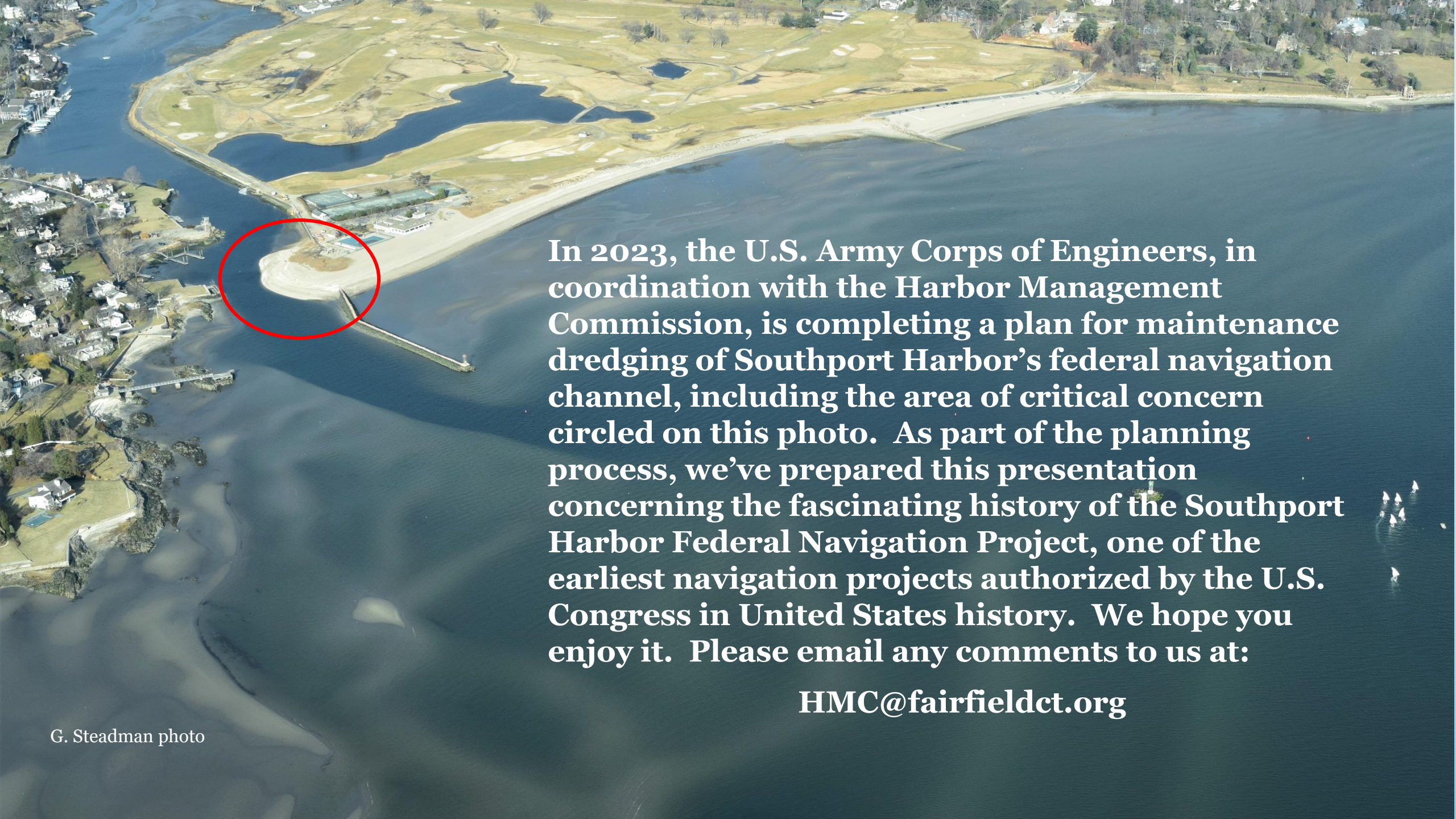


G. Steadman photo

Southport Harbor: Historic Navigation Project On the Connecticut Coast



A Presentation By:
Fairfield Harbor Management Commission
July 2023



In 2023, the U.S. Army Corps of Engineers, in coordination with the Harbor Management Commission, is completing a plan for maintenance dredging of Southport Harbor's federal navigation channel, including the area of critical concern circled on this photo. As part of the planning process, we've prepared this presentation concerning the fascinating history of the Southport Harbor Federal Navigation Project, one of the earliest navigation projects authorized by the U.S. Congress in United States history. We hope you enjoy it. Please email any comments to us at:

HMC@fairfieldct.org

The Town of Fairfield in Southwest Connecticut



Fairfield is a coastal community on the north shore of Long Island Sound, part of the coastal area of the State of Connecticut as defined in the CT Coastal Management Act.

Much of Fairfield's character and quality of life is tied intrinsically to the water and shoreline resources of Long Island Sound.

Among the Town's distinct districts is the Village of Southport.

Southport Harbor

Southport Harbor at the mouth of the Mill River is one of Fairfield's most important natural resources — a center of boating activity in western Long Island Sound and one of the most historic and scenic locations on the Connecticut coast.

The harbor played a prominent role in the development of Fairfield and continues to have a major influence on the Town's quality of life.

Since 1986, principal responsibility for guiding the harbor's beneficial use and conservation rests with the **Fairfield Harbor Management Commission**.



Google Earth

Historic Maritime Community

Few places have more nautical tradition than Southport Harbor. From about 1760 to 1900 the harbor was a major maritime center, its wharves bustling with activity.

“Market boats” carried cargoes (notably onions and other local farm products) to distant and nearby ports. Vessels ranging from small sloops to large ocean-going ships were built in shipyards on the west side of the harbor.

When we review the history of the Southport Harbor Federal Navigation Project (FNP) described in this presentation, we learn much about not only Southport but also about the federal navigation history of the United States.

Photo by Roderick P. Curtis; Published by Pequot Library Association

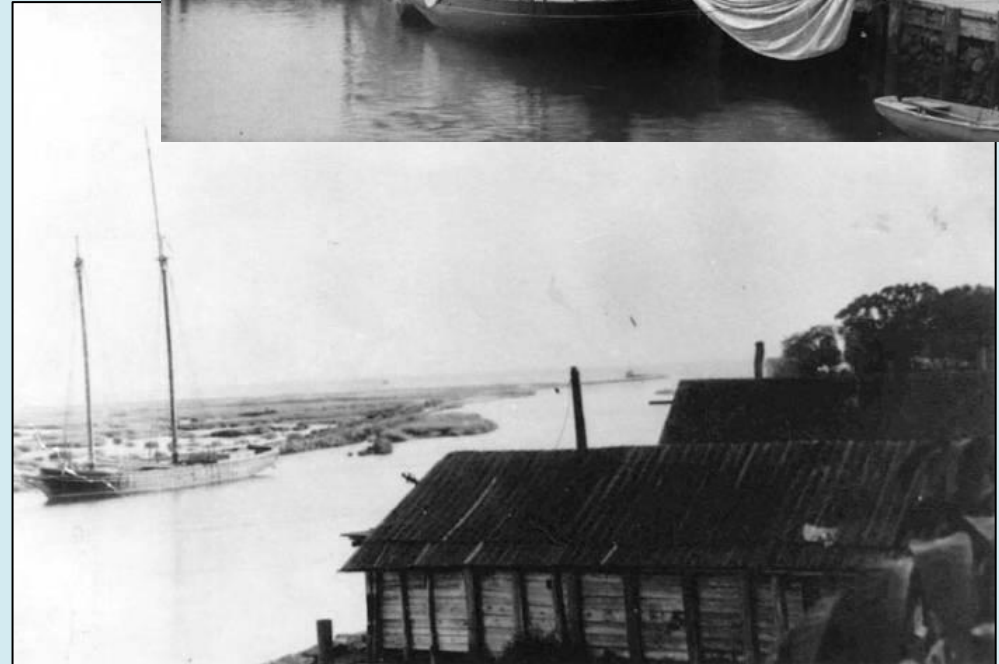
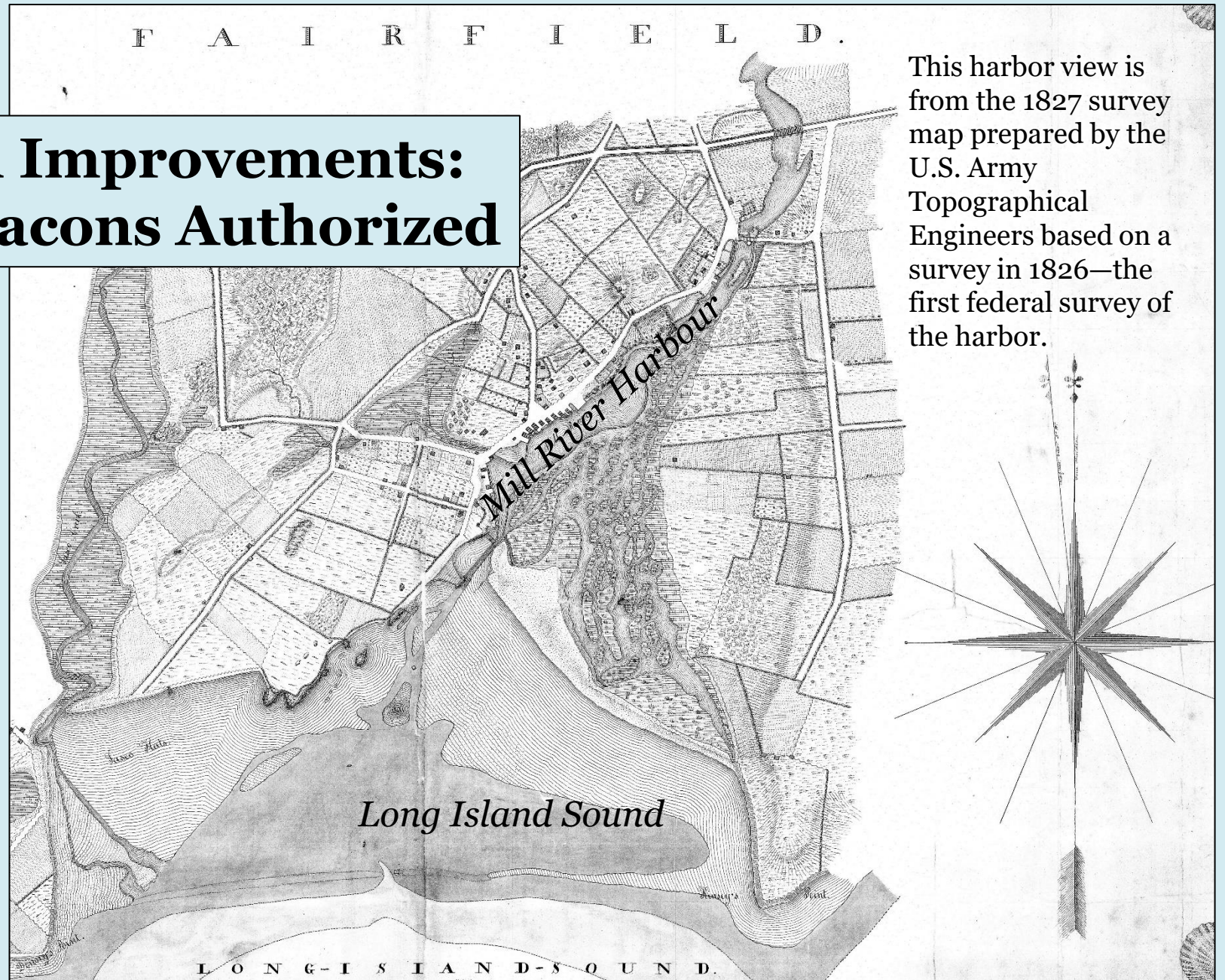


Photo uncredited; Published by Pequot Library Association

1825 Navigation Improvements: Three Harbor Beacons Authorized

An 1825 Act of Congress concerning the building of lighthouses and light vessels authorized the federal government to build “*three small beacons at the entrance to Mill river harbour*” as Southport Harbor then was known.



This harbor view is from the 1827 survey map prepared by the U.S. Army Topographical Engineers based on a survey in 1826—the first federal survey of the harbor.

Three Harbor Beacons Constructed

The beacons are not considered part of the Southport Harbor Federal Navigation Project because they're not the responsibility of the Army Corps of Engineers. Maintenance is the responsibility of the U.S. Coast Guard.

On this portion of the 1827 survey map prepared by the U.S. Army Topographical Engineers, we've highlighted the locations of the three beacons that were already constructed by that time on submerged land deeded to the federal government by the State of CT (see slides 10-12).

Inner Beacon

Middle Beacon

Long Island Sound

Outer Beacon

From the U.S. Army Corps of Engineers Archives

First Harbor “Jetty”



Drawn by J.W. Barber; Engraved by A. Willard

Maintenance of a navigation channel in Southport Harbor has been a matter of community concern since the 1700s.

This pre-1829 scene by John Warner Barber is from his 1836 book *History and Antiquities of Every Town in Connecticut with Geographical Descriptions*. The engraving depicts the first “jetty” attempt. This involved placement of logs by townspeople to block sand from drifting into the harbor from the barrier spit on the east side of the harbor’s entrance.

Plans for Navigation Improvements

From the U.S. Army Corps of Engineers Archives

I E L D

1827 Survey Map (1826 Survey)

Following the 1826 harbor survey, the Army Engineers prepared plans for building a federal “breakwater” (jetty) and “dyke” (the wall along the east side of harbor) for “*improving the navigation of the Mill River.*”

1829 Authorization of the Federal Navigation Project

A March 1829 Act of Congress authorized federal construction of the jetty and harbor wall according to the Army Engineers' plans, thereby making Southport Harbor one of the earliest Federal Navigation Projects in the U.S. Construction started in 1829 following transfer of submerged lands and tidelands from the State of CT to the federal government (see the following slides); the works were completed by 1837.

Copies of the federal acts authorizing navigation improvements in Southport Harbor, including the 1829 Act, have been obtained from the National Archives.

BY AUTHORITY OF CONGRESS.

THE
Public Statutes at Large
OF THE
UNITED STATES OF AMERICA,
FROM THE
ORGANIZATION OF THE GOVERNMENT IN 1789, TO MARCH 3, 1845.
ARRANGED IN CHRONOLOGICAL ORDER.
WITH
REFERENCES TO THE MATTER OF EACH ACT AND TO THE SUBSEQUENT ACTS
ON THE SAME SUBJECT,
AND
COPIOUS NOTES OF THE DECISIONS
OF THE
Courts of the United States
CONSTRUING THOSE ACTS, AND UPON THE SUBJECTS OF THE LAWS.
WITH AN
INDEX TO THE CONTENTS OF EACH VOLUME,
AND A
FULL GENERAL INDEX TO THE WHOLE WORK, IN THE CONCLUDING VOLUME.
TOGETHER WITH
*The Declaration of Independence, the Articles of Confederation, and
the Constitution of the United States;*
AND ALSO,
TABLES, IN THE LAST VOLUME, CONTAINING LISTS OF THE ACTS RELATING TO THE JUDICIARY,
IMPOSTS AND TONNAGE, THE PUBLIC LANDS, ETC.
EDITED BY
RICHARD PETERS, ESQ.,
COUNSELLOR AT LAW.

The rights and interest of the United States in the stereotype plates from which this work is printed, are hereby recognised, acknowledged, and declared by the publishers, according to the provisions of the joint resolution of Congress, passed March 3, 1845.

VOL. IV.

BOSTON:
CHARLES C. LITTLE AND JAMES BROWN.
1846.

Working in the Public Trust Area

To build the beacons, jetty, and harbor wall, the Federal Government first needed land deeded from the State of CT. This is because all tidelands (including wetlands and intertidal flats) and submerged lands are part of the Public Trust Area; title to these lands and waters is held by the state in trust for the benefit of the general public.



The historic Southport Harbor jetty extends into the Public Trust Area of the State of CT.

Special Acts of the CT Legislature

In response to the two Federal Acts authorizing first the beacons and then the jetty and wall, the CT Legislature quickly passed two Special State Acts authorizing the Governor to “*cede the jurisdiction of this state*” over these navigation structures and over “*all territory and waters*” needed to build the structures, and to do so by “*deed of cession*.”

This copy of the 1829 Special Act concerning the jetty and wall was provided by the CT State Library.

Sea Wall, Mill River Harbor, in Fairfield.

May, 1829.

WHEREAS, The congress of the United States, by an act passed on the second day of March, 1829, authorized the building of a dyke and break-water, or sea wall, for the security and improvement of Mill River Harbour, in this state, and appropriated six thousand and ninety-seven dollars for the same :

Be it enacted by the Senate and House of Representatives in General Assembly convened, That his excellency the governour be and he is hereby authorized and empowered to cede the jurisdiction of this state, over the said dyke and sea wall, and over all territory and waters which shall be within three rods of said works, respectively, to the United States, by deed of cession, under his hand and the seal of this state ; reserving the right of serving and executing all legal process, civil and criminal, within the same.

SEC. 2. That this law take effect immediately from the date of its passage.

ELISHA PHELPS,

Speaker of the House of Representatives.

JOHN S. PETERS,

President of the Senate.

Approved May 14, 1829,

GIDEON TOMLINSON.

(523.)

May 18th 1829.

The Governor, this day in pursuance of a resolve of the General Assembly executed the following deed, viz.

Whereas the Congress of the United States by an act passed on the 2nd day of March in the Year of our Lord one thousand eight hundred and twenty nine, authorized the building of a dyke & break water or sea wall, for the security & improvement of Mill River harbour in this State and appropriated six thousand and ninety seven dollars for the same:

And whereas the General Assembly of the said State of Connecticut at the Session thereof holden at Hartford on the first Wednesday in May in the Year of our Lord one thousand eight hundred and twenty nine, did authorize and empower the Governor of said State to cede to the United States, the jurisdiction of said State over the said dyke and sea wall and over all territory and water which shall be within three rods of said works respectively to the United States by and of cession, under his hand, and the seal of this State; reserving the right of suing and executing all legal process civil & criminal within the same.

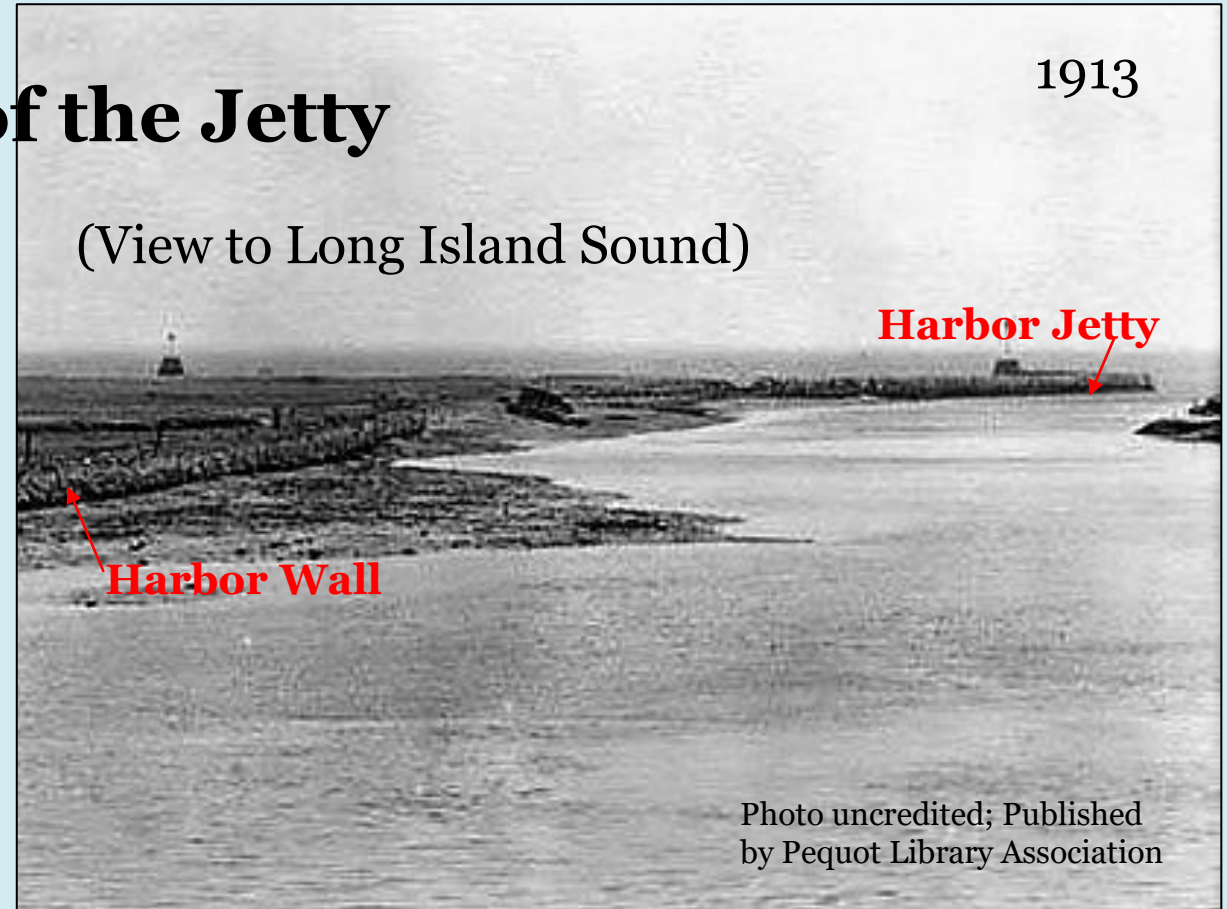
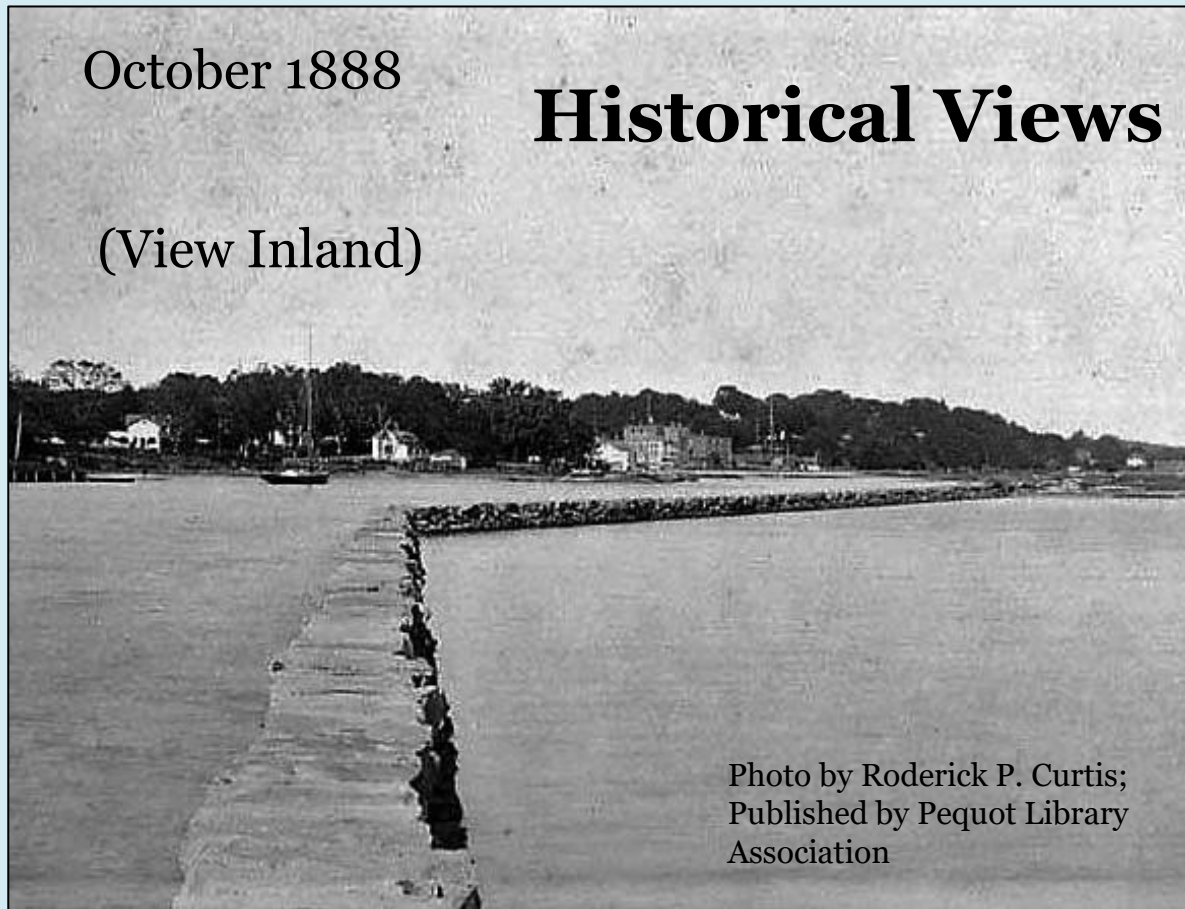
Therefore be it known,

That I Gideon Tomlinson Governor of said State by virtue of the power and authority aforesaid do by these presents give and grant to the United States of America, the jurisdiction in and over the said dyke & sea wall & over all territory & water which shall be within three rods of said works respectively.

Governors' Actions

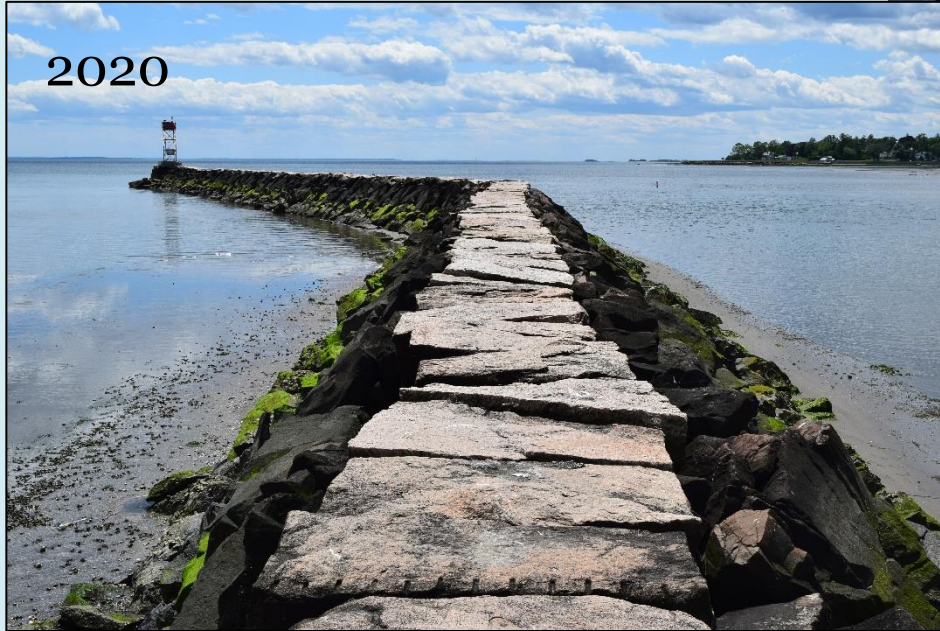
As authorized by the Special CT Acts of 1825 and 1829 concerning the beacons and the jetty and wall, the then-Governors of CT executed deeds of cession to transfer submerged lands and tidelands to the federal government to build the federal navigation structures.

This copy of Governor Gideon Tomlinson's execution of a deed to the federal government in 1829 for construction of the jetty and dyke was provided by the CT State Library.



The historic Southport Harbor jetty was constructed, as recommended by the Army's Topographical Engineers, as *“a breakwater of stone running southward from the sand-spit opposite Southport out into the sound from the high-water line to about the low-water line, a distance of about 1,400 feet.”*

Harbor Jetty

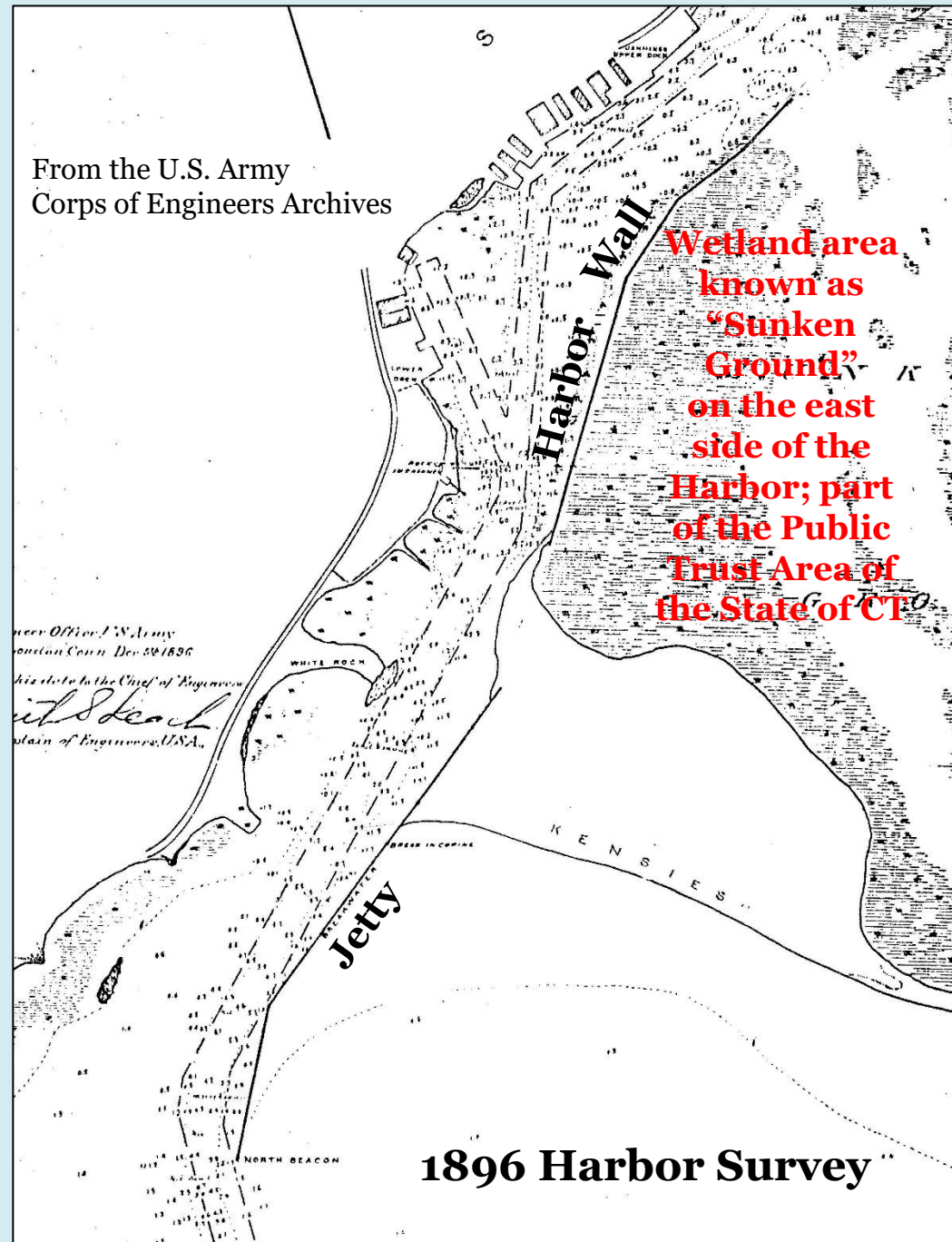


The jetty's purpose, described in a post-construction report by the Army Engineers was “to prevent the sand which is moved westward along the shore by the waves from falling into the channel of Mill River, and to increase the action of the current along the channel.” Sand now has overtopped the jetty, however, and the jetty's function is much diminished as shown on this 2021 photo.

Harbor Dyke (Wall)

As recommended by the Army Engineers, the wall along the east side of the harbor was to be constructed as “a dike of earth 1,450 feet long, extending northward from the sand-spit along the edge of the low, sunken, marsh ground.” Harbor surveys of the time identified the wetland and open water area east of the dyke and later filled by the Country Club of Fairfield (1916) as the “Sunken Ground.”

From the U.S. Army
Corps of Engineers Archives



1896 Harbor Survey

Harbor Dyke (Cont.)

c.1913

“Sunken Ground”

Photo uncredited; Published
by Pequot Library Association

c.1913

Photo uncredited; Published
by Pequot Library Association

Shown on these historical views toward Long Island Sound, the harbor wall was constructed to extend north from the jetty, forming a barrier between the harbor and the “Sunken Ground” to the east.

“Sunken Ground”

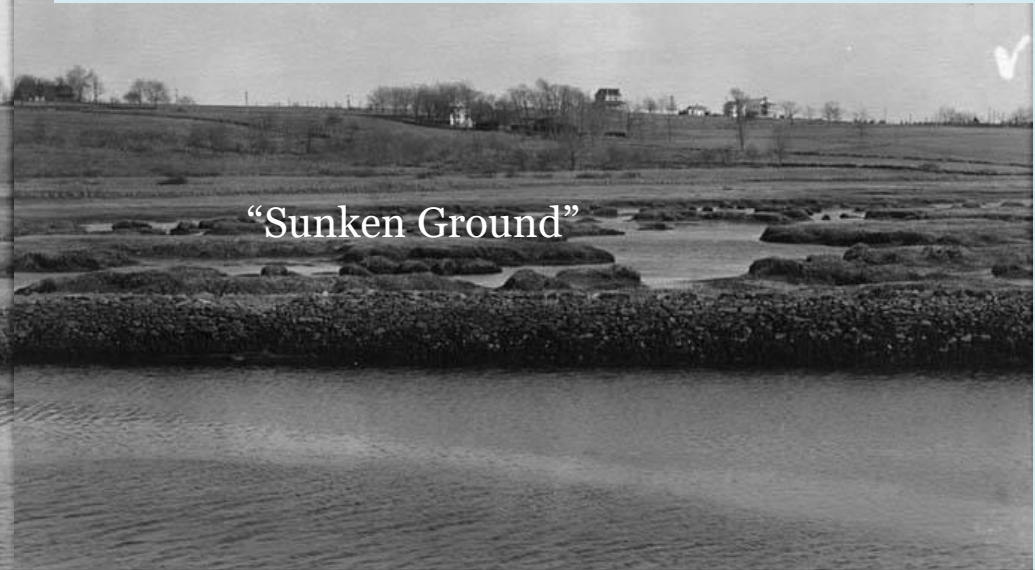
Harbor Dyke (Cont.)

1913

These historical photos (the view is east toward Sasco Hill) show the northern extent of the wall separating the harbor from the “Sunken Ground” to the east.

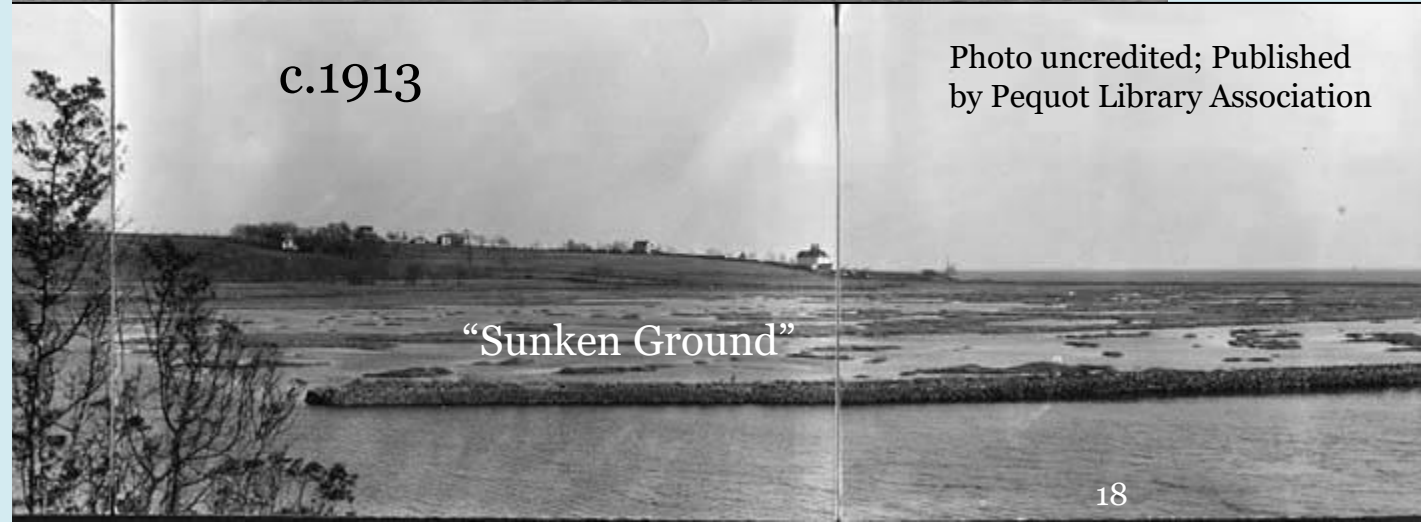


Photo uncredited; Published
by Pequot Library Association



“Sunken Ground”

The wall was constructed of stone, not earth, as originally recommended. Its purpose was *“to compel the water, which at the flood tides flows eastward into the low ground north of the sand-spit, to all pass around its north end, and thus increase the scouring action of the current on the main channel in front of the dyke.”*



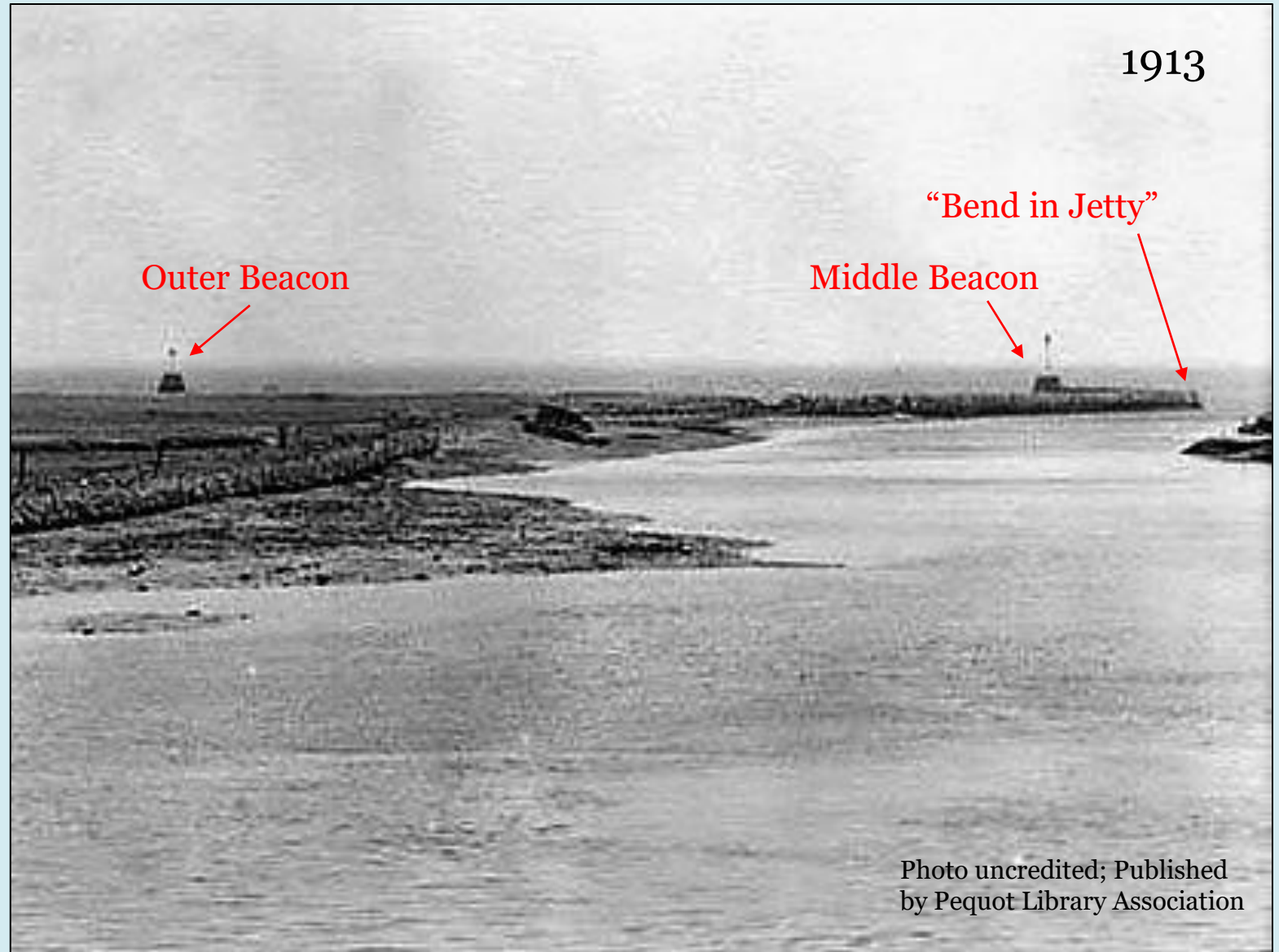
c.1913

Photo uncredited; Published
by Pequot Library Association

“Sunken Ground”

Two Beacons

When the jetty and wall were completed in 1837, the inner beacon (its former location is marked by the bend in the jetty) had been removed; the middle beacon remained at the end of the jetty; and the outer beacon wasn't affected. The middle and outer beacons remain in these same positions today.

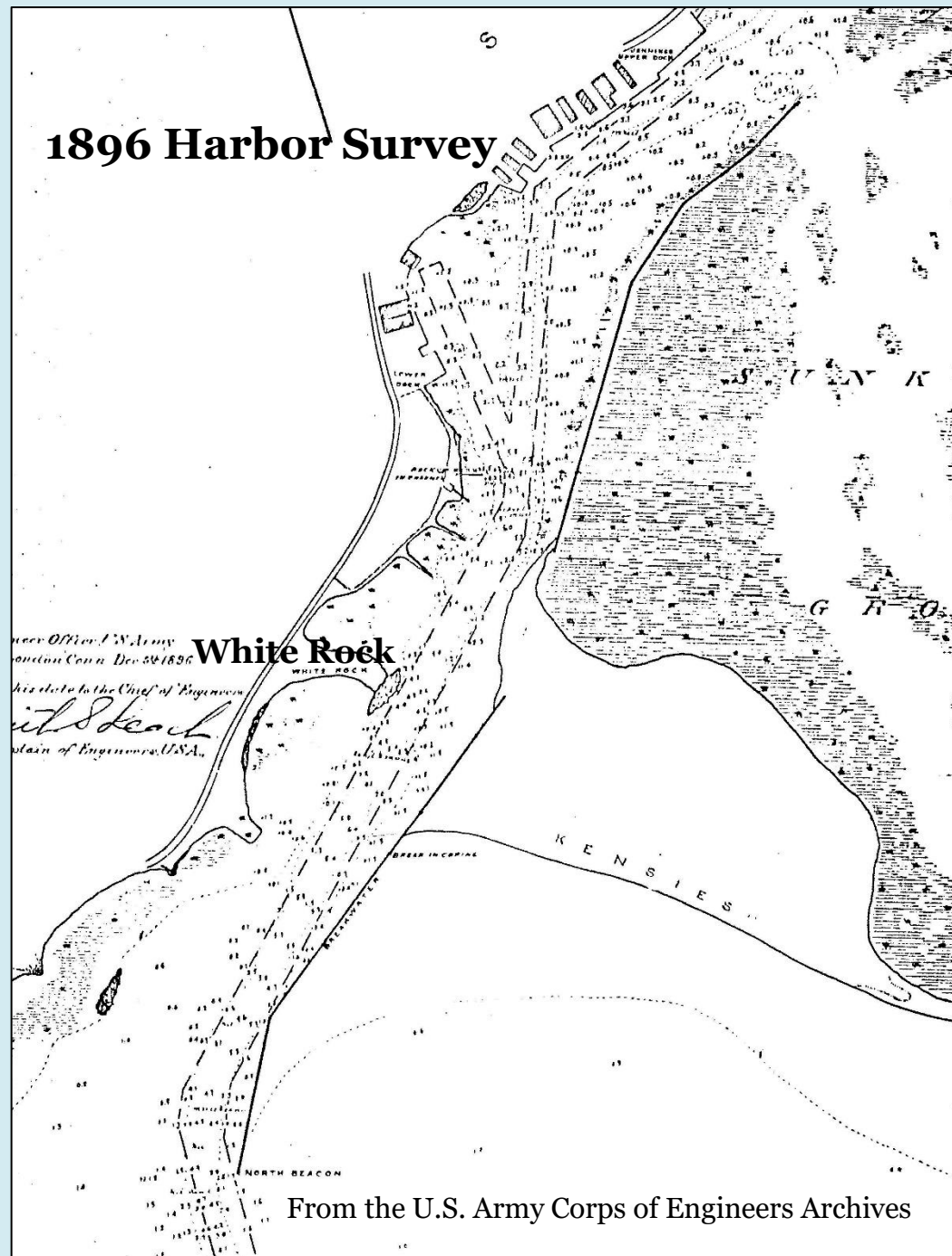


Navigation Channels

Prior to construction of the jetty and wall, and for a significant time after, the townspeople worked to maintain a navigation channel. To dredge, they used oxen to pull road scrapers along the bottom at low tide.

In 1870, the Army Engineers reported that “*the channel, at best, at mean low water, with the present extent of the breakwater (jetty), is not more that 2 feet deep, and any deposit that forms in it is readily removed by the residents using a road scraper.*”

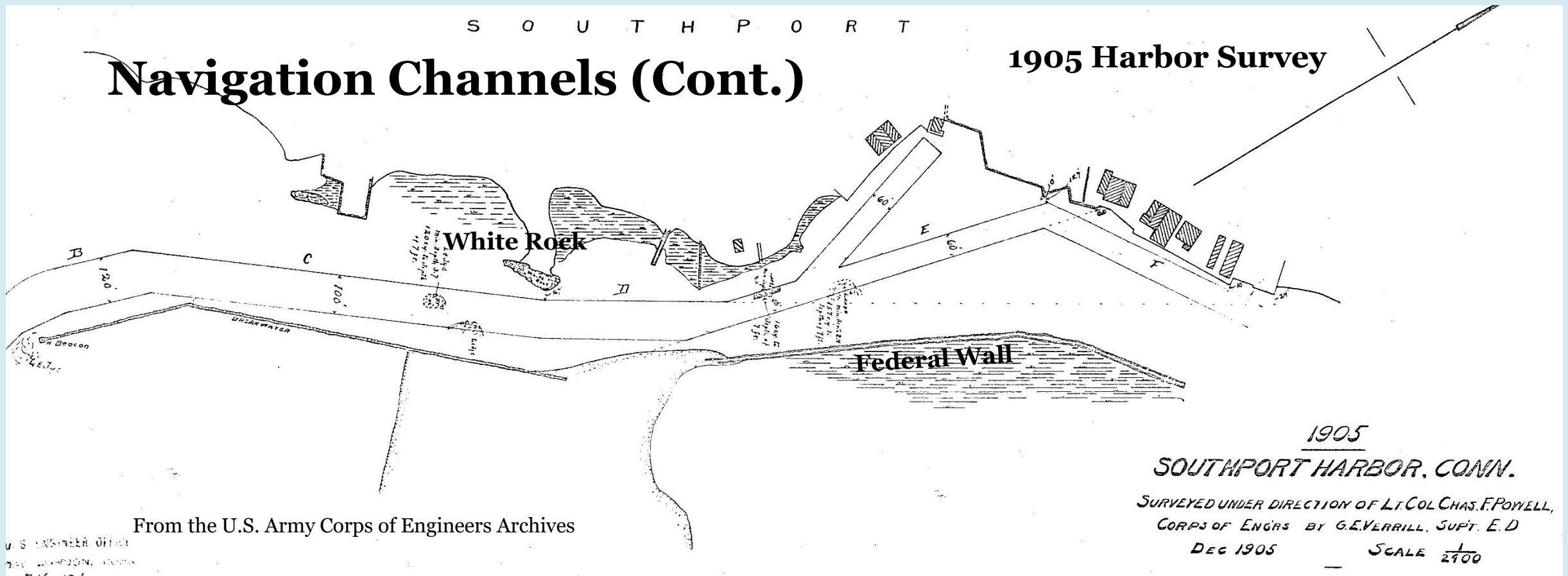




From the U.S. Army Corps of Engineers Archives

Navigation Channels (Cont.)

In 1878, Congress modified the Federal Navigation Project to include a “*channel 100 ft. wide and 4 ft. deep at mean low water across the bar and up the stream to White Rock, 1,200 ft from the outer end of the pier, and thence in a bifurcated channel to the nearest docks.*” Channel dimensions have been modified by Congress many times since, including most recently at the request of the Harbor Management Commission in 1996 and 2007.

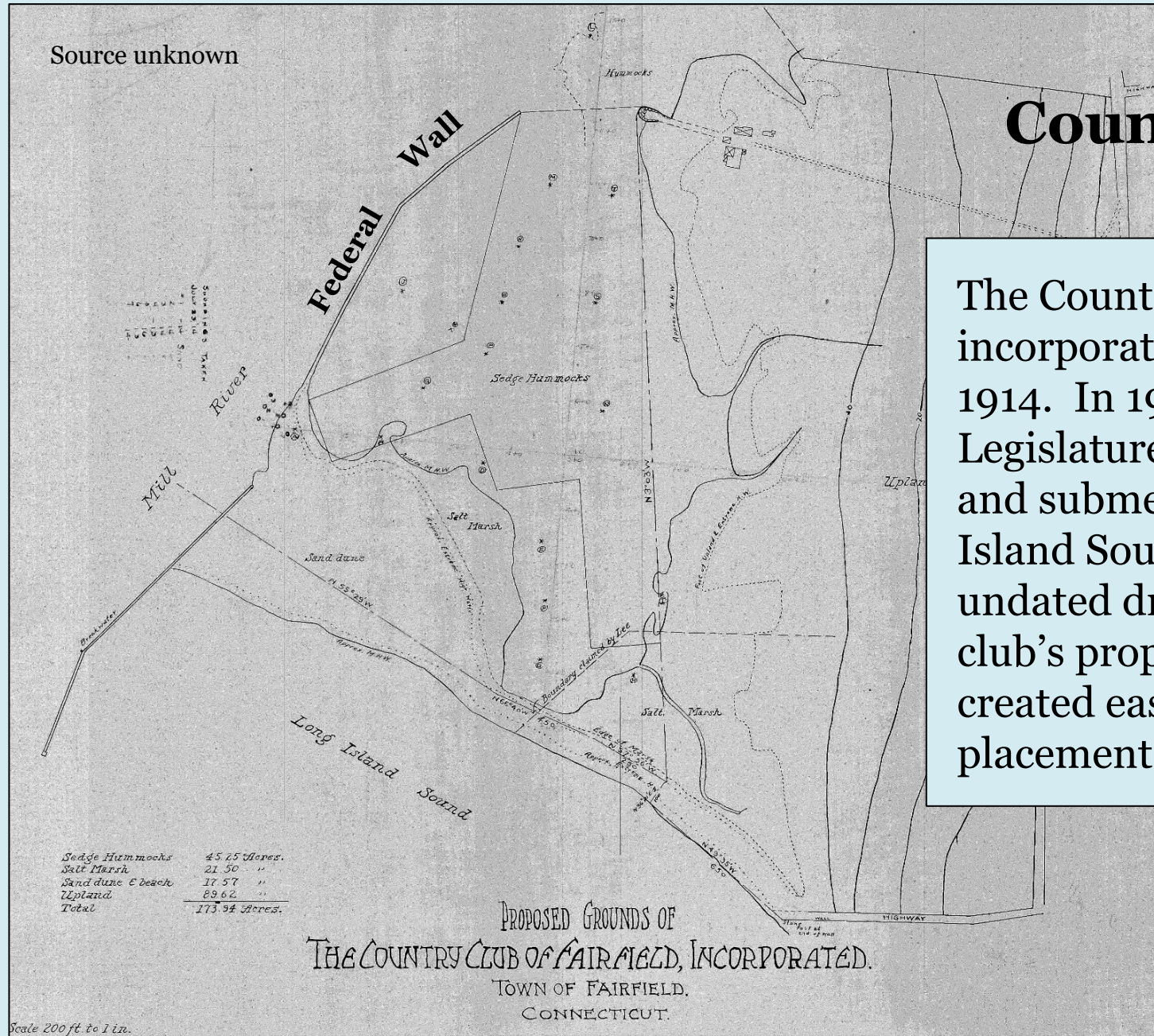


This 1905 drawing by the Corps of Engineers shows the bifurcated channels to the wharves on the harbor's west side. Described on the following slides, this harbor area was dredged and widened by the Country Club of Fairfield in 1916 to obtain fill for creating the club's grounds to the east of the federal wall.

Source unknown

Country Club of Fairfield

The Country Club of Fairfield was incorporated on the east side of the harbor in 1914. In 1915, a Special Act of the CT Legislature authorized the club to dredge tidal and submerged lands in the harbor and Long Island Sound for the club's purposes. This undated drawing from that time shows the club's proposed grounds that would be created east of the federal wall by the placement of dredged material.



Country Club of Fairfield (Cont.)

With permits issued by the Corps of Engineers in 1915, the Country Club dredged almost one million cubic yards of fill from the harbor and the area between the middle and outer beacons to fill the “Sunken Ground,” thereby creating the golf course that would open in 1921. This dredging also widened and deepened the harbor’s channel and anchorage basin.

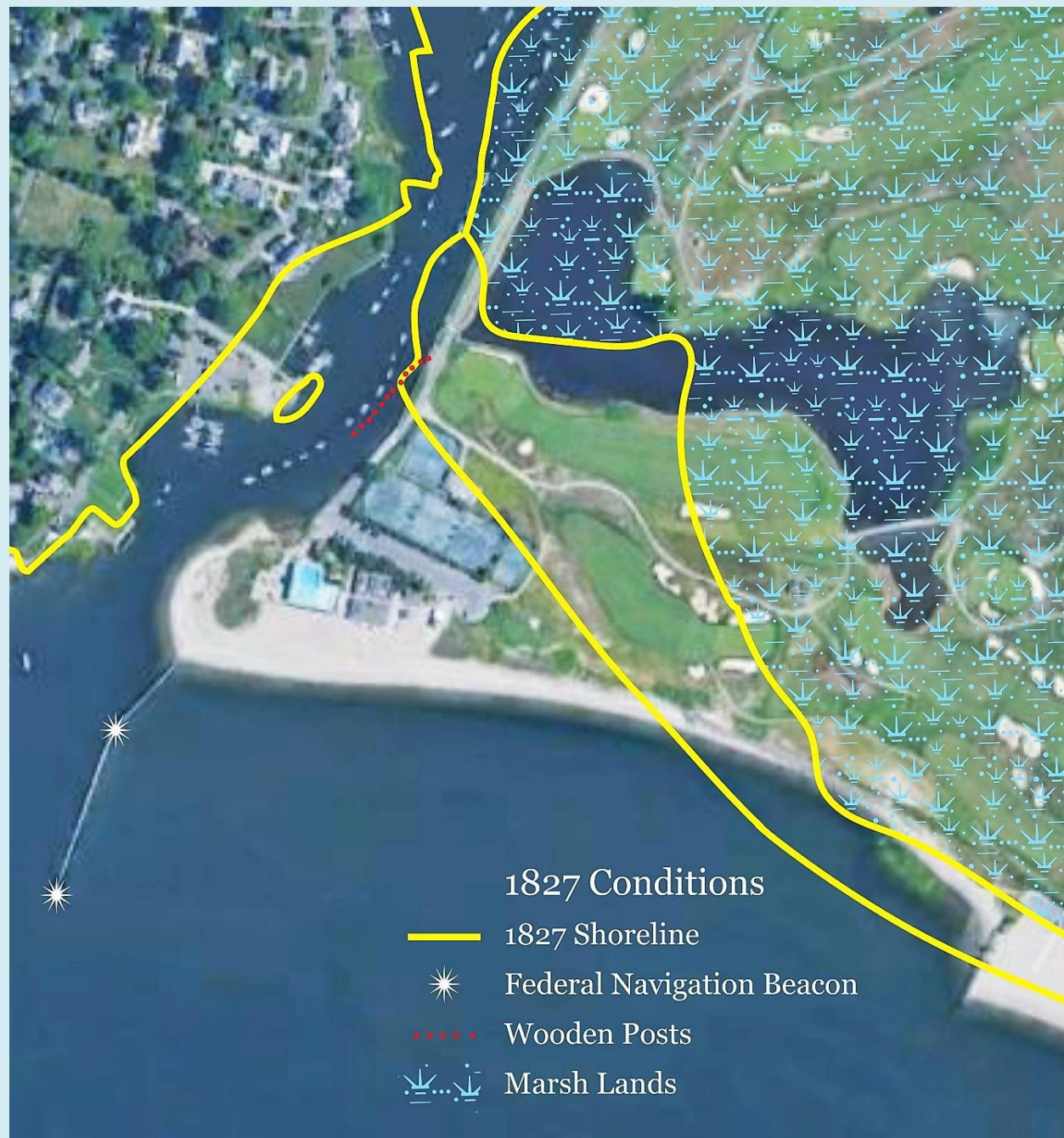
Country Club of
Fairfield

1934

CT State Library, from the first aerial survey of the State of CT

Shoreline Changes 1827 - 2019

Prior to construction of the jetty and wall, the shoreline in 1827 (shown here in yellow) at the entrance to Southport Harbor was much different than it is now. This image was created by superimposing the Army's 1827 survey map on a recent aerial photo. To do so, we were able to match the 1827 beacon locations with those same locations on the 2019 photo. The jetty quickly trapped the littoral movement of sand, creating new land to the east of the jetty.



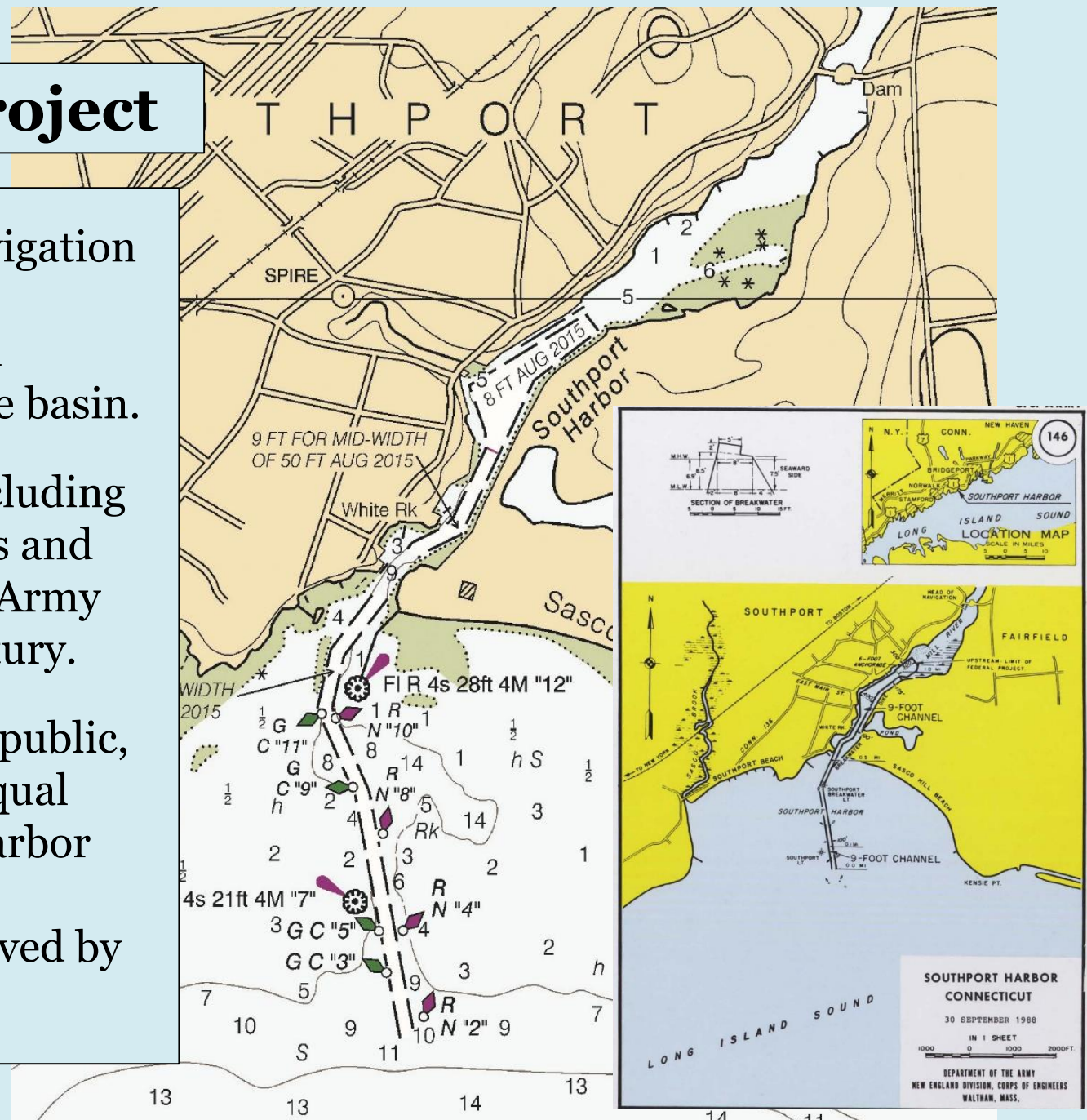
From the 2020 overlay map prepared for harbor planning purposes by G. Steadman and C. Clancy using U.S. Army Engineers' 1827 survey map and 2019 Google Earth image.

2023 Federal Navigation Project

In 2023, the Southport Harbor Federal Navigation Project, as authorized by the U.S. Congress, consists of the jetty, dyke (wall), designated navigation channel, and a federal anchorage basin.

Responsibility for maintaining the FNP, including maintenance dredging when the need arises and funds are available, still rests with the U.S. Army Corps of Engineers, as it did in the 19th century.

Day to day management of the FNP for the public, consistent with the Corps' "open to all on equal terms" policy, is the responsibility of the Harbor Management Commission pursuant to the Southport Harbor Management Plan approved by the State of CT and adopted by the Town.



Maintenance Dredging

In 2023, maintenance of the harbor's navigation channel continues to be a harbor management priority, just as it was in the 1700s. The federal channel and anchorage remain subject to ongoing shoaling so dredging is needed from time to time to maintain safe and beneficial operation of the harbor.

At the request of the Harbor Management Commission, maintenance dredging by the Corps of Engineers was accomplished most recently in 2004-2005.

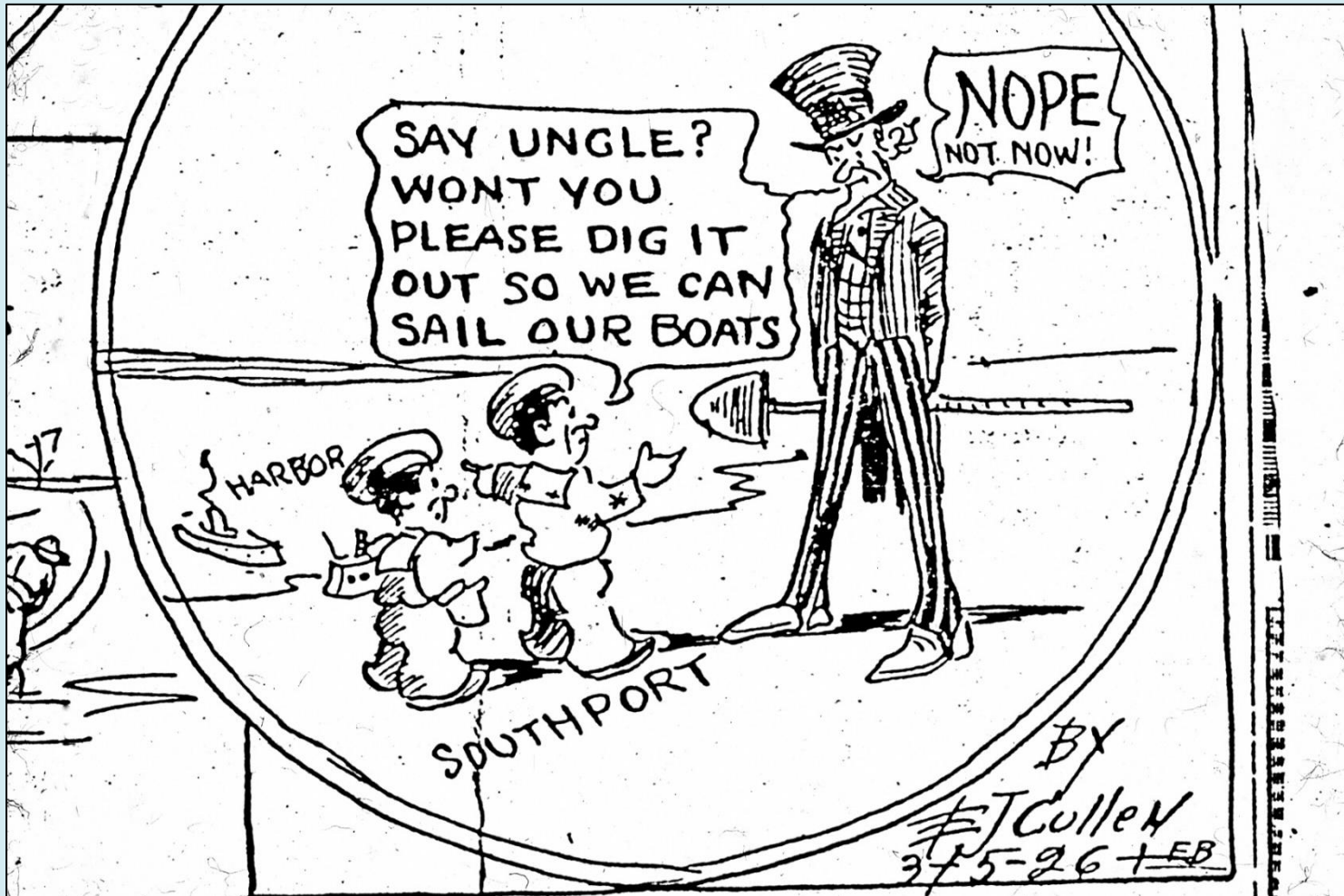
In 2004 and 2014-15, the Fairfield DPW excavated sand from the sand bar alongside the jetty and from the channel itself and used that sand to nourish Town beaches. The state permits for that work were applied for and obtained by the HMC.



G. Steadman photo



Hugh Smith photo



Fairfield News 1926

Dredging: A Complex Process

The dredging process in all CT harbors is inherently complex and lengthy, with many funding and regulatory hurdles, and has been that way for many years.

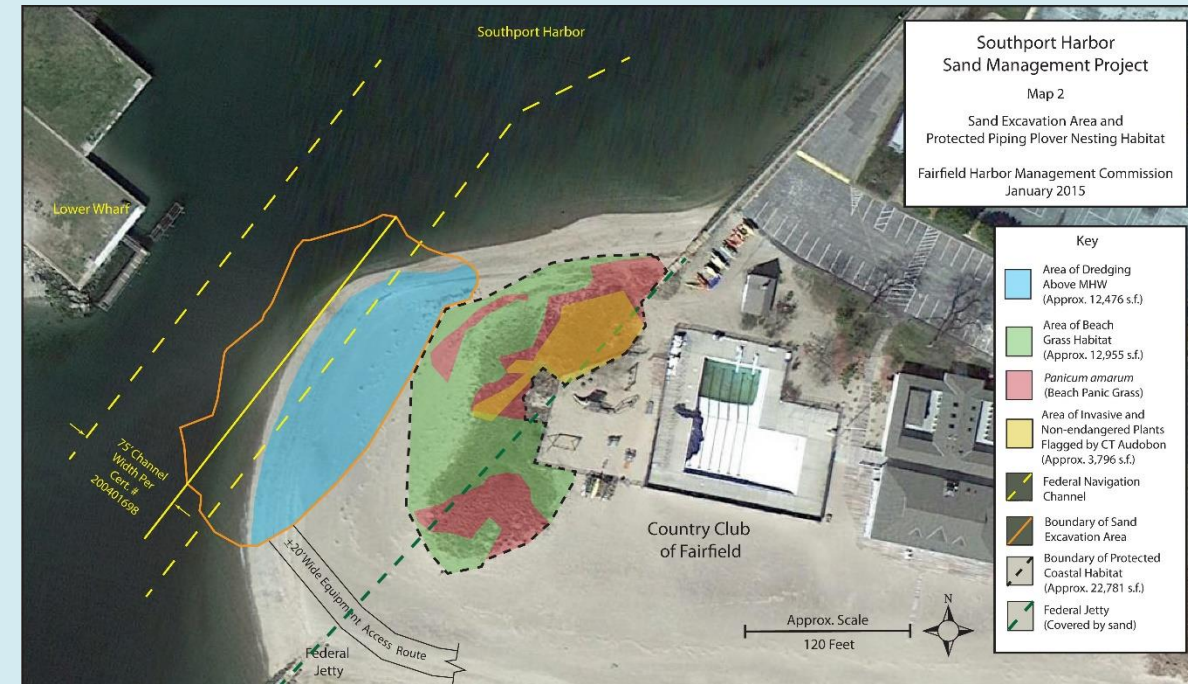
In 1925, the federal government proposed to abandon the Federal Navigation Project in Southport due to the decline of waterborne commerce. That decision was reversed and the project was reauthorized by Congress specifically to serve recreational boating.

Planning in 2023 for Maintenance Dredging

Over many years, wind-blown and wave-washed sand built up against the east side of the harbor jetty, over-topped the jetty, and accumulated in and near the federal channel. Efforts to achieve a long-term solution to this problem have been thwarted in recent years by the presence of a protected plant species on the sand bar, and by nesting of an endangered bird species—the piping plover.

In 2023, the Harbor Management Commission is working with the Corps of Engineers and CT DEEP to achieve implementation of a new dredging plan to restore the full width of the channel while protecting plant and bird habitat and using the dredged material for beneficial purposes.

To be continued...



Thank You

The Harbor Management Commission appreciates everyone's interest and support for our continued efforts to manage safe and beneficial use of Southport Harbor and protect the harbor's exceptional natural and cultural resources for the benefit of future generations.

**Visit us at: www.fairfieldct.org/hmc
or email
HMC@fairfieldct.org**

Acknowledgments

Town of Fairfield Harbor Management Commission

Kim Taylor (Chair)
Jac Herschler (Vice Chair)
Bill Perugini (Secretary)
George O. Harris (Alt.)
Dave J. Henry (Alt.)
Don Hyman
Doug Metchick
Eric Sundman
Jeffrey Warren

Bryan LeClerc, Harbor Master
John Dean, Deputy Harbor Master
Betty Gabriel, Administrator
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G. Steadman photo

Research and power point presentation by G. Steadman for the FHMC.
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