown on the present survey by the rock symbol.

Note A

The bare rocks shown on Charts 6449 and 6450 about 200 miles southeast of Fourmile Rock originally with T-2422 (1899), but was not located by the present survey party. This rock is described in the descriptive report of T-2422 as "bare at low tide" and probably means bare only at low tide. This would account for the present party not locating it. It has been carried forward to the present survey as a rock symbol but without any legend. The rock symbol should replace the bare rock symbol on the charts.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.)

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 164d, e, 60.)

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) The variation is noted on the sheet instead of the Declination.

18. The geographic datum of the sheet is North American 1927 and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate.

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 65k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 79, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by __________.

24. Remarks:


Examined and approved:

C. K. Green
Chief, Section of Field Records

Fred L. Seacock
Chief, Section of Field Work

J. A. Robertson
Chief, Division of Charts

Chief, Division of Hyd. and Top.