Application Harry Keates & Robin Silverman

Project Requirement/ Activity Description— Revised 26 August, 2020

The subject property is located in Freeport on the southern bank of Kelsey Brook, a tidal stream which runs to the Harasseeket River approximately 3,540 feet from the proposed site. The brook is unique with clay banks rising 5' from the stream bed, at this location composed of alluvial fines covered in part by flat stones and rocks. The tidal rise of the water in the stream is 4.5' and at this location the brook the brook is 33' in width with +-6" of water depth in the stream at low water. Navigation in this waterway is by canoe or kayak. At a distance of 10' upstream from the proposed site the character of the brook changes dramatically first with large cobble stone in the stream and the large rocks and ledge rising 2'-4' in height blocking passage except by foot. At 70' upstream the brook elevation rises +-2' with an aperture in the ledge through which fresh water runoff discharges into the stream. Tidal waters flow beyond this point only at high water.

No piers or other fixed structures are evident from the proposed site. There will be no interference with navigation as the navigable portion of the brook terminates at the site.

The applicants are recreational boaters seeking to obtain safe access by kayak to the tidal waters of the Harasseeket River.

The applicants propose to construct a fixed timber pier $4' \times 50'$ supported on driven pile and accessed directly from the upland by a ramp $4' \times 12'$. A seasonal ramp $3' \times 21'$ will connect with a $6' \times 14'$ seasonal float.

Alternatives Analysis

The Applicants are recreational boaters with kayaks being their chosen conveyance. The nearest launch for kayak or other hand carry conveyances is located at Porters Landing approximately 2.5 miles by road from the proposed site.

Several alternatives to the proposed pile supported structure have been considered prior to the choice of both this site and the method of construction. They are as follows:

- ---- 1. A crib supported structure. This alternative has an unfavorable environmental footprint and is not feasible to build over a salt marsh.
- ---- 2. With no ledge at the site a structure pinned and chained to rock, while a better environmental solution than a crib structure is not possible at this location.

- ---- 3. Construction of a boardwalk over the salt marsh leading to a staircase at the stream bank appears a reasonable solution save for a number of unacceptable consequences, the first of which is the large environmental footprint with resulting damage to the salt marsh. The second is the installation of stairs off the bank leading to the water. This would require 4" x 6' posts situate at the marsh edge which raises the probability of bank erosion and is not a viable option.
- ---- 4. Consideration was given to moving the project further downstream where the channel widens but this presented several unacceptable issues, one being the distance from the upland to the brook which increases dramatically as you move southward which would result in a lengthy structure with a large environmental footprint. In addition, there are several vernal pools which would have to be crossed in order to reach the stream.
- ---- 5. The last item for consideration is the use of the existing staircase at the head of the brook before it rises 2' in elevation. This alternative is not feasible due to the character of the stream bed which has ledge and rock blocking passage by kayak upstream from the site.

As a result, the proposed method chosen for access is a fixed ramp, $4' \times 12'$ leading to a fixed pier, $4' \times 50'$ supported on driven pile, elevated from the marsh 1' for each foot of width. A lightweight seasonal ramp, $3' \times 21'$ leads to a seasonal float, $6' \times 14'$ which will extend into the brook 13' leaving 17' of water for passage at high tide as the stream width at this location is 33'.

Care will be taken to keep the pier structure as short as possible to allow the seasonal ramp to connect to the float without impacting the stream bank. The pier will have a low profile and will be aesthetically pleasing.

Visual Impact

The proposed dock system will not be visible from any historic landmarks and will Have as low a profile as reasonably possible. The ramp will be stored on the pier During the off season and the float will be stored in the upland.

Wetland Impact

The area of impact to the salt marsh below highest annual tide is estimated to be less than 5 square feet. The estimated indirect impact at or below mean low water is estimated to be zero square feet.

Erosion Control Plan

Soil disturbance above mean high water will be limited to six $6'' \times 6''$ supports for the first three bents of the structure from the junction of the upland and the marsh. Supports for the balance of the structure will be limited to four $6'' \times 6''$ pile driven into the salt marsh. There will be no soil disturbance below low water.

Construction Plan

1. Fixed Pier: 4' x 50'

Pier supported on driven pile using 6" x 6" timbers; 6" x 6" headers; 4" x 6" stringers; X trussed handrail both sides; 5/4" x 6" Alaskan Yellow cedar decking.

2. Access Ramp: 4' x 12'

4" X 6" stringers; 4" x 6" posts dug into the ground; Alaskan Yellow cedar decking.

3. Seasonal Ramp

Timber ramp. $2'' \times 6''$ stringers, X bracing, old fashioned handrail; $5/4'' \times 6''$ Alaskan Yellow cedar decking; custom fabricated irons securing ramp to float and to pier.

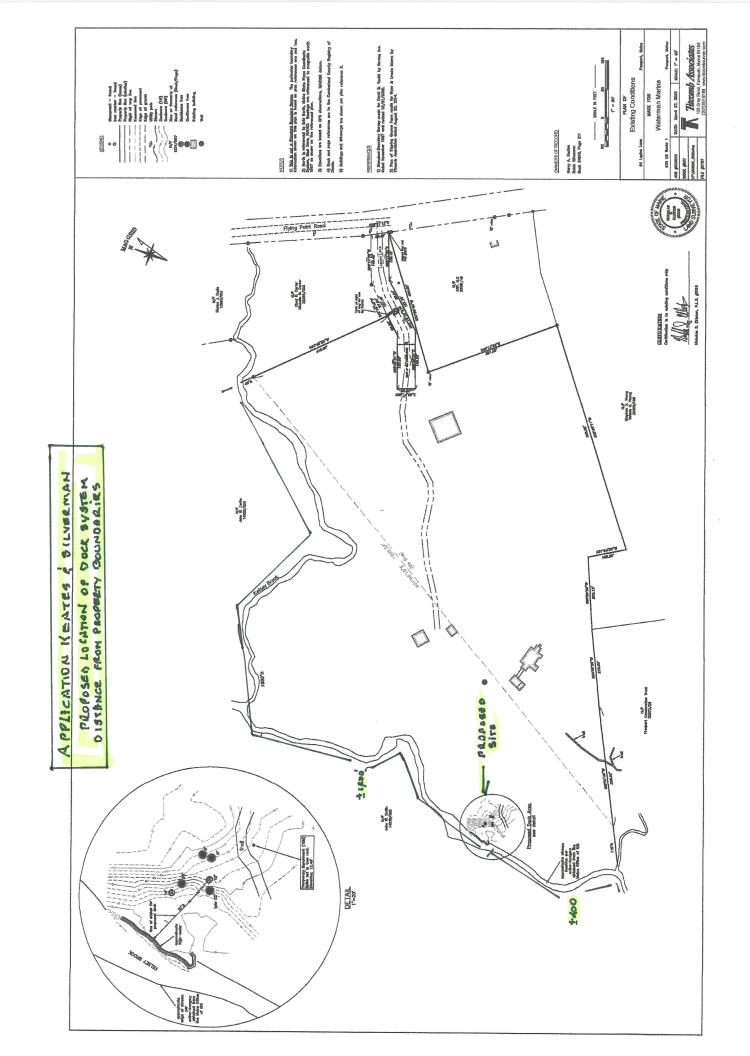
4. Seasonal Float, 6' x 14'

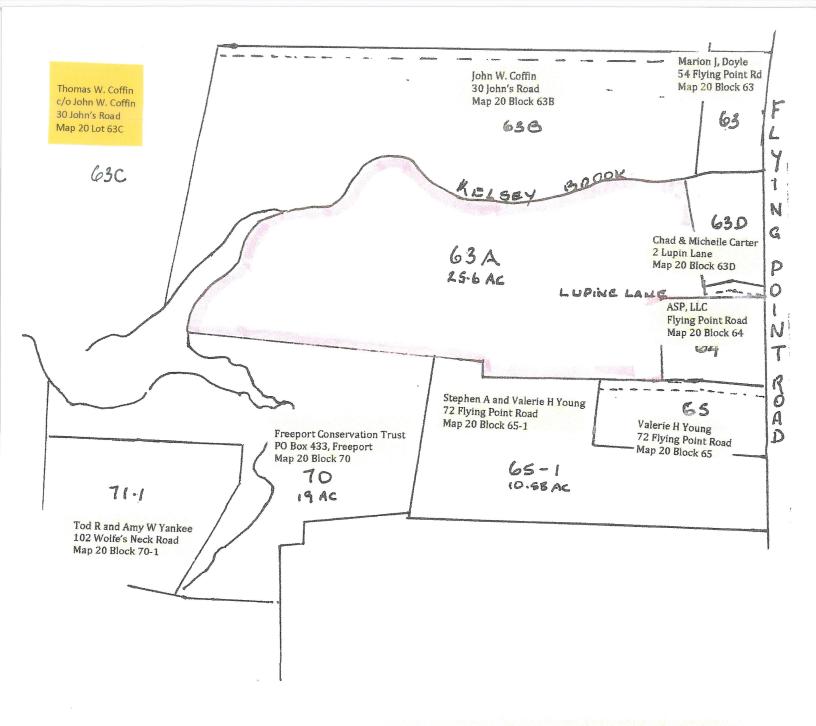
 $2'' \times 10''$ laminated stringers; corner bollards; $4'' \times 6''$ structural supports for integrity of float; fully foamed; $5/4'' \times 6''$ Alaskan Yellow cedar decking; $4'' \times 6''$ shoes on bottom to keep the float above stream bed an for seasonal hauling and launching.

5. Material Specifications:

All structural lumber subject to salt water immersion is CCA pressure treated yellow pine; all structural lumber not subject to salt water immersion is ACQ or equivalent severe surface pressure treated southern yellow pine. All decking and finish handrail is Alaskan Yellow cedar; all hardware is hot dipped galvanized product except fasteners for decking and handrail which are stainless steel.

Revised 08/26/20.





Application of Harry Keates & Robin Silverman
Plan Showing Location
of
Property Boundaries
and
Names of Abutters

10/05/2019 Revised 08/26/20



29 August, 2020

Thomas W. Coffin c/o John W. Coffin 30 John's Road Freeport, ME 04032

Harry Keates & Robin Silverman/Notice of Application 64 Lupine Lane, Freeport

Take notice that an application will be made on 9 September, 2020, on behalf of the above mentioned persons to the Coastal Waters Commission for a permit to build a dock system for recreational access to tidal waters at 64 Lupine Lane. The meeting will be held in a virtual format at 6 pm. If you wish to participate please contact the following person at town hall who will provide instructions for access:

Jhanselman@freeportmaine.com

This notice is sent to you as an abutter to the subject property.

Peter F. Spencer

Agent for the owners Map 20 Block 63C