

6029

Graphic Control

U. S. COAST & GEODETIC SURVEY
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Ed. June, 1923

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New York

DESCRIPTIVE REPORT

Topographic } Sheet No. "K" 6029
Hydrographic }

LOCALITY

Long Island Sound

North portion of Hempstead Harbor.

1933

CHIEF OF PARTY

Harold A. Cotton

U. S. GOVERNMENT PRINTING OFFICE: 1923

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DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET NO. "K"

North portion of Hempstead Harbor.

INSTRUCTIONS:

This survey was accomplished under instructions dated March 23, 1933.

CONTROL:

This sheet was controlled by three main scheme triangulation stations (Matinico₃ - Glen Cove Beacon and Pier) and ten intersection stations on both shores of the harbor. The location of Stations "New York" and "Point" were determined by triangulation after the topography had been done (for the coordination of U. S. E. control about head of Hempstead Harbor).

EXTENT:

The sheet takes in the east shore of Hempstead Harbor from Dosoris Pond to Carpenter Point, and on the west shore from the long pier halfway between Mott and Prospect Points to the gravel pit at about 40° - 50½°

JUNCTIONS:

This sheet joins sheet "L" on the east, sheet "I" on the west and sheet "J" on the south.

METHODS:

Ordinary plane-table methods were used, but the traverses were for the most part well controlled by resections of intersection triangulation stations. On the other hand there were no triangulation stations directly occupied except Station "Cone".

Starting with the table points at the end of sheet "L" in Dosoris Pond and orienting on topo Station "Brown" the remainder of Dosoris Pond was located. This was a short orientation with no check available but was carried out on to the outside coast where triangulation stations "Matinico₃", "Green", and "Sky" on the far side of the harbor became visible. Resections on these points checked as did also the last point on the outside coast on sheet "L" so the position was accepted and the

work continued. This traverse was continued to tri."Round". Station "Round" is not in accordance with the description which calls it a round red house on the end of the dock. The house is rectangular and weathered gray, but cuts taken to the center of it indicate that it is the station.

Work on the east shore was then discontinued and a traverse started at tri."Pier" on the long pier half way between Mott Point and Prospect Point. This traverse was run with orientation on stations on the far side of the harbor to stations "New York" and "Point". These were also later checked by triangulation about as close as they could be plotted. From this point the traverse was carried with orientation on triangulation "Side" with resections on "Glen Cove Light" and "Stack" to a loose end about latitude $40^{\circ} 50\frac{1}{2}'$ which was later tied in to the control on sheet "J".

A three point fix was then picked up about three hundred meters south of the inshore end of the Glen Cove Breakwater and run south to the flagpole on Mosquito Neck. At this point there was a discrepancy of about three or four meters with a cut to this pole from the opposite side of the harbor; accordingly another three point fix was taken back on the sand spit at the lower end of Mosquito Neck and another location of the flag pole made. An adjustment was made of this section of the shore line and the flag pole. The last fix was determined from six different stations and is thought to be very good.

From here a traverse was run up Glen Cove Creek and back and on down the shore south of Sea Cliff, to a loose end which was later checked back from sheet "J".

A traverse was started near the Glen Cove Beacon and run north to close within a meter at triangulation station "Cone". An old Coast Survey Station with no name on the disk was recovered on the breakwater off Week Point.

A traverse was run up around the swamp southwest of Dosoris Pond and a cut passed through one of the points determined on sheet "L", and also on one of the last points of the traverse coming down from Matinicock Point.

NATURE OF THE SHORELINE:

From the north east border of the sheet down to topo Station "Boat" the entire shoreline is private estates or clubs, each property extending over a considerable area. At the inshore end of the Glen Cove Breakwater is a well kept park and bathing beach, joined on the south by another yacht club, while still another occupies the lower end of Mosquito Neck (north of the sand spit).

The village of Glen Cove sprawls around behind Mosquito Neck and Glen Cove Creek, while the village of Sea Cliff occupies the hill to the south of Glen Cove Creek and continues to the southern boundary of the sheet.

On the west shore private estates occupy practically the entire

area.

Along most of the west bank and along the east bank south of Glen Cove Creek, and between Glen Cove Creek and the Glen Cove Breakwater are rather abrupt bluffs, while the rest of the shoreline is comparatively low.

All along the shore below Sea Cliff from Station "Land" a boardwalk runs just outside of the high water line.

The shore line from the northwest corner of the sheet to Mott Point is foul area for about two hundred meters off shore. Nothing, however, was found as far out as the rock marked "Picket Rock" on the chart.

There is also some foul area off of Dosoris Island, Week Point and south of Sea Cliff, but the remainder of the shoreline is largely sand or gravel beach.

About half a mile north of the Glen Cove Breakwater is a small boat harbor formed by building rock breakwaters.

CHANGES:

The bridge over the outfall of Dosoris Pond is now a stone arch bridge with headgates below for control of tidal flow. The high and low water line below this bridge is considerably changed by silting and artificial filling.

The outfall to the southward of Dosoris Island has been closed by a causeway and the area south of the island is a high water marsh.

"Round" is the center of a weathered gray rectangular dock house instead of a red circular one as described.

Triangulation "Pole" has been destroyed.

The marsh to the north of Week Point has been ^{←week's Pr}trenched for drainage and the creek closed. The marsh is now dry except after extremely heavy rains or very high winter tides. In a few years it will be completely reclaimed.

In Glen Cove Creek a large dredge is operating. At the time of observation, the sand spit had been cut through and the dredge was proceeding across the swamp and up Glen Cove Creek. It is probable that the spoil will fill the present channel, that shown on this sheet, and it is recommended that a resurvey of this portion be made next year or that the data be obtained from the Army Engineers.

The pond shown on the point about half way between topo Stations "Pile" and "Road" is being encroached upon by a city dump and will eventually be filled, as will also that neck of the marsh extending up to

Geographic Names examined and found to agree ⁶⁰²⁹
with other authorities except Week Pt and Glen Cove Cr.
which will be the subject of inquiry. Harlow Bacon, Senior Cartographer
Glencove Cr. as on Chart 1213 OK, H.B. Dec 3, 1934
Weeks Pt OK, Dec 12, 1934, H.Bacon, See Eldridge Chart No. 2, U.S.G.S. Oyster Bay Quad. x H 1722 (1866) Nov 27, 1934

topo Station "School". It is expected that the old outlet will soon
silt up.

STATISTICS:

Statute Miles of Highwater.....	13
Statute Miles of Low water Creeks, Sloughs, etc.....	12
Statute Miles of Roads, Railroads, etc.,	1/2
Number of Recoverable Positions	
Triangulation.....	13
Topographic.....	47
Number of Positions occupied.....	82
Number of offshore rocks.....	186
Area.....	12 sq. mi.

Respectfully Submitted
W. O. Minkley
Surveyor, C & G Survey

Harold Alcott
Chief of Party

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PLANE TABLE POSITIONS FOR SHEET "K"

<u>NAME</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DESCRIPTION</u>
Sum	40°- 53.67	73°- 38.30	Center of small weathered gray summer house on the top of the bluff in front of a large white wooden house just south of the main outlet to Dosoris Pond.
Guard	40°- 53.60	73°- 38.19	Center of stone guard house at the entrance to J. P. Morgan's estate.
White	40°- 53.61	73°- 38.29	Northwest chimney of large white wooden house on hill just south of main outlet to Dosoris Pond.
Stand	40°- 53.59	73°- 38.45	Large northwest chimney of yellowish brown large stone house.
Ror	40°- 52.63	73°- 39.20	Yellow chimney on a red roofed house.
Bath	40°- 52.50	73°- 39.33	Seaward gable of small blue gray bath house just above high tide line about 400 meters south of Week Point.
Glass	40°- 52.38	73°- 39.20	Green glassed roof conservatory on estate of Arthur Lowe.
Air	40°- 52.29	73°- 39.45	Airport wind direction indicator on end of breakwater forming the small boat and hydroplane anchorage $\frac{1}{2}$ mile south of Week Point.
Beak	40°- 52.26	73°- 39.44	Navigation beacon at entrance to this same small boat harbor.
Boat	40°- 52.11	73°- 39.30	Seaward gable of two story white wood boat house.
Pole	40°- 51.88	73°- 39.32	Flagpole over clock on brick bath house in public park at the inshore end of Glen Cove Breakwater.
Navy	40°- 51.78	73°- 39.28	Flagpole at New York Yacht Club.
Club	40°- 51.40	73°- 39.11	Flagpole on dock of club house just north of Mosquito Cove and the entrance to Glen Cove Creek.
Old	40°- 51.36	73°- 38.93	Center of cupola on top of old weathered boat house at mouth of Glen Cove Creek.

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<u>NAME</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DESCRIPTION</u>
Brick	40°- 51.68	73°- 38.28	Tall yellow brick stack near head of navigation on Glen Cove Creek.
School	40°- 53.51	73°- 38.18	White cupola on red brick school in the village of Glen Cove.
Pipe	40°- 50.98	73°- 38.68	Standpipe on highest point of hill above Sea Cliff. It is visible from almost all of Hempstead Harbor and well out onto the Sound.
Light	40°- 51.15	73°- 39.06	Small red light on top of a cast iron standard at outer end of a jetty off of the Seacliff beach.
Square	40°- 50.95	73°- 39.07	Square yellow cupola of house on Seacliff bluff about the point where the shoreline makes a rather sharp turn to the southward.
Gone	40°- 50.90	73°- 39.22	Flagpole on corner of dock at boathouse just south of the bend in the shoreline at Seacliff. This is not the flagpole on the building but the one on the northwest corner of the dock.
Dome	40°- 50.73	73°- 39.19	Green dome on a residence on the Seacliff bluff. There are two domed residences in this neighborhood but this is set in the trees and is about three quarters of a mile north of the other one.
Near	40°- 50.62	73°- 40.15	Flagpole at inshore end of a dock near a well built bath house.
Far	40°- 50.73	73°- 40.19	Property survey marker (a cross cut in top of a granite monument) near the high tide line and about twenty feet north of a large boulder on the beach.
Bee	40°- 50.83	73°- 40.25	Flagpole on corner of concrete bulkhead (Northeasterly corner). This bulkhead is painted white and is readily visible all over this part of the harbor. There is an artificial swimming pool on the area protected by this bulkhead.
Stuck	40°- 50.86	73°- 40.32	North chimney of a large white stucco house.
Wet	40°- 50.86	73°- 40.28	Flagpole on south gable of a bath house near the high water line.
East	40°- 50.92	73°- 40.38	East gable of shingle and wood house about fifty meters in from the beach.
Bat	40°- 51.53	73°- 40.89	West gable of small green bath house on the beach near the tripod of the New York Fish Commission which is the Coast Survey Station New York.

<u>NAME</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>DESCRIPTION</u>
Gab	40°- 51.58	73°- 41.07	East gable of small green bath house on edge of bluff above high tide line about 170 meters from the end of a substantially built stone sea wall.
Chim	40°- 51.57	73°- 41.11	North chimney of house about 70 meters back from high water line.
Pil	40°- 51.61	73°- 41.18	Stone pillar at end of long stone breakwater. This breakwater is very substantially built and has about a five foot sidewalk on top of it.
Gug	40°- 50.94	73°- 40.67	Cupola on red roof house on west hill of Hempstead Harbor. The signal is the center of the tower not the chimney which is to one side of the center of the tower.

MEMORANDUM BY CHIEF OF PARTY NO.3

REGARDING TOPOGRAPHIC SHEET "J" (K) "L"

LONG ISLAND SOUND 1933

LOW WATER LINE

In common with other topographic sheets executed during the present (H.A. Cotton -1933) season, the location of the low water line on this sheet was a distinct job in itself i.e., the entire low water line was visited during periods of low water and the low water line located with due regard for existing tidal conditions.

PROMINENT OBJECTS * LANDMARKS

Also in common with the other topographic sheets executed during the present season, there are numerous extensive estates located over the area coming within the limits of this sheet. Some of the large buildings on these estates comprise the most prominent objects of the landscape.

As these buildings are not only of outstanding prominence but also have particular promise of permanence, it is believed that the chart should show a reasonable number of them. Accordingly the principal objects of this character (at frequent intervals) have been listed on Form 567 "Landmarks for charts". In each case some particular point of the structure has been located.

CONNECTION WITH WORK OF U.S. ENGINEERS.

Coast and Geodetic Survey triangulation furnished control for sheets "K" and "L" while triangulation of the U.S. Engineers furnished control for sheets "J" which covers the lower portion of Hempstead Harbor.

The line \triangle Glen Cove Lt. - \triangle New York is the base for the extension of the U.S. Engineers triangulation into Hempstead Bay. Connection was made on this line between the triangulation of the Coast and Geodetic Survey and the U.S. Engineers. The value determined for both the azimuth and distance of this line was slightly different than that originally used by the U.S. Engineers. The different values for both the azimuth and distance of this line \triangle Glen Cove Lt. - \triangle New York are as follows:

	Azimuth Back	Log distance
U.S. Engineers	257 - 25° - 52.0"	3.226342
C. & G. Survey	257 - 25° - 04.1"	3.226363
Difference	87.9"	.000021

The above differences of azimuth and distance for the line Glen Cove Lt. - New York, were properly allowed for when converting the U.S. Engineers triangular co-ordinates of these stations into geographic positions for plotting on topographic sheet "J".

RECOVERY - OLD INTERSECTION TRIANGULATION STATIONS

The following former intersection triangulation stations were recovered during the course of the present topography:

Sheet "K" - Cone - Side - Stack - Sky - Green - Brown - Tow (all 1930); Point and New York (1917 - redetermined 1933); Tall Tank, Manhasset 1932.

Sheet "L" - Tank (Oak Neck) - Staff - Yel (all 1930); Dock - White - Will (all 1931).

CHANGES

Along shore line there have been numerous minor changes of filling and excavating, mostly the former. There has also been many changes among the small boat landings; many old ones gone and many new ones built. These scarcely merit individual mention; they are all corroborated by the aerial photography.

ACCOMPANYING DATA:

(a) Blue prints Nos. 11135587 (Sheet No.2) and 11627395 (sheets Nos. 1 and 2). These prints are of Glen Cove and Hempstead Bay respectively. One them are shown the U.S. Engineers triangulation stations, their scheme being extended from the base Δ Glen Cove Lt. to Δ New York which base was tied into the C. & G. Survey work during the present season.

(b) Description and position (rectangular co-ordinates) of twenty five triangulation stations of the U.S. Engineers.

(c) Computations for the conversion of the above rectangular co-ordinates into geographic positions for plotting on topographic sheet "J". In these computations due allowance was made for the new determination of the base Δ Glen Cove Lt. Δ New York. Computations were only made for such stations as were recovered and used for control.

Harold A. Cotton
Harold A. Cotton,
Chief of Party.

Card Form 524 accompany this report for the following stations

STAK - RAIN * HAIL * GATE - LAND - ROAD - PILE - COR - PAV - KONK -
WEEK - RED - MAN - ARMY

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Mamaroneck, N.Y.

November 13, 1933

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Harold A. Cotton
Harold A. Cotton

Chief of Party.

DESCRIPTION	POSITION North American Datum						METHOD OF DETERMINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE					
	°	'	D. M. METERS	°	'	D. P. METERS			Datum Name
N.W. Chim.White House on hill	40	53	1131	73	38	393	White	P.T.	223 ^x 222,1213
Yellow chim on red roofed house	40	52	1158	73	39	281	Red	P.T.	222 ^x ,1213 223 [✓]
Green Glass roof conservatory	40	52	697	73	39	286	Glass	P.T.	223 [✓]
Red roof tower surmounted by flag pole	40	52	506	73	39	2	Tow	Triang.	223 [✓] .1213
Yellow brick stack on hill above Seacliff	40	51	306	73	38	549	Stack	Triang.	223 [✓]
Standpipe on hill above Seacliff	40	50	1816	73	38	962	Pipe	P.T.	223 [✓] ,1213
White cupola on red brick school	40	51	942	73	38	225	School	P.T.	223 ^x
Boathouse-cupola	40	51	654	73	38	1300	Old	P.T.	223 [✓]
Castellated tower	40	51	1473	73	42	97	Sky	Triang.	223 [✓] ,1213
Green Roof tower	40	51	1228	73	41	1257	Green	Triang.	223 [✓] ,1213
Seaward chim on brown brick house	40	51	1234	73	41	546	Brown	Triang.	223 [✓] ,1213
Tower on red house on hill	40	50	1763	73	40	941	Gug	P.T.	223 [✓] ,1213
White bulkhead and seawall "FLAGSTAFF" at	40	50	1537	73	40	333	Bee	P.T.	223 [✓]
North chimney of house	40	51	1020	73	41	152	Chim	P.T.	223 ^x House now charted
This list only from Topographic sheet "K" (H.A. Cotton-1933) For landmarks other than from Topo. sheets see Special report (Same Form) For charts 222,1213 and 223									

This list only from Topographic sheet "K" (H.A. Cotton-1935) For landmarks other than from Topo. sheets see Special report (Same Form) For charts 222, 1213 and 223

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaves and like objects are not sufficiently permanent to chart.

(1) as for chart 1213

(2) & (3) as for charts 222 -223

73248-1917

5/15/06

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 6029

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 No. "K"

REGISTER NO. 6029 Graphic Control

State New York

General locality Long Island Sound

Locality North portion of Hempstead Harbor.

Scale 1:10,000 Date of survey September-October, 19 33

Vessel Project HT-134

Chief of party Harold A. Cotton

Surveyed by W. O. Hinkley

Inked by A. Black

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated March 23rd, 19 33

Remarks:

TOPOGRAPHIC
REVIEW OF ~~GRAPHIC CONTROL~~ SURVEY T- 6029, SCALE 1/10,000,

Date of Review *7/29/35* *12/18/35.*

1. This survey has been reviewed in connection with Air Photo Compilation Nos. T- , *5092, 5333* , 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-*5092, 5333* , 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.

There were 9 stations described on Form 524. A small letter (d) was applied in green after each of the following stations.

*ROAD, PILE, RED, ARMY, WEEK, KONK, PAV, COR, MAN.
 STEP, RAIN, HAIL, GATE. (Rain)*

L. McKenna T-5333
Joseph Andrews T-5092
B. G. Jones

*Others to be applied in
 connection with T-5091
 and T-5333.*