DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY State: Mass, DESCRIPTIVE REPORT. John: Sheet No. 3764 - 67



Winter Season, 1919.

February-May.

#### DESCRIPTIVE REPORT.

To accompany Field Sheets A. B. C. & D.

Revision work on the North Shore of Massachusetts Bay.

Party of John A. Daniels.

- 1. Scale. Limits. The scale used for this revision is the same as that used upon the old original sheets, namely, 1:10,000. The four sheets are laid out perpendicular to the Meridians, and include the shoreline and adjacent land areas to a depth of from one-half to two miles from Grovers' Cliff Northeastward to the Village of Magnolia. The following cities and villages of considerable size are included within the limits of the work: Chelsea, Beachmont, Revere, Nahant, Lynn, Swampscott, Marblehead, Salem, Beverly, Danvers, Beverly Farms, Manchester, and Magnolia. The outlying islands within the limits of the work were included in the revision. The four sheets have a total of 115 miles of shoreline, 350 miles of roads streets and railroads, and 9 miles of creeks.
- 2. Methods. Projections were first constructed and all former surveys were transferred to the projections in pencil, town plots. city surveys and plant layouts were fitted upon these projections in the best manner possible. The revision work that had been done in small plots before the party took over the work was also fitted upon and transferred to the projections. This transferring was done for the most part, during bad weather. When a compilation of all data obtainable had been completed, the sheets were taken into the field and verified. This verification was accomplished by running traverse with the regulation Coast Survey Plane fable outfit, constantly checked by 3-point fixes, along the shoreline and the main roads. Straight cross roads and street systems were paced and sketched for the location of individual houses and buildings. The entire ground was gone over with sheet or sketch-book for additions and corrections. The sheets, therefore, amount practically to a re-survey of the entire area, the old work serving only as a framework upon which the new details have been placed.



- 3. <u>Control</u>. The triangulation control consisted mainly of objects located by the wire drag parties in 1915-16, although some points located in 1894 and earlier were available. There was found to be sufficient triangulation for the control of the topography without additional work.
- 4. Changes. The most notable changes are those that have been brought about by the parking of the beaches by the Massachusetts Metropolitan Park Commission. Through the work of this Commission the beaches from Grovers' Cliff to Swampscott have been improved, and the system of buildings shown upon the old survey has been entirely removed and changed. Fires in recent years in Chelsea and Salem have brought about extensive street changes that were noted and corrected. The greater part of all the shoreline has been improved or altered in one way or another. The changes are shown upon the sheets. All of the cities have extended their limits considerably, and the added areas are shown in detail. Extensive railroad yards and spurs have been added, and many industrial plants built.
- 5. <u>Contours</u>. No contour: work was done, as there has been very slight changes in this respect.
- 6. Party. During the first part of the work, the party consisted of 1 Jr. H. & G. E., 1 Field Draftsman and 2 App. Draftsmen, besides the Chief of Party. During the latter part, we were without the services of the Jr. H. & G. E. The work of the Draftsman and apprentice Draftsmen was particularly satisfactory. They did a large amount of accurate and painstaking work and showed excellent spirit at all times.

Very respectfully submitted,

John A Danila Jr. H. & G. Engineer.

For locations of prominent objects - see descriptions of stations (accession no. 73541).

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.

Records accompanying sheet (check those forwarded): Photographs,

Descriptive report, Horizontal angle books, Field computations,

Remarks: Revision sheet

One descriptive Report for sheets A. B. C. & D. Copies forwarded with sheets A & C.

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.

Register No. 3765 Field Sheet C.
State
General locality
Locality Salem.to Manchester
Chief of party John A. Daniels
Surveyed by Stanton M. Ferguson
Date of survey
Scale
Heights in feet above No playetions shown
Contour interval feet.
Inked by Field Party Lettered by . Field Party
Records accompanying sheet (check those forwarded): Photographs,
Descriptive report, Horizontal angle books, Field computations,
Data from other sources affecting sheet

Remarks: Revision sheet

One descriptive report covers Sheets A. B. C. & D. Copies forwarded with sheets A & C.

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.

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Register No. 3766 Field Sheet B.
State
General locality
Locality Lynn.to Salem
Chief of party John.A. Daniels
Surveyed by John.A. Daniels
Date of survey February April, 1919
Scale
Heights in feet above No.contours shown
Contour interval feet.
Inked by .Field.Porty Lettered by . Field Party
Records accompanying sheet (check those forwarded): Photographs,
Descriptive report, Horizontal angle books, Field computations,
Data from other sources affecting sheet
Remarks: Revision sheet.

One descriptive Report for Sheets A. B. C. D. Copies filed with sheets A. & C.

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.

Remarks: Revision sheet.

One descriptive report for sheets A. B. C. & D. Copies forwarded with Sheet A & C.