

11173

Diag. Cht. Nos. 1207-2 & 1208-2.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey **Shoreline**

Field No. **PH 6116** Office No. **T41173**

LOCALITY

State **Massachusetts**

General locality **Massachusetts Bay**

Locality **Duxbury Bay**

1951-1953

CHIEF OF PARTY
E. H. Kirsch, Chief of Field Party
E. H. Kirsch, Baltimore District Officer

LIBRARY & ARCHIVES

DATE **January 2, 1966**

COMM-DC 61300

11173

DATA RECORD

①

T-11173

Project No. (II): **Ph-116**

Quadrangle Name (IV):

Field Office (II): **Plymouth, Mass.**Chief of Party: **E. H. Kirsch**Photogrammetric Office (III): **Baltimore, Md.**Officer-in-Charge: **E. H. Kirsch**Instructions dated (II) (III): **30 April 1953**Copy filed in Division of
Photogrammetry (IV)**9 June 1953 (Supplement 1)****9 July 1953 (Supplement 2)****11 July 1953 (Supplement 3)****10 July 1953 (Letter 70-1mh)****12 Feb. 1954 (office)**Method of Compilation (III): **Graphic**Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): **1.000**

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N.A. 1927**Vertical Datum (III): **MHW**

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): **STANDISH MONUMENT, 1889**Lat.: **42° 00' 49.657" (1532.1 m)** Long.: **70° 40' 57.720" (1328.1 m)**

Adjusted

~~Uncorrected~~

Plane Coordinates (IV):

State: **Mass.**Zone: **Mainland**

Y=

X=

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.

SHORELINE

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

DATA RECORD

(3)

Field Inspection by (II): **W. M. Reynolds**

Date: July 1953

Planetable contouring by (II):

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location): **1953 - Date of Photography;
Field inspection**

Projection and Grids ruled by (IV): **A. Riley**

Date: 4 Nov. 1953

Projection and Grids checked by (IV): **H. D. Wolfe**

Date: 4 Nov. 1953

Control plotted by (III): **J. King**

Date: 24 Feb. 1954

Control checked by (III): **L. A. Senasack**

Date: 2 Mar. 1954

Radial Plot ~~of Stereoscopic~~

Date: 15 Mar. 1954

~~contouring~~ (III): **F. M. Wisiecki**

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): **J. Homick**

Date: 14 June 1955

Photogrammetric Office Review by (III): **R. Glaser**

Date: 26 June 1955

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

Date:

Camera (kind or source) (III): **Production and Marketing Administration, single lens and U.S.C. & G. S. single lens camera "J".**

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
DPT-2K-173 to 175	10/22/51	1238	1:10,000	4.2 above MLW
DPT-5K-116 to 119	7/26/52	--	1:10,000	---
DPT-5K-178 to 182	"	1103	1:10,000	4.7 above MLW
J-428, 429	4/29/53	0705	1:10,000	1.8 " "
J-573	"	1332	"	0.4 below MLW
J-590, 591	"	1348	"	0.4 " "
J-598	"	1356	"	0.4 " "
J-619, 620, 622, 623	"	1409	"	0.3 " "
J-632, 633, 635, 636	"	1415	"	0.3 " "
J-643, 644, 645	"	1417	"	0.1 " "
J-653, 654	"	1427	"	0.1 above MLW

Tide (III)
From predicted tide tables

Reference Station: **Boston**
Subordinate Station: **Plymouth**
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	9.5	11.0
1.0	9.6	11.1

Washington Office Review by (IV): **S.G. Blankenbaker**

Date: **Nov, 1964**

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **14 (approx.)**

Shoreline (More than 200 meters to opposite shore) (III): **19 mi.**

Shoreline (Less than 200 meters to opposite shore) (III): **9 mi.**

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): **32** Recovered: **19** Identified: **19**

Number of BMs searched for (II): Recovered: Identified:

Number of Recoverable Photo Stations established (III): **1**

Number of Temporary Photo Hydro Stations established (III):

Remarks:

SHORELINE MAPPING PROJECT PH-116

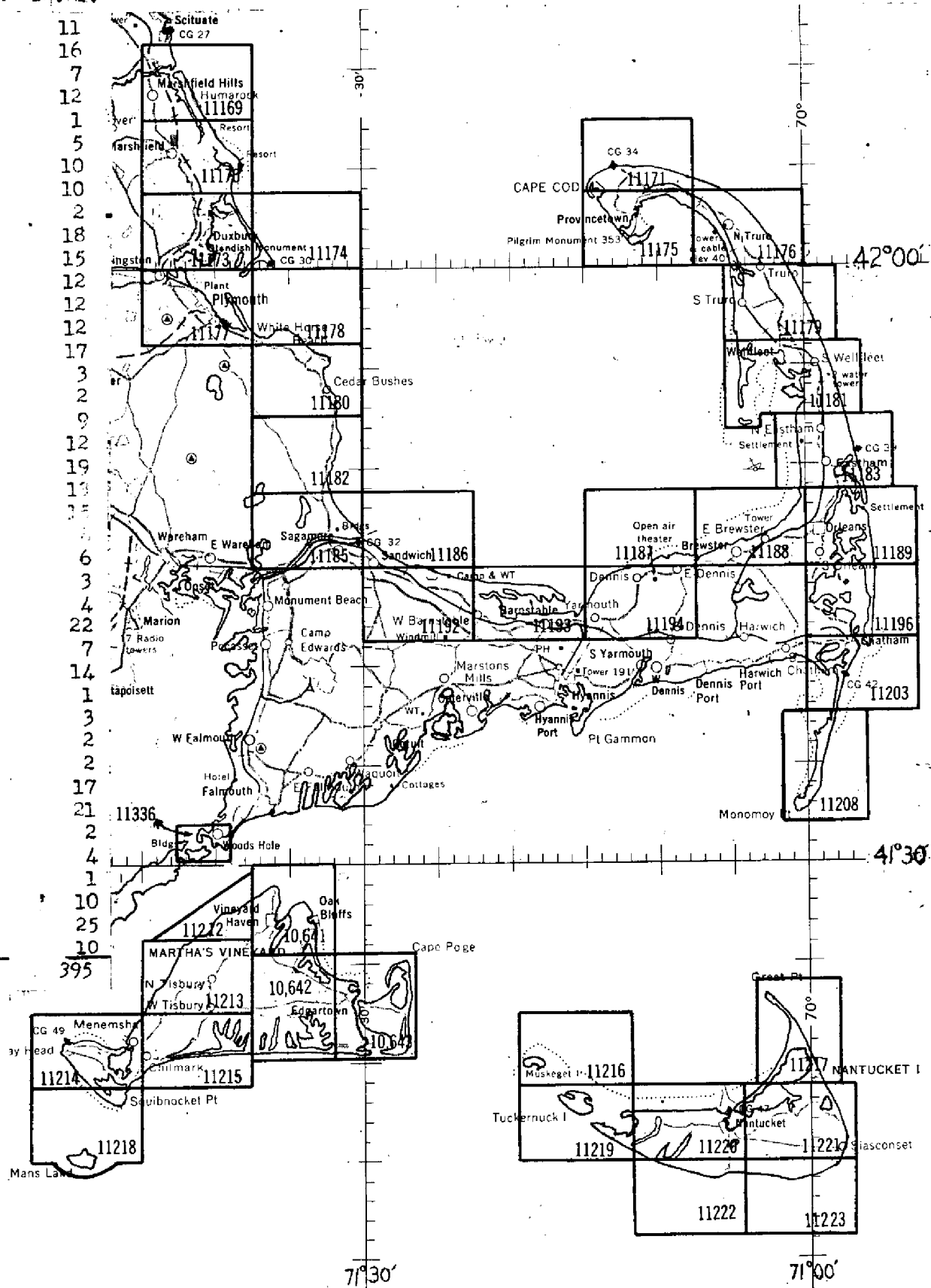
CAPE COD, MASS.

5

Official Mileage for Cost Accounts

Station Lin.Mi. Area
No. Shoreline Sq.Mi.

11169	24	11
11170	12	16
11171	10	7
11172	26	12
11174	6	1
11175	18	5
11176	12	10
11177	14	10
11178	4	2
11179	15	18
11180	9	15
11181	31	12
11182	7	12
11183	23	12
11185	8	17
11186	6	3
11187	5	2
11188	13	9
11189	20	12
11192	5	19
11193	32	13
11194	7	15
11196	14	6
11198	14	3
11212	12	4
11213	7	22
11214	22	7
11215	25	14
11216	5	1
11217	22	3
11218	9	2
11219	12	2
11220	24	17
11221	20	21
11222	6	2
11223	7	4
11336	7	1
10641	18	10
10642	12	25
10643	40	10
TOTALS	607	395



6

Summary to Accompany Descriptive Reports

T-11173 and T-11174

T-11173 and T-11174 are two of 40 similar surveys comprising project FM-116. Project coverage includes (1) Cape Cod Bay shoreline, (2) the entire east shore of Cape Cod, and (3) the islands of Martha's Vineyard and Nantucket. The subject maps cover Cape Cod Bay shoreline, north of Plymouth.

2. AREAL FIELD INSPECTION

This shoreline sheet is located along the west side of Massachusetts Bay and includes portions of Duxbury and Kingston Bays. The land area consists of a part of Duxbury Beach and the village of Duxbury.

Several items of historical interest are located within the area, namely; John Alden House, the site of Myles Standish house and the cemetery containing the graves of the Alden and Standish families.

Photography was of good quality and no difficulty was encountered in their interpretation in the field.

Field inspection is believed complete and was performed on the following photographs: DPT-5K-116 through DPT-5K-120; DPT-5K-178 through DPT-5K-180; DPT-2K-173 through DPT-2K-175; 53-J-428 and 53-J-429; and low water photographs as listed in paragraph 7.

3. HORIZONTAL CONTROL

All control by this Bureau was searched for and where recovered was identified.

The following third-order traverse stations, established by the Massachusetts Geodetic Survey, were recovered and identified: 29X, 29AA, 29AB, 29AC, 29AD, 29AE, 29AP, 29AQ, 29AS, 53C, 53F and 53H.

The following stations were reported lost: 29Y, 29Z, 29AF, 29AG, 29AH, 29AJ, 29AK, 29AL, 29AM, 29AN, 29AR, 53E and 53G.

4. VERTICAL CONTROL

Vertical control was established in vicinity of Kingston and Duxbury Bays solely for horizontalizing Kelsh Plotter models for mean low water line delineation. (See paragraph 7).

5. CONTOURS AND DRAINAGE

Contours do not apply.

All perennial drainage is plainly visible on photographs. No field inspection notes were found necessary.

6. WOODLAND COVER

Inapplicable.

7. SHORELINE AND ALONGSHORE FEATURES

The mean high water line has been indicated at intervals on the photographs. The mean high water line was inspected by driving or walking along the beach at approximate high water. Check measurements from identifiable points were taken at scattered intervals to check the inspection.

The low water line is to be delineated by stereoscopic instrument methods. Vertical control was established by spirit leveling from existing bench marks; from water surface using a tide staff in Plymouth Harbor connected to Plymouth Tidal Bench Marks; and, from a tide staff installed temporarily at Powder Point and connected to a nearby recovered bench mark.

Some areas of Duxbury and Kingston Bays were visited at or near time of low water. In these areas notations by symbol on photographs were made as to the approximate (along flats) and mean low water lines (along channels, natural or artificial).

This information is found on single lens contact prints, all 53-J-: 572, 574, 591, 592, 594, 596 thru 598, 626, 627, 629, 631, 646 thru 648, and 653.

The foreshore varies from steep to gradual and the distance between the mean high and mean low water lines varies accordingly.

The only bluffs of significance to the map are around Captains Hill and Standish Shores. These bluffs are approximately 35 feet high and should be symbolized on the map.

All docks, wharves, piers, etc. are adequately covered by the photographs.

There are no submarine cables in the area.

There are no other shoreline structures in the area.

8. OFFSHORE FEATURES

Cripple Rocks have been identified on the photographs and their elevation above the water level and time of day have been noted on the photographs.

9. LANDMARKS AND AIDS TO NAVIGATION

All landmarks for nautical charts are adequately covered by Form 567.

There are no fixed aids to navigation in the area.

10. BOUNDARIES, MONUMENTS AND LINES

Inapplicable.

11. OTHER CONTROL

No other control was established.

12. OTHER INTERIOR FEATURES

All roads have been classified according to Paragraph 5441 of the Topographic Manual.

There are no bridges over navigable waters.

There are no airports or landing fields.

13. GEOGRAPHIC NAMES

No changes were noted during field work.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

Letter of Transmittal No. Ph-116-2, Forms 567, Landmarks and Aids to Navigation, to be forwarded to Washington Office at a later date.

Letter of Transmittal No. Ph-116-8, Data, Map T-11174 (Supplemental Horizontal Control), forwarded to Washington Office 11 September 1953.

Letter of Transmittal No. Ph-116-13, Low water photographs and other data, Plymouth Harbor, forwarded to Washington Office 11 September 1953.

Letter of Transmittal No. Ph-116-7, Data, Map T-11173, forwarded to Washington Office 11 September 1953.

Submitted
9 September 1953

William M. Reynolds
William M. Reynolds
Cartographic Survey Aid

Approved & Forwarded
11 September 1953

E. H. Kirsch
E. H. Kirsch
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT
Project No. Ph-116
Surveys Nos. T-11169 & T-11170,
T-11173 & T-11174,
T-11177 & T-11178

21. AREA COVERED

This radial plot covers the area of surveys T-11169 and T-11170, T-11173 and T-11174, also, T-11177 and T-11178. These are shoreline surveys along Cape Cod and Massachusetts Bays, from Manomet Point northward through Plymouth Harbor, Plymouth and Duxbury Bays to Scituate Harbor.

22. METHOD - RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black and Massachusetts Mainland Grids in red, at a scale of 1:10,000 were furnished by the Washington office.

All control points and most of the substitute points were plotted using the beam compass and meter bar method, a few substitute points were plotted graphically.

A sketch showing the layout of surveys, distribution of control and photograph centers, and a list of control stations are attached to this report.

Photographs:

Single lens photographs, taken by Robinson Aerial Surveys for Production and Marketing Administration, 1:20,000 contact scale and ratioed to 1:10,000, were used in this radial plot. Seventy-one (71) photographs were used, numbered as follows:

2K-64 through 2K-66
2K-119 through 2K-121
2K-166 through 2K-179
2K-182 through 2K-185
2K-187 and 2K-188
5K-106 through 5K-120
5K-162 through 5K-167
5K-170 through 5K-188
7K-80 through 7K-84

No office photograph was furnished for 5K-182; the field photograph was used for this plot.

Templets:

Vinylite templets were made from all photographs using a master templet to correct errors due to paper distortion, except photograph 5K-182 which had no fiducial marks.

22. METHOD - RADIAL PLOT (cont'd)

Closure and adjustment to control:

Vinylite sheets with 5,000 foot grids were used as base sheets. All identified control was transferred to the base sheets by matching common grid lines.

The radial plot was done in three sections. The first priority was for surveys T-11173 and T-11174. The plot was started with the middle flight in survey T-11173 and tied into control into the middle of surveys T-11170 and T-11177. The flight to the west was then laid, followed by the two remaining flights to the east, extending the plot into survey T-11174. After this section of the plot was finished it was extended northward through surveys T-11170 and T-11169. These two sections of the plot were then picked up, base sheets changed and the plot extended south and eastward to tie into control in the middle of survey T-11180. Four control stations, namely 29C, MGS, 1934; 29AU, MGS, 1934; PLYMOUTH STONE WATER TANK, 1908 and PLYMOUTH GRAY TANK, 1908 could not be held in this radial plot.

Transfer of Points:

The position of all pass points, photo points and photo centers were pricked directly on the map manuscript by superimposing the manuscript on the completed plot and matching common grid lines.

23. ADEQUACY OF CONTROL

The density and distribution of control was adequate.

While pricking control station PLYMOUTH STONE WATER TANK, 1908 it was believed to be misidentified. This station did not hold in the radial plot. The tall odd-shaped structure close by was pricked in the office. At the same time this station was repricked - control station PLYMOUTH GREY HOUSE LARGE CHIMNEY, 1908 was pricked from its description; both stations are near each other and were held in the plot.

The following control could not be held in the radial plot:

29C, MGS, 1934 - The radially plotted position falls approximately 0.5 mm to the SE of the plotted position. The description indicates it was pricked, in the field, too far from the railroad and bulkhead.

Sub. Pt. 29AU, MGS, 1934 - The radially plotted position falls approximately 0.6 mm to the SE of the plotted position. The only apparent reason for this discrepancy is the year difference in the point of grass between photography and field work.

PLYMOUTH GRAY TANK, 1908 - The radially plotted position falls approximately 400 meters to the NW of the plotted position. There was no field inspection of a tank in the approximate locality that this tank should be. It is believed that this station may now be destroyed. Since there was sufficient other control in the above-mentioned areas, no further investigation was made.

24. SUPPLEMENTAL DATA

No graphic control surveys were used in this radial plot.

25. PHOTOGRAPHY

The photographic coverage and definition of the photographs were adequate.

Respectfully submitted
29 March 1954

Leroy A. Senasack

Leroy A. Senasack
Carto. Photo. Aid

LIST OF CONTROL

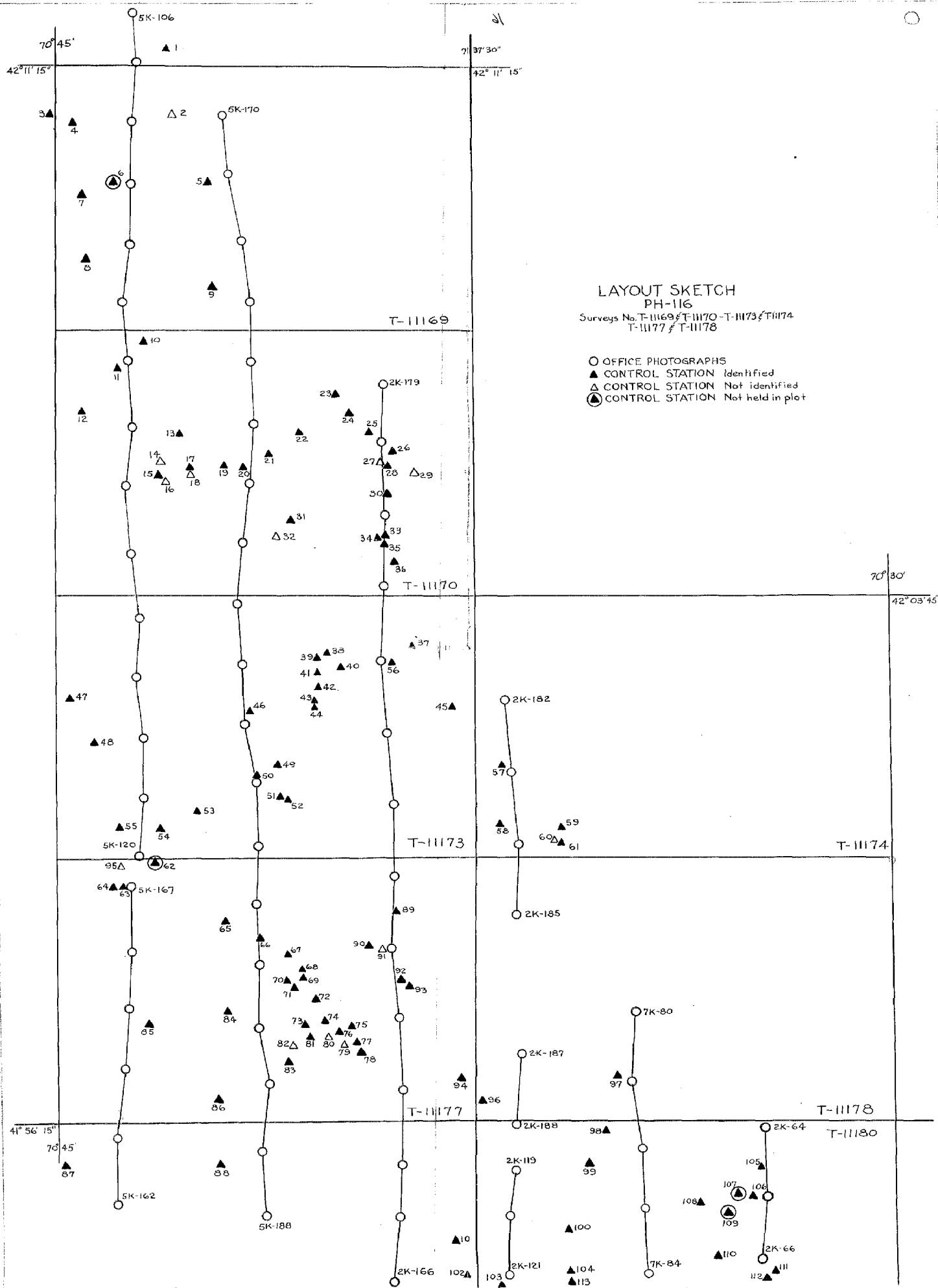
No.	Station	Identification
1.	SCITUATE SECOND CLIFF TOWER (TOWER USC&GS), MGS, 1908	Direct
2.	THIRD CLIFF SCITUATE O.P., 1940	None
3.	M3A 22, MGS, 1934	Direct
4.	29B, MGS, 1934	Sub. Pt.
5.	FOURTH CLIFF (USE), 1943	Direct
6.	29C, MGS, 1934	Direct
7.	STODDARD'S BARN CUPOLA, 1885	Direct
8.	NORTH MARSHFIELD UNITARIAN CHURCH SPIRE, MGS, 1849	Direct
9.	HOLLY HILL, 1943	Sub. Pt.
10.	MARS, MGS, 1938	Sub. Pt.
11.	HIGHLANDS, MGS, 1938	Direct
12.	72 L, MGS	Sub. Pt.
13.	72M, MGS	Direct
14.	72K, MGS	None
15.	MARSHFIELD CENTER STANDPIPE, MGS, 1938	Direct
16.	PUDDING, MGS, 1938	None
17.	MARSHFIELD CONGREGATIONAL CHURCH, 1908	Direct
18.	72J, MGS	None
19.	72 G, MGS	Sub. Pt.
20.	72F, MGS	Sub. Pt.
21.	72E, MGS	Sub. Pt.
22.	72C, MGS	Sub. Pt.
23.	29J, MGS, 1934	Direct
24.	72A, MGS, 1936	Sub. Pt.
25.	29K, MGS, 1934	Direct
26.	BRANT ROCK BLACK CHURCH SPIRE, 1908	Direct
27.	BRANT, MGS, 1938	None
28.	BRANT TANK, MGS, 1938	Direct
29.	B.R. 1 (MARSHFIELD TOWN SURVEY), 1940	None
30.	29Q, MGS, 1934	Direct
31.	WEBSTER'S (HON. DANIEL) HOUSE WEST CHIMNEY, 1849	Direct
32.	BLACK MOUNT, MGS, 1935	None
33.	GREEN HARBOR WOU RADIO TOWER, NORTH EAST, 1938	Direct
34.	GREEN HARBOR, WOU RADIO TOWER, WEST, 1938	Direct
35.	GREEN HARBOR, WCU TOWER, SOUTH EAST, 1938	Direct
36.	29U, MGS, 1934	Sub. Pt.
37.	DUXY, MGS, 1938	Sub. Pt.
38.	29AB, MGS, 1934	Sub. Pt.
39.	29AC, MGS, 1934	Sub. Pt.
40.	29AA, MGS, 1934	Sub. Pt.
41.	29AD, MGS, 1934	Direct
42.	29AE, MGS, 1934	Sub. Pt.
43.	DUXBURY TALL CHURCH SPIRE, 1908	Direct
44.	DUXBURY SQUARE CHURCH SPIRE, 1908	Direct
45.	FIX NO. 1, 1953	Direct
46.	SOUTH DUXBURY UNITARIAN CHURCH SPIRE, MGS, 1888	Direct
47.	53H, MGS, 1935	Sub. Pt.
48.	53F, MGS, 1935	Sub. Pt.

LIST OF CONTROL (cont'd)

No.	Station	Identification
49.	29AF, MGS, 1934	Direct
50.	29AQ, MGS, 1934	Sub. pt.
51.	DUXBURY STANDPIPE, MGS, 1938	Direct
52.	STANDISH MONUMENT, 1889	Direct
53.	29AS, MGS, 1934	Sub. Pt.
54.	DUXBURY CONCRETE TOWER, 1908	Direct
55.	53C, MGS, 1935	Sub. Pt.
56.	29X, MGS, 1934	Direct
57.	FIX NO. 2, 1953	Sub. Ft.
58.	FIX NO. 3, 1953	Sub. Ft.
59.	DURNET DATUM, 1940	Direct
60.	PLYMOUTH, MGS, 1938	None
61.	PLYMOUTH (GURNET) LIGHTHOUSE, MGS, 1938	Direct
62.	29AU, MGS, 1934	Sub. Ft.
63.	KINGSTON CHURCH SHORT SPIRE, 1908	Direct
64.	KINGSTON UNITARIAN CHURCH, 1886	Direct
65.	29AU, MGS	Sub. Pt.
66.	PLYMOUTH CORDAGE WORKS LARGE CHIMNEY, 1908	Direct
67.	29AX, MGS	Sub. Pt.
68.	HOLMES, MGS, 1934	Sub. Pt.
69.	1 AL, MGS	Direct
70.	1 AJ, MGS	Direct
71.	1 AK, MGS	Sub. Pt.
72.	1 AM, MGS	Direct
73.	PLYMOUTH NATIONAL MONUMENT, 1886	Direct
74.	PLYMOUTH CATHOLIC CHURCH, 1908	None
	1 AN, MGS	Direct
75.	STATE PIER, MGS, 1934	Sub. Pt.
76.	PLYMOUTH METHODIST EPISCOPAL CHURCH, 1908	Direct
	1 AP, MGS	None
77.	PLYMOUTH HARBOR SOUTH CHANNEL RANGE FRONT LT., 1953	Direct
	PLYMOUTH HARBOR SOUTH CHANNEL RANGE REAR LT., 1953	Direct
	PLYMOUTH HARBOR SPLITTING KNIFE CHANNEL RANGE FRONT LT., 1953	Direct
	PLYMOUTH HARBOR SPLITTING KNIFE CHANNEL RANGE REAR LT., 1953	Direct
78.	PLYMOUTH HIGH SCHOOL DOME, 1908	Direct
79.	PLYMOUTH TRINITARIAN CHURCH SPIRE, 1908	None
	PLYMOUTH FIRST CHURCH SPIRE, 1908	None
80.	PLYMOUTH COURTHOUSE CUPOLA, 1908	None
81.	160 A, MGS, 1941	Sub. Ft.
82.	160 B, MGS, 1941	None
83.	PLYMOUTH SAMOSET TANK, MGS, 1938	Direct
84.	NORTH PLYMOUTH, MGS	Sub. Ft.
85.	MONK HILL, MGS, 1835	Sub. Ft.
86.	160 H, MGS	Direct
87.	1 AA, MGS	Sub. Pt.
88.	MICAJAH, 1941	Direct
89.	DUXBURY PIER LIGHTHOUSE, 1877	Direct
90.	PLYMOUTH HARBOR CHANNEL LT. 4, 1953	Direct
91.	PLYMOUTH BEACH PIERHEAD DAYBEACON, 1953	None
92.	PLYMOUTH HARBOR CHANNEL LT. 11, 1953	Direct
93.	LONG BEACH NORTH, MGS, 1934 (REF. MK, USE "Y")	Direct
94.	LONG BEACH SOUTH, MGS, 1934	Sub. Pt.
95.	53 A, MGS, 1935	None

LIST OF CONTROL (Cont'd)

No.	Station	Identification
96.	M3BA, MGS, 1936	Sub. Pt.
97.	PLYMOUTH ROCKY POINT HOUSE CHIMNEY, 1908	Direct
98.	M3BD, MGS, 1936	Sub. Pt.
99.	MANOMET, 1835	Sub. Pt.
100.	SYM A, MGS	Sub. Pt.
101.	JENX, MGS, 1941	Sub. Pt.
102.	160 AD, MGS	Sub. Pt.
103.	160 AH, MGS	Sub. Pt.
104.	SYMINGTON, MGS, 1941	Sub. Pt.
105.	GUARD (MANOMET PT. COAST GUARD), 1940	Direct
106.	PLYMOUTH GREY HOUSE LARGE CHIMNEY, 1908	Direct, in office
107.	PLYMOUTH STONE WATER TANK, 1908	Direct
108.	M3BF, MGS, 1936	Sub. Pt.
109.	PLYMOUTH GRAY TANK, 1908	Direct
110.	M3BJ, MGS, 1936	Sub. Pt.
111.	INDIA, 1940	Direct
112.	INDIAN HILL 2, MGS, 1941	Sub. Pt.
113.	160 AR, MGS	Sub. Pt.



LAYOUT SKETCH PH-116

Surveys No. T-11169, T-11170, T-11173, T-11174,
T-11177, T-11178

- OFFICE PHOTOGRAPHS
- ▲ CONTROL STATION identified
- △ CONTROL STATION Not identified
- ⊙ CONTROL STATION Not held in plot

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T. 11173

PROJECT NO. 6116

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -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)	
DUXY, MGS, 1938	GTZ G-4249 P. 242	N.A. 1927	42 02 59.653				1840.5	(10.7)	
			70 38 39.729				913.6	(466.2)	
29AB, MGS, 1934	MGS P. 11	"	383,162.06	3,162.06	(1,837.94)		963.8	(560.2)	
			825,506.57	506.57	(4,493.43)		154.4	(1369.6)	
FIX No. 1, 1953	Field Comp.	"	42 02 08.240				254.2	(1597.0)	
			70 37 57.623				1325.4	(54.7)	
29AC, MGS, 1934	MGS P. 11	"	382,854.15	2,854.15	(2,145.85)		870.0	(654.0)	
			824,746.41	4,746.41	(253.59)		1446.7	(77.3)	
29X, MGS, 1934	MGS P. 11	"	382,492.55	2,492.55	(2,507.45)		759.7	(764.3)	
			830,280.94	280.94	(4,719.06)		85.6	(1438.4)	
29AD, MGS, 1934	MGS P. 12	"	381,550.60	1,550.60	(3,449.40)		472.6	(1051.4)	
			824,773.18	4,773.18	(226.82)		1454.9	(69.1)	
29AA, MGS, 1934	MGS P. 11	"	381,874.31	1,874.31	(3,125.69)		571.3	(952.7)	
			826,712.95	1,712.95	(3,287.05)		522.1	(1001.9)	
29AE, MGS, 1934	MGS P. 12	"	380,148.15	148.15	(4,851.85)		45.2	(1478.8)	
			824,830.98	4,830.98	(169.02)		1472.5	(51.5)	
53H, MGS, 1935	MGS P. 14	"	379,164.58	4,164.58	(835.42)		1269.4	(254.6)	
			804,997.74	4,997.74	(2.26)		1523.3	(0.7)	
SOUTH DUXBURY UNIT- TARIAN CHURCH SPIRE, 1888	GTZ G-4249 P. 244	"	42 02 06.055				186.8	(1664.4)	
			70 41 33.524				771.1	(609.0)	
53F, MGS, 1935	MGS P. 14	"	375,387.44	387.44	(4,612.56)		118.1	(1405.9)	
			807,023.03	2,023.03	(2,976.97)		616.6	(907.4)	
29 AQ, MGS, 1934	MGS P. 13	"	372,637.28	2,637.28	(2,362.72)		803.8	(720.2)	
			820,008.06	8,06	(4,991.94)		2.5	(1521.5)	

1 FT. = .3048006 METER

COMPUTED BY: B. Kurs

DATE 2/17/54

CHECKED BY: L. A. Senasack

DATE 23 February 1954

COMM-DC-5784

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T. 11173

PROJECT NO. 6116

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
Sub. Pt. 53F, MGS, 1935		N.A. 1927	375,335.15	335.15	(4,664.85)		102.2	(1421.8)	
			807,049.04	2049.04	(2,950.96)		624.5	(899.5)	
Sub. Pt. 53C, MGS, 1935		"	368,120.18	3120.18	(1,879.82)		951.0	(573.0)	
			808,873.46	3873.46	(1,126.54)		1180.6	(343.4)	
Sub. Pt. 53H, MGS, 1935		"	379,293.37	4293.37	(706.63)		1308.6	(215.4)	
			804,954.05	4954.05	(45.95)		1510.0	(14.0)	
Sub. Pt. 29AS, MGS, 1934		"	369,476.69	4476.69	(523.31)		1364.5	(159.5)	
			815,158.27	158.27	(4,841.73)		48.2	(1475.8)	
Sub. Pt. 29AA, MGS, 1934		"		PLOTTED GRAPHICALLY					
Sub. Pt. 29AB, MGS, 1934		"	383,161.60	3161.60	(1,838.40)		963.7	(560.3)	
			825,675.57	675.57	(4,324.43)		205.9	(1318.1)	
Sub. Pt. 29AC, MGS, 1934		"	382,815.97	2815.97	(2,184.03)		858.3	(665.7)	
			824,734.82	4734.82	(265.18)		1443.2	(80.8)	
Sub. Pt. 29AE, MGS, 1934		"	380,139.75	139.75	(4,860.25)		42.6	(1481.4)	
			825,142.87	142.87	(4,857.13)		43.5	(1480.5)	
Sub. Pt. DUXY, MGS, 1938		"	42 02				1787.7	(63.5)	
			70 38				884.1	(495.7)	
Sub. Pt. 29AQ, MGS, 1934		"	372,613.65	2613.65	(2,386.35)		796.6	(727.4)	
			820,028.12	28.12	(4,971.88)		8.6	(1515.4)	

1 FT. = 3048006 METER

COMPUTED BY: B. Kurs

DATE

2/18/54

CHECKED BY: L. A. Senasack

DATE

23 February 1954

COMMA-DC-5784

31. DELINEATION

Graphic methods were used to delineate this manuscript. Because the PMA photographs were considerably smaller in scale than the worksheet, it was necessary to locate more detail points than usually required. The vertical projector was used to compensate for the scale difference.

None of the swamp and marsh areas in the interior were field inspected. These areas were delineated directly from the Duxbury Quadrangle, by use of the vertical projector, except in the areas where office interpretation of the photographs showed definite changes.

The interior limits of delineation are as specified in the project instructions.

The delineation was done on a worksheet and transferred to the manuscript by scribing methods. The stick-up of names, notes and symbols was done on a separate vinylite sheet.

32. CONTROL

Refer to Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

The U. S. G. S. Duxbury quadrangle was used for geographic names.

The revision data for the Duxbury quadrangle submitted by the field party was used for additional field inspection.

34. CONTOURS AND DRAINAGE

Contours: Inapplicable.

Drainage: A few small interior streams were not indicated by field inspection. The revision data indicated no changes so the streams were projected from the quadrangle and delineated as unsurveyed streams.

35. SHORELINE AND ALONGSHORE DETAILS

Shoreline inspection was adequate.

The mean low water line shown on the map manuscript with closely spaced dots, was field inspected as definite and observed at low tides. The low water line, field inspected as approximate, as well as all low water lines delineated in the office from photographs taken at low tide, are shown with the usual approximate low water line symbol.

Shallow areas were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS

The limits of the channel named Cowyard could not be delineated from the photographs.

37. LANDMARKS AND AIDS

Forms 567 have been submitted for four landmarks to be charted and two landmarks recommended for deletion.

38. CONTROL FOR FUTURE SURVEYS

Form 524 for topographic station EARL, 1953 has been prepared.

No photo-hydro stations were located in the compilation office. Refer to the hydrographic survey data for photo-hydro stations located by the hydrographic party.

39. JUNCTIONS

Junctions are in agreement with T-11170 to the north, T-11174 to the east and T-11177 to the south. No contemporary survey to the west.

40. HORIZONTAL AND VERTICAL ACCURACY

Refer to Photogrammetric Plot Report.

41. to 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. quadrangle, Duxbury, Mass., scale 1:31,680, edition of 1941, revised in 1947.

47. COMPARISON WITH NAUTICAL CHARTS

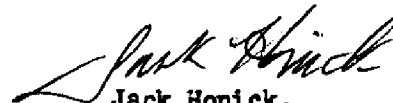
Comparison has been made with Chart No. 245, scale 1:20,000 published April 1932 (2nd Edition), corrected to 2/26/55.

47. COMPARISON WITH NAUTICAL CHARTS (cont'd)

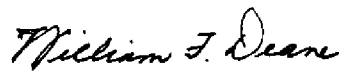
Items to be applied to Nautical Charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
14 June 1955


Jack Honick,
Carto. Photo. Aid

Approved and forwarded


for E. H. Kirsch,
Capt. C&GS
Baltimore District Officer

48. GEOGRAPHIC NAMES LIST

- * Bluefish River (Chart Spelling).
- ** Eagle Nest Point (Chart Spelling).

Abrams Hill
Alden Island
Alden St
Allens Lane

Back River
Baileys Corner
Bay Road
Blackwater Pond
*Blue Fish River
Bourne Wharf River
Bow St

Camp Chappa Challa
Captains Hill
Chestnut St
Church St
Clarks Island
Columbus Ave
Cowyard
Cox Corner
Crescent St
Cripple Rocks

Dead Swamp
Depot St
Duck Hill River
Dug Way
Duxbury
Duxbury Bay
Duxbury Beach
Duxbury Elementary School
Duxbury Free Library
Duxbury High School
Duxbury Marsh
Duxbury Yacht Club

**Eagles Nest Point
Elm St
Enterprise St

Grave of Miles Standish
Great Wood Island
Great Wood Island River

Halls Brook
Hardin Hill
Harrison St
High Pines
Holy Family Church

48. GEOGRAPHIC NAMES LIST (cont'd)

Island Creek (Creek name)
Island Creek (Town name)
Island Creek Pond
John Alden House

Kingston
Kingston Bay

Little Wood Island
Little Wood Island River
Long Point

Marshall St
Massachusetts Bay
Massachusetts 3 (Hwy)
Massachusetts 3A (Hwy)
Massachusetts 14 (Hwy)
Massachusetts 139 (Hwy)
Mayflower Cemetery
Mayflower St
Mile Brook
Millbrook
Mill Pond
Miramar
Myles Standish State Park

National Sailors Home
New York - New Haven & Harford R. R.
North Hill
North Hill Marsh

Oak St
Old Burying Ground Grave of Myles Standish

Park St
Partridge Rd.
Pine Hill
Powder Point
Powder Point Ave.

Rocky Nook Point

Saquish Neck
School St
Soule Ave
South Duxbury
South Station St
Standish Shore
Standish St
St Francis Xavier Seminary
St George St
St Margarets Convent
Summer St
Surplus St

48. GEOGRAPHIC NAMES LIST (cont'd)

Tarkiln Rd
The Nook
Tinkertown
Toby Garden St
Tremont St
Tussock Brook

Washington St
West Brook
West St
Winthrop St

*Names checked
and approved
5-15-65
A. J. Wroughton*

PHOTOGRAMMETRIC OFFICE REVIEW

T- 11173

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

CONTROL STATIONS

5a. Classification label ☒5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒ 9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒40. R. Glaser Joseph Steinberg
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler_____
Supervisor

43. Remarks:

M-2623-12

Review Report

T - 11173

November 1964

62. Comparison with Registered Topographic Surveys

3625	1:20,000 scale	1916
------	----------------	------

The prior survey includes some rock information not shown on T-11173. These rocks were carried forward to H-8164 and H-8165 (dated 1954, 1955 - refer to side heading 64) from H-3906, dated 1917. T-3625 and H-3906 are contemporary surveys.

Except for the additional rock information shown on T-3625, the subject survey, T-11173, supersedes the prior topographic survey for charting purposes in the common area.

63. Comparison with Maps of Other Agencies

USGS quadrangle, Duxbury	1:24,000 scale	1961
--------------------------	----------------	------

No significant differences were noted between the quadrangle and planimetric survey.

64. Comparison with Contemporary Hydrographic Surveys

H-8164	1:10,000 scale	1954-55
H-8165	1:10,000 scale	1954-55

T-11173 provided the shoreline for the hydrographic surveys. In addition to the rocks transferred to H-8164 and H-8165 from T-11173, the hydrographic surveys smooth sheets show a few additional rocks. These rocks were located either by the subject hydrographic surveys or by H-3906, dated 1917. Except for this difference in rock information, T-11173 is in agreement with the hydrographic surveys.

65. Comparison with Nautical Charts

245	1:20,000	Revised	4-1-63
-----	----------	---------	--------

T-11173 was applied to the chart in 1956. No changes effecting the chart were made during the final review of T-11173.

-e-

66. Adequacy of Results and Future Surveys

This map meets the National Map Accuracy standards and Bureau requirements.

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

Approved by:

Charles Shuman
Chief, Photogrammetric Branch
hcl.

Chief, Nautical Chart Division

J. E. Waugh 7/26/65
Chief, Photogrammetry Division

TO BE CHARTED

STRIKE OUT ONE

Plymouth, Mass.

23 Oct. 1953

NONFLUENT/CLINIC/MDS/OR/ LANDMARKS FOR CHARTS

I recommend that the following objects which have ~~not~~ 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 **Isaiah Y. Fitzgerald**

Lorin F. Woodcock

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.

~~TOP SECRET//SI//NF~~
TO BE DELETED

STRIKE OUT ONE

NON-FLUENTING/AIDS/OR/ LANDMARKS FOR CHARTS

Plymouth, Massachusetts

23 October 1953

I recommend that the following objects which have ~~not been~~ been inspected from seaward to determine their value as landmarks be ~~added to~~ ~~the~~ charts indicated.

The positions given have been checked after listing by

Lorin F. Woodcock

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.

