From: Shelley ksbraza@aol.com

Subject: District of Chapman Beach Groin Retention and

Repair for flood & erosion control.

Date: Feb 12, 2023 at 10:12:51 AM

To: Damian Ranelli damianranelli@aol.com

K.E.Braza Construction LLC #3 Custom Drive Old Saybrook Ct 06475

Excavation Seawalls Marine Construction

2/11/2023

Project Proposal

Client.

Chapman Breach Association Westbrook Ct

Project Proposal is based on Certificate of Permission provided to KEBC (K.E.Braza Construction LLC) Lic.#202207043-COP Listed in project site plan provided by DEEP, and Docko. KEBC will provide a proposed cost for each groin listed along with a site package cost option.

- (A) General Notes 1 & 2..(B) Site Preparation
- (C) Groin Method of Construction B C D E (D) Cost of Construction
- (E) Next steps Time Frames. Options.
- (A) General Notes.

General Note. #1

As of 2/11/2023 no bid package has been provided or method of construction for bidders. KEBC will provide a proposal based on page.2-of 3 with measurements and current site conditions provided. Due to review, these costs may change if project runs into seasonal work conditions, meaning, if board decides to do 2 groin repairs this year, the next set maybe a different cost due to increases in materials. We are basing our materials estimate, operation costs on a Spring 2023- Mar.01 to June 01 basis, with option to do remaining 2 in Fall of 2023. Please note. Docko lists in Overall Plan Pg, item #5 Application drawings are not construction drawings, KEBC is basically providing a as-built per engineering

specifications on previous projects that adhere to specifications to DEEP and Town of Westbrook. Any deviations by other contract bidders, or changes may not represent KEBC methods of construction. Since Association has not provided construction drawings with specifications, if KEBC design scope is our custom build application for this plan. Our cost evaluation is based on our installation and material installation for this model of groin construction.

Please note, all excavation, drilling and pinning of steel reinforcement is included in this project estimate, embedment of steel and epoxy is included spec provided pending.

General Note.# 2

KEBC has provided the Town of Westbrook, Wadahanuk Yacht club in stonington, Fenwick Buorough in Old Saybrook, With construction methods that completely protect environmental resources and site safety. These locations were designed by Docko, GNCB, and DEEP so our practices and installations meet there specifications. A site review of each of these locations can be provided, along with references for these projects, concrete installation, granite revetment installation & Timber combined.

General Note #3

KEBC recommends to Association that 2 groins Be Completed Spring 2023, then 2 groins in the Fall of 2023. Due to increased storms, and conditions, and being a warmer winter KEBC is interested in this project and can begin construction as early as March 01.2023. With this all materials can be purchased, fabricated for 2 groins, construction can begin on 2 sections at the same time, saving on costs mobilization, concrete placement etc. 2 footings can be done, 2 walls at the same time. along with the piles and timber system. We are estimating a 30-36 day project schedule pending weather and tides.

(B) Site Preparation

In accordance to planning all work constructed in location will have immediate posting of permit. Locations will be sectioned off with silt fence on upper level, sectional posting of caution fence and signage. Working with tides installation of sediment boom, installation

and use of rhino matting material, crane matting materials. On-site dumpster carting for debris, Co provided stage area at our shop location at 3 custom drive. 5 min away.

Stock-pile of materials off-site, Stock pile of materials at KEBC yard location for less impact on beach location, Materials brought to site when needed. Each Groin pending review will be removed in 2 days pending tides, hauled off site, area pre-marked by survey then installation

of new groin in location. All work done upland away from resources and resident roadways and access. We recommend working on E and D and Completing these structures, then working

our way out of the site and completing the next 2 in fall 2023,. Closest to access area.

(C) Groin Method of Construction . Groins. B, C, D, E.

Based on Authorized Activities page. 2 of 3 with Docko plan.DWG.21-07-3189 Oct.

Please note these structures may have been damaged more since plan provided, additional debris maybe removed, due to storm dec.23.2022.

(C1) Groin B

- (a) Removal of Existing 76ft x 3ft concrete groin Construction of 76ft groin consisting of 19ft of concrete and 57ft of timber with a landward top elevtion of 9.25 and waterward of 3.
- (b) Construction of 6ft wide x 18in high concrete support base along total length of concrete section of the groin
- (c) Place 4 Cy of slavaged scour stone over 150 ft (toe protection stone)
- (d) Install Marker pile at waterward end of the groin.
- (e) installation of removable ped access. Steps.

Method of Construction; {Groins B C D & E }

Concrete Installation (Process of Construction at Each Location, lengths change, with elevations, but process of construction remains the same)

- (1) Review access area with association representative
- (2) Set up site location with excavation equipment and matting materials
- (3) Removal of structure, transport off-site no stock pile
- (4) *working at high and low tide increments, complete installation of concrete

Steel reinforcement fabricated and installed at high tide, formed as tide moves out, KEBC coordinate and install concrete placement, pumping to location,. Complete protection of resources, pumping and wash out containment.

- (5) Placement of concrete, for footing section as per plan.,
- (6) Forming with 8 man crew wall system next day, formed in accordance to exact height locations. Pump and place concrete with same method for pour and placement.
- (7) All concrete trucks will be washed out at KEBC yard location. at Custom Drive Old Saybrook.
- (8) **please note a reinforcement steel schedule has been provided with basic diagram, structural steel will be grade 60 epoxy coated #6 bar in footing & #5 in walls, no spec provided. ** Estimate based on coated reinforcement

Piles, Sheets Whaler Installation, Hardware, Marker Pile. All CCA.2.25 rated materials

- (1) Once concrete is completed, Materials hauled to site for installation, lay-down area
- (2) Installation and driving of piles per locations provided groin profile B
- (3) Driven to refusal with hammer / compressor
- (4) Upper whaler set, timber bolting method installed supported and installation of T and G Sheeting as per plan. Driven to refusal, All CCA rated materials to be installed.
- (5) Marker pile installed, upper sections cleaned up cut, installation of all timber bolts washers,

specific galav.

Site backfill installation of Stone

- (1) Installation of Stone with excavation equipment, smaller units installed in locations at CY items for each groin
- (2) Complete site clean-up each day of construction, no hazards, no materials left on beach.
- (3) Backfilling compaction rolling sections pending access,
- (4) Review with Association at completion of project.
- (D) Costs of Projects. (D1) (Cost of Each Individual Groin B, C, D, E.) (D2) (Package Cost of all 4 Groin Construction)

(D1)

(A) Groin B Cost\$ 118,783.44

Includes. Site preparation, Excavation and removal, Drilling pinning, Installation of concrete forming, placement of concrete, Placement of piles, timber construction Site backfill and clean-up

50% Deposit Required at Contract Signatures. { 59,391.72 }

(B) Groin C Cost.....\$ 121,452.45

Includes . Site preparation, Excavation and removal Installation of concrete forming, drilling pinning of ledge,,,placement of concrete, placement of piles, timber construction, site backfill and clean-up.

50% Deposit Required at Contract Signatures. {60,726.22 }

Includes, Site preparation, excavation and removal installation of concrete forming, drilling pinning of ledge, placement of concrete, placement of piles timber construction, site backfill and clean-up.

50% Deposit Required at Contract Signatures. {62,359.22}

(D) Groin E Cost.....\$ 131,672.45

Includes, Site preparation, excavation and removal installation of concrete forming, drilling pinning of

ledge, placement of concrete, placement of piles timber construction, site backfill and clean-up.

50% Deposit Required at Contract Signatures. {65,836.22 }

(D2) Package Cost of Project.

*If Association elects to Contract KEBC for the 4 groins to install in the next year KEBC will discount the costs of the entire 4 groins. We are willing to work with the Association, in all fairness we have proposed this project twice before and have detailed everything possible for a review and contract with no support. At this time we have detailed the entire project, provided methods of work, Costs of each Groin and a package cost. Please review these options and let us know as soon as review.

| (D2) Package Cost of Project 4 Groins Totals\$ 496,626.7 | 8 |
|--|-----|
| Package Cost Deduction If KEBC is Contracted | |
| For All 4 Groin Construction(- 35,000.0 | 00) |

Package Cost of Project.....(+).\$461,626.78

(E) Next Steps

Please review this proposal with Association members, please contact Kevin direct for questions, site meetings or explanation of proposal. A site meeting can be organized, a review of each phase of construction can be explained in detail on site.

We are interested in this project, and being 5 min away and having our shop and 5 acre yard down the street the time frame and conditions may allow us to complete 2 groins in a 30 day period before season starts. We will provide all insurance, all license information, surveyor is responsible by others, KEBC proposal is valid for 30 days of todays submital, We require a formal deposit, (pending on options) of 50% of project chosen.

^{*}Savings of 8,750.00 per groin*

If you elect to do 1 groin the cost in section D will be contracted for spring 2023 Season.

Please review, and let us know of your intentions.

Thank you KEBC