

EXHIBIT A 2018 FOUNTAIN BEACH LONG TERM MAINTENANCE AND PRESERVATION PLAN

Introduction and History:

As any visitor to the beach can see the West Jetty (at the boundary line between 69 and 61 Soundview Ave), is in disrepair. It needs to be either replaced or removed.

Thanks to Roy Haller, we have recently been able to review documentary history discussing the history of the construction and financing of the West Jetty and the East Jetty (at the east boundary of the beach).

As early as 1947, the members of the association were discussing the erosion of the beach and the need to build jetties to preserve the sand. As far as the records we have been able to review show, in the late 1940's jetties were constructed in the approximate locations we see them today.

By the mid 1960's the jetties had become ineffective and needed replacing. The beach was also suffering continued erosion. The Board of HERCC formed a committee to investigate a way to preserve the beach. In September of 1965, the Madison Flood & Erosion Control Board received a letter from the State of Connecticut Water Resources Commission outlining a potential plan to preserve the beach at the Highlands. (See Exhibit A-1). The letter discussed an Army Corp proposal to build 2 jetties and supplement the sand artificially. The letter also discussed the relative value of the East and West Jetties and implies that the East Jetty is the far more valuable structure with respect to the preservation of sand on the beach.

The committee determined in 1965 to pursue the construction of the two jetties we see today. The original plan was to construct both the East and West Jetties at the same time, however the then owner of 69 Soundview (Mr. Scranton), objected to the construction of the West Jetty and the committee deleted it from the plan. On December 2, 1965 the State Water Resources Commission issued a permit for the construction of the East Jetty (See Exhibit A-2). In an undated letter from the fall of 1965 the committee advised the members of the need to construct the East Jetty and requested that each member send in \$100 to defray the cost of construction (See Exhibit A-3)

In 1968 the effort to build the West Jetty was revived and a permit was obtained for construction (See Exhibit A-4). Over the years the West Jetty, which is subject to greater stress than the East Jetty, has been repaired by the membership several times, but is now in a complete state of disrepair and unsalvageable.

Present State:

At the Annual Meeting of 2017 the Membership authorized the Board to pursue a permit to replace the West Jetty. We engaged the services of John Lust, a consultant that manages the permitting process with the State DEEP, and Mr. Lust engaged the services of a Professional Engineer, Mr. Robert Sonnicshen to approve his plans. On May 21, 2018, HERCC received a Certificate of Permission allowing us to replace the West Jetty. (See Exhibit A-5 for the aerial plan view) A full copy of the COP is available for review, it was too large a file to be generally emailed.

The Board contacted 6 local marine contractors and requested bids for the work. Only two responded. Coastal Marine Construction submitted a bid for \$70,800 (See Exhibit A-6) and Bombaci Construction submitted a bid for \$130,000 (See Exhibit A-7).

In an effort to secure construction financing, the Board contacted Guilford Savings Bank ("GSB") and obtained approval for an \$85,000 5 year loan, payable over 5 years and bearing 6% interest. The loan would be secured by a mortgage on the Beach Lot as well as a conditional assignment of the dues that HERCC collects from its members. As an additional condition, GSB requires HERCC to move its accounts to GSB. Given the current run rate of Association operating costs (about \$15,000 per year), the debt service on \$85,000 would require that we increase the dues to \$600 per year.

\$85,000 Loan				
Curent Income	\$ 17,700	\$300 * 59		
Additional Income	\$ 17,700			
Total Income	\$ 35,400			
Operating Expenses	\$ (15,500)	Average of past three years		
Debt Service	\$ (19,764)	Payment on an \$85,000 Loan		
Net Income	\$ 136			

An Alternative Approach:

As the Board was preparing to vote on a plan to recommend to the Association at this year's meeting, Guy Simonian approached us with some data he had gathered on his own initiative regarding the Jetties. Guy spoke with the head of the Land & Water Resources Division of the DEEP regarding the relative effectiveness of the West Jetty in protecting and preserving the Beach, as well as its ability to protect the seawall from wave action. Both Guy and the Board president have spoken with Mr. Lust and Mr. Sonnicshen regarding this issue. They were both clear in their opinions about the following:

- The West Jetty does not help preserve sand on the beach;

- The West Jetty may provide some protection for the seawall in the case of South West storms, but that effect is probably minimal;
- The East Jetty provides all of the erosion protection for the beach, and it has survived as long as it has due to the protection offered by the seaward crescent shaped rock outcropping;
- The beneficial effect of the East Jetty could be increased by raising it 2 feet so that it is not submerged at low tide, and by strengthening the rock outcropping by adding more rock and resetting some as well.

Mr. Sonnicshen has recommended the following East Jetty Project:

- Remove the decrepit portion of the West Jetty, leaving the portion embedded in the rock seawall;
- Observe the impact of the lack of a jetty on the seawall for two – three years (we have 5 years to complete the work), to see if it really needs to be replaced;
- Apply for a permit to replace the East Jetty with an increased height and repair the rock outcropping. Mr. Sonnicshen believes the DEEP will grant this permit, but that the process could take 18 months or more;
- Stabilize the East Jetty where there are gaps in the sheet wood pilings in the tidal area by “sistering” new wood sheet pilings in these sections. Sand is currently washing through these gaps.

-

Costs Associated:

In order to execute on the revised plan, HERCC would incur the following costs using Coastal Marine Construction to complete the work and Lust/Sonnicshen to do the permitting:

- \$20,000 Cost to remove the decrepit portion of the West Jetty;
- \$5,000 Cost to stabilize the East Jetty;
- \$10,000 Estimated costs to obtain a permit for East Jetty replacement.

To finance this the Board recommends that we borrow \$45,000 (to cover these costs and potential contingencies). The Board further recommends that HERCC increase dues to \$600 per years as this will allow us to make payments on the \$45,000 loan and to build a reserve that we can use toward the cost of the finally approved East Jetty project.

\$45,000 Loan				
Curent Income	\$ 17,700	\$300 * 59		
Additional Income	\$ 17,700			
Total Income	\$ 35,400			
Operating Expenses	\$ (15,500)	Average of past three years		
Debt Service	\$ (10,465)	Payment on an \$45,000 Loan		
Net Income	\$ 9,435			

Throughout the past 70 years the HERCC membership has recognized the value that accrues to us all by having and preserving an enjoyable beach. The Membership has had the foresight and determination to build the Jetties, purchase the Fountain Beach Lot in the 1960's and to excavate it and double the size of the beach in the late 70's. In more recent times members have worked to maintain the both the East and West Jetties, and the Association has spent considerable time and money to repair the seawall after Irene and Sandy. The East Jetty Project is a continuation of this history and will serve to maintain our beach for a generation or two to come.

While we cannot predict the final cost of the East Jetty Project, it is reasonable to assume that it could be in the \$100,000 range. During the permitting process we will be better able to estimate the costs and seek bids for construction. There are several alternative financing options ranging from additional debt with GSB or others, special assessments, or the sale of low or zero interest bonds to Members.

The Board unanimously recommends that we begin the East Jetty Project.



STATE OF CONNECTICUT

WATER RESOURCES COMMISSION
STATE OFFICE BUILDING · HARTFORD 15, CONNECTICUT

Exhibit A-1

September 9, 1965

Mr. Robert T. Cairns, Chairman
Madison Flood & Erosion Control Board
Seaview Avenue
Madison, Connecticut

Re: Shore Erosion
Highlands (Sound View) Madison

Dear Mr. Cairns:

During our recent telephone conversation, you indicated that some residents in the Sound View area were concerned over recent erosion of their shoreline property.

The Army Engineers called this area "Highlands" in the 1949 cooperative report on erosion in Madison. In the report, they recommended a groin at each end and creating 100 feet of "dry" beach by artificial sand fill.

It appears that the most important need is for the groin at the east end to block sand moving toward Hartford Bay.

There is a slight possibility that there might be some natural movement of sand that could eventually fill the groin, although the report indicates that this is doubtful. If the owners do not wish to wait for possible natural filling of the groin, sand could be placed artificially.

Some westerly sand movement can be anticipated from southeast winds, although this appears less serious than the opposite direction. A shorter groin at the west end would tend to reduce whatever westerly movement might occur.

Evidence at nearby sandy areas indicate that the east end of this beach can be expected to be wider than the west end. If an attempt is made to maintain an average "dry" width of 100 feet, the east end would probably have to be about 140 feet wide. This could be rather

Mr. Robert T. Cairns

- 2 -

September 9, 1965

expensive because of the steep offshore slope in that area. It might be more practical to plan on an average width of about 60 feet with the east end about 100 feet wide.

The attached sketch shows roughly such a plan. As a rough guess, the east groin might cost up to \$40,000, the sand fill up to \$50,000 and the west groin up to \$20,000, including State overhead expenses.

As you are probably aware, the State would pay the initial cost of a cooperative project, subject to reimbursement of 2/3 of the cost (for private property) over a period of about 18 years starting after the project is completed.

If the residents wish to consider the problem further, we would be glad to meet with you and them to discuss it.

Very truly yours,

Robert A. McCabe

Robert A. McCabe
Hydraulic Engineer

RAM:dlp

enc.



STATE OF CONNECTICUT
WATER RESOURCES COMMISSION
STATE OFFICE BUILDING • HARTFORD 15, CONNECTICUT

Exhibit A-2

CERTIFICATE

December 2, 1965

No. 2377

Highland-East River Civic Association, Inc.
c/o Mr. Edward G. Birdsey, Chairman
Route #1
Middlefield, Connecticut

Gentlemen:

This authorization refers to your application dated September 15, 1965.
The proposed work in accordance with the application and accompanying plans includes:

Constructing and maintaining a pile and timber groin 75 feet
long in Long Island Sound approximately 1500 feet east of
Hogshead Point at Madison.

The Commission, after investigation, has considered your application with due regard for the matters enumerated in Section 25-7b, 1963 Supplement to the General Statutes and is of the opinion that the proposed work is in conformance with the purposes of this Section and is not in violation of any of its provisions or regulations. This authorization, therefore, will constitute the Certificate or Permit required by Section 25-7d, 1963 Supplement to the General Statutes.

If the structure or work herein authorized is not completed on or before the 2nd day of December, 19 68, this Certificate, if not previously revoked or specifically extended, shall cease and be null and void.

This certificate is issued under the following conditions:

1. The Commission shall be notified when the work is completed.

This Certificate is subject to and in no way derogates any present or future property or other rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

Very truly yours,

WATER RESOURCES COMMISSION

BY William S. Wise
William S. Wise, Director

HIGHLANDS EAST RIVER CIVIC CORPORATION

Dear Property Owner:

For some time a very serious erosion problem has existed along our shore front. In some areas the sand erosion has been so severe that the level of the beach is actually undermining existing sea walls. The most serious complaint is that bathers not only do not have a decent beach, but, if they wish to go swimming, they are subjected to walking over barnacle-encrusted and treacherous rocks in order to try to reach a sand bar that lies some distance from the shore and is useable only at low tide. The existing jetties in the area are useless and unsightly and interfere with getting to the sand bar.

Last summer this situation reached emergency proportions and finally led to some constructive action to correct this condition. The Board of Directors of the Highlands East River Civic Corporation appointed a Committee to study this situation and come up with a recommendation. The Committee considered various engineers for the project and finally hired John Hines, an engineer from Westbrook and a retired officer of the Army Corps of Engineers, who has done a great deal of erosion control work in the area. After making a thorough study of our beach and adjoining shore, and after discussing the matter with the Committee, Mr. Hines recommended that a sand-tight wooden jetty 75 feet long be constructed straight out into the Sound from the eastern edge of the Association beach.

The construction of a stone jetty was considered. It was found to be extremely costly, somewhere in the neighborhood of \$40,000-\$60,000. It was also discovered that the existing stones and boulders in the area would be of no value in the construction of a stone jetty. A stone jetty cannot be made out of round stones such as exist in the area. It also must be absolutely sand-tight if it is to work, and has to be specially constructed. It has been estimated by the engineer and the contractor that, if the wooden jetty is properly taken care of, it should have a life expectancy of twenty-five years.

Mr. Hines drew up the plans and specifications for the wooden jetty, a copy of which is enclosed, and submitted them to the Army Corps of Engineers and the State Water Resources Commission. While waiting for the necessary approvals, the Committee determined that the contractor best qualified to do this type of work is Albert Hotchkiss, a marine contractor from Milford. He has done a great deal of this sort of work along the shore, including jetties at Short Beach, Clinton, Cedar Island Marina, and the Milford Yacht Club. Mr. Hotchkiss has submitted a price of \$3,200. to build the new jetty, clear out the loose stone, and remove the old jetties.

The Committee's recommendation that we proceed with the work was approved by the Board at a meeting last December. The building of the jetty is now in progress.

The Committee and the Board feel that every property owner will benefit substantially from having this beach erosion problem corrected. Certainly shore property that does not have access to a good sandy beach does not command the price of similar shore property that does have access to a good sandy beach. A good sandy beach is an asset also to anyone renting his shore property. Finally, regardless of the enhancement to the area by a good sandy beach, the responsibility for correcting this serious erosion problem lies with the property owners in the area. Solving this erosion problem will not be any great economic burden if everyone carries his fair share of the cost involved. We are therefore asking everyone to chip in \$100 each so that we can pay Mr. Hotchkiss for doing this work.

Some may ask, "Will this jetty work?", and "Is there any guarantee that we will get any sand?" So that we understand each other, neither the engineer nor Mr. Hotchkiss will guarantee anything as far as sand is concerned, nor will they guarantee that there never will be another 1938 Hurricane that will heave huge rocks against this wooden jetty and destroy it. But both of these men have seen erosion problems as severe as ours; they have seen them corrected by the proper construction of a jetty; and they can point to existing areas nearby where jetties have been put in and have worked. Furthermore, the Army Corps of Engineers also came up with the recommendation to build a jetty in the same location. The simple fact is that a beginning must be made.

We on the Committee feel that we have acted in your best interest and now we would appreciate very much your helping us to conclude our work by mailing your check for \$100 to Robert B. Snow, Jr., Treasurer, 297 Neck Road, Madison, Conn., at the earliest possible moment, and please not later than October 1, 1966. If you have any additional questions, please feel free to contact anyone on the Committee in regard to this matter. We hope that you have a good winter and that we will greet you next summer with a greatly improved beach.

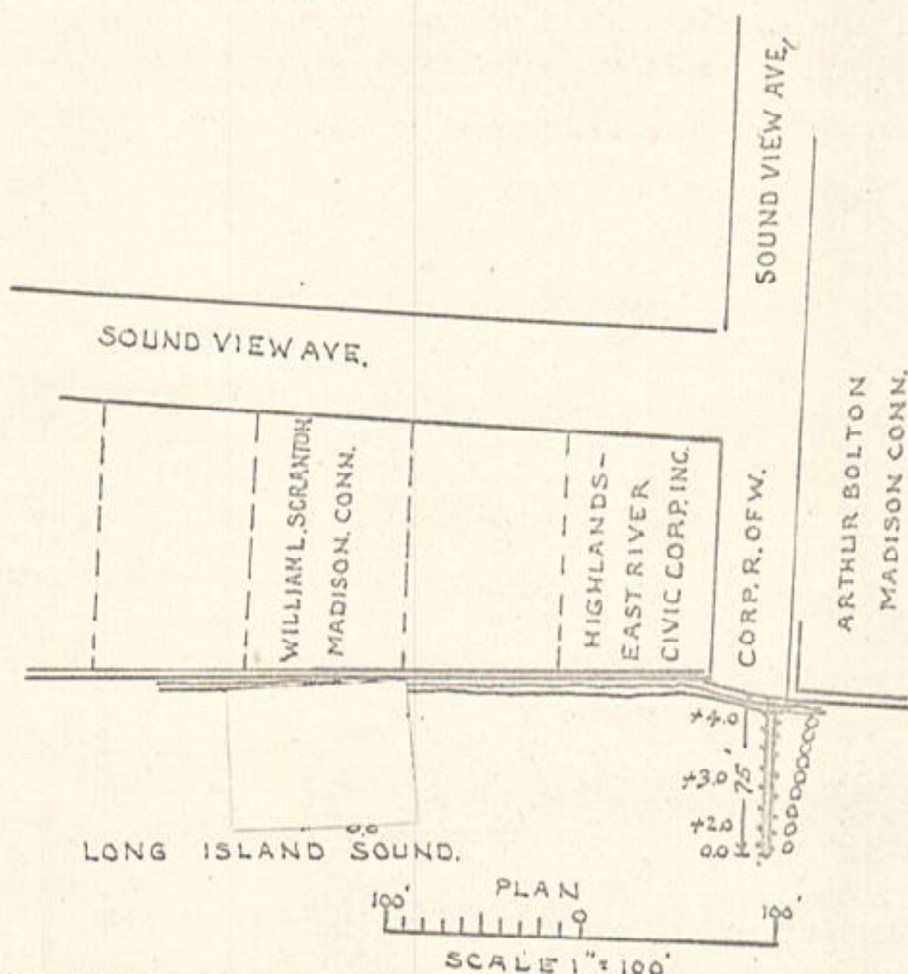
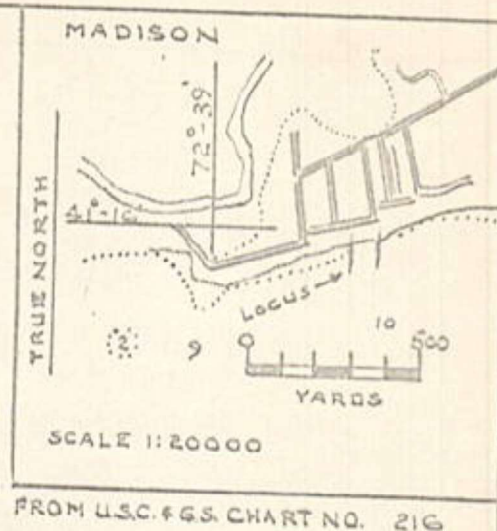
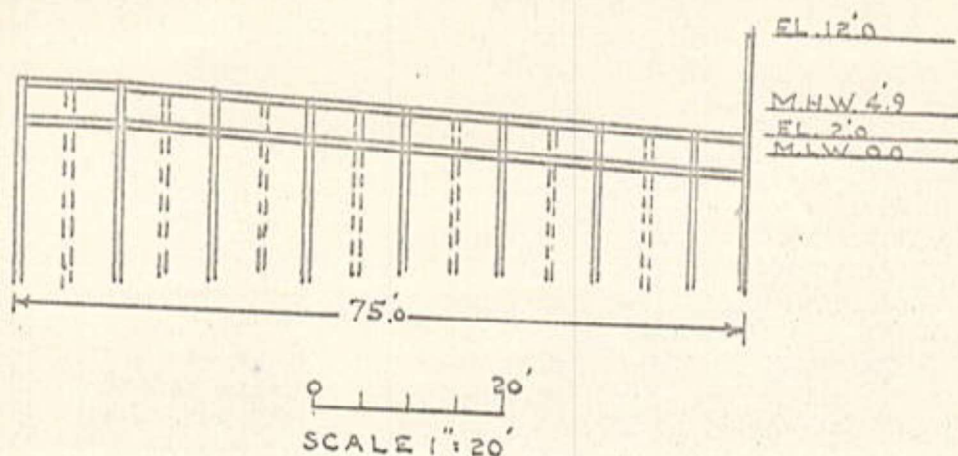
Sincerely yours,

Edward G. Birdsey
Edward G. Birdsey
Chairman

The following are Committee members:

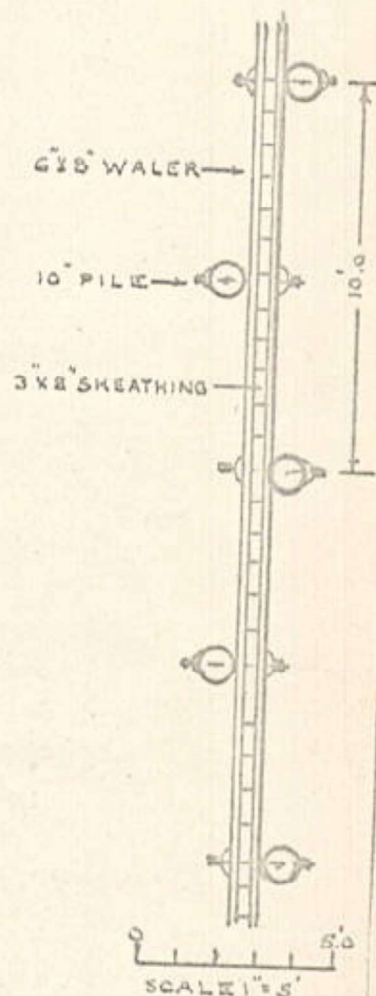
Edward G. Birdsey, Chairman
Elwood D. Burton
Edward Brennan
Patrick J. Delahunty
William H. Haller
Robert B. Snow, Jr.

SIDE SECTION OF GROIN.



SOUNDINGS IN FEET
AND REFERTO M.L.W.

TOP SECTION

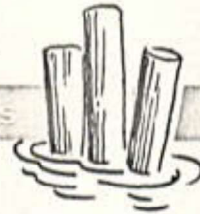


SEPT. 15 1905.

PROPOSED PILE & TIMBER GROINS IN
LONG ISLAND SOUND AT MADISON
CONN. APPLICATION BY HIGHLANDS -
EAST RIVER CIVIC CORP., INC.

15-20
TR 4-6666

A. K. Hotchkiss



83 CARRINGTON AVE.
MILFORD, CONNECTICUT

October 15, 1965

Highlands-East River Civic Corp. Inc.
Madison, Conn.

Atten. Mr. Edward Birdsey

Dear Sir:

In reply to our conversation of last month, I am pleased to submit the following specifications and quotation for a pile and timber jetty on the beach in front of your property at Madison, Conn.

Specifications

10" top diameter new creosoted piling 15' long

6"x8" creosoted wales top and bottom

3"x10" " planking

3/4" galvanized nuts, bolts and washers

Piling shall be driven on staggered sides 5' on center

Piling shall be driven into ground a minimum of 10'

Details of construction are shown on enclosed sketch. For the above construction of 75' of jetty, I quote the price of \$38.00

per lineal foot or a total price of \$2850.00

For clearing out existing jetties. 250.00

Total \$3100.00

Exhibit A-4



STATE OF CONNECTICUT
WATER RESOURCES COMMISSION
STATE OFFICE BUILDING · HARTFORD 15, CONNECTICUT

December 18, 1969
CERTIFICATE

No. 2714

Mr. Charles J. Wood, Jr., President
Highlands East River Civic Association
P. O. Box # - 579
Wallingford, Connecticut

~~XXXXXXXXXX~~ Dear Mr. Wood, Jr.:

This authorization refers to your application dated October 2, 1969.
The proposed work in accordance with the application and accompanying plans includes:
constructing, installing and maintaining a pile and timber groin 60 feet long
in Long Island Sound at Madison, Connecticut.

The Commission, after investigation, has considered your application with due regard for the matters enumerated in Section 25-7b, 1963 Supplement to the General Statutes and is of the opinion that the proposed work is in conformance with the purposes of this Section and is not in violation of any of its provisions or regulations. This authorization, therefore, will constitute the Certificate or Permit required by Section 25-7d, 1963 Supplement to the General Statutes.

If the structure or work herein authorized is not completed on or before the 18th day of December, 19 72, this Certificate, if not previously revoked or specifically extended, shall cease and be null and void.

This certificate is issued under the following conditions:

1. The Commission shall be notified when the work is completed.

This Certificate is subject to and in no way derogates any present or future property or other rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

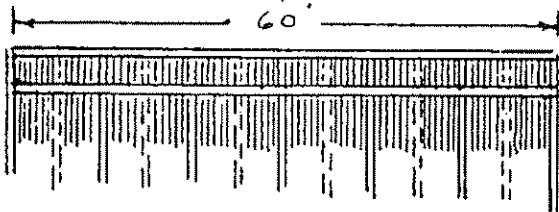
Very truly yours,
WATER RESOURCES COMMISSION

BY


~~XXXXXXXXXX~~ Director
John J. Curry,

cc: Army Engineers

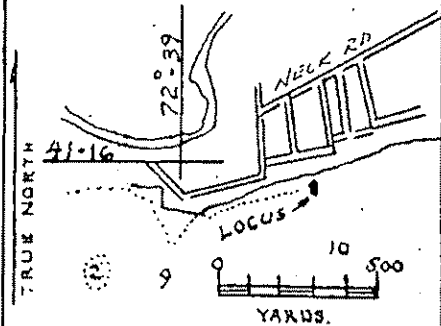
SIDE SECTION OF GROIN



SCALE 1"=20'

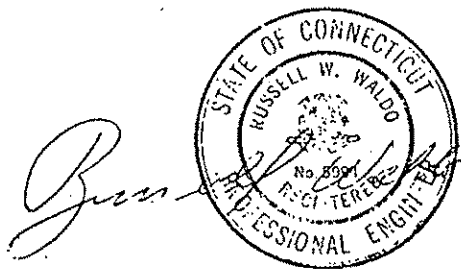
EL 7.0
M.H.W. 4.9
M.L.W. 0.0

MADISON.



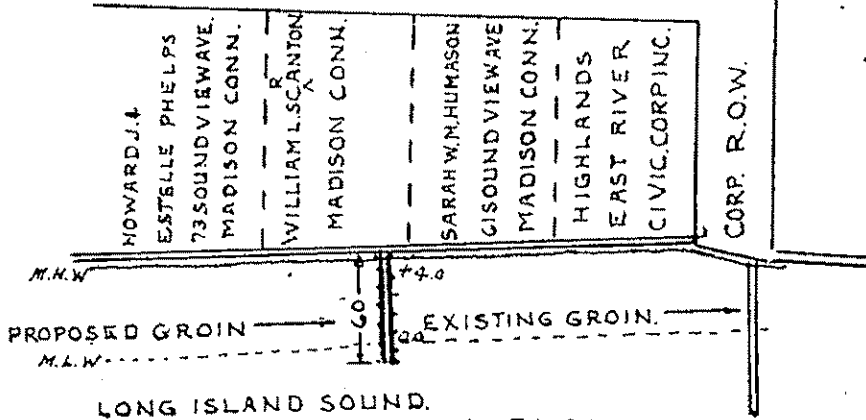
SCALE 1"=20000'

FROM U.S.C. & G.S. CHART NO. 216.



SOUND VIEW AVE.

SOUND VIEW AVE.

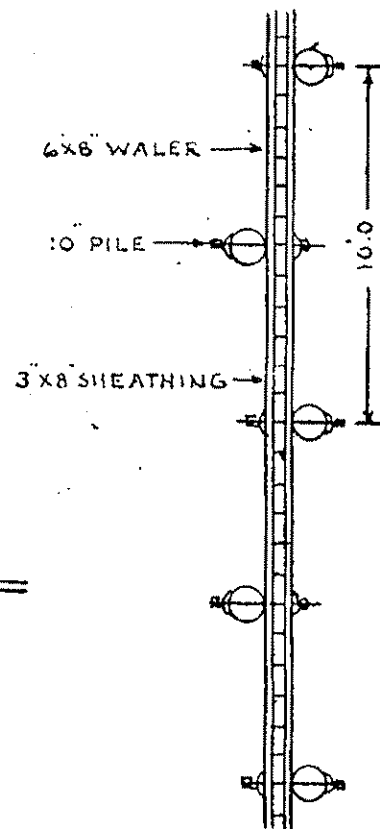


PLAN.

SCALE 1"=100'

SOUNDINGS IN FEET
AND REFER TO M.L.W.

TOP SECTION.



SCALE 1"=5.0'

PROPOSED PILE AND TIMBER GROIN IN
LONG ISLAND SOUND AT MADISON CONN.
APPLICATION BY HIGHLANDS EAST RIVER
CIVIC CORP. INC. SEPT. 20, 1969.



<u>Permitting Agent:</u> John B. Lust	
<u>Drawn By:</u>	JFW
<u>Checked By:</u>	R.S.
<u>Date:</u>	February 5, 2018
<u>Revised:</u>	March 5, 2018
<u>DATUM:</u>	NAVD88
<u>C.L. (HTL) =</u>	3.7 (4.0)
<u>MHW =</u>	2.3
<u>MLW =</u>	-2.8
<u>Project</u>	<u>Applicant</u>
HERCC 61 SOUNDVIEW AVENUE NEW HAVEN COUNTY MADISON, CONNECTICUT	
GROIN REPLACEMENT	
EXISTING w/ PROP. CONDITIONS	
PROPERTY VIEW	Sheet: 4 of 6



Proposal

March 30, 2018

HERCA
61 Soundview Avenue
Madison, CT 06433

RE: Project # 17-2018 Groin Replacement, Permit # Unknown

Scope:

Remove existing 59 liner feet wood groin and and dispose.
Move existing rock rip rap for construction of new groin.
Install new pressure treated piles with approximate spacing of six feet.
Install 8" x 8" pressure treated whalers.
Install new tounge and groove 3" x 10" pressure treated sheet pile.
Groin is bolted with galvanized hardware.
Rock rip rap replaced against wall.

Price includes all mobilization and demobilization.
All labor and material is included as contract.
Price is based on information supplied, final permits needed.

Cost \$ 70,800.00

Sincerely,

Stan Burrows
Coastal Marine Construction LLC.

BOMBACI CONSTRUCTION, INC.

General and Marine Contractors

P.O. BOX 220
April 9, 2018

HADLYME, CONNECTICUT 06439-0220

TELEPHONE (860) 388-9685
FAX (860) 434-8392

Mr. Jonathan A. Flatow
Highlands East River Civic Corporation
71 Chapel Street
Milford, Connecticut 06460

Project: ***Replacement of Wooden Groin at Soundview Avenue
Madison, Connecticut***

Dear Mr. Flatow:

The following proposal is for removing the old groin and furnishing and driving piles and installing clamps and stringers for a new groin at the above location. The groin is to be the same dimensions as shown on plans by John D. Lust.

It is understood that there will be a project meeting prior to beginning the job, so that there is a full understanding of the scope of work to be done. It is also understood that it is the responsibility of Highlands East River Civic Corporation to have all State, town and federal permits in place to do the work and to notify the DEEP, State and town, of the start and finish of work, if required. It is further understood that a copy of the permit is to be sent to Bombaci Construction, Inc. for review before signing of the contract.

It is understood that the piles are to be 16 to 25 feet long and will be driven to 10' +/- penetration and the sheeting will be driven to 5' +/- penetration using an air impact or vibratory hammer, as needed. It is further understood that the pile installation and groin demolition, etc. will be done using a crane from land.

Piles are to be CCA pressure treated marine grade southern pine
Whalers are to be 6" x 12" CCA pressure treated southern pine
Sheeting is to be 4" tongue and groove CCA pressure treated southern pine, if needed
All 1", 3/4", 5/8", 1/2" fasteners are to be galvanized
All nails are to be galvanized

As I have worked in this area before, I am familiar with the area and am aware of the possibility of obstructions. It is understood that if there are any obstructions and/or unusually hard driving conditions and it is not possible to get adequate penetration or piles must be realigned, an alternate method may have to be used (i.e. moving piles one way or the other, boring, etc.). There may be an extra charge for this which will be negotiated, which is fair and agreeable to both parties. It is also understood that we can leave our rig at your site while on the job.

Mr. Jonathan A. Flatow

Highlands East River Civic Corporation

Project: *Replacement of Wooden Groin at Soundview Avenue
Madison, Connecticut*

April 9, 2018

Page 2

AMOUNT: **\$120,000.00** (Plus 6% State tax on labor, if applicable)
\$10,000.00 for restoration of any damage to the abutting properties as a result of construction activities. Any money remaining from the \$10,000.00 after restoration of any damage to the abutting properties will be credited to Highlands East River Civic Corporation.

Please give me a call at your earliest convenience, so I can review this proposal with you. The best number to call is my cell 860-575-0109 anytime. Thank you for this opportunity to quote.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Edward Bombaci", with a stylized flourish at the end.

Edward Bombaci, President