Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
....., *Director*

State: Washington

DESCRIPTIVE REPORT

Topographic
~~*Hydrographic*~~ } *Sheet No.* "M"

LOCALITY

North Shore of Elliott Bay
~~Vicinity of~~
Puget Sound, ~~Washington.~~

*19*34.

CHIEF OF PARTY

Jack Senior.

U. S. GOVERNMENT PRINTING OFFICE: 1931

Form 537a

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

REG. NO.

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 "M"

REGISTER NO. 6330

State Washington

General locality ~~Vicinity of~~ Puget Sound

Locality North Shore of ~~Puget Sound~~ Elliott Bay

Scale 1:5,000 Date of survey October 29, 1934 to March 26, 1935.

Vessel U.S.C. & G.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.H.W. to ground ~~to tops of trees~~

~~Contour~~ Approximate contour ~~Form Line~~ interval 20 feet

Instructions dated March 29, 1934.

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1928

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "M"

NORTH SHORE OF ELLIOTT BAY

PUGET SOUND

WASHINGTON

- o -

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.

Junctions are made with Topographic Sheet "C - 1934", at triangulation station "FULMER - 1934", Latitude 47°38.45' north, Longitude 122°24.83' west, and with Topographic Sheet "A - 1935", at triangulation station "HART - 1934", Latitude 47°37.33' north, Longitude 122°21.83' 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 southeastward 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 descrepancies which may be noted are due to construction which has taken place since the previous survey.

William F. Malnate

Respectfully submitted,

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

APPROVED AND FORWARDED:

Jack Senior

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

GEOGRAPHIC NAMES

Survey No. T6330

Date. July 30, 1935 WASHINGTON

Chart No. 6450

Diagram No. 6450-2

Approved by the Division of Geographic Names, Department of Interior. ✳

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

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Fourmile Rock ✓	Same			
	Magnolia Bluff ✓	"			
	Smith Cove ✓	"			
	Elliott Bay ✓	"			

Names approved 9/5/35

K.T. Adams

(M-136)

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

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

Chief of Party Jack Senior Surveyed by W.F. Malnate W.F. Garber Inked by W.F. Malnate

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-formlines- was accomplished. (Par. 18, 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, 43, 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 of H-5846 (1935) and balance of sheet compared with H-5724 (1934). RJB March 3, 1936 (see Note A)

10. The span, draw and clearance of bridges are shown. (Par. 16c.) ✓
noted in Desc. Rep. page 2.

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.

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~~Note A:-~~

~~The rock charted on 6449 and 6450 as a bare rock about 200 meters southeast of Fourmile Rock is described in the Desc. Rep of T-2422 (1899) as "bare at low tide." It has been relaied and is shown on the present survey by the rock awash symbol.~~

Note A

The bare rock shown on Charts 6449 and 6450 about 200 meters southeast of Fourmile Rock originates 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 awash but without any legend. The rock awash symbol should replace the bare rock symbol on the charts.

A.L.S.

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. No 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. 16d, 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 error of the Declinatoire.

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, 66k.) ✓

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 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:

Reviewed in office by R.J. Christman March 3, 1936.
Inspected by A.L. Shalowitz

Examined and approved:

C. K. Green
Chief, Section of Field Records

Fred. L. Peacock
Chief, Section of Field Work

L.O. Colbert
Chief, Division of Charts

[signature]
Chief, Division of Hyd. and Top.

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