

6402

Graphic Control

U. S. COAST & GEODETIC SURVEY
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Acce No.

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New Jersey

DESCRIPTIVE REPORT

GRAPHIC CONTROL

Sheet No. X

LOCALITY

Mullica River, Lower Part

193 5

CHIEF OF PARTY

Benjamin H. Rigg.

U. S. GOVERNMENT PRINTING OFFICE: 1928

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DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

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REG. NO.

TOPOGRAPHIC TITLE SHEET

Acc. No.

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. X

REGISTER NO.

6402
T6402

State New Jersey

General locality Atlantic Co.

Locality Mullica River " (Lower Part) "

Scale 1/10,000 Date of survey May, 1935

Vessel Party No. 19

Chief of party B. H. Rigg

Surveyed by A. M. Rogers, Jr.

Inked by T. B. Nutting

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated May 16, 1935

Remarks: Hydrography done.

DESCRIPTIVE REPORT TO ACCOMPANY
GRAPHIC CONTROL SHEET X

Outline

1. INSTRUCTIONS.
2. PURPOSE
3. LIMITS OF SHEET.
4. DESCRIPTION OF TERRITORY.
5. CONTROL.
6. SURVEYING METHODS USED.
7. PERMANENT STATIONS ESTABLISHED.
8. AIDS TO NAVIGATION AND LANDMARKS.
9. TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR PHOTO COMPILATION.
10. GEOGRAPHIC NAMES.

DESCRIPTIVE REPORT TO ACCOMPANY
GRAPHIC CONTROL SHEET X

INSTRUCTIONS

The survey was carried out under instructions dated May 16, 1935.

PURPOSE

The purpose of the survey was to locate topographic control for hydrography, to establish permanent stations, to locate aids to navigation and check landmarks, and to locate topographic features for use in the air photo compilation, including one and one-half miles of shoreline west of the Mullica River Bridge which fell off the area photographed.

LIMITS OF SHEET

The topography on this sheet included the Mullica River and surrounding territory between latitudes $39^{\circ} 31.7'$ and $39^{\circ} 35.7'$; longitudes $72^{\circ} 26'$ and $74^{\circ} 30'$.

DESCRIPTION OF TERRITORY

The territory covered by this sheet is in general marshy. The Mullica River runs along the center of the sheet and is bordered on both sides by broad flats of marsh. At lat. $39^{\circ} 33.5'$, Long. $74^{\circ} 27'.0$, the Bass River branches off of the Mullica River and runs northward to the village of New Gretna. This village is a fishing center, and the Bass River is used as an outlet for boats basing at New Gretna. At lat. $39^{\circ} 32.5'$, Long. $74^{\circ} 26.8'$ Nacote Creek branches off of the Mullica River and runs WSW through the village of Nacote which is also a fishing center. U. S. Route No. 9 (N.J. No. 4) traverses the entire length of this sheet from north to south, crossing Nacote Creek, Mullica River, and Bass River.

CONTROL

The following triangulations were used for control on this sheet:

AKIMBO	Rigg, 1935
MULLICA	" "
LONG	" "
NACOTE	" "
*HOWELL	" "
GRETNA	MEANY 1932

*The triangulation position of station HOWELL was not available while the work was being done on this sheet. It was, however, located by topography and used for control. When the triangulation position became available, it was plotted on the sheet and found to agree with the topographic position without plotable error.

SURVEYING METHODS USED

The hydrographic signals on sheet X were located by graphic triangulation. Beyond long. $74^{\circ} 28'$, control was very weak.. In order to strengthen the position of hydrographic signals west of that point, re-sections were taken on the topographic location of station HOWELL. Because these re-sections were longer than the cuts already drawn to the set-ups, particular care was taken in setting up, levelling, and orienting the planetable. To establish control up the Bass River, a scheme of triangulation was run graphically. Using the topographic location of HOWELL and triangulation station MULLICA as an initial or base line, the scheme was extended up the river to where the highway crosses the Bass River. A short traverse was then run from the last station on the scheme to triangulation GRETNA. The error of closure was five meters. This error was adjusted. Shoreline was rodded in at intervals in conjunction with the other work.

PERMANENT STATIONS ESTABLISHED

A. The following monumented stations were located, designated with the letter "D" on the control Sheet, and described on form 521:

SWAN
BASS

BROAD
POLE

B. B.. Natural Objects Located and Described. -- None

C. Bolstad Fourth Order Stations. -- All of Bolstad's "4th order" stations (located for Air-Photo Compilation Control) falling within the limits of the graphical control sheets were plotted. Wherever possible, they were checked with the planetable. In the few cases where discrepancies occurred, they were adjusted by re-checks of the computations or of the topography, or both. The final position as shown on the sheet and the card, is to be considered correct.

Following is a list of stations falling on sheet "X":

Station	Whether or Not Checked	Amt. of Discrep.	Remarks.
SO. GAB CRAMER	checked		
E. G. FRENCH	Not Checked	See my card for Corr. Pos.	E.R.A. Stations 1851 and 1853 were located by means of the Air Photo Compilation. Cards have been submitted for these stations. They have been plotted on the control sheets.
W. G. MULLICA R.	Checked	on sheet R.	
S. G. HICKORY PT.	Checked		

AIDS TO NAVIGATION AND LANDMARKS

For a discussion of aids to navigation see corresponding paragraph in descriptive report accompanying sheet M. Light 26-D was the only aid to navigation falling on this sheet. Its position was submitted on form 567.

TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR PHOTO COMPILATION

Shoreline along the Mullica River for approximately a mile and a half west of the Mullica River Bridge was missed in the flight of air photos covering this area. It was run in in its entirety on the graphic control sheet. The three bridges across the Mullica, Nacote, and Bass Rivers were located and the clearances above mean high water determined. Additional patches of shoreline were obtained as a check between the topography and the air photo compilation

The shoreline agreed within five meters. The smaller discrepancies were adjusted by changing the compilation. (All less than 5 meters)

GEOGRAPHIC NAMES

The following Geographic Names were obtained by the topographer by interviewing local residents. The bridge tender at Highway No. 19 and Mr. Frank Cook, Proprietor of Great Bay Ship Yard on Nacote Creek. COLLINS POINT, COLLINS COVE, WADING RIVER and MOSSES POINT.

Respectfully submitted,

Addison S. Hall,
Surveyor

Forwarded by,

Lt. Benjamin H. Rigg,
Chief of Party.

REVIEW OF GRAPHIC CONTROL SURVEY T- 6402 , SCALE 1:10,000 ,

Date of Review 4/5/37

✓ 1. This survey has been reviewed in connection with Air Photo Compilation Nos. T-5447, 5634 , , with particular attention to the following details:

- ✓ (a) Projection has been checked in the Field.
- ✓ (b) Accuracy of location of plane table control points.
- ✓ (c) Discrepancies between detail on this survey and the air photo compilations listed above.
- ✓ (d) Discrepancies found in descriptions submitted on Form 524 when compared with the air photo compilations listed above.

✓ 2. Refer to the reviews and descriptive reports of air photo compilations Nos. T-5447, 5634 , , for a more complete discussion of any errors or discrepancies found.

✓ Any material errors found on this survey are noted in subsequent paragraphs of this review, and these have been reported to the Field Records Section and the Cartographic Section.

✓ Notes and corrections resulting from the review are shown on this survey in green.

Frank L. Toller