

Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: *Mass.*

11-5613

DESCRIPTIVE REPORT.

Topo. Sheet No. *3764-67*

LOCALITY:

*North Shore of
Massachusetts Bay.*

1919

CHIEF OF PARTY:

Daniels, John A.

3764-67

3764
3765
3766
3767

10/21

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, 380 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 Table 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. Control. 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. Contours. 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. Daniels
Jr. H. & G. Engineer.

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

DEPARTMENT OF COMMERCE
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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. **3764** Field Sheet D.

State **Massachusetts**

General locality **Massachusetts Bay**

Locality **Manchester to Magnolia**

Chief of party **John A. Daniels**

Surveyed by **Stanton M. Ferguson**

Date of survey **May, 1919**

Scale **1 : 10000**

Heights in feet above **No contours 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 for sheets A. B. C. & D. Copies forwarded with sheets A & C.

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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 Massachusetts.
General locality Massachusetts Bay.
Locality Salem to Manchester.
Chief of party John A. Daniels.
Surveyed by Stanton M. Ferguson.
Date of survey February to April, 1919.
Scale 1 : 10000.
Heights in feet above No elevations 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.

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.

Register No. **3766** Field Sheet B.

State **Massachusetts**

General locality **Massachusetts Bay**

Locality **Lynn to Salem**

Chief of party **John A. Daniels**

Surveyed by **John A. Daniels**

Date of survey **February - April, 1919.**

Scale **1 : 10000**

Heights in feet above **No contours 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 for Sheets A. B. C. D. Copies filed with
sheets A. & C.

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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. 3767 Field Sheet A

State Massachusetts
General locality Massachusetts Bay.
Locality ~~Crocker, Gliff, & Lynn~~ *to Chelsea*.
Chief of party John A. Daniels
Surveyed by John A. Daniels
Date of survey April & May 1919.
Scale 1:10000
Heights in feet above No contours 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 for sheets A. B. C. & D. Copies
forwarded with Sheet A & C.