

8749 a b c

File. Cht. No. 295-2 & 206

Form 604

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PHOTOGRAMMETRIC TOPOG. SURV.

Field No. PL-7(15) Office No. T-871

LOCALITY

State PENNSYLVANIA - PHILADELPHIA

General locality DE. WIDE ST.

Locality CALDEN

194 ⁰

CHIEF OF PARTY

W. J. Jones, Chief of Field Party
T. E. Good, Baltimore Photogrammetric Office

LIBRARY & ARCHIVES

DATE March 11, 1952

B-1870-1 (1)

DATA RECORD

T - 8749 C

Project No. (II): PH-7(46)E

Quadrangle Name (IV): Camden

Field Office (II): Camden, New Jersey

Chief of Party: Edmund L. Jones

Photogrammetric Office (III): Baltimore Photo. Office

Officer-in-Charge: Thos. B. Reed

Instructions dated (II) (III): 25 March 1946
 Suppl. No. 1--14 June 1946
 " No. 2--14 June 1946
 19 July 1946

Copy filed in Division of
 Photogrammetry (IV)
 Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV): 3-2-49

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 26 June 50

Publication Scale (IV): 1:24,000

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): M.S.L.

Mean sea level except as follows:
 Elevations shown as (25) refer to mean high water
 Elevations shown as (5) refer to sounding datum
 i.e., mean low water or mean lower low water

Reference Station (III): FOOT, 1933

Lat.: 39° 57' 54.669" (1686.1m) Long.: 75° 04' 28.459" (675.4m)

Adjusted
~~Unadjusted~~

Plane Coordinates (IV):

State: New Jersey Zone:

Y = 412,518.74 Ft.

X = 1,885,661.70 Ft.

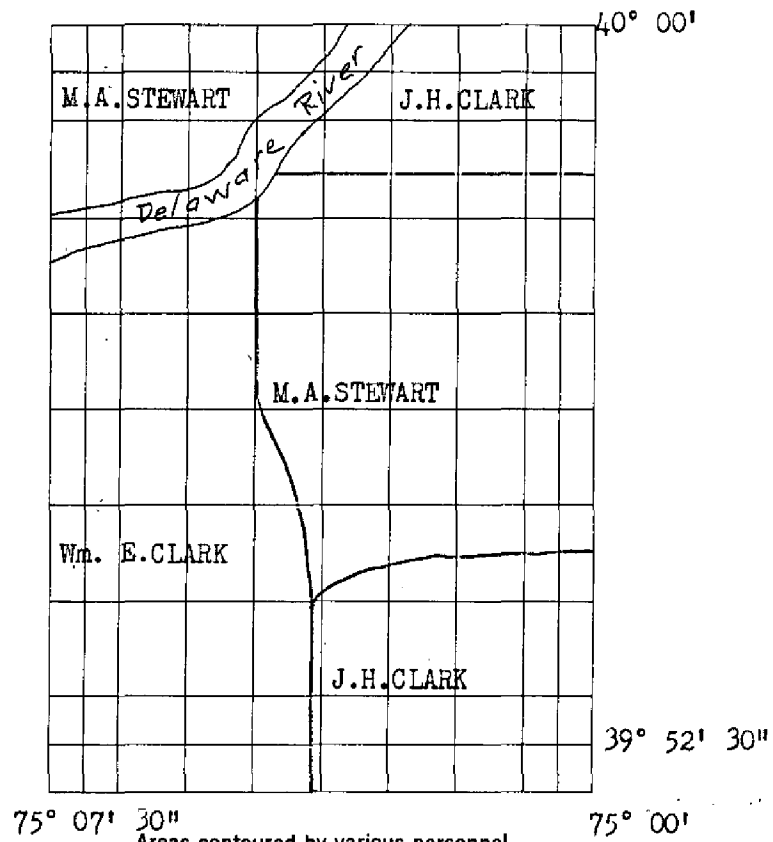
Pennsylvania, South Zone

Y = 241,530.26 Ft.

X = 2,749,837.85 Ft.

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

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



Areas contoured by various personnel
 (Show name within area)
 (II) (III)

DATA RECORD

Field Inspection by (II): Wm. E. Clark
Matthew A. Stewart
James H. Clark
I.Y.Fitzgerald

Date: 25 Sept.-14 Nov. 1946
25 Sept.-15 Nov. 1946
15 Sept.-20 Sept. "
15 Oct. -30 Oct. "

Planetable contouring by (II):
Wm. E. Clark
James H. Clark
Matthew A. Stewart

Date:
14 Oct.-14 Nov. 1946
23 Sept.-15 Nov. "
14 Oct.-8 Nov. 1946

Completion Surveys by (II):
J. Weiler
R. Horn

Date:
Feb-Mar 1949

Mean High Water Location (III) (State date and method of location):

Traced from reductions of shoreline surveys Nos. T-8749A, T-8749B, and T-8769.

Projection and Grids ruled by (IV): T.L.J.

Date: 12-3-46

Projection and Grids checked by (IV): T.L.J.

Date: 12-3-46

Control plotted by (III):
Enola N. Cross

Date: 11-24-47

Control checked by (III):
Frank J. Tarcza

Date: 12-3-47

Radial Plot ~~of Stereoscopic~~

Date:

~~Stereoscopic~~ Section extension by (III):

Frank J. Tarcza

12-16-47

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III):
Ruth E. Rudolph

Date: 12-2-48 to 2-2-49

Photogrammetric Office Review by (III):
Joseph W. Vonasek

Date: 2-7-49 to 2-24-49

Elevations on Manuscript
checked by (II) (III):

Joseph W. Vonasek

Date: 2-21-49

Camera (kind or source) (III): U.S.Coast and Geodetic Survey Nine lens, focal length $8\frac{1}{4}$ "

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
15513-15515 incl.	3-10-46	1210 <i>EST</i>	1:20,000	0.5' ^{1.2'} above MLW
15519-15521 "	3-10-46	1220 "	1:20,000	0.9' ^{1.0'} above MLW
15640-15642 "	3-21-46	1520 "	1:20,000	0.7' ^{4.7'} above MLW

Tide (III)

* Reference Station: Philadelphia, Pa.
Subordinate Station:
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	5.4	5.7

Washington Office Review by (IV): *J.L. Rihh*

Date: *Apr. 12, 1950*

Final Drafting by (IV): *S.V. Dean*

Date: *6/25/52*

Drafting verified for reproduction by (IV): *gg5*

Date:

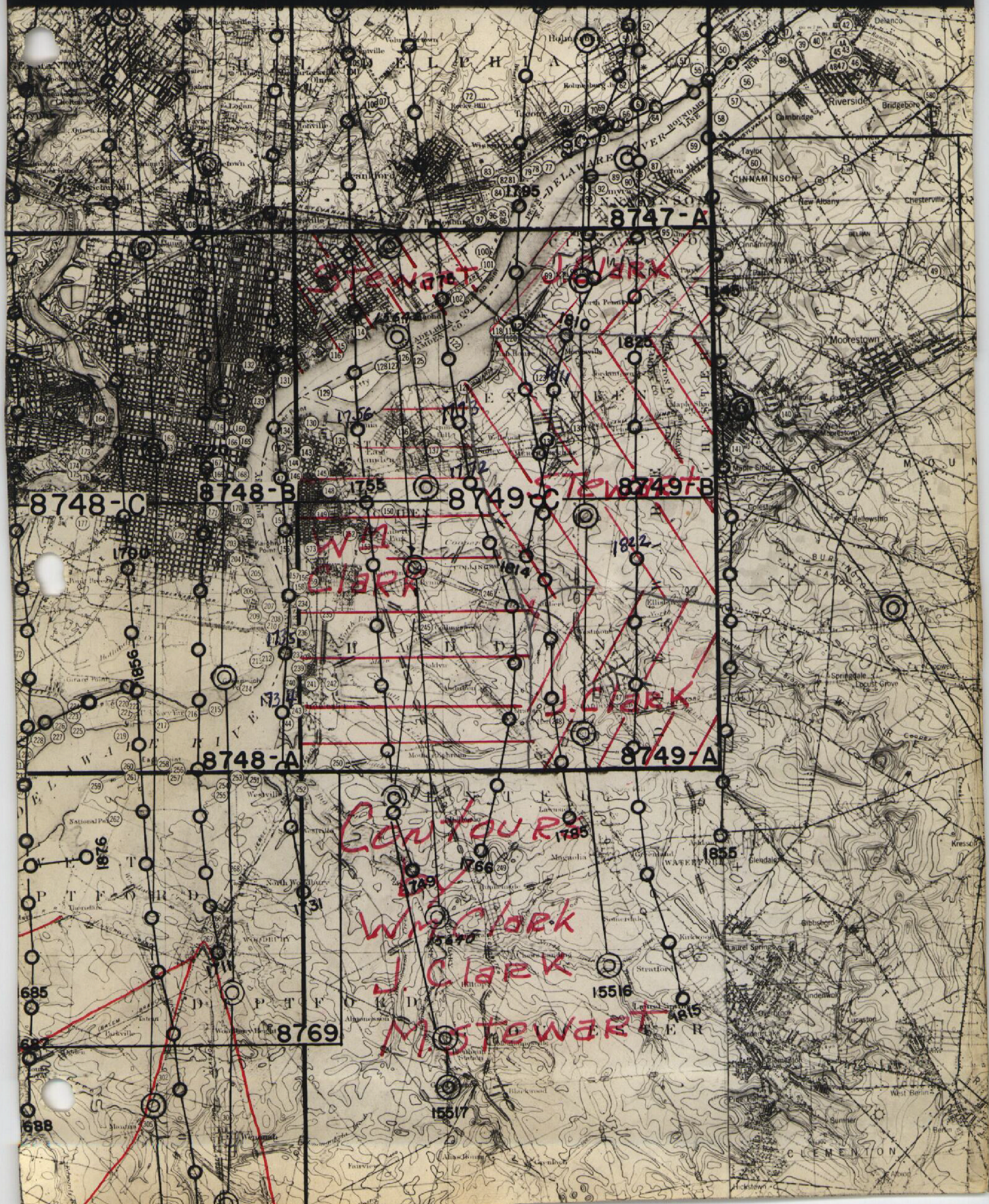
Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 52
Shoreline (More than 200 meters to opposite shore) (III): 18 statute miles
Shoreline (Less than 200 meters to opposite shore) (III): 20 " "
Control Leveling - Miles (II): 102 " "
Number of Triangulation Stations searched for (II): 89 Recovered: Identified: 30
Number of BMs searched for (II): Recovered: 22 Identified: 3
Number of Recoverable Photo Stations established (III): 2
Number of Temporary Photo Hydro Stations established (III): none

Remarks:

* Actual tide observations at Philadelphia, Pa. corrected to Bridesburg, Pa. to Gloucester, N.J.



Summary to Accompany T-8749C

This map is one of a series of 18 topographic, $7\frac{1}{2}$ -minute quadrangles in project Ph-7 (46) extending southward along the Delaware River from Philadelphia, Pennsylvania to Lower Delaware Bay. Detailed shoreline information along the Delaware River was furnished by a series of 24 shoreline sheets at 1:10,000 scale.

These topographic sheets compiled at 1:20,000 scale are to be published by the U. S. Geological Survey at 1:24,000 scale as standard topographic quadrangles.

The registered copies under T-8749C will include the original descriptive report, a cloth-mounted print of the manuscript at a scale of 1:20,000 and a cloth-mounted color print of the published map at a scale of 1:24,000.

7

FIELD INSPECTION REPORT
T-8749 (39-52.5 / 75-00 / 7.5)
Project Pn-7 (46)
Sub-Project E
E. L. Jones, Chief of Party

All phases of field work were completed in accordance with the Director's Instructions, Project Pn-7 (46), dated 25 March 1946, Supplemental Instructions No.1, dated 14 June 1946 and Supplemental Instructions No.2, dated 11 October 1946, except for deviations herein noted.

The field work on this quadrangle was completed by the following personnel.

<u>Name & Title</u>	<u>Field Work</u>	<u>1946 Dates</u>
William E. Clark Photo Aid	Horizontal Control Recovery	25 Sept. - 11 Oct.
	Vertical Control Recovery	25 Sept. - 11 Oct.
	Interior Inspection	14 Oct. - 14 Nov.
	Contours	14 Oct. - 14 Nov.
James H. Clark Engineering Aid	Horizontal Control Recovery	15 - 20 Sept.
	Interior Inspection	15 - 20 Sept.
	Contours	23 Sept. - 15 Nov.
Matthew A. Stewart Engineering Aid	Vertical Control Recovery	25 Sept. - 11 Oct.
	Fly levels	25 Sept. - 11 Oct.
	Contours	14 Oct. - 8 Nov.
	Interior Inspection	14 Oct. - 15 Nov.
I. Y. Fitzgerald Photo Aid	Horizontal Control Recovery	15 - 30 Oct.
	Shoreline Inspection	15 - 30 Oct.

1. Description of the Area:

The Northern portion of the area is strategically situated on a large bend of the Delaware River, partially in Philadelphia. It is the lower link of the chain that binds the two largest industrial areas in the country, New York and Philadelphia. Naturally some of these industries have been established in this area, especially large ship yards, radio communications, food canners and packers. A thriving host of smaller, busy industries create textiles, leather goods, pens, heating systems, cork products and forgings.

In the less congested parts of the quadrangle, truck farming is the chief occupation.

2. Completeness of Field Inspection:

Field inspection is felt to be adequate and complete.

3. Interpretation of the Photographs:

Due to the recent date of the photography, March 1946, no difficulty was encountered in interpretation of the photographic details for various phases of the work.

The interior inspection was made on the 9-lens, 1/20,000 scale photographs; the shoreline inspection on the single lens 1/10,000 scale photographs.

4. Horizontal Control:

89 horizontal control stations were searched for or recovered. Of these, 30 were identified on the photographs, either by substitute station method, swinging arcs, or pricking direct.

5. Vertical Control:

Field work on the vertical control consisted of recovery and identification of existing bench marks on 9-lens photographs, establishing 4th order elevations for contouring and the determination of datum difference between the City of Camden elevations and our datum.

Recovery:

22 bench marks were recovered. In the thickly populated urban areas where bench marks were close together, only the most prominent were identified on the photographs.

4th Order Leveling:

Approximately 102 miles of fly levels were run, using wye level methods; elevation computations were carried to the nearest .01 of a foot with no closures exceeding 1 foot.

Datum Difference, City of Camden:

The City of Camden had established level elevations on the curbs, at street intersections. These elevations were placed on our datum in conjunction with 4th order leveling.

Seventy Eight city curb elevations were tested and it was determined that 4.15 feet must be added to the city elevations to place them on our datum. After making this datum adjustment, the accuracy of the city elevations was found to be as follows:

8.

Vertical Control: (Cont'd)

50	city	elevations	in	error	less	than	0.25	feet	
22	"	"	"	"	from	0.25	to	0.50	feet
3	"	"	"	"	from	0.50	to	0.75	"
1	"	"	"	"	from	0.75	to	1.00	"
2	"	"	"	"	from	1.00	to	1.17	"

The maximum error was 1.17 feet, and of the 78 elevation checks, 6 exceeded 0.50 feet of error. A second field examination of the latter six elevations was made and it was found that the curbs were badly broken or newly constructed since initial leveling. In view of close density (elevations every block) and only 03% of them had an appreciable error, They were accepted for contouring with the understanding that the contour man should be constantly on the alert for any city elevations which might be in error. For further information on accuracy of the city elevations see item No. 16.

6. Contours & Drainage:

Contouring was done in the field, except in the City of Camden, on 1/20,000 scale, 9-lens photographs by planetable methods. The contour interval was 20 feet, except that the 10 foot and 30 foot contours were also surveyed.

Preliminary to field work a stereoscopic examination of the photographs was made, drainage was delineated, and later checked by planetable methods.

A portion of the City of Camden was contoured in the field office, using city elevations, which were located at one block intervals. A stereoscopic examination of the work was made and some contours re-shaped for better topographic expression.

Several accuracy checks were made on the office contours, using planetable traverse methods, with starting and closing points on Coast and Geodetic Survey Bench Marks. No contours were found to be in error the allowable 1/2 contour interval, and the majority of points tested were within two feet of true elevation.

Because of the ^Plethora of city elevations, the field party feels the office contouring is equal to standard field accuracy and was accomplished at approximately 1/3 the normal field cost.

7. Mean High Water Line:

Only that part of the mean high water line requiring clarification was delineated on the photographs.

The average range of tide is 5.4 feet.

9.

8. Low Water Line:

The field investigation, and tide data record indicates the photography was near flood stage of tide. The approximate low water line was delineated and checked by sextant fixes in the areas visited at time of low water. Along pier and dock areas the MLWL and MHWL coincide in all sections of the quad.

9. Wharves and Shoreline Structures:

Adequately covered on photographs.

10. Detail off shore from High Water Line:

Adequately covered on photographs.

11. Landmarks and Aids to Navigation:

All Landmarks and Aids to Navigation are reported on the attached forms # 567. *See Review Report*

12. Hydrographic Control:

One topographic station was identified on the photographs, and described on form # 524. Since there was a plethora of existing horizontal control, no additional hydrographic signal sites were selected.

13. Landing Fields and Aeronautical Aids:

Central Air Port is the only landing field in the area. It is privately owned and does not accommodate commercial aircraft. The field is equipped with hardsurfaced runways and is one of the best equipped to handle small air-craft in this part of the country. It has been delineated on the photographs.

There are no aeronautical aids.

14. Roads:

Classified.

15. Bridges: *See Field Edit Report.*

A field investigation of the published bridge data was made during Oct. and Nov. by H. M. White, Engineering Aid. Horizontal and vertical clearances were measured in the field with a steel tape.

All published data in the 1941 list of Bridges over Navigable Waters of the United States was found to be correct except for the following discrepancies:

1941 Bridge List Page 120
Delaware River

Pennsylvania Railroad Bridge at Delair, New Jersey
Field measurement shows a vertical clearance of 51.8 ft.
Listed clearance is 50.8 ft.

Pensauken Creek

1941 Bridge List Page 366

The public Service R.R. Co. Bridge has been removed and should be taken from the published list.

The Burlington County bridge 1.87 miles from the mouth has been removed and should not be listed.

Bridges on Pensauken Creek should be listed as follows:

1.0 mile above mouth-at Palmyra, Pennsylvania.

Railroad Bridge: 3 spans fixed.

	<u>East span</u>	<u>Center span</u>	<u>West span</u>
Hor.cl.	23.0	32.0 ft.	33.0 ft.
Ver.cl.		10.7 ft. above M.H.W.	

River Road Hwy. Bridge at Palmyra 1.1 miles above mouth: 3 span fixed bridge.

	<u>East span</u>	<u>Center span</u>	<u>West span</u>
Hor. cl.	35.0 ft.	45.0 ft.	36.0 ft.
Ver. cl.	7.3 ft.	8.5 ft.	7.3 ft.

Route 41 Hwy. Bridge, Palmyra, 1.4 miles above the mouth is a one span fixed bridge.

Clearances: Horizontal 88.0 ft.
Vertical 7.2 ft.

Route 25 Hwy. Bridge, Final Points, 2.5 miles above the mouth is a one span fixed Bridge.

Clearances: Horizontal 64.0 ft.
Vertical 12.0 ft.

41.
Work Landing Road Bridge, Five points, 3.0 miles
above the mouth is a one span fixed bridge.
Clearances: Horizontal 49.0 ft.
Vertical 3.9 ft.

Over the South Branch of Pensauken Creek: Route 41
Hwy. Bridge, Five points, 3.0 miles above mouth
is a one span fixed bridge.
Clearances: Horizontal 58.0 ft.
Vertical 3.8 ft.

Newton Creek

1941 Bridge List Page 324

The railroad and highway bridges, Camden-Gloucester
6.2. mile above the mouth, of the New York Shipbuilding
Corp. are the same type and have the same clearances.
Both are single span fixed bridges:
Clearances: Horizontal 20.0 ft.
Vertical 6.0 ft. above M.H.W.

The Highway bridge, Broadway, Camden and Gloucester
0.3 mile above mouth is a 2 span fixed bridge.
Clearances: Horizontal: North span 52.7 ft. South span 51.2 ft.
Vertical 5.4 above M.H.W.

The Pennsylvania Rail Road bridge, Camden-Gloucester,
0.4 mile above mouth is a trestle bridge with 16 trestles
with a horizontal clearance of 10.0 ft. between treatles.
Vertical clearance 1.6 ft. above M.H.W.

The bridges above this were not measured in the field
as there is not sufficient clearance on the above bridge.

Cooper River

1941 Bridge List Page 104

The following discrepancies were noted:

The bridge listed at Entrance Road should be:
Admiral Wilson Boulevard, single span bascule
type. Horizontal clearance: 68.0 ft.
Vertical clearance: 3.7 ft.

The highway bridge on Browning Road at Collings-
wood has been removed.

16. Buildings:

No comment necessary.

12.

17. Boundaries:

Boundaries were identified on the photographs. in the field. Legal descriptions for the boundaries will be furnished as a special report. *Filed in Div. of Photogrammetry*

18. Geographic Names:

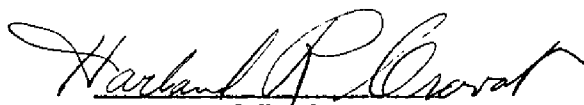
Geographic name information was obtained during field work by the topographer. These names were incorporated in a special Geographic name report by Lowell I. Bass, Engineering Aid. *Filed in Geographic Name Section, Div. of Charts.*

Submitted
15 Nov. 1946

Wm. E. Clark
Photo Aid

Approved
20 Nov. 1946

Edmund L. Jones *
Chief of Party


By Harland R. Cravat
Photogrammetrist

Supplement to Completeness of Interior Inspection:

~~to~~ ^{with} The interior inspection was not completed in accordance with the project instructions. The interior inspection was completed at the time of, and in conjunction with contouring, on 9-lens photographs. To complete the interior inspection on single lens photographs would have entailed the work of an additional party.

MAP T. 8749C

PROJECT NO. PH-7(46)E

SCALE OF MAP 1:20,000

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	
✓ HILL, ECCENTRIC 1933	Acc.No. G-1664 P. 68	N.A. 1927	39 59	20.142					621.2	1229.3		
			75 02	34.112					809.3	614.2		
✓ ERATO, 1936	U.S.E.D. PHILA. DISTR.	"	39 59	19.340					596.5	1254.0		
			75 02	34.439					817.1	606.4		
✓ DELAIR, GARDEN WATER WORKS, STACK 1933	Acc.No. G-1751 P. 96	"	39 59	19.906	<i>Destroyed 1946</i>				613.9	1236.6		
			75 02	59.615					1414.4	9.1		
✓ PHILADELPHIA, COKE CO. TALLER STACK, 1933	Acc.No. G-1751 P. 96	"	39 59	41.222					1271.4	579.1		
			75 04	07.122					169.0	1254.4		
✓ ELECTRIC, 1925	Acc.No. G-1969 P. 143	"	39 58	57.247					1765.6	84.9		
			75 04	27.284					647.4	776.2		
✓ PHILADELPHIA UNITED GAS IMPROVE- MENT CO., GAS TANK FINIAL, 1933	Acc.No. G-1751 P. 97	"	39 59	05.605					172.9	1677.6		
			75 05	13.987					331.9	1091.7		
✓ PHILADELPHIA, PEARSON AND LAURASCHER LUMBER CO. TANK (USE) 1925	Acc.No. G-1969 P. 148	"	39 58	45.989					1418.4	432.7		
			75 05	41.321					980.5	443.220		
✓ PHILADELPHIA, CO. GRAIN ELEVATOR FLAGPOLE, 1933	Acc.No. G-1751 P. 97	"	39 58	48.564					1497.8	352.7		
			75 06	08.500					201.7	1222.0		
✓ PHILADELPHIA, CO. SQUAT BLACK WATER TANK, 1933	Acc.No. G-1751 P. 97	"	39 58	36.578					1128.1	722.4		
			75 06	24.590					583.5	840.2		
✓ PHILADELPHIA, WM. CRAMP & SONS CO., HIGH CHIMNEY, 1925	Acc.No. G-1969 P. 148	"	39 58	26.853					828.2	1022.3		
			75 06	47.250					1121.2	302.6		
✓ COAL, 1925	Acc.No. G-1969 P. 142	"	39 58	15.459					476.8	1373.7		
			75 06	48.979					1162.3	261.5		
✓ CRAMPS, 1925	Acc.No. G-1969 P. 142	"	39 58	07.474					230.5	1620.0		
			75 07	08.566					203.3	1220.6		

1 FT. = 3048006 METER

COMPUTED BY: R.M. Whitson

DATE November 12, 1947

CHECKED BY: H.R. Rudolph

DATE 13 Nov. 1947

M-2388-12

MAP T-8749C

PROJECT NO. PH-7(46)E

SCALE OF MAP 1:20,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM N.A.	LATITUDE OR LONGITUDE	DISTANCE FROM GRID 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
✓ FISHER POINT RANGE FRONT LIGHT, 1935	Acc. pg. 18-340 361	1927	39 58 39.781 75 04 12.052			1226.9 623.6 286.0 1137.7	
✓ FISHER POINT RANGE REAR LIGHT, 1935	" "		39 58 43.230 75 03 44.936			1333.3 517.2 1066.3 357.4	
✓ TANK, 1925	-1969		39 58 40.223 75 03 56.207			1240.6 609.9 1333.7 90.0	
✓ DELAIR KIECKHEFER CONTAINER CO., STACK, 1933	-1751 97		39 58 37.817 75 03 56.339			1166.4 684.1 1336.9 86.9	
✓ PENSACOLA, MERCHANT VILLAGE-PENSACOLA WATER COMPANY, 1933	-1751 98		39 57 57.434 75 03 07.745			1771.4 79.1 183.8 1240.2	
✓ STANDPIPE, FOOT, 1933	-1664 68		39 57 54.669 75 04 28.459			1686.1 164.4 675.4 748.6	
✓ RAIL, 1925	-1969 142		39 58 14.835 75 05 23.019			457.5 1393.0 546.3 877.6	
✓ PERRY ISLAND, CHERRY LAVEROCK OIL CO. TANK, 1925	-1969 148		39 58 11.732 75 05 53.646	Destroyed 1946		361.8 1488.7 1273.1 150.8	
✓ MID-PERRY, 1925	-1969 142		39 58 12.016 75 06 04.672	Destroyed 1946		370.6 1479.9 110.9 1313.0	
✓ CAMDEN R.K.CO., STACK, 1933	-1751 98		39 57 26.76 75 07 22.00			825.3 1025.2 522.2 902.0	
✓ COOPER POINT TANK (USE), 1925	-1969 141		39 57 26.285 75 07 23.097			810.7 1039.8 584.2 875.9	
✓ CAMDEN, HIGHLAND WORSTED MILLS, CHIMNEY, (USE), 1925	-1969 148		39 57 07.503 75 06 41.924			231.4 1619.1 996.8 427.4	

1 FT. = 3048006 METER

COMPUTED BY R.M. Whitson

DATE November 7, 1947

CHECKED BY Harry R. Rudolph

DATE

7 November 1947

M-2388-12

MAP T-8749-C

PROJECT NO. PH-7(46)E

SCALE OF MAP 1:20,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (ACCORDING TO Pg. No.)	DATUM N.A. 1927	LATITUDE OR Y-COORDINATE LONGITUDE OR X-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)	FORWARD	(BACK)
PAVONIA, HIGH STAND- PIPE, 1925	1969 148		39 57 11.469 75 05 33.634				353.7	1496.8		
CAMDEN, NEW JERSEY WATER CO. STANDPIPE 1933	1751 99		39 57 02.091 75 05 05.311				798.4	625.8		
MERCHANTVILLE, E.S. PERKINS CO. ICE PLANT STACK, 1933	" 98		39 57 10.623 75 02 26.802				64.5	1786.0		
MERCHANTVILLE LARGER MUNICIPAL STANDPIPE, " 1933	" "		39 57 01.185 75 03 01.026				126.1	1298.2		
CAMDEN, NORTH BAP- TIST CHURCH, DOME, 1925	1969 147		39 56 56.275 75 07 20.727				327.6	1522.9		
CAMDEN, COURT HOUSE BALL, 1925	-1969 148		75 03 01.026 39 56 56.275				636.2	788.0		
NEW JERSEY G.C.S. MONUMENT 3961	N.J.G.C. S. CAM- DEN CO.		325.039.03 1,891,925.49	5039.03 (4960.97) 1925.49 (8074.51)			36.5	1814.0		
CAMDEN, HIGH SCHOOL SQUARE, TOWER, CENTER, FINAL, 1933	-1751 100		39 56 06.924 75 05 55.785				24.4	1399.9		
CAMDEN, ST. JOSEPH'S CHURCH, CROSS ON GREEN DOME, 1933	-1751 101		39 55 48.641 75 06 37.441				1735.6	114.9		
CAMDEN PUMPING STA- TION #4, GRAY STANDPIPE, 1933	-1751 101		39 55 40.446 75 06 21.270				492.0	932.3		
CAMDEN, CROFT'S CHIM- NEY (USE) 1925	-1969 146		39 55 11.381 75 07 17.265				1250.8	599.7		
CAMDEN, ST. PETER & PAUL CHURCH SQUARE, SPIRE WITH CROSS, 1933	-1751 100		39 56 06.480 75 07 08.480				261.8	1162.6		
							1535.9	1512.1		
							586.9	2461.1		
							213.6	1636.9		
							1324.5	100.1		
							1500.2	350.3		
							889.0	535.7		
							1247.4	603.1		
							505.1	919.7		
							351.0	1499.5		
							410.0	1014.9		
							199.9	1650.6		
							201.3	1223.3		

1 FT. = 3048006 METER

COMPUTED BY Ruth M. Whitson

DATE November 7, 1947

CHECKED BY Harry R. Rudolph

DATE 7 November 1947

M-2308-12

MAP T. 3749-C PROJECT NO. PH-7(46)E SCALE OF MAP 1:20,000 SCALE FACTOR none

STATION	SOURCE OF INFORMATION (INDEX) No. Pg.	DATUM N.A. 1927	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
CAMDEN, NEW YORK SHIERS BUILDING CO. WATER TANK, 1933	G-1751 101		39 54 44.365 75 07 14.039			1368.3 482.2 333.5 1091.6	
GLOUCESTER, ST. MARY'S CHURCH, SPIRE, 1933	-1751 103		39 53 47.482 75 07 17.742			1464.4 386.1 421.5 1003.9	
GLOUCESTER, MUNICIPAL PAL STANDPIPE, 1933-1751	99		39 53 48.125 75 06 59.152			1484.3 366.2 1405.3 20.1	
COLLINGSWOOD, LETTERED WATER TANK, 1933	-1751 102		39 54 28.231 75 05 13.067			870.7 979.8 310.4 1114.8	
COLLINGSWOOD, MUNICIPAL STAND- PIPE, 1933	-1751 102		39 54 55.358 75 04 09.854			1707.4 143.1 234.0 1191.0	
HADDONFIELD, BLACK STANDPIPE, 1933	" 103		39 53 30.561 75 01 50.413			942.6 907.9 1197.7 227.8	
HADDON HEIGHTS, NEW JERSEY WATER CO., MOST EASTERLY STANDPIPE, 1933	" 104		39 53 13.518 75 03 00.318			416.9 1433.6 7.6 1418.0	
BROOKLAWN, MUNICIPAL PAL WATER TANK, 1933	-1751 104		39 52 42.028 75 06 52.511			1296.2 554.3 1247.8 178.0	
PHILADELPHIA, LADY HELP CHURCH SPIRE, BLACK CROSS & CLOCK, 1933	-1751 97		39 59 13.105 75 06 20.834			404.2 1446.3 494.3 929.2	
CAMDEN, EVANSON & LEVERING CO BED TANK (USE) 1923	-1969 145		39 55 34.595 75 07 24.134			1067.0 783.5 573.0 851.7	
U.S.C.&G.S. and SS MONUMENT 902 U.S.C. & G.S. and SS MONUMENT 905, 1934	NJGCS CAMDEN COUNTY " "		386,831.47 1,886,828.35 382,627.41 1,890,270.68	6,831.17 3,168.53 6,828.35 3,171.65 2,627.41 7,372.59 270.68 9,729.32		2082.2 965.8 2081.3 966.7 800.8 2247.2 82.5 2965.5	

MAP T. 8749C

PROJECT NO. PH-7(46)E

SCALE OF MAP 1:20,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM N.A. 1927	LATITUDE OR Y-COORDINATE LONGITUDE OR X-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)	
NEW JERSEY GCS MONUMENT 3955	NJGCS CAMDEN COUNTY		388,838.89 1,898,626.74	8,838.89	1161.11		2694.1	353.9	
US&GS & SS MONU- MENT 4002, 1935	"		386,936.48	6,936.48	3063.52		2629.4	418.6	
N.J. GCS MONUMENT 6929, 1938	"		1,877,724.20	7,724.20	2275.80		2114.2	933.8	
			392,972.3	2,972.3	7027.7		2354.3	693.7	
			1,891,720.6	1,720.6	8,279.4		906.0	2142.0	
N.J. GCS MONUMENT 6951, 1940	"		418,671.02	8,671.02	1,328.98		524.4	2523.6	
			1,900,703.12	703.12	9,296.88		2642.9	405.1	
N.J. GCS MONUMENT 6958, 1938	"		405,658.24	5,658.24	4,341.76		214.3	2833.7	
N.J. GCS MONUMENT 6962, 1938	"		1,898,531.36	8,531.36	1468.64		1724.6	1323.4	
			399,640.96	9,640.96	359.04		2600.4	447.6	
			1,897,490.09	7,490.09	2,509.91		2938.6	109.4	
N.J. GCS MONUMENT 6972, 1938	"		385,875.22	5,875.22	4,124.78		2283.0	765.0	
			1,900,299.09	299.09	9,700.91		1790.8	1257.2	
N.J. GCS MONUMENT 9915, 1939	"		409,130.28	9,130.28	869.72		91.2	2956.8	
N.J. GCS MONUMENT 9919, 1939	"		1,880,089.03	89.03	9,910.97		2782.9	265.1	
			411,987.50	1,987.50	8,012.50		27.1	3020.9	
N.J. GCS MONUMENT 9920, 1939	"		1,885,980.92	5,980.92	4,019.08		605.8	2442.2	
			412,880.76	2,880.76	7119.24		1823.0	1225.0	
N.J. GCS MONUMENT 12966, 1940	"		1,887,493.21	7,493.21	2506.79		878.1	2169.9	
			409,145.98	9,145.98	854.02		2283.9	764.1	
N.J. GCS MONU- MENT 12973, 1940	"		1,890,220.81	220.81	9779.19		2787.7	260.3	
			401,595.47	1,595.47	8404.53		67.3	2980.7	
			1,887,832.36	7,832.36	2167.64		486.3	2561.7	
							2387.3	660.7	

1 FT. = 3048008 METERS
COMPUTED BY: Ruth M. Whitson

DATE November 7, 1947

CHECKED BY: H.A.A. Rudolph

DATE 13 November 1947

M-7388-12

MAP T. 8749-C

PROJECT NO. PH-7(46)E

SCALE OF MAP 1:20,000

SCALE FACTOR None

STATION	SOURCE OF INFORMATION (INDEX)	DATUM N.A. 1927	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
SUB-STATION FOOT			39 57	<i>Not a Sta.</i>		1700.5 150.0	
SUB-STATION CRAMPS			75 64	" "		655.1 768.9	
			39 58	" "		228.3 1622.2	
			75 07			207.3 1216.6	
SUB PT. N.J. GCS MON. No. 902	NJGCS CAMDEN COUNTY		380,000 +			2072.4 (975.6)	
			1,880,000 +			2090.4 (957.6)	
SUB.PT. NJGCS MON. No. 905	"		380,000 +			797.1 (2250.9)	
			1,890,000 +			109.9 (2938.1)	
SUB.PT. NJGCS MON. No. 981	"		400,000 +			2842.3 (205.7)	
			1,900,000 +			3001.1 (46.9)	
SUB.PT. NJGCS MON. No. 6958	"		400,000 +			1725.0 (1323.0)	
			1,890,000 +			2641.0 (407.0)	
SUB.PT. NJGCS MON. No. 6972	"		380,000 +			1819.9 (1228.1)	
			1,900,000 +			83.1 (2964.9)	
NJGCS MON. 9925, 1939	"		419,369.41	9,369.41 630.59		2855.8 192.2	
			1,892,640.86	2,640.86 7,359.14		804.9 2243.1	
CAMDEN, 1933	Acc. No. G-1664 Pg. 69		39 56 41.048	*		1266.0 584.5	
			75 07 13.614			323.2 1101.2	
NJGCS MONUMENT 3953, 1937	NJ GCS Camden Co.		389,964.22	9,964.22 35.78		3037.1 10.9	
			1900,281.80	281.80 9,718.20		85.9 2962.1	
NJGCS MONUMENT 3951 1937	"		393,703.36	3,703.36 6,296.64		1128.8 1919.2	
			1903,438.39	3,438.39 6,561.61		1048.0 2000.0	
NJGCS MONUMENT 12963 1940	"		406,435.73	6,435.73 3,564.27		1961.6 1086.4	
			1887,723.17	7,723.17 2,276.83		2354.0 694.0	

1 FT. = 3048006 METER

COMPUTED BY: Ruth E. Rudolph

DATE 2 December 1948

CHECKED BY: H.R. Rudolph

DATE 3 Dec. 1948

M-2388-12

MAP T-8749C

PROJECT NO. PH-7(46)E

SCALE OF MAP 1:20,000

SCALE FACTOR 1.000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM N.A. 1927	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
N.J.G.C.S. MONUMENT 6953, 1938	N.J.G.C.S. CAMDEN COUNTY		414,242.99	4,242.99 5,757.01		1293.3 1754.7	
N.J.G.C.S. MONUMENT 985 1939	"		1899,960.21	9,960.21 29.79		3035.9 12.1	
N.J.G.C.S. MONUMENT 6964 1938	"		419,197.70	9,197.70 802.30		2803.50 244.5	
N.J.G.C.S. MONUMENT 6960 1938	"		1901,394.78	1,394.78 8605.22		425.1 2622.9	
N.J.G.C.S. MONUMENT 6959 1938	"		395,748.77	5,748.77 4251.23		1752.2 1295.8	
N.J.G.C.S. MONUMENT 6956, 1938	"		1896,780.70	6,780.70 3219.30		2066.8 981.2	
N.J.G.C.S. MONUMENT 12971 1940	"		402,622.77	2,622.77 7377.23		799.4 2248.6	
N.J.G.C.S. MONUMENT 12968, 1940	"		1897,980.07	7,980.07 2019.93		2432.3 615.7	
N.J.G.C.S. MONUMENT 9922 1939	"		404,106.65	4,106.65 5893.34		1251.7 1796.3	
N.J.G.C.S. MONUMENT 9918, 1939	"		1898,261.75	8,261.75 1738.25		2518.2 529.8	
N.J.G.C.S. MONUMENT 9913, 1939	"		407,948.14	7,948.14 2051.86		2422.6 625.4	
N.J.G.C.S. MONUMENT 952	"		1898,927.26	8,927.26 1072.74		2721.0 327.0	
			414,327.08	4,327.08 5,672.92		1318.9 1729.1	
			1894,238.92	4,238.92 5,761.08		1292.0 1756.0	
			411,067.65	1,067.65 8,932.35		325.4 2722.6	
			1,891,849.72	1,849.72 8,150.28		563.8 2484.2	
			416,704.08	6,704.08 3,295.92		2043.4 1004.6	
			1,890,201.05	201.05 9,798.95		61.3 2986.7	
			411,367.23	1,367.23 8,632.77		416.7 2631.3	
			1,883,296.71	3,296.71 6703.29		1004.8 2043.2	
			406,664.79	6,664.79 3,335.21		2031.4 1016.6	
			1878,175.34	8175.34 1824.66		2491.8 556.2	
			423,866.59	3,866.59 6135.41		1178.5 1869.5	
			1897,312.59	7312.59 2687.41		2228.9 819.1	

1 FT. = 3048008 METER

COMPUTED BY: R.E. Rudolph

DATE 2 December 1948

CHECKED BY: H.R. Rudolph

DATE 3 December 1948

M. 2388-12

-5-

COMPILATION REPORT

MAP MANUSCRIPT, SURVEY NO. T-8749-C

T-8749C (Camden quadrangle) is one of four topographic manuscripts in Project NO. PH-7(46)E located along the Delaware River. These surveys are to be compiled in accordance with the instructions dated 25 March 1946, 19 July 1946 by graphic photogrammetric methods.

26. CONTROL

See layout of control submitted to the Washington Office 15 January 1948 with the radial plot report. A list of stations on Form No. M-2388-12 is included in this report. Six additional N.J. G.C.S. monuments shown on shoreline surveys T-8749A and T-8749B by the Washington Office were plotted on the manuscript after the radial plot was run. In addition, fourteen N.J.G.C.S. Monuments, identified as vertical control only were also plotted on the manuscript.

27. RADIAL PLOT

Refer to radial plot report for Surveys No. T-8747 to T-8750 inclusive, which was submitted to the Washington Office 15 January 1948.
Filed in Div. of Photogrammetry General Files.

N.J.G.C.S. MONUMENT 3955, 1937 - Pricked direct - pricking positive. The sketch on control station identification form No. M-2226-12 and position identified on the field photograph for this station agrees with the sketch by the New Jersey Geodetic Control Survey for MONUMENT 3956. Station was not used in the radial plot.

N.J.G.C.S. MONUMENT 6951, 1940 - Pricked direct - positive. Field photograph not available for use in the compilation office. Pricked on office photograph from Form No. M-2226-12, Control Station Identification. Did not hold in the radial plot. Radially plotted position falls 0.5 mm west of the geographic position.

28. DELINEATION

The compilation is in accordance with the written instructions pertaining to Project No. PH-7(46) dated 19 July 1946 and Photogrammetry Instructions No. 17 dated 15 September 1947. *Filed in Div. Photogr. office Files.*

Shoreline and adjacent detail were traced directly from the reductions of shoreline manuscripts covering the area. These shoreline surveys were T-8749-A, T-8749-B, and T-8769.

-6-

28. DELINEATION (Continued)

The interior was delineated from nine lens photographs supplemented with field inspection data. No difficulties were encountered.

Road classifications were converted in the compilation office to agree with Photogrammetry Instructions No. 10, dated 4-14-47.

29. SUPPLEMENTAL DATA

1. Street map of Philadelphia and vicinity published by the Philadelphia Transit Company January 1947.
2. Zoning map of the borough of Haddonfield January 1945
3. Street map of Gloucester
4. Map of the borough of Brooklawn
5. Map of West Collingswood Ext. June 30, 1939
6. Blueprint of Haddon Township March 1928
7. Road map of Camden County 1941
8. Blueprint of road map of Camden County Edition 1943
9. Base map of Camden County 1939
10. Map of the City of Camden and vicinity.
11. Blueprints of Pennsylvania Railroad, Philadelphia Terminal Division
 - a. Delaware Avenue Branch R/W and Track Map V-1.012
S.T. 1
 - b. Connecting Railroad, Kensington and Tacony Branch V-1.02
3
 - c. Delaware River Railroad and Bridge Co. R/W and Track Map V-1.0
2
 - d. Philadelphia and Reading Railway Co. Delaware Avenue Branch V-1012JA
2
12. Blueprints of Reading Company
 - a. Camden, New Jersey, scale 1"=600' P-7031
 - b. Port Richmond Yard, Fifth Street to Richmond Street
 - c. Port Richmond Yard, Richmond Street to piers, scale 1"=400' P-6345
13. Map of Maple Shade Township Burlington Co. N.J. Revised to June 1942.

-7-

30. MEAN HIGH WATER LINE

All the mean high water line was traced from the reductions of shoreline surveys T-8749A, T-8749B, and T-8769.

31. MEAN LOW WATER LINE

No comment.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE

No comment

33. WHARVES AND SHORELINE STRUCTURES

No comment.

34. LANDMARKS AND AIDS TO NAVIGATION

Seven (7) existing landmarks, one new landmark, and two (2) aids to navigation were located for charting. One landmark is recommended for deletion.

All landmarks and aids to navigation are reported on Form No. 567, attached to the field report for this survey.

35. HYDROGRAPHIC CONTROL

None shown.

36. LANDING FIELDS AND AERONAUTICAL AIDS

See field report for information pertaining to Central Airport which is the only airport within the area.

37. GEOGRAPHIC NAMES

Geographic names were taken from a final names standard furnished by the Washington Office. A list of names is attached to this report.

West Merchantville, City Line, and Stockton have not been shown on the manuscript because their locations are not positive. A note has been shown on the discrepancy overlay requesting that these locations be checked during field edit.

38. JUNCTIONS

Junctions with Surveys No. T-8748C to the west and with T-8747C to the north have been made and are in agreement.

There are no contemporary surveys to the east and south.

38. JUNCTIONS (Continued)

Junction with U. S. Army Engineers Philadelphia, Pa.-N.J. quadrangle to the south, scale 1:62,500, published in 1942 and with Mount Holly, N.J. quadrangle, to the east, scale 1:62,500, published in 1943 was attempted by use of the vertical projector and found to be impracticable.

The planimetry along the edge junctioning with these quadrangles has been compiled 1/2 inch beyond the neat line. The contours shown on the quadrangles were surveyed by the Geological Survey of N.J., City of Philadelphia, in 1894, and since the field party did not contour on the photographs beyond the project limits, it was not possible to delineate 1/2 inch beyond the neat edge. It is recommended that the junction with these quadrangles be checked by the field edit party.

39. BOUNDARIES

Boundaries were taken from Base Map of Camden County 1941, excepting where information of a later date showed a difference in location. In these cases, the later information was accepted. Refer also to the field report attached to this report.

40. BRIDGES

Refer to the field report for list of bridge discrepancies.

See also the descriptive reports for Shoreline Surveys Nos. T-8749A, T-8749B and T-8769.

41. DISCREPANCY OVERLAY

A discrepancy overlay has been prepared and is being submitted with this manuscript.

42. VERTICAL CONTROL

Three bench marks and twenty-two N.J.G.C.S. Monuments (identified as vertical control but which are also triangulation stations) have been shown on the manuscript.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

Survey No. T-8749A has been compared with the U. S. Army, Corps of Engineers, Philadelphia quadrangle, scale 1:62,500, edition of 1943. Minute comparison was not made because of the great difference in scale between the two surveys. However, they appear to be, in general, in fair agreement. See descriptive report for T-8749A.

45. COMPARISON WITH NAUTICAL CHARTS

Refer to the descriptive reports for T-8749A and T-8749B.

-9-

Respectfully submitted
7 February 1949

Lutz E. Rudolph
Engineering Draftsman
Compilation and Descriptive Report

Joseph W. Vonesek
Photogrammetric Engineer
Compilation Office Reviewer

Harry R. Rudolph
Photogrammetrist
Supervisor

Approved and forwarded
2 March 1949

Thomas B. Rind
Officer in Charge
Baltimore Photogrammetric Office

FIELD EDIT REPORT
QUADRANGLE T-8749 C (3952.5/7500/7.5)
DELAWARE RIVER-Camden, N. J.
PROJECT PH-7 (46)
E. R. McCarthy, Chief of Party

The field edit survey of this quadrangle was made by Mr John Weiler and Mr Robert Horn, Photogrammetrists, from 23 February 1949 to 18 March 1949, in accordance with The Director's Field Edit Instructions dated 24 August 1945 and supplementary instructions.

46. METHODS

The field edit man rode in a truck over sufficient roads, and walked the shoreline necessary, to enable him to view all details within the limits of the quadrangle. Geographic Names and Boundaries were checked with local residents, at the Camden City Hall, Township Courthouses, and in interviews with several private engineers.

6. CONTOURS AND DRAINAGE

A few corrections in both contours and drainage have been indicated on the map manuscript. In general, the pattern of contours and drainage appears adequate.

7. MEAN HIGH WATER LINE

Some alterations of the mHWL were necessary on the manuscript due to the construction of dikes and bulkheads along the north shore of the Delaware River.

13. LANDING FIELDS AND AERONAUTICAL AIDS

A radio tower, WJMJ, has been located graphically near Delair Junction which may be used as an aeronautical aid. It is painted red and white and illuminated by obstruction lights at night. A radio tower, WKDN, with similar features, was cut in by planetable north of Fairview. Forms 567 and 524 are submitted on same. *See Review Report.*

15. BRIDGES

All bridge information for the area covered by this report as listed in the U. S. Engineers 'List of bridges Over Navigable

Waters in the U. S. dated July 1, 1941 was verified in the field, all clearances were carefully measured with a steel tape, and the published descriptions and clearances were found to be correct except for the following discrepancies, which were reported to the Local District Engineer:

COOPER RIVER, NEW JERSEY

State Street, Camden

Bridge book ----- 49'(left) --- 49'(right)
U.S.C.&G.S. ----- 47' " --- 20' "

North River Avenue, Camden

Bridge Book ----- 35'(left) --- 35'(right)
U.S.C.&G.S. ----- 34' " --- 37' "

Baird Avenue, Camden

Bridge book ----- 39'(left) --- 39'(right) -- 7.9'(ver-HW)
U.S.C.&G.S. ----- 42.6' " --- 42.6' " -- 12.0' "

Kaighn Avenue, Camden

Bridge book ----- 64'(left) --- 64'(right)
U.S.C.&G.S. ----- 26' " --- 60' "

DELAWARE RIVER

Delair, New Jersey

Bridge Book ----- 122'(left) --- 124'(right) -- 50.8'(vert.
U.S.C.&G.S. ----- 120.2' " --- 122' " -- 48.3' " HW)

PENNSAUKEN CREEK, NEW JERSEY

Palmyra (Penna. R.R.)

Bridge Book ----- 50'(center span)
U.S.C.&G.S. ----- 38' "

Not listed in bridge book...

1.2 - Palmyra - Hwy - Fixed - 3 span - 42.0'(L) - 43.0'(C) -
38.0'(R) - Vertical(HW) 7.3'(L) - 8.5'(C) - 7.3'(R)

PENNSAUKEN CREEK(SOUTH BRANCH), NEW JERSEY

Five Points

Bridge Book ----- 60'(center span)
U.S.C.&G.S. ----- 62' "

LITTLE TIMBER CREEK, NEW JERSEY

Rt. # 6, Gloucester

Bridge Book ----- 30'(both spans)
U. S. C. & G. S. - 28.5' "

NEWTON CREEK, NEW JERSEY

- Gloucester-Camden, Broadway, N.J.S.H.D.
 ✓ Bridge book --- Bascule, one span, 50' horiz. cl.
 U.S.C.&G.S. --- Fixed, two span, 51.2'(L), 52.8'(R)
- Gloucester-Camden, Broadway, Penna. R.R.
 ✓ Bridge book --- Fixed, one span
 U.S.C.&G.S. --- Fixed, trestle, 16 span, 10' horizontal
 clearance between each

17. BOUNDARY MONUMENTS AND LINES

Several corrections and additions of boundary lines have been indicated on the manuscript with appropriate notes for delineation.

18. Geographic Names

The predominant local usage is "BACK CHANNEL" when reference is made to the body of water between Camden and Petty Island. PENNYPACKER PARK, adjacent to Cooper River, has been added to the field edit sheet.

47. ADEQUACY OF COMPILATION

In general the compilation appears to be very good. The minor corrections and additions necessary are indicated on the sheet.

48. VERTICAL ACCURACY TEST

One vertical accuracy test was made in the northeast sector of the quadrangle, the results of which are as follows:

- 47 - Points tested
 44 - Of points tested were within $\frac{1}{2}$ contour interval
 3 - of points tested were in error more than $\frac{1}{2}$ contour interval
 93.6% of all points tested were within the allowable limits
 of accuracy.

Vertical Closure - 0.6'

49. Reviews

The southern half of the manuscript was reviewed by Mr William H. Baum, Gloucester Engineer for fifteen years, and by various other borough officials in the area. The northern half was

reviewed by Mr Benjamin A. Sleeper, Surveyor General of Western New Jersey, and by other county officials. They found no errors in the corrected manuscript.

John D. Weiler
Photogrammetrist

Robert A. Horn
Robert A. Horn
Photogrammetrist

NOT TO BE DELETED

STRIKE OUT ONE

October 11, 1946

Camden, New Jersey

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be ~~rechecked~~ on (deleted from) the charts indicated. J. Fitzgerald, Engr. Aid - E. Jones, Chief of Party

The positions given have been checked after listing by _____

The positions given have been checked after listing by

Chief of Party:

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

NON-LOCALIZING AIDS OR LANDMARKS FOR CHARTS

**TO BE CHARTED
TO BE CHARTERED**

STRIKE OUT ONE

Camden, New Jersey

Oct. 17

1946

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be chartered on ~~(between from)~~ the charts indicated. E. L. Jones
The positions given have been checked after listing by Chief of Party
I. Y. Fitzgerald, Engr. Aid.

Chief of Party

Chief of Party:

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

Camden, New Jersey

Oct. 11, 1946

I recommend that the following objects which have ~~(been used)~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(navigation)~~ the charts indicated by Fitzgerald, Engr. Aid E. I. Jones
The positions given have been checked after listing by Chief of Party

STATE New Jersey										POSITION					METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		LONGITUDE		DATUM													
			° ' "	D. M. METERS	° ' "	D. P. METERS														
*TOWER	(CITY HALL), Camden	① Camhall	39 56	✓1266	75 07	✓322	NA 1927	87498	1946	X							280-295			

Chief of Party

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given

T-8749C

GEOGRAPHIC NAMES

- | | | |
|--|------------------------------------|----------------------------|
| • Audubon | • Gloucester | • Philadelphia County |
| • Audubon Lake | • Haddon Heights | • Pine Point Park |
| • Baldwin Run | • Haddon Lake | • Pochack Creek |
| • Barrington | • Haddon Township | • Port Richmond |
| • Beideman | • Haddonfield | • Port Richmond Anchorage |
| • Bellmawr <i>Crescent Park</i> | • Herwood | • Stoy's Landing |
| • Bon Air | • Hillcrest | • Tavistock |
| • Bridesburg | • Iron Rock | • Tindale Run |
| • Broadway | • Jordantown | • Vernon |
| • Brooklawn | • Knight Park | • Wellwood |
| • Burlington County | • Little Timber Creek | • West Collingswood |
| • Camden | • Maple Shade | • West Haddonfield |
| • Camden County | • Maple Shade Township + | • Westmont |
| • Central Airport | • Merchantville | • Woodlynne <i>Borough</i> |
| • Cinnaminson Township | • Morris | • Yorkship Square |
| • Cloverdale <i>Highland Park</i> | • Morrisville | |
| • Collingswood | • Mount Ephraim | • Camden, New Jersey, and |
| • Cooper Creek | • Municipal Wharf | • Petty Island Bridge |
| • Cooper Point | • New Camden Cemetery | • Back Channel |
| • Cooper River | • New Jersey | • New Jersey Channel |
| • Cooper River (North Branch) | • N.J. Petty Island Bridge Channel | • Petty Island Bridge |
| • Cooper Valley Golf Course | • Newton Creek | (bridges to Petty I.) |
| • Cramer Hill | • Newton Cr (Main Branch) | |
| • Cuthbert | • Newton Cr (North Branch) | |
| • Delair | • Newton Cr (South Branch) | |
| • Delair Junction | • Newton Lake | |
| • Delaware River | • North Pennsville | |
| • Delaware Township | • Northmont | |
| • Dudley Grange | • Oaklyn | |
| • East Camden | • Orston | |
| • East Gloucester <i>W. Collingswood Heights</i> | • Palmyra | |
| • East Pennsauken * | • Parkside | |
| • Ellisburg | • Parry | |
| • Erlton | • Pennsauken * | |
| • Evergreen Cemetery | • Pennsauken Creek * | |
| • Fairview | • Pennsauken Cr (North Branch) | |
| • Farnham Park | • Pennsauken Cr (South Branch) | |
| • Fish House | • Pennsauken Township * | |
| • Fisher Point | • Pennsylvania | |
| • Fisher Point Dike | • Penna Reading Seashore Lines | |
| • Five Mile Point | • Peter Creek | |
| • Frankford Creek | • Petty Island | |
| • Garden State Park | • Philadelphia | |

Names preceded by
• are approved
subject to final
field edit. 3/16/49
L. Hock

✓ 4-7-50
a.j.w.

* = referred to U.S. B.G.N. for correct spelling.
whether Penn or Penn

- Crystal Lake (W. side of Westmont)
- Kings Highway = also N.S. No. 41, in part
- + ~~Maple Shade Township above is Chester Twp. on 1941 Census Map. Presumably name has been officially changed.~~
- Hopkins Pond (E. side of W. Haddonfield)

T-8749 C (names of schools, cemeteries, etc, not included in principal list):

	Remarks	Decisions
1	(from southeast corner of sheet):	
2	✓ Wesley R. Stafford School -	
3	✓ United Fire Company -	
3	✓ Cedar Grove Cemetery	
4	✓ Old St. Marys Cemetery	
5	✓ Nicholson Avenue -	
5	✓ Audubon High School	
6	✓ Orston R.R. Sta.	
6	✓ Audubon R.R. Sta.	
7	✓ Fairview Athletic Feidl -	
7	✓ W. Collingswood R.R. Sta.	
8	✓ Oaklyn R.R. Sta.	
8	✓ Beetlewood Avenue -	
9	✓ Excelsior Consistory -	
9	✓ Edw. C. Knight High School	
10	✓ Episcopal Home -	
10	✓ Cuthbert R.R. Sta.	
11	✓ Westmont R.R. Sta.	
11	✓ Westmont Fire Dept. - ✓ West Haddonfield R.R. Sta.	
12	✓ Erlton School -	
13	✓ Cooperstown Road -	
13	✓ Locustwood Cemetery	
14	✓ North Park Drive	
14	✓ Calvary Cemetery	
15	✓ Camden Co. Vocational School	
15	✓ Harleigh Cemetery	
15	✓ Perpetual Rosary Shrine -	
16	New York Shipbuilding Company	
16	✓ New York Shipbuilding Company -	
17	✓ Old Camden Cemetery	
17	✓ Admiral Wilson Boulevard	
18	✓ State Street -	
18	✓ Westfield Avenue -	
19	✓ Woodrow Wilson High School	
19	✓ Iron Rock Golf Course	
20	✓ Bethel Cemetery <i>Bethel Park Cemetery</i>	
20	✓ Arlington Cemetery	
21	Crescent Cemetery <i>Crescent Cemetery</i>	
21	✓ Crescent Burial Park (should it not be Crescent?)	
22	✓ Crescent Boulevard -	
22	<u>In Philadelphia:</u>	
23	✓ Hoxie Gym	
24	✓ Northeast Sewage Treatment Works	
24	✓ St. Peters Cemetery	
25	✓ Holy Redeemer Cemetery	
25	✓ Bridesburg Park	
26	✓ Reading Co. Pier A	
26	✓ Pier H	
27		

T-8749

Road numbers and railway names

Remarks

Decisions

1	Pennsylvania R.R. (line from Camden to Burlington in N.J.; also	
2	in Philadelphia)	
3	Reading R.R.) both names used in Philadelphia area: Philadelphia & Reading R.R.) Reading Railway is preferred name in Railway Guide	
4		
5	Road numbers appear to be only partially applied: for example, U.S. No.	
6	30, State No. 43 appears to have been omitted; State No. 42 is not shown.	
7	State No. 41 also presents some questions: in southeast corner of sheet,	
8	application does not appear to agree with 1946 N.J. State Highway Map; also in northeast corner, the State map has S41 instead of 41.	
9	There should also be a check of whether it is U.S. 130 and State No. 45,	
10	or State No. 44, in the southwest section of the sheet; U.S. 130 and State No. 25 appears to be in order for section of main highway east of Camden.	
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-8749C

GEOGRAPHIC NAMES		Survey No. T-8749C									
Name on Survey	<div>On Chart No. On previous survey No. On U. S. quadrangle Maps From local information On local Maps P. O. Guide or Map Rand McNally Atlas U. S. Light List</div>										38.
	A	B	C	D	E	F	G	H	K		
Kensington Avenue											1
Frankford Avenue											2
Allegheny Avenue											3
N.J. S41N											4
Tacony - Palmyra Bridge											5
New Brunswick											6
Moorestown											7
Marltown											8
Mt. Holly											9
Asbury Park											10
Kreson											11
Glendale											12
Runnemedede											13
Atlantic City											14
Thorofare											15
Pennsville											16
							4-7-50				17
							A. J. W.				18
							pm JR				19
											20
											21
											22
											23
											24
											25
											26
											27
											M 234

GEOGRAPHIC NAMES

Survey No. T-8749C

GEOGRAPHIC NAMES											34
Survey No. T-8749c											
Name on Survey	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List			
	A	B	C	D	E	F	G	H	K		
Cooper River Parkway -										1	
Maple Shade Township - instead of Chester Township										2	
Camden, New Jersey and Petty Island Bridge - instead of Petty Island Bridge										3	
Pennypacker Park										4	
Cooper River Golf Club - instead of Cooper Valley Golf Course										5	
Audubon Park (Borough)										6	
Morgan Village										7	
Whitman Park (locality)										8	
Highland Park " instead of Cloverdale										9	
Wallworth Park "										10	
Woodlynne Borough instead of Woodlynne										11	
Gloucester Heights										12	
West Collingswood Heights - instead of East Gloucester										13	
Chandlers Run										14	
Tavistock County Club										15	
Haddon Heights Park										16	
Friends Cemetery										17	
Crescent Park instead of Bellmar										18	
West Jersey Hospital										19	
Moorestown Township										20	
Cooper Hospital										21	
Back Channel instead of New Jersey Channel										22	
Crescent Burial Park - instead of Crescent Burial Park										23	
Bethel Park (Cemt.) - instead of Bethel Cemetery										24	
Delaware River Bridge										25	
Maple Avenue										26	
Sorrel Horse Road										27	
										M 234	

40.

Review Report T-8749C
Topographic Map Manuscript
April 12, 1950

61. General.-The following surveys furnished detailed shoreline information for this area.

T-8749A	1:10,000	1949
8749B	"	"
8769	"	"

62. Comparison with Registered Topo Surveys.-For the areas in common, this survey supersedes-

T- 165 (1842)	1:10,000	T-2099 (1890)	1:1,200
T- 168 (1843)	1:10,000	T-1992 (1890)	1:9,600
T-1943 (1878)	1:4,800	T-1993 (1890)	1:9,600
T-1945 (1878)	1:4,800	T-1993a (1911)	1:10,000
T-1942 (1878)	1:4,800	T-4174 (1925)	1:5,000
T-1956 (1878)	1:4,800	T-4175 (1925)	1:5,000
T-2144 (1885)	1:2,400	T-4176 (1925)	1:5,000
T-1934 (1888)	1:1,200	T-3521 (1915)	1:9,600

for nautical charting purposes.

This survey also supersedes T-6395 (1935) 1:10,000 except for the offshore features—wrecks and stone and gravel spoil banks.

63. Comparison with Maps of other Agencies.-

Philadelphia, Pa.-N.J. (1943)	1:62,500	Army Map Service
Philadelphia, Pa.-N.J. (1898)	1:62,500	U.S. Geological Survey

64. Comparison with Contemporary Hydro Surveys.- None

65. Comparison with Nautical Charts.-

No. 280 2/13/50	1:15,000	
296 9/6/48	1:40,000	The clearances for the RR bridge should be corrected.

66. Adequacy of Results.-This map complies with national map accuracy standards.

67. Urban Limits.-To avoid confusion with political boundaries and other detail, the urban limits have been outlined on a print of the manuscript instead of the manuscript itself. An extra copy was made that will be retained in the manuscript envelope until the map is published.

68. Navigational Aids and Landmarks.-Aids and landmarks are

41.

listed on Form 567 and filed in the Division of Charts as Chart Letters No. 679 (1946) No. 427 (1948), and No. 606 (1949). See photostat copies following the Field Edit Report.

69. Overlays.--An overlay has been prepared showing road classification, control, etc. Boundaries are shown on the manuscript, but have also been shown on the overlay for clarification. Checked and unchecked spot elevations are not differentiated on the manuscript so they have been shown on the overlay in different colors.

Reviewed by:

Jack L. Rihn
Jack L. Rihn, Cartographer

APPROVED

S. V. Griffith ^{S.S. 1/3/52}
Chief, Review Section
Div. of Photogrammetry ^{K.H.M. 6-29-50}

H. Edmundson
Chief, Nautical Chart Branch
Division of Charts ^{SH}

O. J. Reading
Chief, Div. of Photogrammetry

Carl O. Heston
Chief, Div. of Coastal Surveys
^{W.H.}

Diag. Cht. No. 295-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PHOTOGRAMMETRIC SHORELINE

Field No. DL-7(16)F Office No. T-271.0 4

LOCALITY

State NEW JERSEY

General locality DELAWARE RIVER

Locality LITTLE TIMBER CREEK TO COOPER RIVER

194 6

CHIEF OF PARTY

E. L. Jones, Chief of Field Party

T. B. Reed, Baltimore Photogrammetric Office

LIBRARY & ARCHIVES

DATE _____

DATA RECORD

T- 8749-A

Quadrangle (II):

Project No. (II): PH-7(46)E

Field Office:

Camden, New Jersey

Chief of Party:

E.L.Jones

Compilation Office:

Washington Office
 Baltimore Photogrammetric Office
 Instructions dated (II III):
 25 March 1946, 19 July 1946, and
 15 September 1947

Chief of Party:

Thos. B. Reed
 Copy filed in Descriptive
 Report No. T- (VI)

Completed survey received in office: 9-1-49

Reported to Nautical Chart Section: 9-8-49

Reviewed: 18 Apr 50

Applied to chart No.

Date:

Redrafting Completed:

4-12-1951

April 11, 1951

Registered: 11-16-51

Published: May 1951

Compilation Scale: 1:10,000

Published Scale: 1:10,000

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927

Datum Plane (III): M.H.W.

Reference Station (III): ~~1933~~ Camden, High School, square tower center, final, 1933

Lat.: ~~39° 56' 06.924" (213.6m)~~ Long.: ~~75° 05' 55.785" (1324.5m)~~ Adjusted
 39° 56' 06.924" (213.6m) 75° 05' 55.785" (1324.5m) ~~Used~~ ~~Adjusted~~

State Plane Coordinates (VI): New Jersey

X = 1,878,809.43 Ft.

Y = 401,648.49 Ft.

Pennsylvania, South Zone

X = 2,743,368.63 Ft.

Y = 230,427.68 Ft.

Military Grid Zone (VI)

PHOTOGRAPHS (III)

75th meridian

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
46-D-1733-1736 incl.	3/3/46	1345	1:10,000	0.8' above MHW
46-D-1751-1754 "	3/3/46	1415	"	0.3' " "
46-D-1767-1770 "	3/3/46	1435	"	0.1' " "
46-D-1786-1789 "	3/3/46	1455	"	5.2' " MLW
46-D-1814	3/3/46	1515	"	4.9' above MLW
46-D-1819-1822 "	3/3/46	1530	"	4.7' above MLW
46-D-1850-1854 "	3/10/46	1420	"	0.5' above MLW

Actual tide observations at Philadelphia corrected to
Tide from (III): "Bridesburg to Gloucester".

Mean Range: 5.4'

Spring Range: 5.8'

Camera: (Kind or source) U.S.Coast and Geodetic Survey single lens
camera, wide angle, type D. Focal length 12".

Field Inspection by:

date:

See page 1 of field report for
T-8749C.

Sept-Nov. 22, 1946

Field Edit by: *J. Weiler*
R. Horn

date: Feb-Mar 1949

Date of Mean High-Water Line Location (III): Same as date of photographs
supplemented with field data obtained during September to November 1946.

Projection and Grids ruled by (III) Washington Office date:

" " " checked by: Washington Office date:

Control plotted by: Washington Office date:

Additional control plotted by: R.E.Rudolph

12/1/48

Control checked by:

date:

Washington Office

Additional control checked by: J.W. Vonasek.

12/20/48

Radial Plot by:

date:

None

Detailed by:

date:

Washington Office

Additional detailing by: R. E. Rudolph

11/2 - 12/1/48

Reviewed in compilation office by:

date:

J. W. Vonasek

12/17 to 12/24/48

Elevations on Field Edit Sheet

checked by:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): $6\frac{1}{2}$

Shoreline (More than 200 meters to opposite shore): 5. statute miles

Shoreline (Less than 200 meters to opposite shore): 12.6 statute miles
(measured along approximate centerline only)

Number of Recoverable Topographic Stations established: None

Number of ^{photo hydro} ~~Temporary Hydrographic~~ Stations located by radial
plot: none

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: Since no monumented horizontal control stations established
by the U. S. Coast and Geodetic Survey fall within the area
of this survey, the same station that was used on Survey
No. T-8749B has been used as a reference station for Survey
No. T-8749A.

Summary to Accompany T-8749A

This is one of a series of 24 shoreline maps in Project Ph-7(46) covering both sides of the Delaware River from Trenton, New Jersey and extending southward to Lower Delaware Bay.

These shoreline sheets at a scale of 1:10,000 are to furnish material for the revision of nautical charts for this area, and for a series of 18 topographic compilations at a scale of 1:20,000 which are to be published by the U. S. Geological Survey as standard topographic quadrangles at 1:24,000.

FIELD REPORT

SHORELINE MANUSCRIPT

SURVEY NO. T-8749A

PROJECT NO. PH-7(46)E

For data concerning the field inspection of this manuscript refer to the original field report for T-8749 submitted to the Baltimore Photogrammetric Office by E. L. Jones on 27 November 1946. This field report is a part of the descriptive report for T-8749C.

COMPILATION REPORT

SHORELINE MANUSCRIPT

SURVEY NO. T-8749A

Survey No. T-8749A is one of six (6) shoreline manuscripts in Project No. PH-7(46)E located in or near the City of Philadelphia along the Delaware River.

T-8749A was compiled in the Washington Office using the stereo-planigraph and was revised and corrected in the Baltimore Photogrammetric Office.

26. CONTROL

Twelve (12) additional control stations were plotted within the area of this survey at the Baltimore Office. In addition, four stations were re-plotted.

The following information concerning the control stations plotted in the Washington Office was furnished by the Stereo-mapping Section.

"N.J. G.C.S. MONUMENT 4000, 1935 - could not be identified.
"N.J. G.C.S. MONUMENT 12973, 1940- could not be held; position submitted by Baltimore Office is believed to be unadjusted."

The plotting of MONUMENT 12973 was found to be incorrect and is one of the four stations which were re-plotted. The station now holds.

27. RADIAL PLOT

Survey No. T-8749A was compiled in the Washington Office by use of the Zeiss Stereoplanigraph using the available wide angle 12" focal length photography. This photography was reduced to 8 $\frac{1}{4}$ " focal length in order to use the 8 $\frac{1}{4}$ " normal angle Zeiss lenses in the stereoplanigraph. Previous tests indicated that the horizontal errors introduced due to change in the focal length were negligible.

In order to continue both Cooper River and Little Timber Creek beyond the stereoplanigraph delineation, two partial radial plots were run using vinylite templates. Triangulation stations and secondary control points established by the 1:20,000 radial plot were used as control.

28. DELINEATION

The compilation is in accordance with the written instructions pertaining to Project No. PH-7(46) dated 19 July 1946 and 15 September 1947.

In the Washington Office all of the planimetric details were compiled from office interpretation of the photographs. For economy, all of the planimetry within the areas of each model was compiled by the operator. After the survey was completed it was turned over to a draftsman who inked in only the half minute on the west side of the manuscript.

In the Baltimore Office, the remaining shoreline and adjacent planimetry were inked in and corrected, and field inspection data were applied using prominent shoreline features and road intersections as control points. In the areas of the partial radial plots, detail points were cut in and the area was then delineated.

The channels of the three branches of Newton Creek were obtained by inking them in on the 1:20,000 photograph (tide of 0.5' above MLW) where they were clearly visible. Using the vertical projector and superimposing the 1:20,000 photo on the 1:10,000 photos the channels were inked on the single lens photographs and then transferred to the manuscript.

29. SUPPLEMENTAL DATA

1. Map of the City of Camden and vicinity.
2. Base map, Camden County, N. J. 1939
3. Road map of Camden County, N. J.

30. MEAN HIGH WATER LINE

No comment.

31. MEAN LOW WATER LINE

No comment

32. DETAILS OFFSHORE FROM THE MEAM HIGH WATER LINE

No comment.

33. WHARVES AND SHORELINE STRUCTURES

No comment

NOTES
FOR
HYDROGRAPHIC PARTIES
DELAWARE RIVER

SHORELINE MANUSCRIPT, SURVEY NO. T-8749A

PROJECT PH-7(46)E

T-8749A was compared with Nautical Chart No. 280, scale 1:15,000 published September 1943 and with Nautical Chart No. 295, scale 1:40,000, published September 1943.

Very little of the area shown on the manuscript appears on the charts. However, a dam across Cooper River below Kaighn Avenue shown on the chart appears on the manuscript as a two span fixed bridge with a vertical clearance of 7 feet. The area along Newton Creek is shown as marsh on the chart and as grass-in-water on the manuscript.

The following topographic information shown on T-8749A is of sufficient importance to warrant immediate application to the charts:

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 charts:

None.

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

Minor differences in cultural and shoreline details need no special discussion.

Respectfully submitted
2 December 1948

Ruth E. Rudolph
Engineering Draftsman

Approved and forwarded

Thos. B. Reed

Thos. B. Reed
Officer in Charge
Baltimore Photogrammetric Office

34. LANDMARKS AND AIDS TO NAVIGATION

None shown.

35. HYDROGRAPHIC CONTROL

None

36. LANDING FIELDS AND AERONAUTICAL AIDS

Central Airport is the only landing field in the area. There are no aeronautical aids. See paragraph 13 of the field report.

37. GEOGRAPHIC NAMES

Geographic names were taken from a final names standard furnished by the Washington Office. A list of names is attached to this report.

38. JUNCTIONS

Junctions have been made with T-8749B to the north, T-8748A to the west, and T-8769 to the southwest and are in agreement.

There are no contemporary surveys to the south and east.

T-8749A is covered by Topographic Survey No. T-8749C.

40. BRIDGES

See field report for bridge discrepancies

Clearances of those bridges across Little Timber Creek and Newton Creek not measured in the field have been shown on the manuscript as listed in the bridge book.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

Survey No. T-8749A has been compared with the U. S. Army Corps of Engineers, Philadelphia quadrangle, scale 1:62,500, edition of 1943.

Minute comparison was not possible because of the great difference in scale between the two surveys. They appear, in general, to be in good agreement. However, the areas along Newton Creek and its three branches and Little Timber Creek appear as marsh on the quadrangle but are shown as grass-in-water on the manuscript.

45. COMPARISON WITH NAUTICAL CHARTS

T-8749-A was compared with Nautical Chart No. 280, scale 1:15,000, published September 1943 and with Nautical Chart No. 295, scale 1:40,000, published September 1943.

45. COMPARISON WITH NAUTICAL CHARTS (continued)

Very little of the area shown on the manuscript appears on the charts. However, a dam across Cooper River below Kaighn Avenue shown on the chart appears on the manuscript as a two span fixed bridge with a vertical clearance of 7 feet. The area along Newton Creek is shown as marsh on the chart but as grass-in-water on the manuscript.

The following topographic information shown on T-8749A is of sufficient importance to warrant immediate application to the charts:

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 charts:

None.

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

Minor differences in cultural and shoreline details need no special discussion.

Respectfully submitted
2 December 1948

Ruth E. Rudolph
Engineering Draftsman
Compilation and Descriptive Report

Harry R. Rudolph
Supervisor

Joseph W. Vonasek
Photogrammetric Engineer
Photogrammetric Office Reviewer

Approved and forwarded
4 January 1949

Thos B. Bond
Officer in Charge
Baltimore Photogrammetric Office

GEOGRAPHIC NAMES

- Audubon Lake
- Camden
- Central Airport
- Cloverdale
- Collingswood
- Cooper River
- Cooper River North Branch
- ~~Cooper Valley Golf Course~~ Cooper River Golf Club
- Cuthbert
- East Gloucester
- Erlton
- Fairview
- Farnham Park
- Gloucester
- Haddon Lake
- Little Timber Creek
- Mount Ephraim
- Newton Creek Main Branch
- Newton Creek North Branch
- Newton Creek South Branch
- Newton Lake
- Northmont
- Parkside
- Peter Creek
- Oaklyn
- Stoy's Landing
- West Collingswood
- Westmont
- Woodlynne
- Yorkship Square

See T-8749C

Review Report T-8749A
Shoreline Map Manuscript
April 18, 1950

61. General:

This survey furnished detailed shoreline information for T-8749C 1:20,000 (1949).

62. Comparison with Registered Topo Surveys.-- For the areas in common, this survey supersedes:

T-165 (1842)	1:10,000	T-4175 (1925)	1:5,000
T-1943 (1878)	1:4,800	T-4176 (1925)	1:5,000
T-1945 (1878)	1:4,800	T-3521 (1915)	1:9,600
T-1992 (1890) 1:9,600 - for nautical charting purposes.			

63. Comparison with Maps of Other Agencies:

Philadelphia, Pa.--N.J. (1943) 1:62,500 Army Map Service
Philadelphia, Pa.--N.J. (1898) 1:62,500 U.S. Geological Survey

65. Comparison with Nautical Charts:

No. 280 2/13/50 1:15,000 See Par. 45 Compilation Report

66. Adequacy of Results:

This map complies with National Map Accuracy Standards.

67. Landmarks:

The radio tower reported by the Field Edit Party is listed on Form 567 and filed as Chart Letter No. 606 (1949) in the Division of Charts.

68. Field Edit:

Information obtained for the field edit of T-8749C was also applied to this survey.

Reviewed by:

Jack L. Rihn
Jack L. Rihn, Cartographer

Approved by:

S. V. Griffith [✓]
Chief, Review Section B 12/13/51
Division of Photogrammetry

A. C. Edmonson
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

Earl O. Heston
Chief, Div. Coastal Surveys
18.14.

SURVEY NO. T8749A

Record of Application to Charts

[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.

Diag. Cht. No. 295-2 & 296

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PHOTOGRAMMETRIC SHORFLINE

Field No. PH-7(46) E Office No. T-8749 B

LOCALITY

State PENNSYLVANIA NEW JERSEY

General locality DELAWARE RIVER

Locality GOLDEN

194 6

CHIEF OF PARTY

E.L.Jones, Chief of Field Party.

T.B.Reed, Baltimore Photogrammetric Office

LIBRARY & ARCHIVES

DATE

DATA RECORD

T- 8749B

Quadrangle (II):

Project No. (II): PH-7(46)E

Field Office:
Camden, New JerseyChief of Party:
E.L. Jones

Compilation Office: Chief of Party:
 Division of Photogrammetry, Washington, D.C.
 and Baltimore Photogrammetric Office Thos. B. Reed
 Instructions dated (II III): March 25, 1946 Copy filed in Descriptive
 19 July 1946, 15 September 1947 Report No. T- (VI)

Completed survey received in office:
11-18-48

Reported to Nautical Chart Section: 12-7-48

Reviewed: 18 Apr 50

Applied to chart No.

Date:

Redrafting Completed:

March 27, 1951

Registered: 11-27-51

Published:

Compilation Scale: 1:10,000

Published Scale: 1:24,000

Scale Factor (III): 1.000

Geographic Datum (III): N.A. 1927 ✓

Datum Plane (III): ~~MSE~~ MHW

Reference Station (III): FOOT, 1938 ✓

Lat.: ✓ ✓ ✓
39° 57' 54.669" 1686.1mLong.: ✓ ✓ ✓
75° 04' 28.459" 675.4mAdjusted
~~Unadjusted~~ ✓

State Plane Coordinates (VI): New Jersey

X = 1,885,661.70 Ft.

Y = 412,518.74 Ft.

Pennsylvania, South Zone

X = 2,749,837.85 Ft.

Y = 241,530.26 Ft.

Military Grid Zone (VI)

PHOTOGRAPHS (III)

75th meridian

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
46-D-1737-1743	3/3/46	1350	1:10,000	0.7' above MHW
-1755-1759	"	1415	"	0.3' " "
-1771-1775	"	1440	"	at MHW
-1790-1795	"	1500	"	5.1' above MLW
-1808-1813	"	1515	"	4.9' above MLW
-1822-1827	"	1530	"	4.7' above MLW
-1843-1849	3/10/46	1420	"	0.5' below MLW

Actual tide observations at Philadelphia corrected to
Tide from (III): Bridesburg to Gloucester

Mean Range: 5.4'

Spring Range: 5.8'

Camera: (Kind or source) U.S.Coast and Geodetic Survey single lens camera,
wide angle, type D. Focal length 12".

Field Inspection by: See page 1 of field report for T-8749C date: 23 Sept. 46 -
25 Nov. 1946

Field Edit by: J. Weiler
R. Horn date: Feb-Mar 1949

Date of Mean High-Water Line Location (III): Same as date of photographs supplemented with field data obtained during September to November 1946.

Projection and Grids ruled by (III) T.L.J. date: 9/15/47

" " " checked by: T.L.J. date: 9/15/47

Control plotted by: L.J.Reed (Wash. Office) date: 9/15/47

Additional control plotted by: J.W.Vonasek date: 3/22/48

Control checked by: Washington Office date: -

Additional control checked by: R.E.Rudolph date: 10/5/48

Radial Plot by: none date:

Detailed by: Washington Office

date: --

Additional detailing by: J.W.Vonasek and
R.E.Rudolph.

date: 3/22 to 3/26/48,)
10/1 to 10/3/48, and)
10/18 to 10/29/48.)

Reviewed in compilation office by:

date:

J.W.Vonasek

date: 11/2 to 11/12/48

Elevations on Field Edit Sheet

checked by:

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 9 statute miles

Shoreline (More than 200 meters to opposite shore): 12.3 statute miles

Shoreline (Less than 200 meters to opposite shore): 7 statute miles
(measured along approximate centerline only)

Number of Recoverable Topographic Stations established: one

photo hydro
Number of Temporary Hydrographic Stations located by radial
plot: none

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:

Summary to Accompany T-8749B

This is one of a series of 24 shoreline maps in Project Ph-7(46) covering both sides of the Delaware River from Trenton, New Jersey and extending southward to Lower Delaware Bay.

These shoreline sheets at a scale of 1:10,000 are to furnish material for the revision of nautical charts for this area, and for a series of 18 topographic compilations at a scale of 1:20,000 which are to be published by the U. S. Geological Survey as standard topographic quadrangles at 1:24,000.

- 4 -

FIELD REPORT

SHORELINE MANUSCRIPT

SURVEY NO. T-8749B

PROJECT NO. PH-7(46)

For data concerning the field inspection of this manuscript refer to the original field report for T-8749 submitted to the Baltimore Photogrammetric Office by E. L. Jones on 27 November 1946. This field report is part of the descriptive report for T-8749C.

COMPILATION REPORT

SHORELINE MANUSCRIPT

SURVEY NO. T-8749B

Survey No. T-8749B is one of six (6) shoreline manuscripts in Project No. Ph-7(46)E located in or near the City of Philadelphia along the Delaware River.

T-8749B was compiled in the Washington Office using the stereo-planigraph and was revised and corrected in the Baltimore Photogrammetric Office.

26. CONTROL

Nine^{teen} (19) additional control stations were plotted within the area of this survey at the Baltimore Compilation Office.

The following information concerning the control stations plotted in the Washington Office was furnished by the Stereomapping Section:

"N. J. G. C.S. MONUMENT 12966, 1940 - could not be held, position submitted by Baltimore Office is believed to be unadjusted."

In the list of plane coordinates of the New Jersey Geodetic Control Survey monuments used by the Washington Office no position has been found for MONUMENT 949. No information is available to the Compilation Office concerning this station.

27. RADIAL PLOT

None.

28. DELINEATION

The compilation is in accordance with the written instructions pertaining to Project No. PH-7(46) dated 19 July 1946 and 15 September 1947.

Survey No. T-8749B was compiled in the Washington Office by use of the Zeiss Stereoplanigraph using the available wide angle 12" focal length photography. This photography was reduced to 8 $\frac{1}{4}$ " focal length in order to use the 8 $\frac{1}{4}$ " normal angle Zeiss lenses in the stereoplanigraph. Previous test indicated that the horizontal errors introduced due to change in the focal length were negligible. All of the planimetric details were compiled mainly from office interpretation of the photographs. For economy, all of the planimetry within the areas of each model was compiled by the operator. After each survey was completed it was turned over to a draftsman who inked in the penciled shoreline and adjacent planimetry.

28. DELINEATION (Continued)

In the Baltimore Compilation Office, the shoreline and adjacent planimetry were corrected and field inspection data applied using prominent shoreline features and road intersections as control points. Considerable revision was found to be necessary in order to comply with present instructions.

When N.J.G.C.S. MONUMENT 6951, 1940, was plotted on the manuscript in the Baltimore Compilation Office it did not agree with the detail in the area. The Washington Office did not use this station which was the only one in the area recovered by the field party. Instead they used three other monuments (935, 949, and 952) for which there are no descriptions in the Baltimore Office and which were not recovered by the field party. On the quadrangle covering this area (T-8749C) a radially plotted position had been established for Monument 6951. It was decided to transfer three pass points and the radially plotted position of Monument 6951 from the 1:20,000 manuscript to T-8949B. In addition, four check points were pricked on the nine lens photographs, radially plotted on the quadrangle, and then transferred to T-8749B. Using these eight points as control, photograph centers and detail points were radially plotted. It was then found that part of the detail at the southern limits of the delineated area was incorrect and this area was re-delineated.

29. SUPPLEMENTAL DATA

1. Sheets No. 1 and 2, 1942 survey, revised to 1 March 1941, Delaware River, Philadelphia to Trenton, U.S. Engineers, scale 1" = 100'.

2. Railroad blueprints -

a. Pennsylvania Railroad, Philadelphia Terminal Division -

1. Delaware River Railroad and Bridge Company, R/W and Track Map, scale 1" = 100' $\frac{V1.0}{2}$

2. Connecting Railway, Kensington and Tacony Branch, R/W and Track Map, scale 1" = 100' $\frac{V1.02}{3}$

b. Reading Company -

1. Port Richmond Yard, Richmond Street to piers, scale 1" = 400'.

30. MEAN HIGH WATER LINE

In the Washington Office the mean high water line was delineated from office interpretation of the single lens photographs. In the Baltimore office, using available field inspection, the mean high water line was revised.

31. MEAN LOW WATER LINE

Only that portion of the mean low water line delineated by the field party has been shown on the manuscript.

32. DETAILS OFFSHORE FROM THE MEAN HIGH WATER LINE

No comment.

33. WHARVES AND SHORELINE STRUCTURES

No comment

34. LANDMARKS AND AIDS TO NAVIGATION

Six (6) landmarks and two (2) aids to navigation were located and are to be charted. They are all triangulation stations. One landmark, CITY HALL, CAMDEN, is to be deleted.

See Forms No. 567 submitted with this report and with the descriptive report for T-8749C. *See Review Report.*

35. HYDROGRAPHIC CONTROL

None.

36. LANDING FIELDS AND AERONAUTICAL AIDS

None.

37. GEOGRAPHIC NAMES

Geographic names were taken from a final names standard furnished by the Washington Office. A list of geographic names is attached to this report.

38. JUNCTIONS

Junctions with Surveys No. T-8748B to the west, T-8747A to the north, and T-8749A to the south have been made and are in agreement.

There is no contemporary survey to the east.

T-8749B is covered by Topographic Survey No. T-8749C.

40. BRIDGES

See field report for bridge discrepancies.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

Survey No. T-8749B has been compared with the U. S. Army, Corps of Engineers, Philadelphia quadrangle, scale 1:62,500, edition of 1943. Minute comparison was not possible because of the great difference in scale between the two surveys. They appear, in general, to be in good agreement.

45. COMPARISON WITH NAUTICAL CHARTS:

By using the vertical projector, T-8749B was compared with Nautical Chart No. 280, scale 1:15,000, published September 1943.

With the exception of a few ~~made~~^{man} changes, the two surveys seem to be in good agreement. A wreck offshore at East Camden has not been shown on the manuscript because it was deleted on field photo No. 1756.

T-8749B was also compared with Nautical Chart No. 295, scale 1:40,000, published September 1943 and with Nautical Chart No. 296, scale 1:40,000 published July 1936. Minute comparison was not made with either of these charts because of the great difference in scale. However, they appear to be in good agreement with the manuscript. Two wrecks near the mouth of Pennsauken Creek are not shown on the manuscript because they are not visible on the photographs.

The following topographic information shown on T-8749B is of sufficient importance to warrant immediate application to the charts:

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 charts:

None.

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

Minor changes in cultural and shoreline details need no special discussion.

Respectfully submitted
1 November 1948

Ruth E. Rudolph
Engineering Draftsman
Compilation and Descriptive Report

Harry R. Rudolph
Supervisor

Joseph W. Vasek
(Photogrammetric Office Reviewer

Approved and forwarded
18 November 1948

Thos B. ...
Officer in Charge
Baltimore Photogrammetric Office

NOTES
FOR
HYDROGRAPHIC PARTIES
DELAWARE RIVER

SHORELINE MANUSCRIPT

SURVEY NO. T-8749B

PROJECT NO. PH 7(46)E

By using the vertical projector, T-8749B was compared with Nautical Chart No. 280, scale 1:15,000, published September 1943.

With the exception of a few man made changes, the two surveys seem to be in good agreement. A wreck off the southern shore of the channel between Petty Island and the New Jersey mainland has not been shown on the manuscript because no data were furnished for it.

T-8749B was also compared with Nautical Chart No. 295, scale 1:40,000 published September 1943, and with Nautical Chart No. 296, scale 1:40,000, published July 1936. Minute comparison was not made with either of these charts because of the great difference in scale. However, they appear to be in good agreement with the manuscript.

The following topographic information shown on T-8749B is of sufficient importance to warrant immediate application to the charts:

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 charts:

None.

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

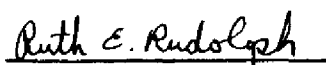
Minor changes in cultural and shoreline details need no special discussion.

Approved and forwarded



Thos. B. Reed
Officer in Charge
Baltimore Photogrammetric Office

Respectfully submitted
1 November 1948


Engineering Draftsman

NONFLOPPING AIDS FOR LANDMARKS FOR CHARTS

**TO BE CHARTED.
TO BE DELETED**

STRIKE OUT ONE

Baltimore, Md.

1 Nov. 1948

I recommend that the following objects which have ~~(not been)~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(the chart)~~ the charts indicated.

The positions given have been checked after listing by

Joseph J. Vonasek

Chief of Party:

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given....

SCALE FACTOR none

SCALE OF MAP.....1:20,000

PROJECT NO. PH-7(46)E

MAP T-8749B

[illegible]

T-151-3048006 METER

Reviewed by _____ J. W. Vonasek

DATE March 22, 1948

Copy
CHECKED BY: R. E. Rudolph

DATE Oct. 5, 1948

M - 2388-12

GEOGRAPHIC NAMES

- Baldwin Run
- Bridesburg
- Camden
- Cooper Point
- Cooper River
- Cramer Hill
- Delair Junction
- Delaware River
- East Camden
- Fish House
- Fisher Point
- Fisher Point Dike
- Five Mile Point
- Frankford Creek
- Morris
- ~~Municipal Wharf~~
- ~~New Jersey Petty Island Bridge Channel~~
- North Branch
- North Pennsville
- Pennsauken Creek
- Petty Island
- Philadelphia
- Pine Point Park
- Pochack Creek
- Port Richmond
- Port Richmond Anchorage
- South Branch

See T-8749 C

Review Report T-8749B
Shoreline Map Manuscript
April 18, 1950

61. General:

This survey furnished detailed shoreline information for T-8749C(1949) 1:20,000.

62. Comparison with Registered Topo Surveys.- For the areas in common, this survey supersedes:

T-168 (1843) 1:10,000	T-1993 (1896) 1:9,600
T-1934 (1888) 1:1,200	T-2099 (1890) 1:1,200
T-1942 (1878) 1:4,800	T-2144 (1885) 1:2,400
T-1943 (1878) 1:4,800	T-1993a (1911) 1:10,000
T-1956 (1878) 1:4,800	T-3521 (1915) 1:9,600
T-1992 (1890) 1:9,600	T-4174 (1925) 1:5,000
	T-4175 (1925) 1:5,000

for nautical charting purposes. This survey also supersedes T-6395(1935) 1:10,000 except for offshore features; wrecks and stone and gravel spoil banks.

63. Comparison with Maps of other Agencies:

Philadelphia, Pa.-N.J.(1943) 1:62,500 Army Map Service
Philadelphia, Pa.-N.J.(1898) 1:62,500 U.S.G.S.

64. Comparison with Contemporary Hydro Surveys: None

65. Comparison with Nautical Charts:

No. 280 2/13/50 1:15,000
No. 296 9/6/48 1:40,000 The clearances for the RR bridge should be corrected.

66. Adequacy of Results:

This map complies with National Map Accuracy Standards.

67. Aids and Landmarks:

These are listed on Form 567 and filed in the Division of Charts as Chart Letter No. 679(1946), No. 427, and No. 606 (1949).

68. Field Edit:

Information obtained for the field edit of T-8749C was also applied to this survey.

Reviewed by:

Jack L. Rihn
Jack L. Rihn, Cartographer

Approved by:

S. V. Griffith [✓]
Chief, Review Section ^{12/13/51}
Division of Photogrammetry

H. Edmonson
Chief, Nautical Chart Branch
Division of Charts

O. S. Reading
Chief, Div. of Photogrammetry

Carl O. Hester
Chief, Div. Coastal Surveys
L. H.

CSGID-SMP 061

27 April 1950

MEMORANDUM FOR: DIRECTOR, U. S. COAST AND GEODETIC SURVEY, DEPARTMENT
OF COMMERCE

ATTN: Administrative Planning Section

SUBJECT: Classification Clearance

1. Reference is made to your memorandum, file No. 731-lmh, dated 31 March 1950, forwarding ten maps for security clearance.

2. There is no objection to the publication of the three inclosed maps as unclassified.

3. The remaining seven maps will be returned to your agency as soon as they are received from the Commanding General, 4th Army, to whom they were sent for examination.

FOR THE ASSISTANT CHIEF OF STAFF, G-2:

3 Incls

1. Map No. T-8771
2. Map No. T-8749B
3. Map No. T-8749C

ERNEST A. BARLOW

Colonel, GSC

Chief, Security & Training Division

NAUTICAL CHARTS BRANCH

SURVEY NO. J-8749B

Record of Application to Charts

[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.