

7842

Diag. Cht. No. 1215-3

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. LISP-1250 Office No. H-7842

LOCALITY

State NEW YORK

General locality SOUTH SHORE OF LONG ISLAND

Locality HEMPSTEAD BAY-REYNOLDS CHANNEL

194/50

CHIEF OF PARTY

I. T. Sanders

LIBRARY & ARCHIVES

DATE JUNE 21, 1951

7842

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER NO. H-7842

Field No. LISP-1250

State NEW YORK

General locality SOUTH SHORE OF LONG ISLAND

Locality HEMPSTEAD BAY - REYNOLDS CHANNEL

Scale 1:10,000 Date of survey 28 Apr. to 16 June 1950

Instructions dated 7 Mar. 1949 & 4 Apr. 1950

Vessel Hydro Skiff

Chief of party Ira T. Sanders

Surveyed by John Laskowski & M.E. Natto

Soundings taken by ~~athometer~~ graphic recorder, hand lead, wire ~~wire~~ Pole

Fathograms scaled by Field Party

Fathograms checked by Field Party

Protracted by B.T. Lewis

Soundings penciled by B.T. Lewis

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~

REMARKS: This survey was smooth plotted at the Norfolk Processing Office.

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SHEET H-7842 (FIELD NO. LISP-1250)

HEMPSTEAD BAY

LONG ISLAND

NEW YORK

LONG ISLAND SHORE PARTY - IRA T. SANDERS, CHIEF OF PARTY

PROJECT CS-337

1950

SCALE 1:10,000

PROJECT: This survey was accomplished under Instructions dated 7 March, 1949, S-2-WA and Supplemental Instructions dated 11 April 1950, FP-Long Island. These instructions called for a new basic hydrographic survey of Hempstead Bay including a definitely delineated area outside the entrance to East Rockaway Inlet.

SURVEY LIMITS AND DATES: This survey extends westward from West Long. 73 degrees 38.35 minutes to and including the seaward approaches to East Rockaway Inlet.

Field work began with the establishment of a tide gage on 28 April and sounding was completed on 16 June 1950.

A junction was made at the eastern limit with Sheet H-7630, 1949, scale 1:10,000.

VESSEL AND EQUIPMENT: Hydrographic Skiff No. 717, propelled by two Johnson LOHP outboard gear-shift motors, was used for the whole of the survey. The party operated from a shore base. Echo soundings were obtained with fathometer number 139 SPX. The transmitter and receiver were mounted inboard.

TIDES AND CURRENTS: The tide note is attached to this report. Currents were not observed.

SMOOTH SHEET: The smooth sheet ^{was} ~~will be~~ plotted by the Norfolk Processing Office.

CONTROL STATIONS: Existing triangulation stations were used for control. It was found necessary to re-mark several of these on account of their poor condition.

The positions of photogrammetric stations were taken from Air Compilation Sheets T-5607⁽¹⁹⁴⁷⁾, T-5611⁽¹⁹⁴⁷⁾, and T-5615⁽¹⁹⁴⁷⁾.

Hydrographic stations were established wherever insufficient control existed in the area. Their positions were determined by taking sextant fixes with check angles at each station site.

SHORELINE AND TOPOGRAPHY: The shoreline and topographic details were transferred from Air Compilation Sheets T-5607, T-5614 and T-5615. (1947) (1947)

SOUNDINGS: Soundings were obtained with the fathometer, handlead and pole. The fathometer was used for most of the soundings. Pole soundings indicated greater depths than the fathometer because of the tendency of the pole to sink into the soft bottom. Bottom specimens were obtained with an armed lead or with a pole.

CONTROL OF HYDROGRAPHY: In the more open areas the hydrography was controlled by the three-point sextant fix method. In the upper reaches of channels and streams where control was lacking the positions of the sounding lines were referred to distinctive shoreline details. The proper remarks were inserted in the sounding records.

In the channel extending northward from N. Lat. 40 degrees 36.0 minutes and W. Long. 73 degrees 35.7 minutes, it is recommended that the positions and soundings for "f" day be plotted first and that preference be given them when plotting "d" day. The control for "d" day is the weaker of the two.

ADEQUACY OF SURVEY: This survey is complete and is considered adequate to supersede prior surveys. A satisfactory junction was made at the eastern limit with 1949 Sheet H-7630 (Field No. WA-1249). There are no holidays and the depth curves can be adequately drawn at the junctions.

Shortly after completion of this survey two major construction projects were started by local authorities which will affect the survey. In approximate N. Lat. 40 degrees 35.7 minutes W. Long. 73 degrees 40.7 minutes a large sewer outlet is being constructed. Four small prints supplied by the Department of Public Works, Nassau County, New York are attached and made a part of this report. The scale of these prints is very small and the details are generalized. The County Engineer has stated that this work is scheduled for completion early in the summer of 1951. It is suggested that the Supervisor, Eastern District be requested to keep in touch with County authorities or the contractor, so that any changes resulting from this construction program may be made available at the earliest date for charting.

A new bridge is being constructed over Reynolds Channel at Atlantic Beach, at approximate N. Lat. 40 degrees 35.6 minutes W. Long. 73 degrees 44.2 minutes. The required dredging has changed the hydrographic and topographic features. A blue-print from the contractor showing the major changes is included and made a part of this report. Bannister Creek has been filled and a new channel opened several hundred feet eastward. It was

Bp 47658 (Mar 1950)

ADEQUACY OF SURVEY: (continued)

reported that the new creek channel was dredged to minus 14 feet. It is assumed that this refers to Mean Sea Level datum, but the informant was uncertain on this point. The new channel is 200 feet wide. The construction of the bridge is well underway. Late in November 1950 a dredge was in operation in the vicinity of the shoal banks on the north side of Reynolds Channel, about south of Laurence Yacht Club. It is again suggested that the Supervisor, Eastern District be requested to keep in touch with the contractor concerning dredging in Reynolds Channel which affects this survey.

CROSSLINES: Crosslines required by the instructions were run during the progress of the work.

COMPARISON WITH PRIOR SURVEYS: No comparison is made with prior surveys, since a comparison in detail with a new edition of Chart 579 is included with this report.

COMPARISON WITH CHART NO. 579: (Print date 6/5/50)

N. Lat.	W. Long.	Survey Depth Feet	Charted Depth Feet	Remarks.
40-35.85	73-38.60	--	2.0	Bare at Low Water.
40-35.7	73-39.1	--	Wreck	Wreck removed. (found.)
40-35.65	73-39.85	--	2 wrecks	Recommend deletion, not
40-35.85	73-40.23	Wreck	--	Barge- bare at HW. (found.)
40-36.1	73-40.34	--	Wreck	Recommend deletion, not
40-37.5505	73-39.65	1.0	5.0	Channel closed. (found.)
40-37.35	73-41.19	--	Wreck	Recommend deletion, not
40-36.65	73-40.4	1-2	4 to 5	Silted area.
40-35.67	73-40.42	11.0	8.0	Shoaling to northwest.
40-35.60	73-40.99	17.0	10.0	11.0 feet 60m to NW.
40-35.45	73-41.203	13.0	9.0	Generally deeper, this area.
40-35.65	73-43.81	Wreck	--	Bare at Low Water.

COAST PILOT INFORMATION: Coast Pilot notes have been submitted under separate cover.

AIDS TO NAVIGATION: A list of ^{Floating} Aids to Navigation covering this survey area has been submitted as a separate report. A copy of the submitted list is appended to this report. Bridge clearances were measured and entered in the sounding records. L80 (1951)

LANDMARKS FOR CHARTS: Landmarks for charts for the whole of the Project were submitted at the close of the field season.

Respectfully submitted

John Laskowski,
Commander, USC & GS.

By direction:

STATISTICS TO ACCOMPANY

HYDROGRAPHIC SHEET H-7842 (FIELD NO. LISP-1250)

HYDRO. SKIFF NO. 717

<u>Date</u> 1950	<u>Day</u> <u>Ltr.</u>	<u>Vol.No.</u>	<u>H.L. and</u> <u>pole sdgs.</u>	<u>No. of</u> <u>positions</u>	<u>Stat. Mi.</u> <u>of Sdgs.</u>
28 Apr.-					
6 June	a	1	47	58	—
8 May	b	2	—	21	2.5
10 "	c	2	—	75	9.8
11 "	d	2	4	51	7.0
12 "	e	3	4	89	8.8
15 "	f	3	3	78	7.7
16 "	g	4	2	27	1.1
17 "	h	4	16	75	7.4
18 "	j	4 & 5	320	104	11.3
19 "	k	5	448	76	8.0
22 "	l	5 & 6	—	150	16.2
23 "	m	6	—	100	9.2
24 "	n	6 & 7	1	68	8.8
25 "	p	7	—	78	5.8
26 "	q	7 & 8	4	75	9.4
31 "	r	8	3	56	5.6
1 June	s	8	—	36	3.6
2 "	t	8 & 9	—	75	10.7
5 "	u	9	—	98	10.3
6 "	v	9 & 10	—	94	9.6
7 "	w	10	—	46	6.5
8 "	x	10 & 11	12	111	21.3
9 "	y	11	—	95	13.5
12 "	z	12	12	122	18.6
13 "	aa	12	—	87	11.3
14 "	ba	13	11	26	1.6
15 "	ca	13	—	19	1.3
16 "	da	13	13	104	10.1
TOTALS	28	13	900	2094	237.0

AREA IN SQUARE STATUTE MILES - 5.4

LIST OF SIGNALS

HYDROGRAPHIC SHEET H-7842 (FIELD NO. LISP-1250)

TRIANGULATION STATIONS

APEX - Lawrence, white house, cupola, apex, 1934.
BEACH - Long Beach, 1934.
BELL - Bell, 1926.
CASA - Atlantic Beach, Casa del Mar Hotel, cupola, 1931.
CITY - Long Beach, City Hall, 1926.
CLUB - Club, 1934.
EAST - Lido, East Twin Tower, 1933.
FIRE - Long Beach, Fire engine house, tower, 1926.
GAS - Long Beach, gas holder, 1926.
LONG - Long Beach, West End School, chimney, 1926.
PIPE - Long Beach, Standpipe, 1934.
ROCK - Rockville Center, Tank, 1933.
SWAMP - Swamp, 1926.
VERNE - Arverne, 1940.
WEST - Lido, West Twin Tower, 1933.
YORK - Far Rockaway, New York City Dept. of Water Supply,
(Standpipe, 1931.)

PHOTOGRAMMETRIC STATIONS: (Selected in the field from Sheet T-5614)

END - Northwest gable, brown house.
HIS - South gable of house.
IDA - South gable, grey house, white shutters.
JAP - Southeast gable of house.
JAW - Northwest corner of bulkhead.
LOU - South gable, small white house.
MID - North gable, old unpainted house.
OAK - Center, two-story house, pointed roof.
ODD - South gable, white house, dark roof.
PET - North end of pier.
ROY - South west gable, red roof shack.
RUB - Northwest gable, white house, green trim.
SAM - Southeast corner of pier.
WHO - Northwest gable of shack.

HYDROGRAPHIC STATIONS

ART - Vol. 1, pg. 12. Temporary banner.
AMY - " " 18. Center of shack.
DON - " " 19. Temporary black and white tripod.

HYDROGRAPHIC STATIONS (continued)

DOG - Vol. 1, pg. 12. North gable, white house, green roof.
 OUT - " " 18. South gable, shack, red roof.
 POT - " " 18. Temporary black and white tripod.
 SAD - " " 18. Temporary barrel signal.
 YES - " " 12. Temporary banner..

TOPOGRAPHIC (PHOTOGRAMMETRIC) STATIONS:

	Origin	Station	
	Sheet No.	No.	
ACE	- T-5614	----	Stack, black steel, 50ft. high, 1947.
*ALP	- -5615	----	L.O. Tower, Atlantic Beach C.G. Sta. 1947.
ANT	- -5614	1415	
BED	- -5607	0708	
BOB	- -5614	1433	
BUT	- -5614	1424	
CAB	- -5614	1452	
CON	- -5614	1458	
CUP	- -5614	1402	
EAT	- -5614	1417	
EGG	- -5614	1432	
*EIM	- -5615	----	East Rockaway Inlet No. 9, 1947.
EVA	- -5614	1407	
*FEZ	- -5615	----	East Rockaway Inlet Breakwater, 1947.
FOX	- -5614	1410	
FRY	- -5614	----	Belfry, South end, the Peoples Ch., 1934.
GAL	- -5615	1511	
GCB	- -5614	1427	
GUY	- -5614	1423	
HER	- -5614	1449	
HUB	- -5607	0701	
ICE	- -5614	1411	
IVY	- -5614	1455	
JIM	- -5614	1442	
KEY	- -5614	1421	
KID	- -5614	1405	
LAW	- -5614	----	Cupola, Lawrence High School, 1947.
LEO *	- -5614	1404	
*LET	- -5614	----	East Rockaway Inlet No. 11, 1947.
LIZ	- -5614	1431	
LOW	- -5614	1420	
NUT	- -5607	0705	
OIL	- -5614	1401	
ORA	- -5614	1425	
PAW	- -5614	1430	
RAT	- -5614	1441	
SHE	- -5614	1429	
SIR	- -5614	1456	

TOPOGRAPHIC (PHOTOGRAMMETRIC) STATIONS: (continued)

SIS	-	T-5614	----	Peak of pyramid roof, 1934.
SKY	-	-5614	1413	
*SUE	-	-5614	----	Chimney, Rhame Ave. Public School, 1947.
TOM	-	-5614	1409	
TRY	-	-5614	1426	
TUB	-	-5614	----	Chimney, west end of house, 1934.
VET	-	-5614	1408	
VEX	-	-5614	1434	
WAR	-	-5614	1412	
ZOO	-	-5614	1444	

Stations not named ~~recovered~~

T-5607	0709
-5607	0710
-5607	0711
-5607	0712
-5607	0713
-5607	0714
-5607	0715

* Note: Recoverable topographic stations, 1947. (Described, on Form 524)

TIDE NOTE TO ACCOMPANY

HYDROGRAPHIC SURVEY H-7842 (FIELD NO. LISP-1250)

The primary tide station at Sandy Hook, New Jersey, was inspected and serviced by the ship HILGARD before hydrographic operations were undertaken.

Observations were obtained at five tide stations. Portable automatic tide gages were maintained at four of the stations. The fifth, at East Rockaway, was a staff from which heights were recorded as needed. The positions of the tide stations are shown on the boat sheet. The limits of the of the areas in which tides from the various stations were used are outlined on the sheet in ink. No differences in time or height were applied to observed tides. Planes of reference were furnished from the Washington Office. The Long Beach station was moved from its first location on the railroad trestle on account of excessive vibration. Both positions for this station are shown.

STATION	N. Lat.	W. Long.	MLW on staff
Atlantic Beach(C. G. Sta.)	40-35.57	73-44.45	2.1 ft.
Bay Park, Hewlett Bay	40-37.79	73-40.18	2.0 "
East Rockaway (staff)	40-38.31	73-39.60	2.3 "
Long Beach (R.R. trestle)	40-35.66	73-39.72	1.0 "
" " (Pier)	40-35.65	73-39.71	2.2 "
Woodmere	40-37.26	73-41.89	1.6 "

FATHOMETER CORRECTIONS

HYDROGRAPHIC SURVEY H-7842 (FIELD NO. LISP-1250)

The corrections are based on an INITIAL of 0.0 feet on the fathograms. Where this varies the proper correction should be applied to bring the recorded depths to 0.0 feet INITIAL. All soundings have been recorded on the FOOT SCALE.

HYDRO SKIFF

All soundings(echo) obtained with

Fathometer No. 139 SPX

Correction Ft.	From Ft.	To
+ 1.6	0.0 - -	4.6
+ 1.4	4.7 - -	5.8
+ 1.2	5.9 - -	6.8
+ 1.0	6.9 - -	7.8
+ 0.8	7.9 - -	9.1
+ 0.6	9.2 - -	18.5
+ 0.4	18.6 - -	27.8
+ 0.2	27.9 - -	37.0
0.0	37.1 - -	45.6
- 0.2	45.7 - -	Sdg. limit

OFFICIAL FLOATING AIDS TO NAVIGATION
H-7842

<u>Name</u>	<u>Lat.</u>	<u>DM</u>	<u>Long.</u>	<u>DP</u>	<u>Depth</u>	<u>Pos. No.</u>	<u>Date</u>
East Rockaway Inlet Lighted Buoy "1"	40-35	290m.	73-46	169m.	17'	57z ✓	12 June 1950
East Rockaway Inlet Buoy "2"	40-35	²²⁴ 298	73-46	99	14	56z ✓	"
East Rockaway Inlet Buoy "3"	40-35	385	73-45	1132	11½	55z ✓	"
East Rockaway Inlet Buoy "4"	40-35	345	73-45	986	11	54z ✓	"
East Rockaway Inlet Lighted Buoy "5"	40-35	428	73-45	889	11	52z ✓	"
East Rockaway Inlet Buoy "6"	40-35	404	73-45	749	10	51z ✓	"
East Rockaway Inlet Buoy "7"	40-35	614	73-45	672	12½	50z ✓	"
East Rockaway Inlet Buoy "8"	40-35	557	73-45	528	13	49z ✓	"
East Rockaway Inlet Lighted Buoy "10"	40-35	850	73-45	175	12	25z ✓	"
East Rockaway Inlet Gong Buoy "4"	40-34	1539	73-45	479	19	56da ✓	16 June 1950
Reynolds Channel Lighted Buoy "1"	40-35	880	73-43	885	12	58a ✓	9 June 1950
Reynolds Channel Lighted Buoy "3"	40-35	816	73-42	1092	17½	57a ✓	"
Reynolds Channel Lighted Buoy "11"	40-35	1519	73-38	797	19½	17a ✓	11 May 1950

FLOATING AIDS (NOT IN LIGHT LIST)

East Rockaway Inlet (Oak) Buoy "1"	40-35	298	73-46	169	16½	58z ✓	12 June 1950
East Rockaway Inlet (Oak) Buoy "5"	40-35	430	73-45	904	10	53z ✓	"
East Rockaway Inlet (Oak) Buoy "10"	40-35	823	73-45	167	10	59z ✓	"
Reynolds Channel (Oak) Buoy "7"	40-35	766	73-41	393	15½	7a ✓	4 May 1950
Reynolds Channel (Oak) Buoy "9"	40-35	1257	73-40	709	17	3a ✓	3 May 1950

LIGHTED BUOYS MAINTAINED BY NASSAU COUNTY

Description	Lat.	DM	Long.	DP	Depth	Pos. No.	Date
Fl. Red (Red)	40-35	1798	73-41	179	--	39a	17 May
Fl. White (Red & Black)	40-35	1031	73-41	184	10	40a	"
Fl. Red (Red)	40-35	1425	73-39	1267	21	41a	18 May
Fl. Green (Black)	40-35	1412	73-39	1350	4 $\frac{1}{2}$	42a	"
Fl. Green (Black)	40-36	787	73-39	818	10 $\frac{1}{2}$	43a	"
Fl. White (Black & Red)	40-36	150	73-41	140	7	46a	19 May
Fl. Red (Red)	40-36	729	73-40	945	6 $\frac{1}{2}$	47a	22 May
Fl. Red (Red)	40-36	532	73-41	668	5	48a	23 May
Fl. Green (Black)	40-37	122	73-42	11	10 $\frac{1}{2}$	49a	"
Fl. Red (Red)	40-37	104	73-41	1316	8 $\frac{1}{2}$	50a	"

UNLIGHTED BUOYS MAINTAINED BY NASSAU COUNTY

Description	Lat.	DM	Long.	DP	Depth	Pos. No.	Date.
Red bbl. buoy "4"	40-36	82m	73-40	218 m	7 ft.	2a	3 May
Red bbl. buoy "2"	40-35	1513	73-39	1312	6	8a	4 May
Black bbl. buoy "1"	40-36	132	73-40	348	4 $\frac{1}{2}$	9a	"
Red bbl. buoy "2"	40-36	283	73-40	287	5	10a	"
Black bbl. buoy "3"	40-36	466	73-40	347	4	11a	"
Red bbl. buoy "8"	40-36	560	73-40	177	11 $\frac{1}{2}$	12a	"
Black bbl. buoy "5"	40-36	778	73-39	1263	3	13a	"
Red bbl. buoy "10"	40-36	674	73-39	1109	3	14a	"
Red bbl. buoy "18"	40-36	1157	73-40	591	3 $\frac{1}{2}$	21a	17 May 1950
Black bbl. buoy "17"	40-36	1165	73-40	614	4 $\frac{1}{2}$	22a	" 1950
Red bbl. buoy "16"	40-36	977	73-40	641	3	23a	"
Black bbl. buoy "15"	40-36	909	73-40	700	1 $\frac{1}{2}$	24a	"
Black bbl. buoy "13"	40-36	820	73-40	761	6	25a	"
Red bbl. buoy "14"	40-36	788	73-40	755	3	26a	"
Black bbl. buoy "11"	40-36	787	73-40	817	5 $\frac{1}{2}$	27a	"
Red bbl. buoy "12"	40-36	776	73-40	814	4	28a	"
Black bbl. buoy "9"	40-36	781	73-40	905	4	29a	"
Red bbl. buoy "10"	40-36	768	73-40	904	6	30a	"
Black bbl. buoy "7"	40-36	750	73-40	1034	1 $\frac{1}{2}$	31a	"
Red bbl. buoy "8"	40-36	669	73-40	941	3	32a	"
Black bbl. buoy "5"	40-36	609	73-40	1143	0	33a	"
Red bbl. buoy "6"	40-36	512	73-40	1099	1	34a	"
Red bbl. buoy "3"	40-36	401	73-40	1331	2	36a	"
Red bbl. buoy "4"	40-36	342	73-40	1260	4 $\frac{1}{2}$	35a	"
Black bbl. buoy "1"	40-36	250	73-41	81	2 $\frac{1}{2}$	37a	"
Red bbl. buoy "2"	40-36	128	73-41	38	3 $\frac{1}{2}$	38a	"
Black bbl. buoy "9"	40-36	1286	73-39	320	4 $\frac{1}{2}$	44a	18 May
Red bbl. buoy "12"	40-36	1106	73-39	432	8 $\frac{1}{2}$	45a	"

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE DELETED

STRIKE OUT ONE

Norfolk, Virginia

3 January 1951

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

The positions given have been checked after listing by John Kaskowski

Ira T. Sanders

Chief of Party.

STATE		POSITION		METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE						
			° ' D. M. METERS	° ' D. P. METERS					
New York, Long Island									
East Rockaway Inlet. Buoys maintained by U. S. Coast Guard.									
1950		Pos.							1950
Light List		No.							Sextant
1074	(FL G) "1" ev. 4 sec.	57 z	40 - 35 287	73 - 46 169	17.4				579
	Can "1"	58 z	40 - 35 298	73 - 46 175	17.2				"
	Nun "2"	56 z	40 - 35 224	73 - 46 104	13.7				"
	Can "3"	55 z	40 - 35 384	73 - 45 1135	11.6				"
	Nun "4"	58 z	40 - 35 337	73 - 45 986	11.4				"
1075	(FL G) "5" ev. 4 sec.	52 z	40 - 35 428	73 - 45 889	10.6				"
	Can "5"	53 z	40 - 35 430	73 - 45 908	10.0				"
	Nun "6"	51 z	40 - 35 403	73 - 45 747	9.6				"
	Can "7"	50 z	40 - 35 614	73 - 45 672	12.6				"
	Nun "8"	49 z	40 - 35 557	73 - 45 528	12.9				"
1077	(FL R) "10" ev. 4 sec.	25 z	40 - 35 858	73 - 45 177	11.8				"
	Nun "10"	59 z	40 - 35 831	73 - 45 167	10.4				"

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.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Norfolk, Virginia

3 January, 1951

I recommend that the following objects which have (~~been~~) been inspected from seaward to determine their value as landmarks be charted on (~~the~~) the charts indicated.

The positions given have been checked after listing by John Waskowski

Sheet 2 of 3

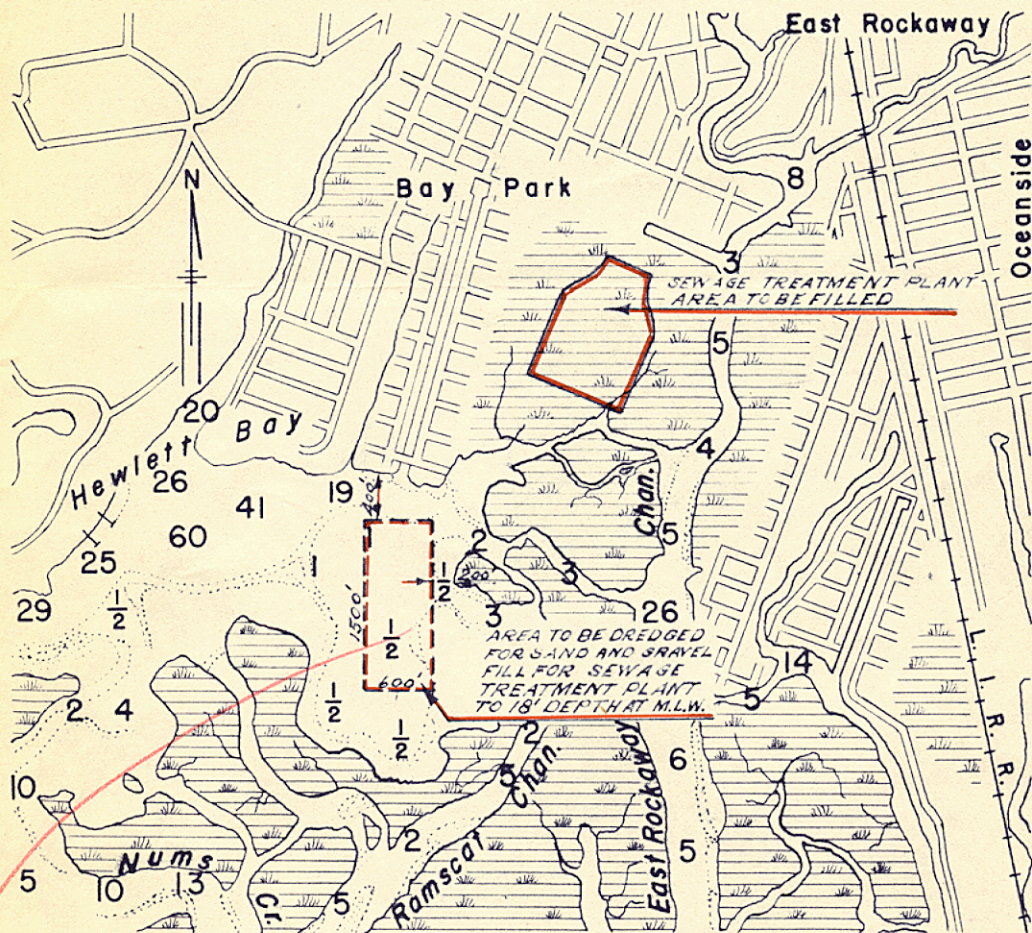
SHEET H-7842 (LISP-1250)

Ira T. Sanders

Chief of Party.

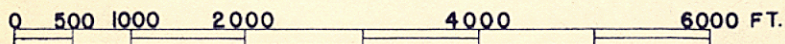
STATE	New York, Long Island	DESCRIPTION	SURVEY NO.	POSITION			Depth Water Ft.	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE	LONGITUDE								
SYMBOL 1950 Light List			Pos. No.	° ' D.M. METERS	° ' D.P. METERS			1950					
		Gong "4" R	56 da	40 - 34	1539	73 - 45	471	18.8	Sextant Fix	16 June	x		579
		Reynolds Channel. Buoys maintained by U. S. Coast Guard											
1079		(FL G) "1" ev. 4 sec.	58 a	40 - 35	885	73 - 43	879	12.2	"	9 June	x		"
1080		(FL G) "3" ev. 4 sec.	57 a	40 - 35	816	73 - 42	1092	17.6	"	9 June	x		"
		Can "7"	7 a	40 - 35	770	73 - 41	387	15.7	"	4 May	x		"
		Can "9"	3 a	40 - 35	1257	73 - 40	710	16.8	"	3 May	x		"
1084		(FL G) "11" ev. 4 sec.	17 a	40 - 35	1517	73 - 38	790	19.5	"	11 May	x		"
		Hempstead Bay. Buoys maintained by Nassau County											
		FL W R & B	40 a	40 - 35	1033	73 - 41	181	10.2	"	17 May	x		"
		FL R R	41 a	40 - 35	1424	73 - 39	1267	21.1	"	18 May	x		"
		FL G B	42 a	40 - 35	1410	73 - 39	1352	4.4	"	18 May	x		"
		FL G B	43 a	40 - 36	777	73 - 39	824	10.6	"	18 May	x		"
		FL W B & R	46 a	40 - 36	140	73 - 41	143	7.2	"	19 May	x		"

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.



SOUNDINGS ARE IN FEET AND REFER TO MEAN LOW WATER.

SCALE: 1" = 1650'



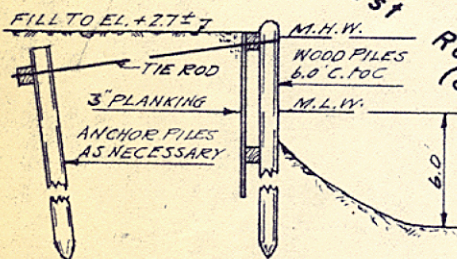
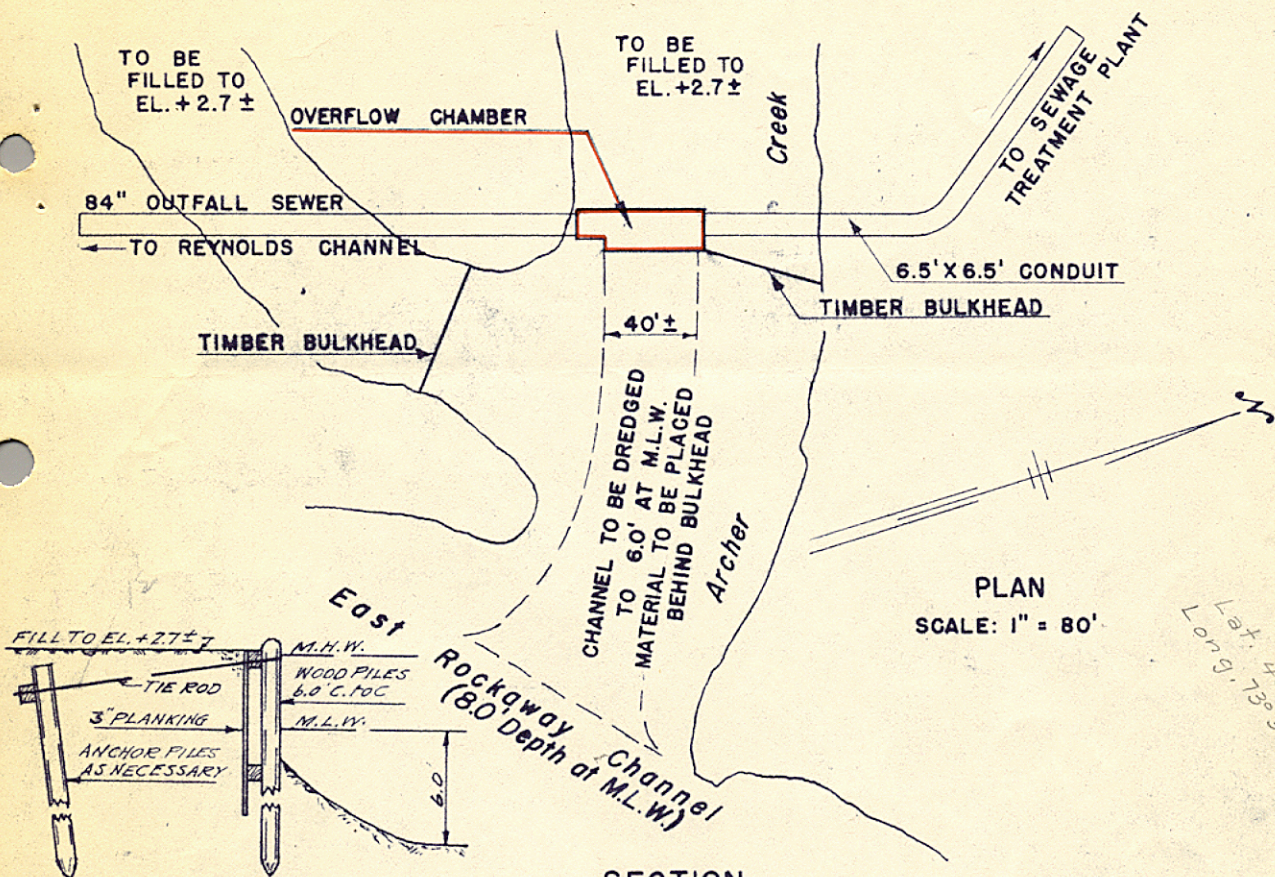
Location of Proposed Area to be Dredged in Hewlett Bay,
Town of Hempstead, Nassau County, New York.

Application by the Department of Public Works, Nassau
County, New York.

March 1949

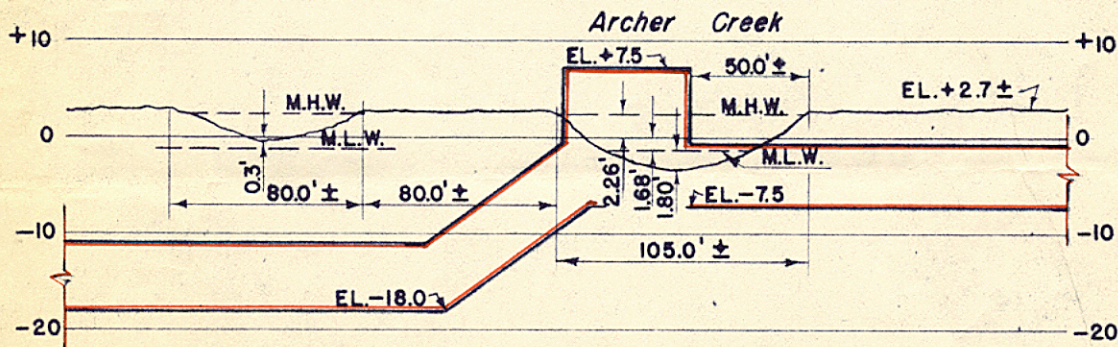
*Dredging in Hewlett Bay had been
completed prior to the hydrographic
survey of 1950*

115

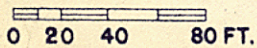


Cross Section of Bulkhead

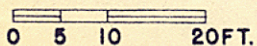
SECTION



HORIZONTAL SCALE FOR SECTION



VERTICAL SCALE FOR SECTION

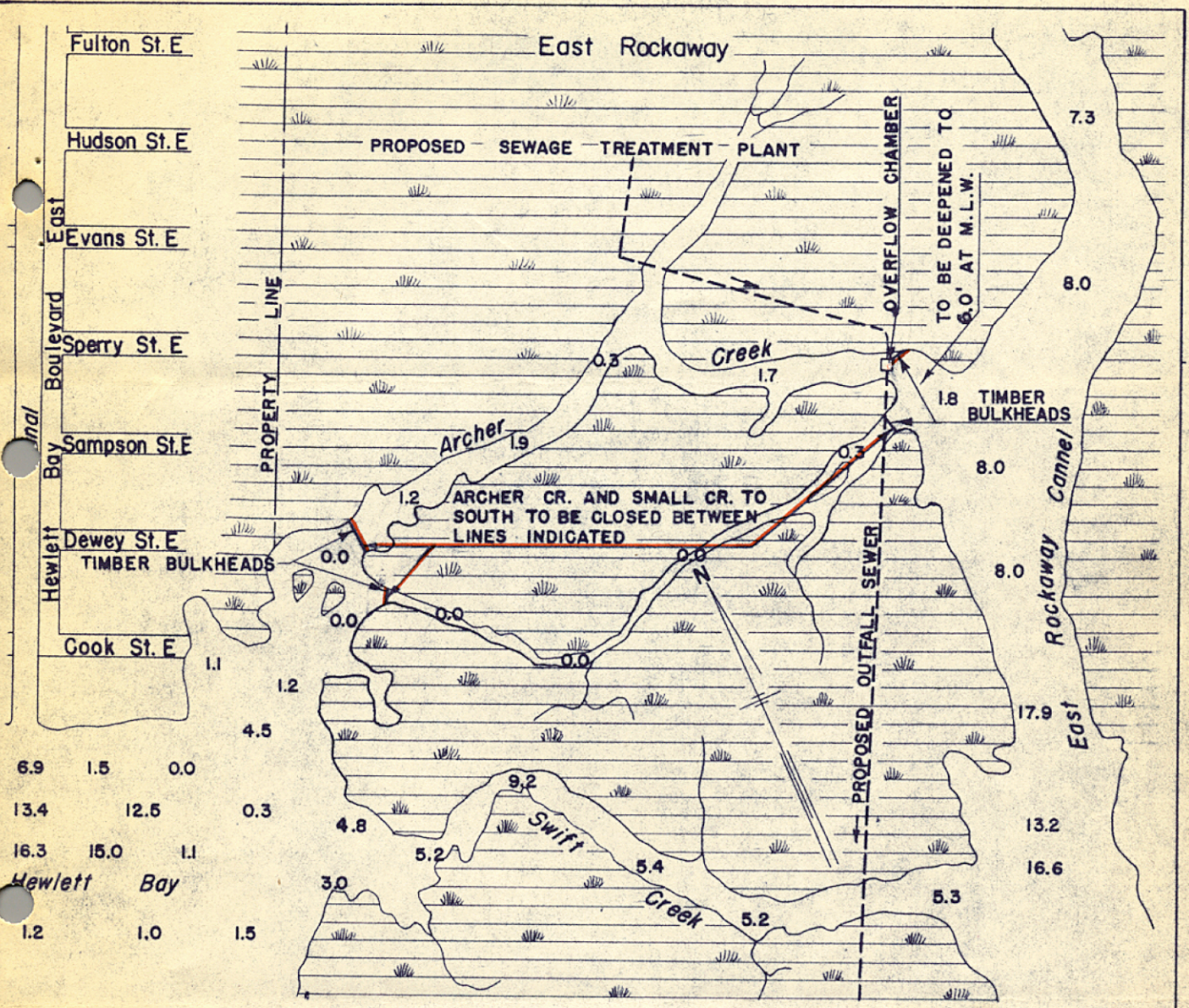


0.00 NASSAU COUNTY DATUM
 PLANE = M.S.L. SANDY HOOK
 AS DETERMINED BY THE U.S.C.&G.S.

Location of Proposed Overflow Chamber in Archer Creek, Town of Hempstead.

Application by the Department of Public Works, Nassau County, N. Y. March, 1949.

Lat. 40°37.7'
 Long. 73°39.8'

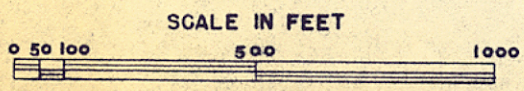


SOUNDINGS ARE IN FEET AND REFER TO MEAN LOW WATER

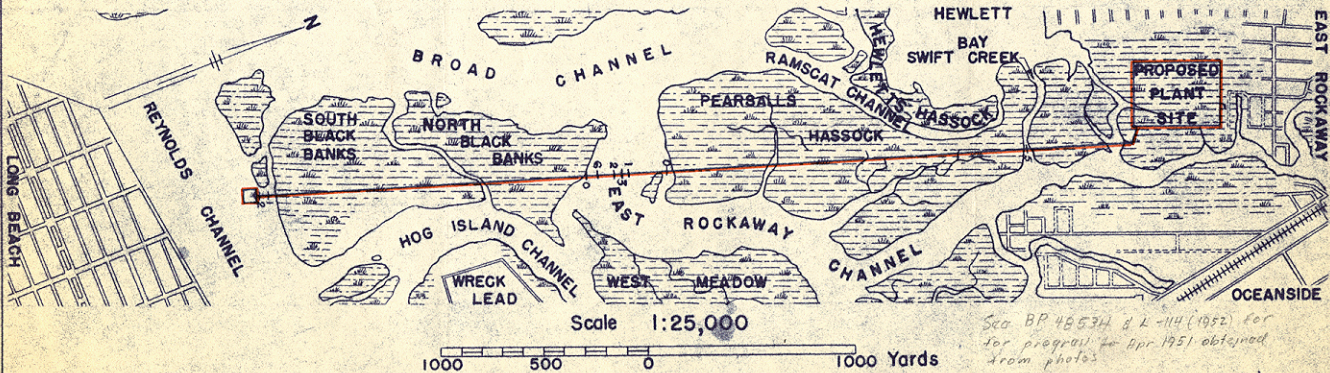
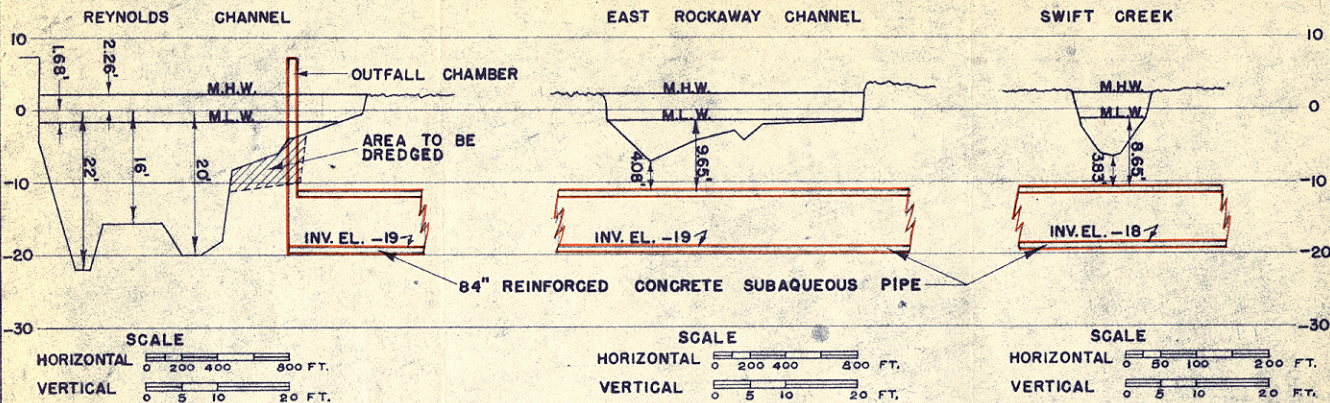
PROPOSED CLOSING OF NONNAVIGABLE CREEKS IN CONNECTION WITH CONSTRUCTION OF PROPOSED OUTFALL SEWER.

APPLICATION BY THE DEPARTMENT OF PUBLIC WORKS, NASSAU COUNTY, NEW YORK.

MARCH 1949



SECTION



SOUNDINGS ARE IN FEET AND REFER TO MEAN LOW WATER.
 ONE SUBMERGED REINFORCED CONCRETE PIPE TO BE USED FOR SEWAGE.

Location of Proposed Outfall Sewer under Meadow Lands
 and Waterways in the Town of Hempstead, from Bay Park to
 Reynolds Channel.

O.OO NASSAU COUNTY DATUM
 PLANE = M.S.L. SANDY HOOK
 AS DETERMINED BY THE U.S.C.&G.S.


Application by the Department of Public Works, Nassau
 County, New York January, 1941

A P P R O V A L S H E E T
T O
A C C O M P A N Y
D E S C R I P T I V E R E P O R T
F O R
S H E E T H-7842
P R O J E C T CS-337
1950

I certify that frequently (3 or more times weekly) I examined and approved the boat sheet and other records for this survey. The smooth sheet ~~will~~^{is} be prepared by the Norfolk Processing Office.

So far as could be determined from the boat sheet this survey was considered complete and adequate, and no additional work was indicated. Attention is directed to the Descriptive Report for information concerning construction projects now in progress in this area, and recommendations concerning them are re-emphasized here.

For a general description of the terrain covered by this survey reference is made to the Field Inspection Report, Project Ph-54(49)c dated January 1950.


Ira T. Sanders
Chief of Party.

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7842 (Field No. LISP-1250)

GENERAL

There are many instances where the current survey differs considerably from chart 579. These differences are apparently caused by extensive dredging activities and the shifting of shoals by strong currents.

The following are some of the more noticeable differences:

Lat. 40-35.59 ✓ Long. 73-44.10 ✓	9 ft. shoal building in a southerly direction
Lat. 40-35.45 ✓ Long. 73-42.62 ✓	⁹ / ₂ ft. shoal shifted to eastward 150 meters
Lat. 40-37.10 ✓ Long. 73-41.79 ✓	Charted channel does not exist

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer.

Norfolk, Va.
18 June 1951

Approved & Forwarded:

Marl O. Heaton
Supervisor, SE District.

Marl O. Heaton

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

28 June 1951

~~DIVISION OF HYDROGRAPHY AND TOPOGRAPHY~~

Division of Charts: R. H. Carstens

Plane of reference approved in
13 volumes of sounding records for

HYDROGRAPHIC SHEET 7842

Locality: Hempstead Bay, Long Island

Chief of Party: I. T. Sanders in 1950

Plane of reference is mean low water, reading

2.1 ft. on tide staff at Atlantic Beach, Far Rockaway
11.9 ft. below B. M. 2 (1927)

2.0 ft. on tide staff at Bay Park, Hewlett Bay
7.4 ft. below BM 1 (1950)

2.3 ft. on tide staff at East Rockaway
14.6 ft. below BM 1 (1927)

1.6 ft. on tide staff at Woodmore
10.2 ft. below BM 3 (1927)

1.0 ft. on tide staff at Long Beach (L.I.R.R.) Trestle)
7.3 ft. below BM LONG BEACH 1 (1932)

~~2.2 ft. on tide staff at Long Beach (Pier)
7.3 ft. below BM LONG BEACH 1 (1932)~~

2.2 ft. on tide staff at Long Beach (Pier)
7.3 ft. below BM LONG BEACH 1 (1932)

Height of mean high water above plane of reference is as follows:

Atlantic Beach	= 4.1 feet
Bay Park	= 3.9 feet
East Rockaway	= 3.9 feet
Woodmere	= 3.9 feet
Long Beach	
(Trestle)	= 3.9 feet
Long Beach	3.9
(Pier)	= 4.5 feet

E. C. McKay
Section

Chief, ~~Division of Tides and Currents.~~

GEOGRAPHIC NAMES

Survey No. H-7842

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	
<u>New York</u>			(for title)					USG-B	1	
<u>Long Island</u>			"	"					2	
<u>Hempstead Bay</u>			"	"					3	
									4	
<u>East Rockaway Inlet</u>				✓					5	
<u>Reynolds Channel</u>				✓				USG-B	6	
<u>Bannister Creek</u>				✓				"	7	
<u>Post Lead</u>				✓					8	
<u>Crooked Creek</u>				✓					9	
<u>Brosevere Bay</u>				✓					10	
<u>Woodmere Channel</u>				✓					11	
<u>Woodsburgh Channel</u>				✓					12	
<u>Macy Channel</u>				✓					13	
<u>Nuns Channel</u>				✓					14	
<u>Broad Channel</u>				✓					15	
<u>Swift Creek</u>				*(see back side)						16
<u>Hog Island Channel</u>				✓					17	
<u>Lido Canals</u>				✓					18	
<u>Island Park</u>		(town)		✓					19	
<u>Island Park Canal</u>				✓					20	
<u>Barnums Channel</u>				✓					21	
<u>East Rockaway Channel</u>				✓					22	
<u>Fortify Creek</u>									23	
<u>Ramscat Channel</u>									24	
<u>Hewlett Bay</u>				✓				Names underlined in red are approved 6-27-57 L. Heck	25	
<u>Sled Creek</u>				✓				All waterways with soundings are named. If desired names of other features can be taken from Ch. 5	26	
<u>Reed Channel</u>									27	

* both names Sled Creek and Swift Creek
are omitted from the smooth sheet
because of conflicting information.

The latest C&GS names survey places
the two names as shown on T-5614;
later information by the Corps of
Engineers, and filed in this Descriptive
Report, shows only one of the names
and is in conflict with the
C&GS names survey.

R.E.E. 1-29-54

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO.

Records accompanying survey:

Boat sheets *.1*...; sounding vols. *.13*...; wire drag vols.;
 bomb vols.; graphic recorder rolls *13 env.*;
 special reports, etc. *1. Descriptive Report.; 1. Smooth Sheet*.....

The following statistics will be submitted with the cartographer's report on the sheet:

	<i>Prelim. Verification</i>	<i>Final Verification</i>
Number of positions on sheet	2094.....	
Number of positions checked	53.....	201.....
Number of positions revised	15.....
Number of soundings revised (refers to depth only)	11.....	20.....
Number of soundings erroneously spaced	16.....	50.....
Number of signals erroneously plotted or transferred
Topographic details	Time	18 hr. 36 hr.
Junctions	Time	2 hr. 16 hr.
Verification of soundings from graphic record	Time	15 hr. 50 hr.
<i>Preliminary Verification --- W. Werline 200 hr.</i>		<i>3-28-52</i>
Verification by..... <i>W. Werline 414 hr.</i>	Total time <i>614 hr.</i>	Date <i>9-30-53</i>
Reviewed by..... <i>R. E. Elkins</i>	Time <i>79 hr.</i>	Date <i>4-25-52</i>
<i>Review Addendum -- R. E. Elkins</i>	<i>24 hr.</i>	<i>12-28-53</i>

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7842

FIELD NO. LISP-1250

New York, Long Island, Hempstead Bay - Reynolds Channel

Project No. CS-337

Surveyed in April - June, 1950

Scale 1:10,000

Soundings:

808 Fathometer
Handlead
Sounding Pole

Control:

Sextant fixes on shore signals

Chief of Party - I. T. Sanders
Surveyed by - J. Laskowski and M. E. Natto
Protracted by - B. T. Lewis
Soundings plotted by - B. T. Lewis
Preliminary Verification by - W. Werline
Verified and inked by - *W. Werline*
Reviewed by - R. E. Elkins, 21 May 1952
Inspected by - R. H. Carstens

1. Shoreline and Control

The source of the shoreline and control is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated.

The survey covers a marsh area marked by numerous channels and connecting canals. The sand and mud bottom is lumpy as the result of scouring, silting and dredging.

4. Junctions with Contemporary Surveys

An adequate junction was made with H-7630 (1950) on the east. There are no contemporary surveys to the west.

| *see addendum
to review*

5. Comparison with Prior Surveys

A.	H-47	(1835)	1:40,000
	H-54	(1840)	1:20,000
	H-129	(1849)	1:10,000
	H-1538	(1877)	1:5,000
	H-1437	(1879)	1:10,000
	H-4792	(1927)	1:10,000
	H-4793	(1927)	1:10,000
	H-4794	(1927)	1:10,000

These prior surveys have been superseded by H-5731 (1934) and H-5732 (1934), and are considered in the reviews of those surveys. Further consideration is deemed unnecessary in the present review.

B.	<u>H-5731 (1934)</u>	<u>1:10,000</u>	<u>H-5732 (1934)</u>	<u>1:10,000</u>
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The present survey covers the area of H-5732 and the west part of H-5731. A comparison between H-7842 and these prior surveys discloses many changes from both natural causes and dredging. The channel of East Rock-away Inlet has shifted northwest about 900 meters. In Reynolds Channel many prior shoals have deepened 2 to 3 ft. In the channel deeps, however, sedimentation has decreased depths as much as 15 ft.; as for example in lat. 40° 35.4', long. 77° 41.7' where a present depth of 18 ft. falls in prior depths of 31 to 37 ft. In the upper reaches of the waterways, silt and sand deposits have closed some channels; in other channels, scouring action and dredging have increased channel depths 2 to 3 ft.

The following critical soundings in Reynolds Channel charted from H-5731 and H-5732 are in areas where the bottom has changed and should be disregarded:

Charted Depth (ft.)	Latitude	Longitude	Present Depth (ft.)
10	40° 35.40'	73° 42.80'	12
12	40° 35.40'	73° 41.23'	18
9	40° 35.45'	73° 41.21'	13
10	40° 35.60'	73° 40.99'	17
8	40° 35.67'	73° 40.42'	11
9	40° 35.72'	73° 39.50'	19

The following wrecks charted from H-5731 were not found on the present survey and are recommended for deletion by the hydrographer. These wrecks are considered to be nonexistent.

	Latitude	Longitude
wreck	40° 35.68'	73° 39.08'
wreck	40° 35.65'	73° 39.82'

	Latitude	Longitude
wreck	40° 35.65'	73° 39.93'
wreck	40° 36.13'	73° 40.31'
wreck	40° 37.38'	73° 41.15'

The development of the eastside of the channel in the vicinity of lat. 40° 37.2', long. 73° 39.23' was prevented by barges moored along the bulkhead. A supplementary sounding has therefore been carried forward from H-5731 to show the continuity of the channel. No change in depths are noted in this vicinity since the time of the prior survey. With this addition the present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 579 (latest print date 7/23/51)

A. Hydrography

The charted hydrography originates principally with the previously discussed prior surveys, supplemented by soundings from miscellaneous surveys of the Corps of Engineers and chart letters. Except for soundings in East Rockaway Inlet charted from a Corps of Engineers survey of September 1950 (Bp. 47284) the present survey is adequate to supersede charted soundings from these miscellaneous sources in this changeable area.

see addendum
to review

Attention is directed to the major construction projects started after completion of the present survey. These projects altering channel conditions are outlined on page 2 of the Descriptive Report.

The group of piles on the present survey in lat. 40° 35.48', long. 73° 44.97' fall on the position of the submerged breakwater piles charted from BP. 31952 (1938). The pile charted 70 meters to the west was not located on the present survey and is apparently nonexistent.

The piles charted in lat. 40° 37.41', long. 73° 41.62' from T-4225 (1926) are not shown on the present survey and are considered to be nonexistent.

B. Aids to Navigation

Except as noted below, the charted aids are in substantial agreement with the present survey and adequately mark the features intended:

1. The buoys shown on the present survey marking the channel of East Rockaway Inlet are not charted because they are frequently shifted in position.

2. The gong buoy 4 in lat. $40^{\circ} 34.88'$, long. $73^{\circ} 45.32'$ on the present survey is 100 meters south of the charted position. Either the charted or the survey position adequately mark the feature intended.
3. The ^{✓38}unlighted buoy 2 charted in lat. $40^{\circ} 35.42'$, long. $73^{\circ} 43.88'$ and lighted buoy 5 charted in lat. $40^{\circ} 35.42'$, long. $73^{\circ} 41.78'$ are not shown on the present survey. These buoys were apparently not on their stations at the time the survey was made.
4. Lighted bouy 3 on the present survey in lat. $40^{\circ} 35.48'$, long. $73^{\circ} 42.78'$ is 70 meters south of its charted position. The survey position more adequately marks the north limit of the channel.
5. Buoy 7 in lat. $40^{\circ} 35.40'$, long. $73^{\circ} 41.40'$ and buoy 9 in lat. $40^{\circ} 35.72'$, long. $73^{\circ} 40.55'$ on the present survey are 150 meters east and 100 meters southeast respectively of the charted positions. The survey positions more adequately mark the feature intended.
6. The numerous unlighted buoys on the present survey marking the channels north of Reynolds Channel are not charted. They are privately maintained by the town of Hempstead and are subject to frequent change.

The charted lighted aids marking the entrances and channels north of Reynolds Channel, are privately maintained by the town of Hempstead, and are in agreement with the present survey except as follows:

7. The lighted buoy shown on the survey in lat. $40^{\circ} 36.43'$, long. $73^{\circ} 39.58'$ has been subsequently shifted 300 meters northeast and is charted in accordance with Bp. 47639 of 1951.
8. No survey positions are shown on the present survey for the fixed light charted in lat. $40^{\circ} 35.60'$, long. $73^{\circ} 41.22'$ and the fixed light charted in lat. $40^{\circ} 36.33'$, long. $73^{\circ} 40.68'$.

C. Dredged Channels

The controlling depths of channels charted in lat. $40^{\circ} 37.32'$, long. $73^{\circ} 41.74'$ and in lat. $40^{\circ} 36.00'$, long. $73^{\circ} 41.15'$ originate with Bp. 32879 (1938) and Bp. 32878 (1938) respectively, and are superseded by depths shown on the present survey. These channels have shoaled as much as 8 ft. since the prior surveys were made.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. Preliminary verification discloses no inadequacies in the smooth plotting.

see
addendum
to review


8. Compliance with Project Instructions


The survey adequately complies with the Project Instructions.


9. Additional Field Work Recommended

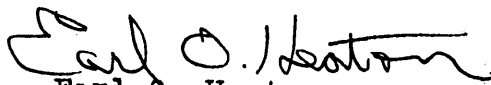
This is a good basic survey and no additional field work is recommended.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


H. Arnold Karo
Chief, Division of Charts


L. S. Hubbard
Chief, Section of Hydrography


Earl O. Heaton
Chief, Division of Coastal Surveys

Addendum to Review

H-7842 (1950)

Verified and inked by - W. Werline
Review Addendum - R. E. Elkins 12-28-53
Inspected by - R. H. Carstens

The verification of this survey has been completed. Soundings and depth curves are now inked, and junctional soundings have been transferred.

Junctions with Contemporary Surveys

No contemporary surveys join the present survey on the west at East Rockaway Inlet; however, present depths are in adequate agreement with charted depths.

Comparison with Chart 579-A (Print date 11-2-53)

The charted hydrography is from the present survey after verification, and several later surveys and construction plans by the Corps of Engineers. Channel conditions existing at the time of this survey have since been altered by construction projects and continual dredging in several areas.

The charted information originating with the present survey is not affected by the minor changes made on the smooth sheet subsequent to verification and chart application.

Condition of Survey

Completion of the verification reveals that the smooth plotting was well done.

Approved by:



H. A. Karo
Chief, Division of Charts

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7842

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
11/5/51	1215	Risegani	Before After Verification and Review <i>Examined only - not applied.</i>
8/1/52	542	H. MacEwen	Before ^{Partial} After _A Verification and Review
8/12/52	579	J. V. Evans	Before ^{Preliminary} After _A Verification and Review
20 Apr. 53	579	H. MacEwen	Before After Verification and Review <i>Re-applied to 579 revision.</i>
July '53	1215	Everett	Before After Verification and Review <i>before After Examined. No correction</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

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.