

4747

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: New Jersey

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~

Sheet No. A

4747

LOCALITY

Shark River,

Avon by the Sea.

1933

CHIEF OF PARTY

Philip C. Doran

Applied to drawing of Chart No 1215
J 11/13/34 - HEM.

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET "A"

SHARK RIVER, NEW JERSEY

AUTHORITY

Work was done under Director's order and instructions dated Feb. 10, 1933.

LIMITS

This sheet covers the shore line of Shark River, Shark River Inlet and the Atlantic Seaboard for a distance of one half mile north and south of the inlet. On the outer coast the shore line extends from $40^{\circ}-10.7'$ to $40^{\circ}-11.9'$. In an east and west direction the area covered is from $74^{\circ}-1.5'$ to $74^{\circ}-3.0'$.

No attempt was made to locate houses or streets as aerial photographs have been taken of this area. Definite objects were located to furnish control for the photographs and for hydrography.

GENERAL DESCRIPTION

Shark River is made up of a channel, bulkheaded on both sides, extending one half mile westward from the Atlantic Ocean and a wide shallow bay, Y shaped, extending to the north and west from the westerly end of the channel.

On either side of the inlet large stone and concrete jetties extend about 150 meters into the Atlantic Ocean.

A concrete bridge with a 50 foot clear ~~draw span~~ ^{bascule} is located at the mouth of the river.

The old highway and trolley car bridges which connected the main streets of Avon and Belmar are being removed and a new concrete bridge, with a ~~lift span~~ ^{bascule}, is being built on the sites of the old bridges.

A wooden trestle bridge carries the railroad tracks over the river just east of the two concrete highway bridges on the main 'Neptune Highway' road. The southerly of these bridges has a ~~lift~~ ^{bascule} span but has no motor at this time.

The flat sand area just to the west of the innermost concrete highway bridges is used, mostly in summer, for an airplane landing field.

A realty development company, Shark River Hills Co., Inc., has bulkheaded and filled in the area on the west side of the easterly arm of the bay.

LANDMARKS

Various water tanks were located by triangulation and can be put on the charts for use from seaward. The positions have been computed and adjusted in the office and are on file there, together with complete descriptions.

CHARACTER OF CONTROL USED

A small scheme of triangulation was observed to give control and cover this area. A quadrilateral of 2nd order accuracy was observed using the 1st order line Observatory 2-Electric as a base.

Numerous stations of 3rd order accuracy were then established along the river to furnish direct control for topography and hydrography. Traverse lines were run between these closely spaced stations. Cuts from three or more triangulation stations were taken to prominent water tanks and the positions computed.

All triangulation is on the North American 1927 datum.

CLOSING ERRORS OF TRAVERSES

The topography was done on the new, paper covered aluminum topographic sheet. Despite large changes in temperature and varying weather conditions, the projection, which was made on this sheet in the Washington office before the field work started, showed no distortion. This is the great advantage of this sheet over the old Whatman sheet. All traverses run between triangulation station closed well within the limits as prescribed in the topographic manual and were adjusted as described therein. Standard practice was used throughout the sheet.

MAGNETIC OBSERVATIONS


No magnetic observations were made as ample data is on hand for this area.

STATISTICS

Statute miles of shore line..... 11.7

Area surveyed in square statute miles9

Respectfully submitted,


Philip C. Doran,
H and G. Eng..

DESCRIPTION OF NATURAL OBJECTS LOCATED BY
TOPOGRAPHY AND MAY BE RECOVERABLE FOR FUTURE WORK.

MAC	Southerly of four large radio towers. ✓
RAD	Second tower from the south end. ✓
NED	Green roofed summer pavilion.
PAR	Small summer pavilion.
CON	N.W. corner of concrete bulkhead with high wire fence on top.
LET	Small flagpole.
WHY	Large white door in side of bank.
HAT	Coast Guard house inside inlet.
GAT	Watch tower at drawbridge at Ocean Ave..
UP	Small summer pavilion.
STA	Similar to UP.
DUB	Cupola with double windows on large house..
MON	End of pier.
HOT	Main entrance to hotel.
EGG	S.E. corner of house on beach.
NEW	Very large flagpole- outlet for septic tank.

This list is made part of the topographic and hydrographic descriptive reports to accompany sheets covering the Shark River, New Jersey, area.

DESCRIPTIONS AND POSITIONS OF NATURAL
OBJECTS TO ACCOMPANY TOPOGRAPHIC SHEET T-4747

STATION	DESCRIPTION	POSITION			
		°	'	"	meters
UP	Small summer pavilion	40	11	56.4	1740.8
		74	00	28.2	686.6
STA	Similar to UP	40	11	49.4	1522.3
		74	00	31.3	739.8
DUB	Cupola with double windows on large house	40	11	29.1	898.9
		74	00	38.4	905.3
MON	End of pier	40	11	06.9	212.4
		74	00	31.1	744.7
HOT	Main entrance to hotel	40	11	03.4	75.3
		74	00	42.1	996.9
EGG	S. E. corner of house on beach	40	10	51.6	1591.0
		74	00	44.2	1045.3
NEW	Very large flagpole - outlet for septic tank	40	10	43.2	1331.3
		74	00	48.9	1157.5

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington, D. C.

August 31., 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.

Philip C. Doren.

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE		LONGITUDE		DATUM		
	D. I.	D. M. METERS	D. I.	D. P. METERS			
1233 Allenhurst Tank. Tall silver tank.	40 14	192.0	74 00	723.5	N.A.1927	△	1215
Monterey Hotel. Cupola of hotel.	40 13	1068.3	73 59	1374.2	"	△	"
Avon Tank. Large black water tank.	40 11	1146.3	74 01	504.2	"	△	"
Spring Lake Heights tank. Tall water tank.	40 08	1401.2	74 02	324.1	"	△	"
Squat tank. A squat tank with 100 m of Spring Lake tank.	40 08	1413.1	74 02	269.5	"	△	"
As all of the above have been located by triangulation complete descriptions are on hand in the office files.							

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, flagstaffs and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington D.C. Aug. 31, 1933

193

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.

~~Philip C. Doren.~~

Chief of Party.

[illegible]

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, flagstuffs and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
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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. A

REGISTER NO. **4747**

State New Jersey

General locality Atlantic Coast

Locality Shark River and Vicinity

Scale 1 : 10,000 Date of survey Feb-Mar., 19 33

Vessel Shore Party

Chief of party Philip C. Doran.

Surveyed by Philip C. Doran.

Inked by Philip C. Doran.

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

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

Instructions dated Feb. 10,, 19 33

Remarks: _____