7109

Original.

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Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. SO-A-54 *Office No.* T-7109

LOCALITY

State FLORIDA

General locality TAMPA BAY

Locality TAMPA BAY BRIDGE CAUSEWAY & CHANNEL, south of Maximo Point.

1954

CHIEF OF PARTY

Roswell C. Bolstad Comdr., USC&GS

LIBRARY & ARCHIVES

DATE May 25, 1954

8-1870-1 (1)

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. SO - A - 54

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE
Florida

GENERAL LOCALITY
Tampa Bay

LOCALITY
Tampa Bay Bridge Causeway Channel, south of Maximo Point

SCALE
1:10,000

DATE OF SURVEY
April, May, 1954

VESSEL
SOSBEE

CHIEF OF PARTY
Roswell C. Bolstad — Roswell C. Bolstad

SURVEYED BY
Wilfred V. Warner — Wilfred V. Warner

INKED BY
Wilfred V. Warner — Wilfred V. Warner

HEIGHTS IN FEET ABOVE MHW OR _____ ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR APPROXIMATE CONTOUR FORM LINE INTERVAL _____ FEET

PROJECT NUMBER
None. Director's Ltr. dated 24 Mar. 1954, ref.: 22/MEK, S-2-SO

REMARKS

12136

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

REGISTER NO. T -

FIELD NO. 80 - A - 54

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE
Florida

GENERAL LOCALITY
Tampa Bay

LOCALITY
Tampa Bay Bridge Causeway Channel, south of Maximo Point

SCALE
1:10,000

DATE OF SURVEY
April, May, 1954

VESSEL
SOSBEE

CHIEF OF PARTY
Roswell C. Bolstad

SURVEYED BY
Wilfred V. Warner

INKED BY
Wilfred V. Warner

HEIGHTS IN FEET ABOVE MHW OR_____ ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR APPROXIMATE CONTOUR FORM LINE INTERVAL_____FEET

PROJECT NUMBER
None. Director's Ltr. dated 24 Mar. 1954, ref.: 22/MEK, S-2-80

REMARKS

12136

DESCRIPTIVE REPORT

to accompany

Topographic Sheet, Field No. SO-A-54

LOWER TAMPA BAY BRIDGE CAUSEWAY CHANNEL.

A. PROJECT.

No project number has been assigned by the Washington Office. In accordance with the Director's letter of 24 March 1954 (ref. 22/MEK, S-2-SO, Subject: Channel along west side of causeway at north end of Tampa Bay Bridge) calling for a hydrographic survey this topographic survey was found necessary for control and to rectify descrepancies as shown on the latest edition of chart No. 586. In order to rigidly control the topography three triangulation stations were establised on the causeway.

B. SURVEY LIMITS AND DATE OF SURVEY.

The northern bridge causeway was surveyed starting just south of Maximo Point to it's extremity at Lat. 27° 38.4' . Channel markers were located up to 1300 yds. east and west of the causeway. Topography was accomplished intermittently from the 20th to 29th of April 1954.

C. EQUIPMENT.

Standard planetable equipment was used; the telemeter rods were calibrated before use, there was no appreciable error. Survey was made on an aluminum-mounted sheet.

D. CONTROL.

The following triangulation stations were used for control:

TAMP 1954
BUNK 1954
SPANK 1954
Mullet Key Shoal Light 1925
Bush Key (USE) 1937-49
Bid 1941-52

The unadjusted field positions were used for the

first three (1954) triangulation stations; these are check positions.

Mullet Key Shoal Light 1925 was taken the GPs (page 724) furnished by the DC office.

The positions of Bush Key and Bid were taken from the descriptive report for photogrammetric map T-5832.(1943)

E. METHODS.

Standard planetable methods were used though all set-up points were taped for distance. Signals ANT and SIT are observing stands placed by the bridge engineers. Signal SIT was located by standard procedures. The planetable cuts to signal ANT were weak and the bridge engineer's distance between these two signals (7,309.428 ft.or 2,227.9 meters) was used. There was no jump in the lines when this signal was used by the hydrographic party.

F. LANDMARKS and GEOGRAPHIC NAMES.

None to report. Names for the causeway and bridge has not yet been established.

G. COMPARISON WITH CHART. List of beacons with FE 4 (1954)

A comparison between this survey and chart 586 (Jan. 1944 - 5th Edition) shows several differences; it was because of these apparent descrepancies that the topography was run in on this aluminum control sheet. The following differences exist:

(1) The ALC shows the causeway extends about 0.35 nautical miles further southward than shown on the chart.

(2) Bulkheading, fender-piling, and the high-water line are shown as existing at this time; they do not agree with chart 586. It is understood from the bridge engineer that no additional changes are contemplated for the near future.

(3) Privately maintained navigation marker "2" was found to have been shifted about 300 yards WSW of it's charted position.

(4) Bridges (bascule near tri. sta. TAMP, and fixed bridge at tri. sta. BUNK) and roadway are complete and in operation, not dashed lines as shown on chart 586.

(5) The navigational beacons "13","14","16","17", in the near vicinity of tri. sta. TAMP 1954, were found to be 30 to 40 yards farther south than shown on chart 586. When the bridge tender's house (signal EON) was plotted on the chart it was found to plot on the south side of the channel instead of on the north side where it is actually located; the difference is approx. 40 yards.

In making the comparison on this chart No. 586 (printed 12/14/53) distortion was taken into account.

H. SPECIAL INFORMATION.

The draw span just north of TAMP 1954 is lighted by a number of lights; fixed red lights are placed at both extremities and in the center of the fender piling on each side of the channel. At the center of the draw on both the E and W sides there are a pair of double green & red lights, a set on the end of each draw leaf.

The power line at the north end of the sheet will undoubtedly be extended to provide for the fender lights at BUNK 1954 (already wired for lights on fenders) and for additional lights on the bridge proper when completed.

J. MAGNETICS.

Declinatoire observations were taken at two locations with the following scaled results:

At signal OAK - - - - 2° 36' E

At signal FEZ - - - - 2° 14' E

Variation obtained at signal OAK may have been effected by the power line and the bridge steel to a slight degree.

Submitted,

Wilfred V. Warner

14 May 1954

Wilfred V. Warner
Ensign USC&GS

Approved & forwarded:

Roswell C. Bolstad

Roswell C. Bolstad
Comdr. USC&GS
Chief of Party

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7109 FIELD NO. SO-A-54

Florida, Tampa Bay, Bridges & Causeways S. of Maximo Pt.

Instructions dated 24 Mar. 1954

Surveyed - April - May 1954 Scale 1:10,000

Plane Table Survey Aluminum Mounted

Chief of Party - R. C. Bolstad
Surveyed by - W. V. Warner
Inked by - W. V. Warner
Reviewed by - T. A. Dinsmore 11 Aug. 1954
Inspected by - R. H. Carstens

1. The primary purpose of this survey was to establish additional control for the hydrographic survey of the causeway channel on the west. The hydrography appears on Field Examination No. 3 (1954). Noticeable discrepancies in the charted causeway shoreline made it advisable to also delineate the shoreline as shown on the present survey. The origin of the control for this survey is given in the Descriptive Report. A formal review of the present survey is not considered necessary.

2. No contemporary topographic surveys adjoin the present survey. RS 453 (Bp. 49616) shows an approximate delineation of the causeway shoreline on the north as it existed when 1952 airphotographs were taken.

3. The present survey falls within an area of water on all prior surveys by this Bureau except RS. 453 (Bp. 49616, 1952). The bridge and causeways which are of recent origin are indicated by dashed lines on Bp. 49616. The apparent differences in shoreline delineation between Bp.49616 and the present survey have resulted from structural changes that have taken place in the last two years. Within the common area, BP. 49616 is superseded by the present survey.

4. The causeways shown on Chart 586 (print date 12/14/54) originates with advance information furnished in Chart Letter 49 (1952). The charted information is entirely superseded by the present survey.

5. A comparison of the present survey with contemporary hydrographic surveys H-7970 (1952) and F.E. No. 3 (1954) reveals no conflicts.

6. The results of the magnetic meridian observationson the present survey are in substantial agreement with the charted values. The value obtained at station OAK is probably influenced by the close proximity of a power line and steel from the nearby bridge.

Examined and approved

H. R. Edmonston
Chief, Nautical Chart Branch

E. R. McCarthy
Acting Chief, Division of Charts

G. R. Fish
Chief, Hydrography Branch

Earl O. Heaton
Chief, Division of Coastal Surveys