

8783

Diag'd. on Diag. Ch. 1218-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Photogrammetric Shoreline

Field No. _____ Office No. T-8783

LOCALITY

State New Jersey

General locality Delaware River

Locality Cohansey River to Nantuxent Cove

194 6

CHIEF OF PARTY

William F. Deane

LIBRARY & ARCHIVES

DATE April 20, 1948

8783

DATA RECORD

T- 8783

Quadrangle (II): Ben Davis Point. Project No. (II): Ph-7(46)

Field Office: New Castle, Del Chief of Party: E.L. Jones

Compilation Office: Chief of Party: William F. Deane
Baltimore Photogrammetric Office

Instructions dated (II III):

March 25, 1946
July 19, 1946

Div. of Photogrammetry
Office Files
Copy filed in Descriptive
Report No. T- (VI)

Completed survey received in office:

1-23-48

Reported to Nautical Chart Section:

Reviewed: 3-17-48 Applied to chart No. Date:

Redrafting Completed:

Registered: 4-2-48

Published: Vault copy only

Compilation Scale: 1:10,000

Published Scale: 1:10,000

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927

Datum Plane (III): MSL

Reference Station (III): BEACH, 1933

Lat.: 39° 19' 13.744" 423.9 m

Long.: 75° 19' 14.218" 340.6 m Adjusted
~~Unadjusted~~

State Plane Coordinates (VI): New Jersey

X = 1,814,983.52 feet Y = 178,095.30 feet

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
46-D-1535-37 incl.	3/1/46	1350	1:10,000	0.4' above MLW * 1.8' above MLW
46-D-1583-89 incl.	3/1/46	1500	1:10,000	0.1' above MLW * 1.4' above MLW

Predicted Tide Tables, Atlantic Ocean, 1946. Reference Tide from (III): Station - Breakwater Harbor, Delaware, with corrections to Ben Davis Point.
 *Actual tide observations at Atlantic City, N.J., with correction for Bayside to Ben Davis Pt.
 Mean Range: 5.8' Spring Range: 6.7'

Camera: (Kind or source) U.S.C. & G.S. wide angle single lens type D camera.
 All negatives are on file in the Washington Office.

Field Inspection by: John D. Weiler

date: May 1946

Field Edit by: D. G. Flippo

date: 10-20-47 to
10-31-47

Date of Mean High-Water Line Location (III): As of photographs 15602-03 incl., 15610-11 incl., and 15613, taken on 21 March 1946.

Projection and Grids ruled by (III) T.L.J.

date: 8/16/46

" " " checked by: T.L.J.

date: 8/16/46

Control plotted by: George O. Fellers

date: 9/2/46

Control checked by: Leroy A. Senasack

date: 9/2/46

Radial Plot by: Frank J. Tarcza
Leroy A. Senasack

date: 9/20/46

Detailed by: Florence M. Senasack

date: 9/23/46 to
10/18/46

Reviewed in compilation office by:
Joseph W. Vonasek

date: 10/22/46 to
10/30/46

Elevations on Field Edit Sheet
checked by: None

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 9

Shoreline (More than 200 meters to opposite shore): 16 statute miles

Shoreline (Less than 200 meters to opposite shore): 33
measured along centerline of stream

Number of Recoverable Topographic Stations established: 4

Number of Temporary Hydrographic Stations located by radial
plot: 2

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered
by, (II) Field Party, (III) Compilation Party, or, (VI) the
Washington Office.

When entering names of personnel on this record give the
surname and initials (not initials only).

Remarks: For plotting of tide curves from predicted tide
tables see descriptive report for T-8760. (Tide curves in report envelope)
Filed in Div. of Photogrammetry - General Files

FIELD REPORT
MAP MANUSCRIPT, SURVEY NO. T-8783

See the field report for Map Manuscript, Survey No. T-8760,
which covers the area of Map Manuscript, Survey No. T-8783, sub-
mitted to the Washington Office 22 January 1947.)

~~Filed in the Div. of Photographic General Files.~~

*Field included in
descriptive report T8760*

MAP T. 8783

PROJECT NO. PH-7(46)-C

SCALE OF MAP 1:10,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
BEACH, 1933, r. 1946	G-1664 p. 67	N.A. 1927	39° 19' 13.744"				423.9 (1426.4)		
* SUB. STATION BEACH			75 19' 14.218"				340.6 (1096.7)		
		N.A. 1927	39 19'				443.6 (1406.7)		
BEN DAVIS 1839-40			75 19'				339.7 (1097.6)		
	G-2105 p-151	N.A. 1927	39 17' 14.911"				459.8 (1390.5)		
* BEN DAVIS (USE) r. 1946			75 17' 29.289"				701.9 (736.0)		
	USE Office Phila., Pa.	N.A. 1927	39 17' 23.446"				723.0 (1127.3)		
COHANSEY, 1933			75 17' 21.040"				504.2 (933.7)		
	G-1664 Pg. 67	N.A. 1927	39 20' 22.380"				690.2 (1160.1)		
* COHANSEY RIVER REAR RANGE LT. 1933, r. 1946			75 21' 38.206"				915.0 (521.9)		
	G-1751 Pg. 130	N.A. 1927	39 20' 39.800"				1227.4 (622.9)		
* COHANSEY RIVER REAR RANGE LT. 1933, r. 1946			75 22' 03.340"				80.0 (1356.8)		
	G-1751 Pg. 130	N.A. 1927	39 20' 47.476"				1464.1 (386.2)		
DAVIS 1933			75 21' 56.121"				1343.8 (93.0)		
	G-1664 Pg. 66	N.A. 1927	39 17' 21.378"				659.3 (1191.0)		
* NEW COHANSEY LT. 1933, r. 1946			75 17' 23.724"				568.5 (869.4)		
	G-1751 Pg. 131	N.A. 1927	39 20' 29.805"				919.2 (931.1)		
MON. NO. 6065 1936.r., 1946			75 21' 41.878"				1002.9 (434.0)		
	Local Control Survey of N.J. pg. 124	N.A. 1927	193,633.3				1107.43 (416.57)		Distances from here to the end are based on the state grid (5000 ft interval)
MON. NO. 6066 1936, r. 1946			1,822,207.1				672.72 (851.28)		
	" " pg. 124	N.A. 1927	192,646.1				806.53 (717.47)		
			1,820,192.3				58.61 (1465.40)		
* Sub.Sta. MON. NO. 6066		N.A. 1927					746.94 (777.06)		
							1494.02 (29.99)		

1 FT. = 3048006 METER

COMPUTED BY: G. O. Fellers

DATE 8/14/46

CHECKED BY: J. Steinberg

DATE

8/20/46

M. 2388-12

[illegible]

COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T - 8783

26. CONTROL:

See radial plot report for Surveys Nos. T-8781 and T-8783, for the layout of control in this area, submitted to the Washington Office 26 November 1946. ~~Filed in Div. of Photogrammetry - General Files~~

Attached to Desc Report T-8781

27. RADIAL PLOT:

A report concerning the facts of a combined radial plot for Surveys Nos. T-8781 and T-8783 was submitted to the Washington Office 26 November 1946.

28. DELINEATION:

The compilation is in accordance with the written instructions pertaining to Project No. Ph-7 (46) dated 19 July 1946.
~~Filed in the Div. of Photogrammetry - Office Files~~

The horizontal control stations, horizontal pass points, and photographic coverage available for the compilation of this survey were adequate.

The field inspection was adequate; however, the field unit, in attempting to identify what they described as "apparent shoreline-top of low bluff (marsh line)", identified instead the outer limits of mud and/or vegetation as these features appear on the photographs which were taken at, or very near mean low water. Therefore, it was necessary for the compilation office to delineate the outer limits of marsh visible at high water after stereoscopic examination of the office photographs, using the nine lens photographs for verification since these were taken near high tide.

30. MEAN HIGH WATER LINE:

The mean high water line, or fast solid land has been delineated in accordance with the office interpretation of the photographs. The outer edge of marsh visible at mean high water has also been delineated in accordance with the office interpretation of the photographs.

31. MEAN LOW WATER LINE:

The position of the mean low water line has been delineated in accordance with the field data and has not been shown unless identified by the field unit. The definite position of the mean low water line has been shown with an alternate dot and dash line and the approximate position with a dotted line. See Revised Report

31A SHOAL AND REEF LINES:

There are no shoal or reef lines shown on the map manuscript. However, a shoal area in the vicinity of Cohansey Cove has been indicated on the map manuscript. Deleted. See Review Report.

31C FORESHORE AREA:

The foreshore area consists of grass-in-water, sand, and mud, and are delineated in accordance with the field data and office interpretation of the photographs.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE:

Four small sand islets were shown on the map manuscript in the vicinity of Drumbo Creek and two small grass islets were shown in the vicinity of Middle Marsh Creek.

33. WHARVES AND SHORELINE STRUCTURES:

An old wooden pier, the remains of a groin, and two small boat skids were shown on the map manuscript in the vicinity of Sea Breeze. Another small wooden pier has been shown at the mouth of a creek just north of Back Creek Point.

34. LANDMARKS AND FIXED AIDS TO NAVIGATION:

Chart Letter 301
Refer to Form No. 567 included with the Field Inspection Report for Survey No. T-8760. Filed in Div. of Photogrammetry - General Files

35. HYDROGRAPHIC CONTROL:

Four recoverable photo (topographic) station and two temporary photo (topographic) stations have been shown on the map manuscript. Form No. 524 has been submitted for each of the recoverable photo (topographic) stations with the report for Survey No. T-8760. A descriptive list of all the photo (topographic) stations has been compiled and is attached to this report. Two additional copies have been furnished for the use of the hydrographic parties.

Form 524 cards are filed in the Div. of Photogrammetry - General Files.

38. GEOGRAPHIC NAMES: Approved list filed in Div. of Charts - Geographic Names Section
X 1/2 Copy filed in the report for T-8760.

Geographic names were taken from a geographic names investigation furnished by the Washington Office on 9 December 1946 on a corrected copy of the United States Army Engineers, Shiloh, N. J. - Del. Quadrangle. A list of names is attached to this report.

39. JUNCTIONS:

A satisfactory junction was made with Survey No. T-8781 to the west. There are no contemporary surveys of the same scale to the north, south, or east of the map manuscript. This survey is part of Survey No. T-8760.

40. HORIZONTAL ACCURACY:

The position of all important details is believed to be within 0.5 mm.

41. RECOMMENDATIONS FOR FUTURE SURVEYS:

Map Manuscript, Survey No. T-8783 is complete with respect to all known topographic details necessary for charting, except the charted features not definitely revealed by photography.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

See side heading 44 of Descriptive Report for Survey No. T-8760.

45. COMPARISON WITH NAUTICAL CHARTS:

See side heading No. 45 of Descriptive Report for Survey No. T-8760.

Respectfully submitted
21 October 1947

Florence M. Senasack
Photogrammetric Aid
Compilation and
Compilation Report

Joseph W. Wonsack
Photogrammetric Engineer
Photogrammetric Office Review

Approved and Forwarded
3 February 1947

Harry R. Rudolph
Supervisor

William F. Dean
Officer in Charge
Baltimore Photogrammetric Office

1946

IDENTIFICATION REPORT

HORIZONTAL CONTROL

Name of Station	Corps of Engineers U.S. Army Quadrangle	Recovery Data	Pricking Data
BEN DAVIS, 1839-40	Shiloh	No Recovery Lost - See review report	Not Pricked

See the field report for the Ben Davis Point Quadrangle No. T-8760 for a listing of the remainder of the horizontal control stations within the area of Survey No. T-8783.

DELAWARE RIVER

PROJECT NO. PH-7 (46)

DESCRIPTION OF THE PHOTO (TOPOGRAPHIC) STATIONS
FOR MAP MANUSCRIPT, SURVEY NO. T-8783

- 6001 Steel windcharger tower, west end of roof of white house.
6002 West end of gable of white house.
"NAT, 1946" - Station is located on the east side of Delaware Bay on the south side of the entrance to Middle Marsh Creek, on a small tip of sand. The station is marked by a standard topographic disk stamped "NAT 1946", set in the top of a 6" diameter concrete monument and extends 6" above ground.
"PAL, 1946" - Station is located on the east side of Delaware Bay one mile east of Cohansey Lighthouse, at the south tip of the brush extending into the sand beach on the east side of the mouth of Drumbo Creek. The station is marked by a standard topographic disk stamped "PAL 1946", set in the top of a 6" diameter concrete monument extending 6" above ground.
"USE, 1946" - Station is on the east shore of Delaware Bay one mile south of Sea Breeze, 17 meters east of M.H.W. on the division line between the sand beach and matted grass to the east. The station mark is a standard disk stamped "USE 1946" cast in 6" stovepipe, projecting 10" above ground.
"VAL, 1946" - Station is located on the east side of Delaware Bay one mile northwest of Ben Davis Point, at the southwest tip of a small pond. The station is marked by a standard topographic disk stamped "VAL, 1946", set in the top of a 6" diameter concrete monument and extends 6" above ground.

LISTED BY: Florence M. Senasack
Photogrammetric Aid

CHECKED BY: Joseph W. Vossack
Photogrammetric Engineer

NOTES
FOR
HYDROGRAPHIC PARTIES

DELAWARE RIVER

MAP MANUSCRIPT, SURVEY NO. T-8783

PROJECT NO. PH-7(46)

The two millimeter circles, accompanied with a name and date, are the positions of the recoverable photo (topographic) stations. The two millimeter circles, accompanied with a number are the positions of the temporary photo (topographic) stations. Two copies of the descriptive list have been furnished for your use.

The dotted line is the approximate position of the mean low water line. The alternate dot and dash line is the accurately determined position of the mean low water line.

The following topographic information shown on T-8783 is of sufficient importance to warrant immediate application to the chart:

None

The following topographic details above the plane of mean high water are not shown on this manuscript, but are believed to still exist and should be carried forward on the chart:

None

Low water features are shown in part and will be completed by the hydrographic party.

Minor changes in culture and shoreline details shown on this survey need no special discussion.

Respectfully submitted

Approved and Forwarded
3 February 1947

William F. Dean

Officer in Charge

Baltimore Photogrammetric Office

Florence M. Senasack
Photogrammetric Aid

Division of Photogrammetry
Review Report of
Shoreline Map Manuscript T-8783

Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

26. Control.

The following triangulation stations, listed as lost by the field inspection party, were removed from the map manuscript:

Ben Davis, 1839-40
Cohansey, 1933

The names of triangulation and topographic stations on the map manuscript were changed to conform with the specifications in paragraph 23 of Photogrammetry Instructions No. 17, 1947.

31. Low Water and Shoal Lines.

A note referring to a shoal area in the vicinity of the mouth of the Cohansey River was removed from the map manuscript. The shoal area is not visible on the photographs.

The symbol for the low water line was changed to conform with the symbol sheet in Photogrammetry Instructions No. 17, 1947.

34. Landmarks and Aids to Navigation.

The geographic position for the 55 foot steel tower was corrected on the Form 567. The tower is at the triangulation station, "Ben Davis, USE". The Nautical Chart Section has been notified of this change. *L. 303 (1948)*

40. Geographic Names. *414 ✓*

Names were added to the map manuscript from the approved list of names submitted by the Geographic Names Section.

44. Comparison with Existing Topographic Surveys.

T 63	1:20,000	1841	T1550	1:20,000	1882,83
T141	1:10,000	"	T1565	1:20,000	1885
T152	1:20,000	1842	T1661	1:20,000	1884,85
T155	1:20,000	1842-43	USGS Shiloh 15'	Quad. 1:62500/	
T157	1:20,000	1842	USE Shiloh Quad.	- 1941	1931

These surveys are superseded in common area by T-8783.

Two notable differences between the USC&GS and USGS surveys and the map manuscript are:

The shoreline has receded up to 200 meters since the older surveys were made.

The new channel, "Cut Through", into the Cohansey River is not shown on the surveys.

45. Comparison with Nautical Charts:

Chart No. 1218 1:80,000 1942 Corr. 1947

The map manuscript has not been applied to the nautical chart. They are in good agreement in common area.

Reviewed by:

Reviewed under direction of:

Charles Theurer
C. Theurer
3-17-48

S. V. Griffith
S. V. Griffith,
Chief, Review Section

APPROVED:

B. J. Jones 4/48
Technical Assistant to the
Chief, Division of Photogrammetry

[Signature]
Chief, Nautical Chart Branch
Division of Photogrammetry

K. T. Adams
Chief, Division of Photogrammetry

[Signature]
Chief, Division of Coastal
Surveys

GEOGRAPHIC NAMES

Survey No. T-8783

[illegible]

SURVEY NO. _____

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.