

## STANDARD LEASE APPLICATION: NON-DISCHARGE

### 1. APPLICANT CONTACT INFORMATION

Applicant	Mook Sea Farms Inc.		
Contact Person	Steve Zimmerman		
Address	321 State Rt. 129		
City	Walpole		
State, Zip	Maine, 04573		
County	Lincoln		
Telephone	855-563-1456		
Email	mkseafarm@gmail.com		
Type of Application	<input type="checkbox"/> Draft Application [submitted before scoping session session] <input checked="" type="checkbox"/> Final Application [submitted after scoping session]		
Dates	Pre-Application Meeting: 3/1/22	Draft Application Submitted: 4/8/22	Scoping Session: Held 8/2/2022
Payment Type	Draft Application: <input type="checkbox"/> Check (included) <input type="checkbox"/> Credit Card		Final Application: <input checked="" type="checkbox"/> Check (included) <input type="checkbox"/> Credit Card

**Note:** The email address you list here will be the primary means by which we will contact you. Please provide an email address that is checked regularly. If you do not use email, please leave this blank.

### 2. PROPOSED LEASE SITE INFORMATION

Location of Proposed Lease Site	
Town	Damariscotta
Waterbody	Damariscotta River
General Description (e.g. south of B Island)	West of Miles Hospital (Days Cove)
Lease Information	
Total acreage requested (100-acre maximum)	4 Acres
Lease term requested (20-year maximum)	20 Years
Type of culture (check all that apply)	<input type="checkbox"/> Bottom (no gear) <input checked="" type="checkbox"/> Suspended (gear in the water and/or on the bottom)
Is any portion of the proposed lease site above mean low water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**Note:** If you selected yes, you need to complete the steps outlined in the section titled: “19. Landowner/Municipal Permission Requirements”.

### 3. GROWING AREA DESIGNATION

Directions: Information for growing area designations can be found here:

<https://www.maine.gov/dmr/shellfish-sanitation-management/closures/index.html>

Growing Area Designation (e.g. WL):	WQ
Growing Area Section (e.g. "A1"):	CR-1

**Note:** If you are proposing to grow molluscan shellfish in waters classified as anything other than open/approved, you will need to contact the Bureau of Public Health to discuss your plans at the following email: [DMRPublicHealthDiv@maine.gov](mailto:DMRPublicHealthDiv@maine.gov)

### 4. SPECIES INFORMATION

A. Please complete the table below and add additional rows as needed.

Name of species to be cultivated (include both common and scientific names):	Name and address of the source of seed stock or juveniles	Maximum number (or biomass) of organisms you anticipate on the site at any given time
1. American Oyster, <i>Crassostrea virginica</i>	Mook Sea Farms Inc., 321 State Rt. 129, Walpole, ME	10,560,000 animals in total are possible on site at any given time. Typical seed on site would be approximately 6-8 million seed oysters.
2. Bay Scallop, <i>Argopecten irradians</i>	Mook Sea Farms Inc., 321 State Rt. 129, Walpole, ME	5 million seed
3. Softshell Clam, <i>Mya arenaria</i>	Mook Sea Farms Inc., 321 State Rt. 129, Walpole, ME	5 Million Seed
4. Surf Clam, <i>Spisula solida</i>	Mook Sea Farms Inc., 321 State Rt. 129, Walpole, ME	5 Million Seed
5.		

B. Do you intend to possess, transport, or sell whole or roe-on scallops?  Yes  No

**If you answered "yes"** please contact the Bureau of Public Health to discuss your plans at the following email: [DMRPublicHealthDiv@maine.gov](mailto:DMRPublicHealthDiv@maine.gov)

**Note:** If you are proposing to grow molluscan shellfish, this application also serves as your written operational plan as required in the National Shellfish Sanitation Program (NSSP) Model Ordinance Chapter 2 and must be maintained in your files. If you wish to submit an operational plan separate from this application, please contact: [DMRPublicHealthDiv@maine.gov](mailto:DMRPublicHealthDiv@maine.gov)

## 5. VICINITY MAP – See Appendix A

**Note:** Please label as: ‘Vicinity Map’.

**Directions:** Using a NOAA Chart or USGS topographic map, show the area within a minimum of one-half mile of the proposed lease site.

The map needs to display the following:

- The waters, shore lands, and lines of mean high and mean low water within the general area of the lease
- An arrow indicating true north
- A scale bar
- The approximate lease boundaries

## 6. BOUNDARY DRAWING – See Appendix B

**Note:** Please label as: ‘Boundary Drawing’.

**Directions:** Depict the boundaries of the proposed lease site. Provide a drawing with all corners, directions, and distances labeled. Provide coordinates for each corner as follows:

- Coordinate Description  
Provide geographic coordinates for each corner of the lease site in latitude and longitude as accurately as possible (e.g., to the nearest second or fraction of a second). Identify the datum from the map, chart, or GPS unit used to develop these coordinates. The datum will be shown on the map or chart you are using. The Coordinate Description may be provided separately from the Boundary Drawing.

## 7. SITE DEVELOPMENT

**Directions:** If your operations require the use of cages, nets, ropes, trays, or any object (structure) other than the organism to be grown directly on the bottom or buoys to mark the corners of the lease site, you must submit gear drawings and maximum structure schematics (information below). This section is intended to provide accurate plans depicting the physical structures to be placed in the proposed area. All dimensions need to be labeled with the appropriate units (i.e. 10ft, 10in). If you are proposing a bottom lease (no gear), please skip to question “F. Marking”.

**Note:** You may embed the schematics within the document or attach them to the end of your application. If you attach the schematics, please label them according to the instructions provided below.

### A. Gear Information

**Directions:** Include a drawing of an individual piece of gear for each of the gear type(s) you plan to use. Include units referenced (i.e. 10in, 10ft, etc.).

1. Gear Drawing: Please include the following for each gear type that will hold organisms to be cultured (e.g. polar circles, marine algae longlines, oyster cages) and label as “Gear Drawing”. This view must show the following:
  - Length, width, and height of each gear type.

**For Gear Drawings, please see Appendix C1-C4**

2. Gear Table: List and describe each individual gear type that you will use in the table below. (e.g. polar circles, marine algae longline, oyster cages, moorings, mooring lines, buoys, etc.).

<b>Specific Gear Type</b> (e.g. soft mesh bag)	<b>Dimensions</b> (e.g. 16"x20"x2")	<b>Time of year gear will be deployed</b> (e.g. Spring, Winter, etc.)	<b>Maximum amount of this gear type that will be deployed on the site</b> (i.e. 200 cages, 100 lantern nets, etc.)	<b>Species that will be grown using this gear type</b>
Zapco Tumbler	13" x 35"	Late Winter, Spring, Summer, Fall, Early Winter	13,200 Zapco Tumblers	American Oyster, Crassostrea virginica
Rebar Staples	10' x 5'	Late Winter, Spring, Summer, Fall, Early Winter	4,400 Posts	American Oyster, Crassostrea virginica
PVC Pipe	5' x 3"	Late Winter, Spring, Summer, Fall, Early Winter	3,520 PVC Pipes	American Oyster, Crassostrea virginica
Plastic Cable	½" x 30 ft	Late Winter, Spring, Summer, Fall, Early Winter	66,000 ft Cable	American Oyster, Crassostrea virginica



**B. Maximum Structure and Mooring System Schematic**

**Directions:** Include drawings of your maximum gear layout. Include units referenced (i.e. 10in, 10ft, etc.).

1. Overhead View. Please include the following and label as “Overhead View”:
  - Maximum layout of gear, including moorings.
  - Length and width of project.
  - Approximate spacing between gear.
  - Lease boundaries and the location of proposed corner markers and any additional gear markers that would be present.

**For the Overhead View Drawings, please see Appendix D1-D3.**

2. Cross-Section View. Please include the following and label as “Cross-Section View”:
  - The sea bottom.
  - Profile of gear in cross-section as it will be deployed.
  - Label gear with dimensions and materials.
  - Show mooring gear with mooring type, scope, hardware, and line type and size.
  - Depth of gear in relation to the water’s surface at mean low water and mean high water (if applicable).

**Note:** Please include an additional Cross Section View, depicting the elements listed above, if there will be seasonal changes to gear layout (i.e. over wintering).

**For the Cross-Section View Drawings, please see Appendix E1-E3.**

**C. On-Site Support Structures**

1. Describe structures such as barges, sheds, etc., to be located on-site. Provide a schematic and indicate the dimensions, including height above sea level, materials, etc.
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A 12 foot by 40 foot barge would be moored near the lease site during periods of husbandry, as well gear deployment and recovery, Typically during the months of May-November. This barge would be moored on a mooring registered by the town, the mooring will be located “off lease” at coordinates 44 1.531 N, 69 32.181W.
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2. Describe the storage and use of oil, gasoline, or other hazardous materials on site. If petroleum products are to be stored on site, provide a spill prevention plan.
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No hazardous materials will be stored on site. Gasoline will be used to operate boats on site.
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#### D. Gear Color

Provide the color of the gear and structures proposed to be used at the lease site.

The zapco tumblers are solid black in color. The rebar staples that the zapco tubes can hang from are an oxidized metal color, akin to dark orange/brown. The PVC pipes that the zapco tubes can also use are white or grey in color. Black ½" plastic cable would be suspended from one PVC pipe to another, with three zapco tumblers hanging from the cable.

The rebar staple configuration is how we plan on using the site for the foreseeable future. We would like to include the option of using the PVC pipe and cable configuration, in the event that we find it works more efficiently for the farm.

#### E. Equipment Layout

Provide schematic or photographic renderings of the generalized layout of the equipment as depicted from two vantage points on the water. Provide the locations of the two vantage points.

**For the Equipment Layout Schematic, please see Appendix F1-F2.**

#### F. Marking

Will you be able to mark your site in accordance with DMR regulations, Chapter 2.80? In part, this requires marker buoys which clearly display the lease ID and the words SEA FARM to be located at each corner of the lease.

Yes  No

If you answered no, explain why and suggest alternate markings.

The marking for this site is unique in that there will be rebar staples or tall PVC pipes protruding from the ground at low tide. We will have a legible sign on the west border of the lease warning mariners of the submerged gear. The lease boundaries will be marked in accordance with DMR regulations. Rebar staples and PVC pipes will be arranged in grids on the lease to support the Zapco tubes containing shellfish seed. In addition to the boundary markers, there will be smaller buoys further marking the lease perimeter so the location is obvious to small craft operators who may traverse the site.

**Note:** If a lease is granted, you will also be required to mark the site in accordance with appropriate US Coast Guard Regulations. If you have questions about US Coast Guard Regulations contact: 1<sup>st</sup> Coast Guard District, Aids to Navigation Office ((617)-223-3293).

## 8. PRODUCTION ACTIVITIES

**Directions:** If you are cultivating more than one species, you will need to provide the following information for each species. Please attach additional pages if needed.

**A.** Please explain your proposed seeding activities. What months will seeding occur and how often will you be onsite to seed during this time.

Zapco tubes will be used in ice-free months (March-Jan). Seed will be deployed starting in the March and periodically until October. During times when seed is being deployed, we will be on site daily to place equipment and stock it. Most of the work is tide specific, so activity will be limited to low tide.

**B.** Please explain your proposed tending/maintenance activities.

Activity can be daily during busy periods, when we grade and thin seed, and less intensive when we are simply checking on gear to ensure everything is in order. Rebar will be installed on site beginning in April and ending in June. Seed will be deployed in Zapco tubes beginning in May. Bars and tubes will remain onsite from April through November. Zapco tubes will be removed starting in September. Bars will be removed or laid flat on mud beginning in October. Gear will be monitored 3-5 days per week while gear and oysters are on the lease.

Thinning would begin the second week of July. Tubes will be harvested, at low tide and brought to Barge for processing. Processing involves dumping Zapco tubes into a tumbler on the barge. The tumbler separates the oysters by size. The tumbled/sized oysters are then dumped into a bagging machine that we use to bag the oysters at the appropriate density (lower density/thinned). The tumbler and the bagger both run off a quiet 5kw gas generator. The process takes about 3 hours from start to finish. This would occur once per day around the low tide, generally 2-3 weeks out of the month 2-5 days per week depending on the tidal cycle. Thinning would end around the second week of September.

**C.** How frequently will you visit the site for routine tending/maintenance (i.e. flipping cages, etc.)?

During deployment of gear and oysters Mook Sea Farm employees will be onsite during most weekdays when the tides allow access during working hours. At other times we will check the system to make sure it is properly tensioned and make any necessary adjustments several times each week.

**D.** Describe the harvesting techniques you will use. If you plan on using a drag, please provide the dimensions.

To harvest product from the tubes we will bring a boat alongside the rows we are harvesting with a person in the water unclipping the tubes and passing them to a person in the boat. We may have multiple boats and multiple people in the water during harvests.

**E.** How often will you be at the site during harvesting periods?

During harvest periods, we will be at the lease site daily. Harvesting must be done at low tide, so we will only be on site during the low tides that coincide with regular work hours.

**F.** Will gear be on the site year-round?  Yes  No

**G.** Describe any overwintering or “off season” plans for the site. For example, will you remove gear from the site and/or deploy gear in different areas within the proposed site? Please include where gear or product will be located if removed from the site.

We will remove all Zapco tubes from the site during the off season. Zapco tubes are stored at our facility (321 State Rt. 129). The rebar staples will be placed in bundles of five, using a heavy duty zip tie to secure them together. The rebar will then be laid down in the mud so that they are level with the river floor, having only the zip tie vertical for easy retrieval in the spring. The PVC pipes will be removed from the site during the off season.

**H.** Please provide details on any predator control techniques you plan to employ.

We do not plan to deploy any predator control techniques. We have not witnessed predators on the site.

- I.** Suspended culture gear can attract birds that roost on the gear and defecate, potentially creating a pollution source impacting shellfish held within the gear. In order to comply with the National Shellfish Sanitation Program (NSSP) Model Ordinance (MO), DMR is requiring that applications for the suspended culture of shellfish include a description of mitigation or deterrent measures to minimize the potential pollution impacts of birds at the proposed site. If appropriate, include sketches or photos that clearly depict those measures put into practice.

Examples may include:

- Submerging suspended gear and associated product at a depth sufficient to deter roosting for two weeks before harvest
- Attaching physical deterrents (i.e. zip ties) to gear
- The site is proposed for the culture of seed only
- The site is proposed for the culture of adductor-only scallops (i.e. no other shellfish species would be grown on the site)
- Proposed gear would always be suspended below the surface of the water at a depth sufficient to deter roosting (i.e. as is common for scallop lantern nets)

The Zapco tubes are only exposed for 1-2 hours per tide, and the thin rebar staples are not conducive for birds to land on. We have not seen birds on the gear during our operation of the site as an experimental lease.

## 9. NOISE AND LIGHT

**Directions:** If a question does not pertain to your proposed operations, please write “not \_\_\_\_\_”

**applicable” or “N/A”.**

**A. What type of boats will be used on the site? When and how often will these vessels be on the site?**

28 ft Carolina Skiffs or other shallow draft vessels will be used on site. These vessels will be on site from spring to late fall, during weekdays and working hours, which can range from 6am to 4pm. The site will be used only at low tide, which will restrict our access to only once a day.

**B. What type of powered equipment (e.g. generator, power washer, grading equipment, barges, etc.) will be used on the site? When and how often will the equipment be used?**

We will be using our 28 ft. Carolina Skiffs or other shallow draft vessels, with Four-Stroke engines. We may also use some post-drivers driven by a small gas engine on site to drive in the rebar staples.

**C. Specify how you intend to reduce noise levels from the boats and other powered equipment.**

Our boats use quiet Four-Stroke engines. The proposed lease site is near a commonly used channel, we will not be producing any additional noise that is not already produced by boat traffic in the channel. Since we are accessing the site at low tide, the water is often too shallow for the prop on the boat’s motor. This requires us to operate the vessel at low RPMs, or turn off the engine and push the boat by hand, further reducing noise levels. The small gas engine that may be used to drive posts in is quiet and efficient.

**D. Provide the number, type (whether fixtures are shielded), wattage and location of lights, other than those used for navigation or marking, that will be used at the proposed lease site.**

No lights will be used at the proposed lease site. In the event of an emergency that requires attention in the dark, small hand held lanterns and or head lamps may be used to illuminate the work area during the emergency response.

E. Indicate under what circumstances you might work at your site beyond daylight hours.

Any afterhours presence on the site would be extremely rare if at all. We might be on the site after dark to deal with a gear emergency (i.e. damage from boats navigating out of the channel or weather related problems) and this would only be if the timing of low tide precludes access to the site during daylight hours.

## 10. CURRENT OPERATIONS

**Directions:** If a question does not pertain to your proposed operations, please write “**not applicable**” or “N/A”.

A. Describe your existing aquaculture operations, including the acronyms of all active leases and/or licenses.

Mook Sea Farms has a land-based hatchery south of Wiley Point in Walpole, where we produce the seed we grow on our 5 leases: DAM DC (experimental); DAM EL3; DAM PP2; DAM SW; and DAM PI2. We also have a land-based market oyster improvement/inventory system at our Walpole property. All of these leases use OysterGro cages for growing larger seed oysters to market size. The experimental lease, which we want to convert to a standard lease, is used primarily as a nursery where we grow smaller hatchery seed to larger sizes which can be transferred to OysterGro cages on our other leases. The Peter’s Island lease (DAM PI2) is used from late October to the end of April to store market ready oysters at a site where there is typically less ice. This allows us to harvest and sell oysters year round.

B. What are your plans for any existing leases and/or Limited Purpose Aquaculture (LPA) licenses if the lease is granted? Will any existing leases and/or LPA licenses be relinquished if the lease is granted? If so, please indicate which ones.

All existing leases will remain if the lease is granted. The experimental lease DAM DC will expire, with the proposed lease replacing it. As noted above, although we intend to grow some seed on the proposed site to larger sizes, we have found that the Zapco culture system is an excellent way to grow hatchery seed to larger sizes before transfer to our OysterGro cages.

## 11. ENVIRONMENTAL CHARACTERIZATION

**Directions:** Using your knowledge of the area, describe the environment of the proposed lease site. Be sure to include units of measurement in your answers (i.e. feet, cm/s).

A. What are the approximate depths at mean low water?

The approximate depths at mean low water are 1-3 inches.

**B. What are the approximate depths at mean high water?**

The approximate depth at mean high water is 10 feet.

**C. Provide the approximate current speed and direction during the ebb and flow.**

Current speeds are less than or equal to 1 knot (slightly less than in the channel). The ebb direction is southwest. The flood direction is northeast.

**D. The following questions (D.1 through D.6) may be answered in writing or by submitting a video. If you plan to submit a video, please contact the Department prior to video collection.**

**1. What are the bottom characteristics (mud, sand, gravel, rock, ledge or some mix, etc.)?**

The bottom is fairly soft mud with a few small cobbles mixed in. It is characteristic of a typical Maine mudflat.

**2. Describe the bottom topography (flat, steep rough, etc.).**

The bottom topography is flat.

**3. Describe marine organisms by species or common names. Based on your personal observations or other sources of information, are these species abundant, common, or rare?**



Green crabs are the most common species in the area, along with low densities of other bivalve shellfish (hard/soft shell clams, oysters, and mussels). Finfish are likely in the area during high tide, and may even be attracted to the structures we would put in place.

**4. Are there shellfish beds or fish migration routes in the surrounding area? If so, please describe.**

There are no known shellfish beds in the area, although our usage may result in stray oysters landing on the mud bottom if they accidentally escape the Zapco tubes. There are no known fish migration routes, although our structures may attract fish during high tide.

**5. Describe the presence and extent of submerged aquatic vegetation, i.e. eelgrass, within the proposed lease area. Please include the date of this observation along with the method of observation. If submerged aquatic vegetation is observed, please also describe the abundance below and sketch the limits of the beds in the vicinity map.**

We have observed no submerged vegetation at or near this site. We are able to visually observe this each time we visit the current experimental lease site at low tide. The water is clear enough to see the bottom of the river, and observe the lack of vegetation. These observations have been made starting prior to our application for an experimental lease, which was granted in February of 2021, and continuously throughout 2021 as we used the lease.

<b>6.</b> Describe the general shoreline and upland characteristics (rocky shoreline, forested, residential, etc.)
The shoreline is fringed with narrow salt marshes, rocky areas, with residential dwellings to the north and south. To the east there is a commercial property (Miles Hospital).

<b>E.</b> Is your proposed lease located within a Maine Department of Inland Fisheries and Wildlife designated Essential Habitat?
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**Note:** The location of Essential Habitats in the State of Maine, along with information on how projects within these areas are reviewed, can be found here: <https://www.maine.gov/ifw/fish-wildlife/wildlife/endangered-threatened-species/essential-wildlife-habitat/index.html>

*If a project is located within an Essential Habitat*, applicants are strongly encouraged to contact the MDIFW Environmental Review Coordinator ([John.Perry@maine.gov](mailto:John.Perry@maine.gov), phone: 207-287-5254) prior to application submission.

**12. EXISTING USES**

<b>A.</b> Describe the existing uses of the proposed area in questions A.1 through A.5 below. Please include the a) type b) time of year c) frequency and d) proximity to the lease site for each existing use.
<b>1. Commercial Fishing</b>
Since the mudflat is in a prohibited area, no shellfish or commercial fishing occurs in this area. We have no witnessed any boats in this cove, although small boats (mostly paddled) can and do pass through the area at high water.
<b>2. Recreational Fishing</b>
The only recreational fishing common to this area is bass fishing, which occurs in summer months. No boats have been witnessed fishing in the proposed lease site, however it is possible. The cove is only accessible to recreational boats at high tide, since it is so shallow at low tide.

**3. Boating Activities (please also include the distance to any navigable channel(s) from your proposed site at low water)**

There is frequent use of the channel to the west of the site during summer months. The Western edge of the experimental lease is 442 ft. away from the channel (see diagram). Since the lease is on a shallow mudflat, it is inside of any boat moorings or constant boat activity. We have not seen any boats in this cove.

**4. Ingress and egress (i.e. coming and going) of shorefront property owners within 1,000 feet of the proposal (e.g. docks, moorings, landing boats on shore, etc.)**

There are four moorings within 1,000 ft of the proposed lease site. Their approximate distances are 371, 596, 736, and 986 feet from the proposed lease site. There is also one dock to the north, approximately 748 feet from the site. The moorings are used most often during the summer. Their travel is from the mooring to the channel, which is in the opposite direction of the proposed lease site. The dock is not often seen used, however activity remains most common in the summertime.

**5. Other uses (kayaking, swimming, etc.)**

There are kayakers, especially in the summertime, who frequent the edge of the river and some enter this area. Our use is not prohibitive of their travel. We often have kayakers paddling through our gear in the river, and this lease would be exactly the same. The local kayak rental in Damariscotta markets tours of the aquaculture sites and gear to customers, so we anticipate that our gear will be welcome. We have not seen swimmers or other uses in this area.

**B. Are there private docks, moorings, or other access points within 1,000 feet of the proposed lease? If yes, please include approximate distance from the proposed lease.**

There is one dock to the north, approximately 748 feet from the site.

**C. Are there public beaches, parks, docking facilities or federally, state, or municipally conserved lands within 1,000 feet of the proposed lease site? If yes, please describe and include approximate distances from proposed lease.**

There are no public beaches, parks, docking facilities, or conserved lands within 1,000 feet of the proposed lease site.

**D.** Are there any Limited Purpose Aquaculture (LPA) licenses or aquaculture leases within 1,000 feet of your proposed lease site? If yes, please list their acronyms below.

Current and pending aquaculture leases and active LPA licenses may be found here: <https://www.maine.gov/dmr/aquaculture/leases/index.html>

There are no LPA licenses or aquaculture leases within 1,000 feet of the proposed lease site.

### **13. EXCLUSIVE USE**

If your lease is granted, what activities would you request be excluded from occurring within the boundaries of the lease site? In your answer please address applicable commercial and recreational fishing, boating activities, and other activities you listed in the 'Existing Uses' section of this application.

We would ask any recreational or commercial shell fishing be prohibited from the lease site. Boating could occur during high tides, and we would include obvious signage to alert boaters of sunken gear.

## 14. RIPARIAN LANDOWNERS AND SITE ACCESS

A. If your lease is within 1,000ft of shorefront land (**which extends to mean low water or 1,650 ft. from shore, whichever is less, according to NOAA charts**), the following supporting documents are required:

1. A labeled copy of a tax map(s) depicting the location of the proposed lease site and including the following elements:
  - Label the map “Tax Map: Town of (name of town).”
  - Legible scale
  - Tax lot numbers clearly displayed
  - The boundaries of the proposed lease
2. Please use the Riparian Landowner List (included on the next page) to list the name and address of every shorefront landowner within 1,000ft of the proposed lease site. Have the tax collector or clerk of the municipality certify the list. Refer to the riparian determination guidance document to ensure all riparian landowners are included:  
<https://www.maine.gov/dmr/aquaculture/forms/documents/RiparianDetermination.pdf>

*Note:* When the application and riparian list are both ready to be submitted, you may choose to email a copy of the riparian list and proposed lease coordinates to [DMRAquaculture@maine.gov](mailto:DMRAquaculture@maine.gov) for staff to verify that all required parcels are included on the list *before* having it certified by the municipality. DMR will not verify a riparian list multiple times, so please ensure there will be no additional changes to the application before emailing the riparian list for verification.

3. If any portion of the site is intertidal, you need to complete the steps outlined in the section titled: “19. Landowner/Municipal Permission Requirements”.

**B.** Will your access to the lease area be across riparian land?

Yes     No

**Note:** If you selected yes, you will need to complete the landowner permission requirements included in “19. Landowner/Municipal Permission Requirements” of this application.

**C.** How will you access the proposed site?

We will access the site with our boats, which are moored at our home facility at 321 State Rt. 129, Walpole, ME.

**D.** How will your proposed activities affect riparian ingress and egress?

Owners will be able to access their property by travelling around the lease site. The closest shore is about 430 feet from the site. This provides a reasonable area to access the shore by going southeast of the site. There is also a 450 foot space north of the site, providing another means of access for riparian owners.

## RIPARIAN LANDOWNER LIST

***\*THIS LIST MUST BE CERTIFIED\****

On this list, please show the current landowners' names and mailing addresses as listed in the municipal tax records for all riparian shorefront parcels within 1,000 feet of the proposed lease site along with the map and lot number for each parcel. **It is the applicant's responsibility to assemble the information for the Town Clerk to certify.** The Town Clerk *only* certifies that the information is correct according to the Town's records. Once you have completed the form, ask the Town Clerk to complete the certification section below. If the parcels are within more than one municipality, provide a separate, certified riparian list for each municipality.

**TOWN OF:**   Damariscotta  

MAP #	LOT #	Landowner name(s) and address(es)
001	038	Neil Parsons Jr. P.O. Box 762 Damariscotta, ME, 04543
001	041	Coves Edge, Inc. 26 Schooner St, Damariscotta, ME, 04543
001	038-002	Miles Health Care, Inc. 35 Miles St, Damariscotta, ME, 04543
011	027	Miles Health Care, Inc. Webster, Vanwinkle Building 79 Schooner St, Damariscotta, ME, 04543
011	029	Miles Health Care, Inc. Schoone Cove Building 35 Schooner St, Damariscotta, ME, 04543
009	022-002	Daniel F. Belknap 56 Water St, Damariscotta, ME, 04543
009	022-001	Anna Belknap Siegel and Eric Siegel (JT) 2455 Ivanhoe Dr, Los Angeles, CA, 90039
009	023	Martha R. Dodge 53 Water St, Damariscotta, ME, 04543
009	025	Jacqueline Alana Cygnus Belknap 10 Belknap Point Rd, Damariscotta, ME, 04543
009	024	Maine Medical Center, Miles Memorial Hospital, ATTN: Accounts Payable 35 Miles Rd, Damariscotta, ME, 04543
009	026	David J. and Louise M. Belknap 9 Belknap Point Rd, Damariscotta, ME, 04543



009	027	Samuel L. Belknap Jr., Personnel Representative (Estate of Lucy S. Belknap) 7 Belknap Pt. Rd, Damariscotta, ME, 04543
009	028-001	<del>Malone</del> / Jacobs, Revocable Trust 7586 Centaur Dr, Evergreen, CO, 80439
009	028	Dean W. Jacobs P.O. Box 123, Damariscotta, ME, 04543
001	038-004	Gustaf R.W. Mclhenny P,O, Box 393, Newcastle, ME, 04553
009	003	John W. Smith 85 Bristol Rd, 04543 Damariscotta, ME
009	004	Norma W. Piper 79 Bristol Rd, Damariscotta, ME, 04543
009	005	Jocelyn S. Capen PO Box 194, Damariscotta, ME, 04543
009	006	Vicki K. Black, Constance J (JT) Moon 73 Bristol Rd, Damariscotta, ME, 04543
009	007	Roy E Seibel Jr. PO Box 580, Damariscotta, ME, 04543
009	008	Philip and Lydia Nield PO Box 892, Damariscotta, ME, 04543
009	009	<del>Stein</del> Stein Beiser, Andrew Terry 61 Bristol Rd, Damariscotta, ME, 04543
009	013-001	Trustee, Patricia OSmer Rev Trust U / A / D April 589 Fair St, Carmel, NY, 10512
009	013	Malcolm C. and Marie R. Foster 1155 Willow Ln, Annapolis, MD, 21409

009	064	Miles Properties, Inc, Hospital and Pump House 35 Miles St, Damariscotta, ME, 04543
009	065	Miles Memorial Hospital 35 Miles St, Damariscotta, ME, 04543 <i>Merged with above lot. -</i>

**Please use additional sheets if necessary and attach hereto.**

**CERTIFICATION**

I, Heather Dube, Town Clerk for the Town of Damariscotta certify that the names and addresses of the property owners listed above, as well as the map and lot numbers, are those listed in the records of this municipality and are current as of this date.

SIGNED: Heather Dube DATE: 3/22/2022





## 15. TECHNICAL CAPABILITY

Provide information regarding professional expertise. Attaching resume or documentation of practical experience necessary to accomplish the proposed project would satisfy this requirement.

Mook Sea Farms has reared shellfish on the Damariscotta River for 37 years. During this time we have grown tens of millions of oysters using a number of different methods and technologies. Our river crew is well trained and works on the river harvesting, tending gear and shellfish all year long in all kinds of weather. Last year we successfully used Zapco tubes on this experimental lease site.

## 16. FINANCIAL CAPABILITY

### A. Financial Capability

Please provide documentation to show you have the financial resources to implement the proposal. For example, you may submit a letter from a financial institution or funding agency indicating that you have an account in good standing, or their willingness to commit funds.

**Note:** Any financial information you submit with your application is part of the public record. Please exercise discretion when submitting financial information.

See Appendix H for a letter from our financial institution.

### B. Cost Estimates

Please provide cost estimates of the proposed aquaculture activities.

The materials we plan on using for this year include the Rebar Staples, Zapco tumblers, and longline clips to attach the tumblers to the rebar staples. The cost estimate for this material is \$495,000. We already own all of the materials that we plan to use this year, and thus will not incur any additional equipment costs. The labor cost estimate is \$48,000 to deploy and process the Zapco tumblers, and the seed that they will contain. This labor cost estimate is for one year of labor, at our current scale of operations.

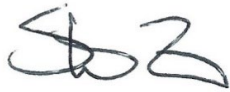
## 17. ESCROW ACCOUNT OR PERFORMANCE BOND

Check the category that describes your operation:

Check Here	Lease Category	Amount of Required Escrow or Performance Bond
<input type="checkbox"/>	No gear/structure, no discharge	\$500.00
<input type="checkbox"/>	No gear/structure, discharge	\$500.00
<input type="checkbox"/>	≤ 400 square feet of gear/structure, no discharge	\$1,500.00
<input checked="" type="checkbox"/>	>400 square feet of gear/structure, no discharge	\$5,000.00*
<input type="checkbox"/>	Gear/Structure, discharge	\$25,000.00

\*DMR may increase the bond/escrow requirements for leases with more than 2,000 square feet of structure.

I, (*printed name of applicant*) Steve Zimmerman have read DMR Aquaculture Regulations Chapter 2.64(10) (D) and if this proposed lease is granted by DMR, I will either open an escrow account or obtain a performance bond, in the amount determined by the lease category.



Chief Operating Officer

9/29/2022

\_\_\_\_\_  
**Applicant Signature**

\_\_\_\_\_  
**Date**

*Note: Add title if signing on behalf of a corporate applicant.*

**ADDITIONAL APPLICANTS:** Each applicant must sign this section indicating that they will open an escrow account or obtain a performance bond. Use the space below for additional persons listed on the application. You may attach additional pages, if necessary.

I, (*printed name of applicant*) \_\_\_\_\_ have read DMR Aquaculture Regulations Chapter 2.64(10) (D) and if this proposed lease is granted by DMR, I will either open an escrow account or obtain a performance bond, in the amount determined by the lease category.

\_\_\_\_\_  
**Applicant Signature**

\_\_\_\_\_  
**Date**

*Note: Add title if signing on behalf of a corporate applicant.*

**18. APPLICANT SIGNATURE PAGE**

I hereby state that the information included in this application is true and correct. I have also read and understand the requirements of the Department’s rules governing aquaculture and the application instructions pertaining to the standard lease process.

Printed name: Steven Zimmerman

Title (*if corporate applicant*): Chief Operating Officer

Signature:  Date: 9/29/2022

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**Note:**

- All applicants must sign and date this page. Please use the space below, if additional signatures are required.
- Corporate applicants, please be sure to include the title(s) (i.e. President, Treasurer, etc.) of the individual(s) signing on the company’s behalf.

**Additional Applicant:**

Printed name: \_\_\_\_\_

Title (*if corporate applicant*): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**19. LANDOWNER/MUNCIPAL PERMISSION REQUIREMENTS (if applicable)**

**Directions:** If any portion of the site is intertidal, you need to complete the steps outlined below.

**Step I: Obtain written permission from all intertidal landowners.**

Pursuant to DMR Regulations Chapter 2.10(3)(G) the Department requires *written permission of every owner of intertidal land in, on, or over which the activity will occur*. It is your responsibility to obtain written permission and include it with your application materials. Please note that the Department does not provide forms for landowner permission.

**Step II: Determine if the municipality where your site is located has a shellfish conservation program.**

Pursuant to 12 MRSA §6072(3) *In any municipality with a shellfish conservation program under section 6671, the Commissioner may not lease areas in the **intertidal zone** within the municipality without the consent of the municipal officers.*

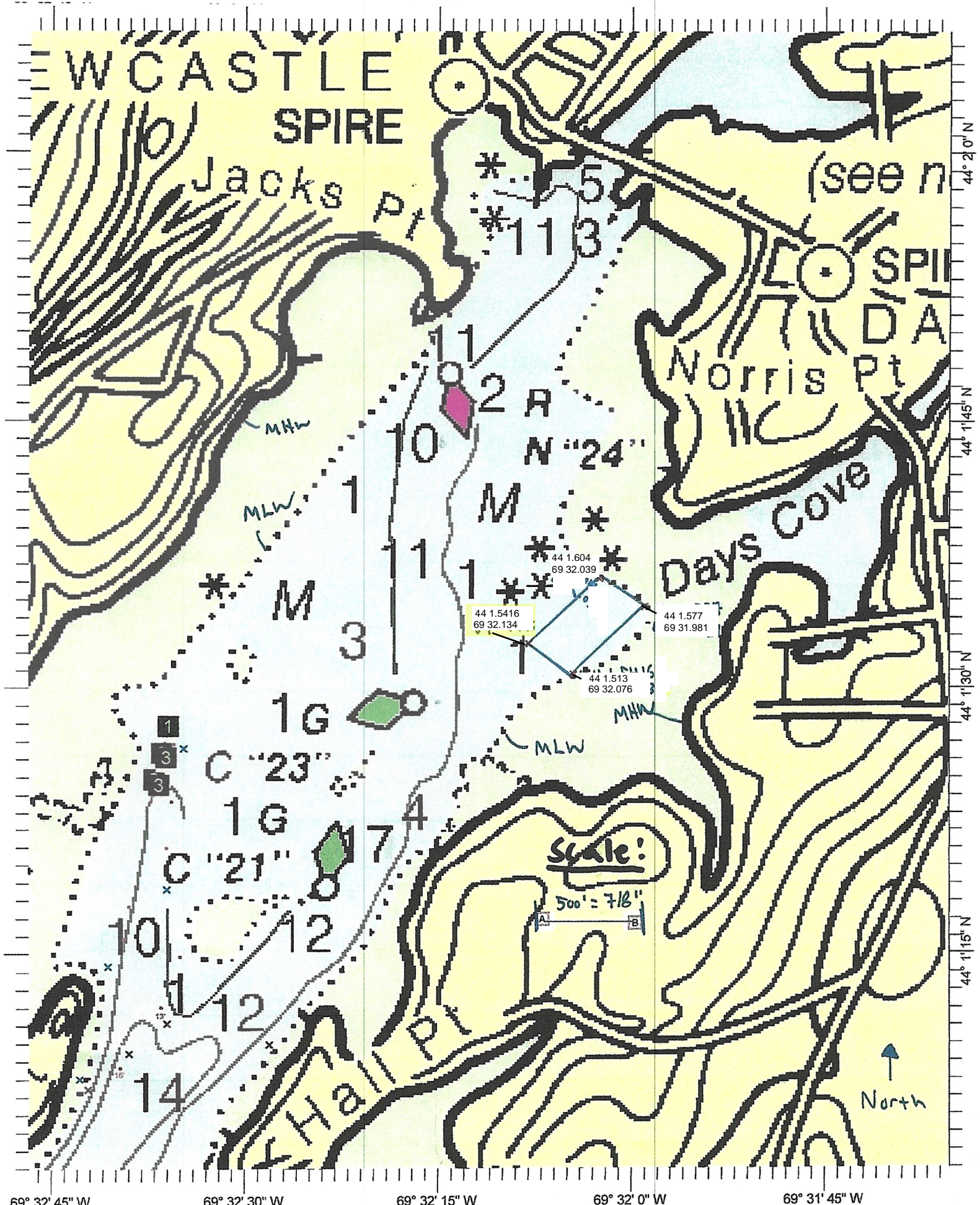
If the municipality where the proposed lease site is located has a shellfish conservation program, it is your responsibility to obtain consent for the proposed lease site from the municipal officers (i.e. the selectmen or councilors of the town, or the mayor and aldermen or councilors of a city.) Consent means a majority vote of the municipal officers as recorded in a public meeting.

It is your responsibility to contact the municipality and determine if they have a shellfish conservation program. Best practices would include discussing your plans with shellfish committee members, but only the consent of municipal officers is required.

Does the municipality, where the proposed site is located, have a shellfish conservation program?  Yes  No

**If you answered yes**, please attach documentation from a public meeting demonstrating that a majority of municipal officers have consented to your proposal.





69° 32' 45" W      69° 32' 30" W      69° 32' 15" W      69° 32' 0" W      69° 31' 45" W

Chart Name: DAMARISCOTTA AND SHEEPSHOT AND KENNEBEC RIVERS ME  
 Chart ID: 13293\_1  
 Top Left: 44° 2' 6" N 69° 32' 46" W  
 Bottom Right: 44° 1' 2" N 69° 31' 35" W



Vicinity Map - Appendix A

© MAPTECH, INC.



# DAM DC

**Legend**

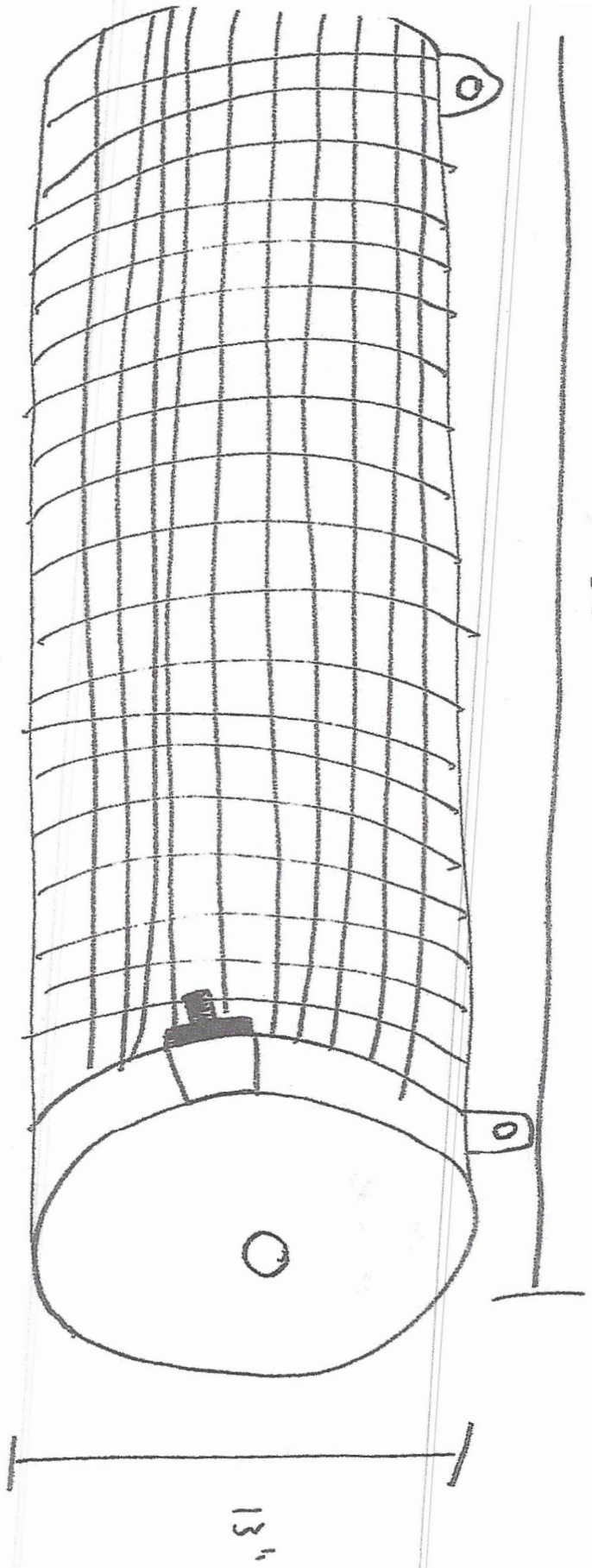
-  lease boundary
-  Mean Low water



Appendix B Boundary drawing



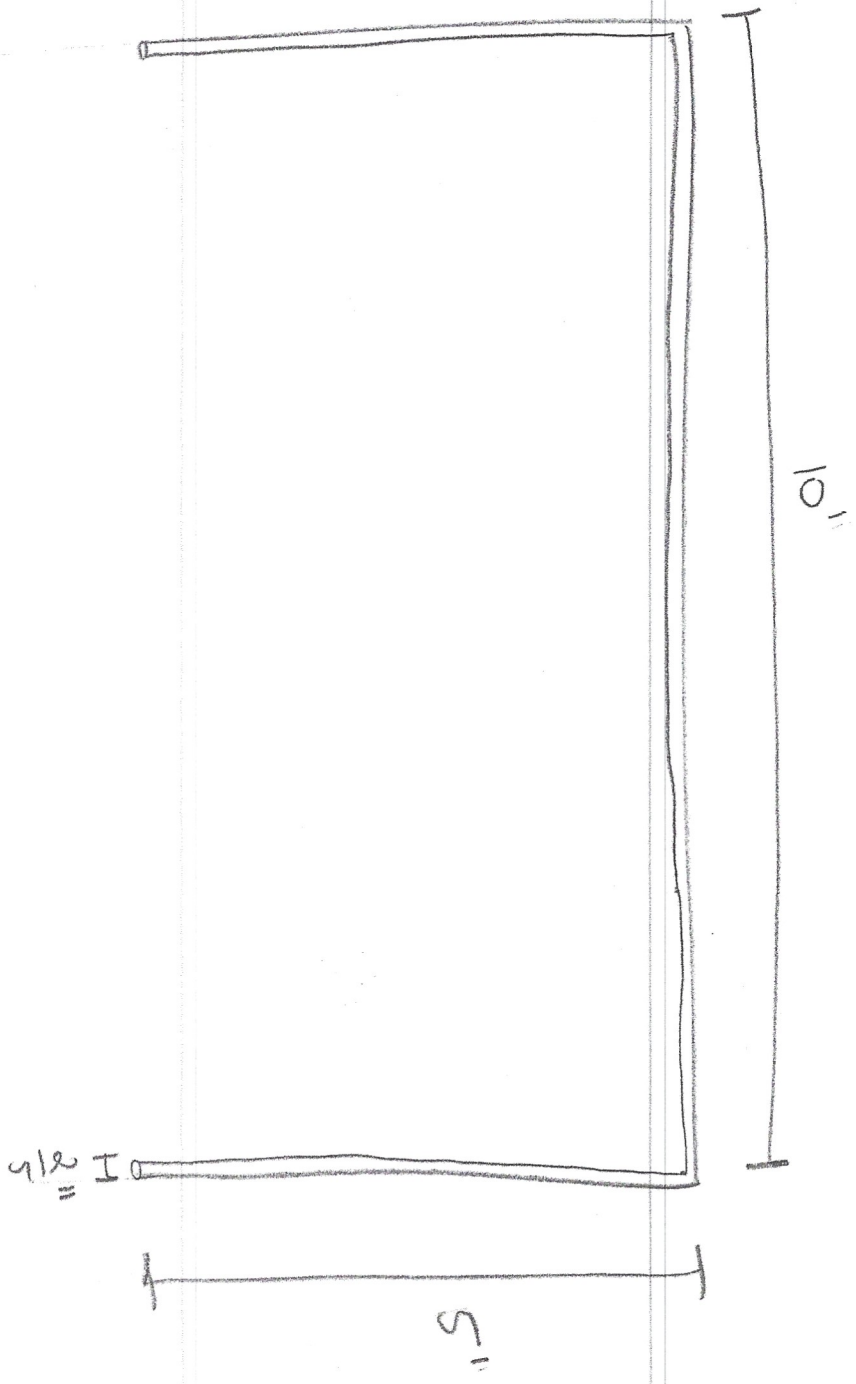
Gear Drawing - Zapco Tumbler  
Appendix C1



35"

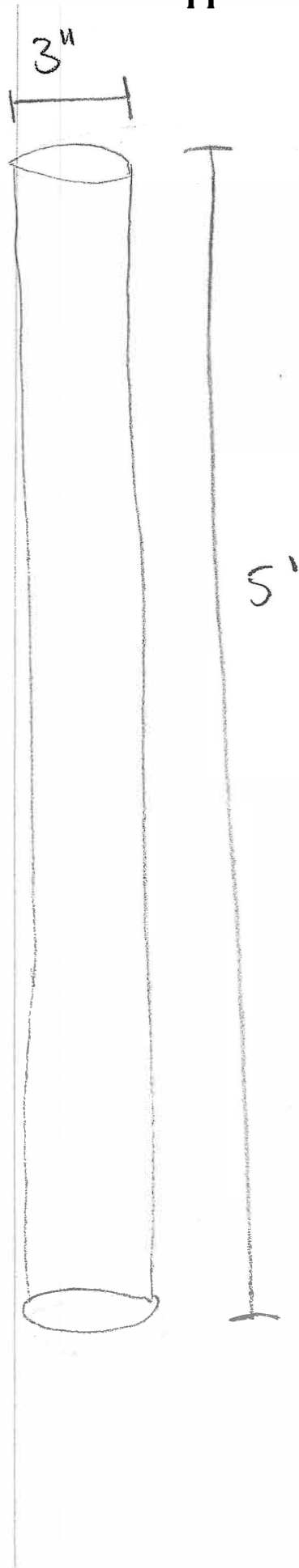
13"

Gear Drawing - Rebar posts, 2x5 in.  
Appendix Ca

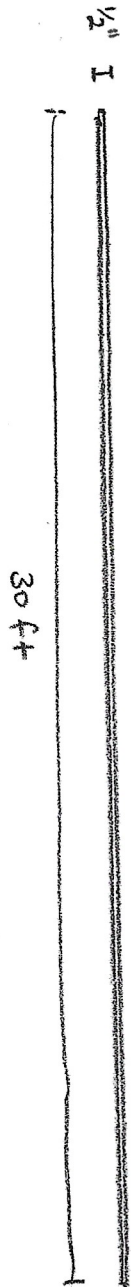




# Gear Drawing-3" pvc zapco support pipe Appendix C3



Gear Drawing - 1/2" Plastic Cable  
Appendix C4



# Appendix D1

## Max Gear Diagram / Overhead View A

Each line (excluding borders) = 4 rows of tubes

22 lines = 88 columns

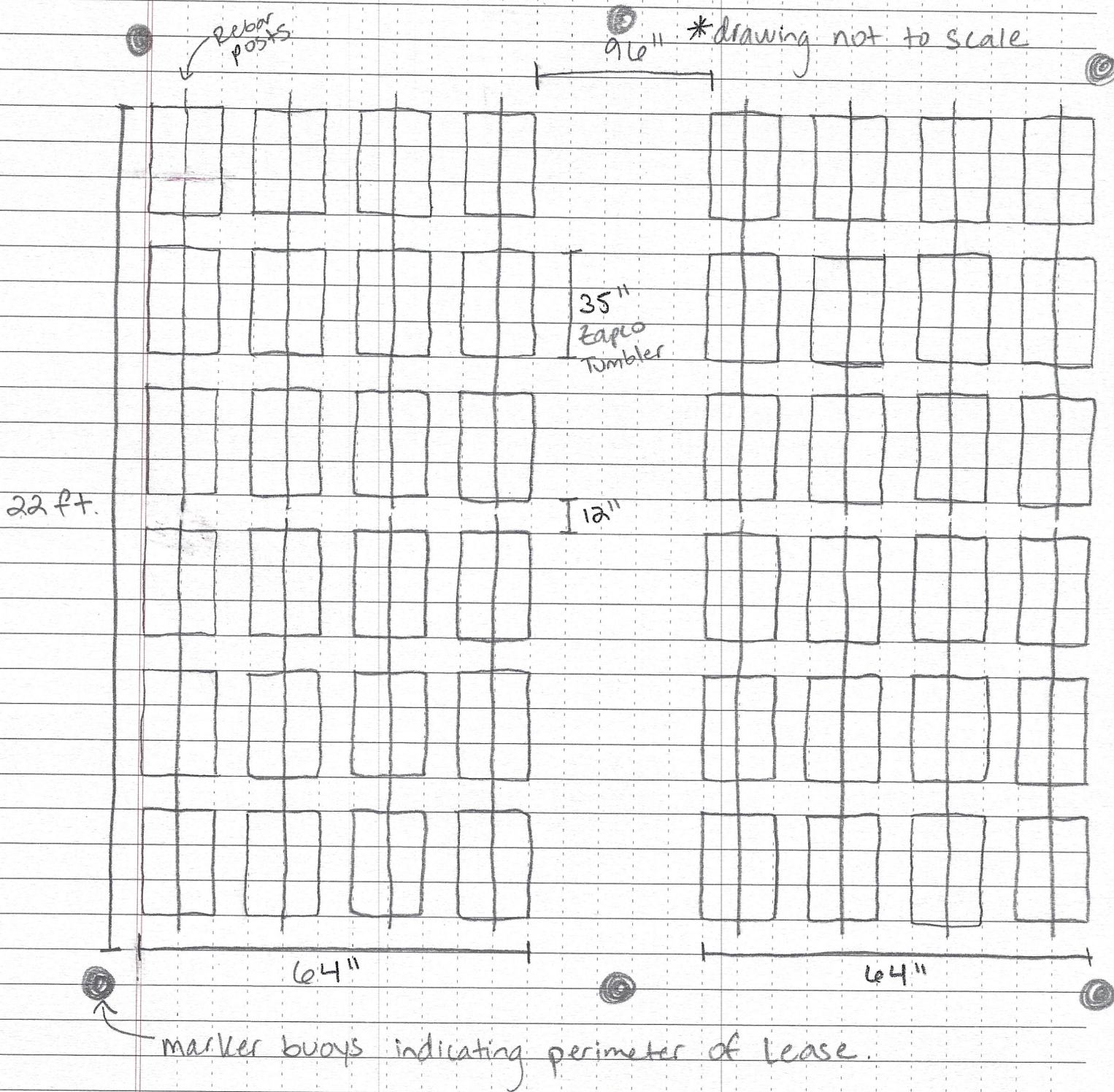
Each line = 150 tubes long

$88 \cdot 150 = 13,200$





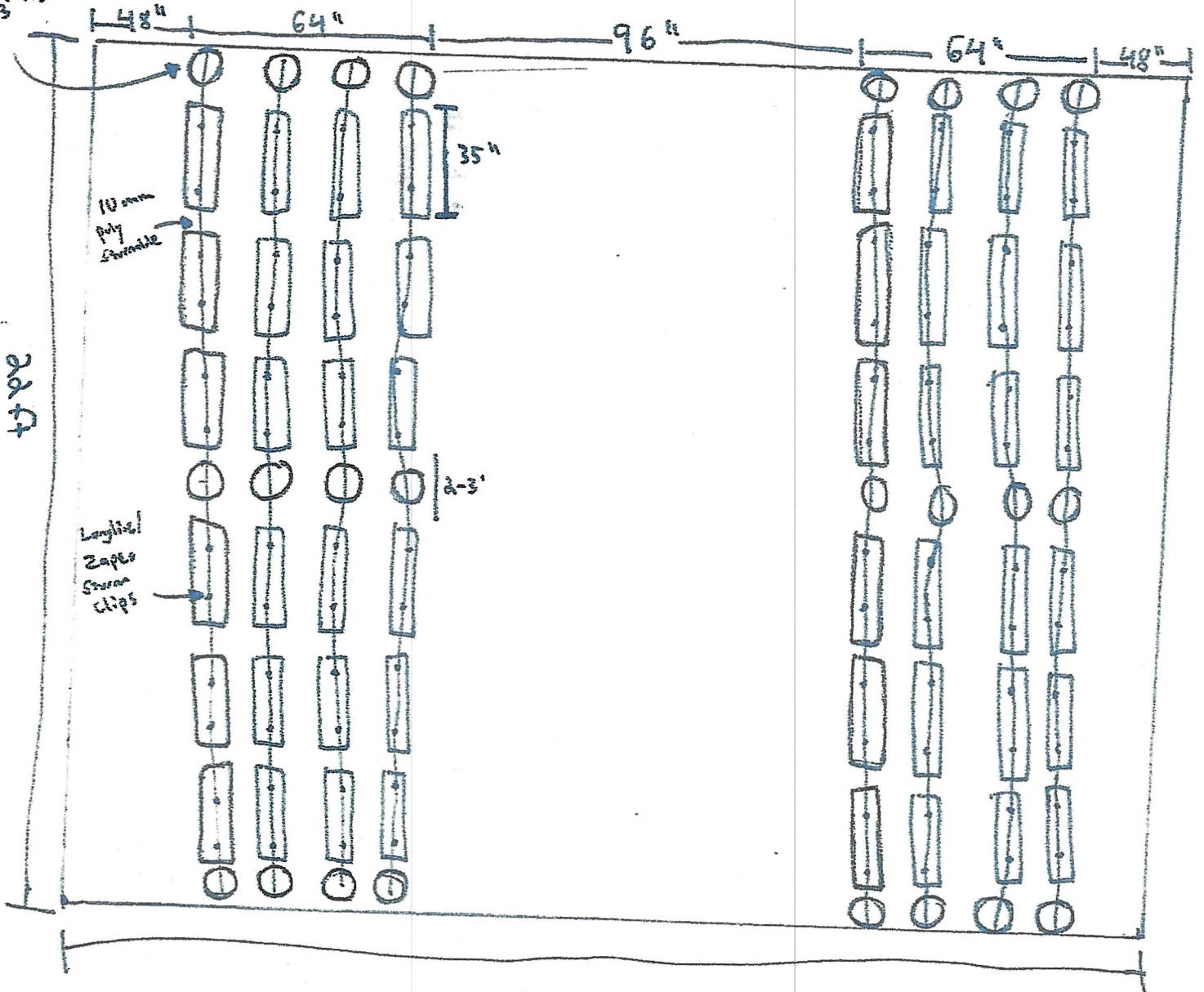
# Appendix D2 - Overhead View Rebar Staple Configuration





# Appendix D3 - Overhead View PVC Pipe & Cable Configuration

Mounting Post  
= 3' high



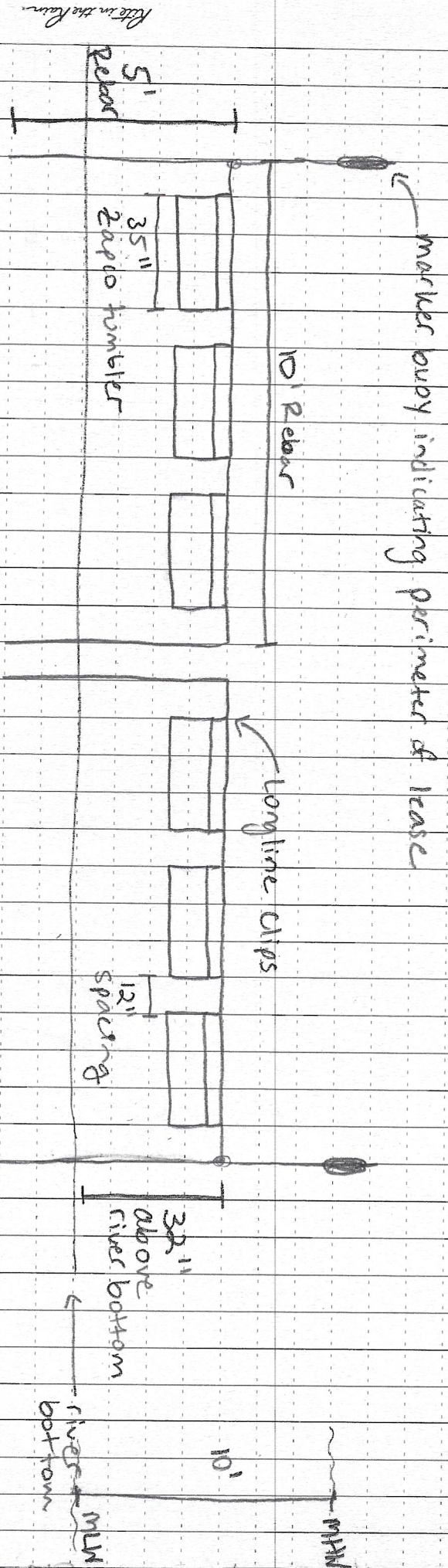
type

10 mm  
Poly  
Straddle

Langhite  
Zaps  
Straps  
clips

26.6 ft

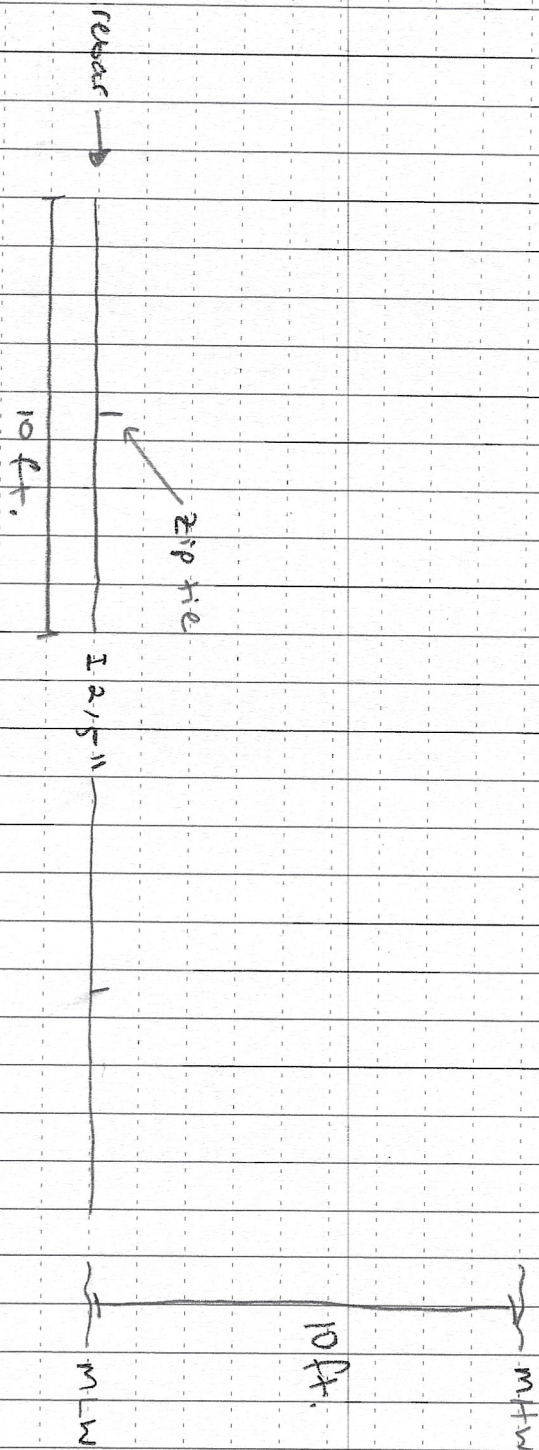
# Appendix E1 - Cross Section View, Rebar Staple Configuration



Rate in the Rain



Appendix ER - Cross Section View - Overwintering Rebar Staples

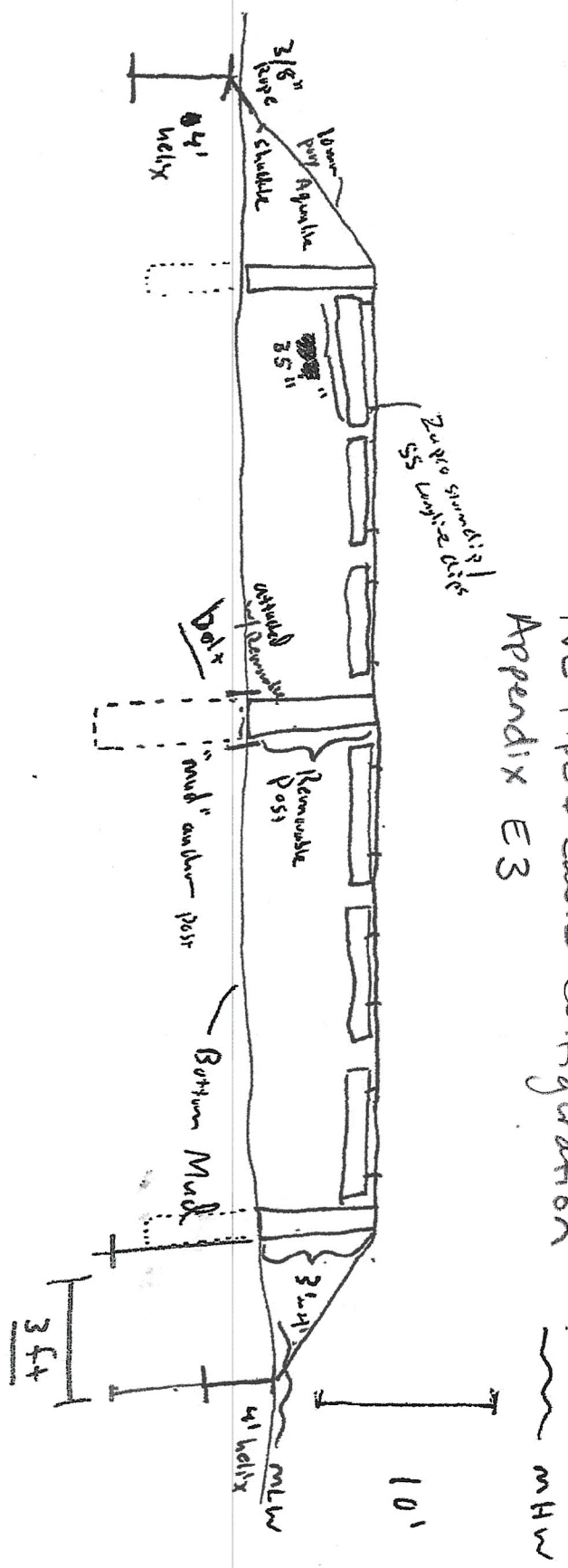


Bundles of 5 Rebar posts laid on river bottom;  
Zip tie sticking up vertically, for easy retrieval.

# Cross-Section View

## PVC Pipe & Caisson Configuration

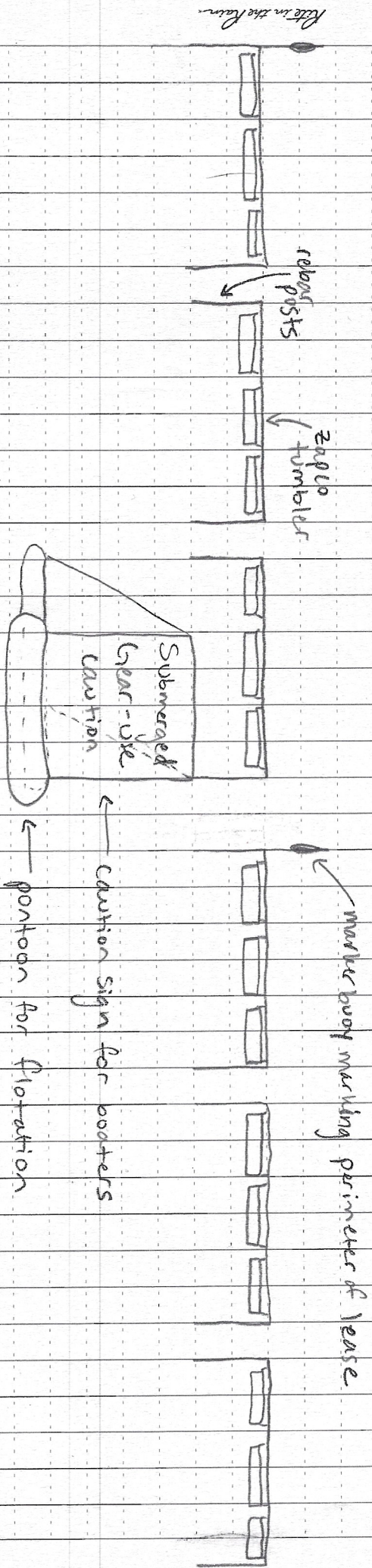
### Appendix E3





Appendix F 1 - Equipment Layout

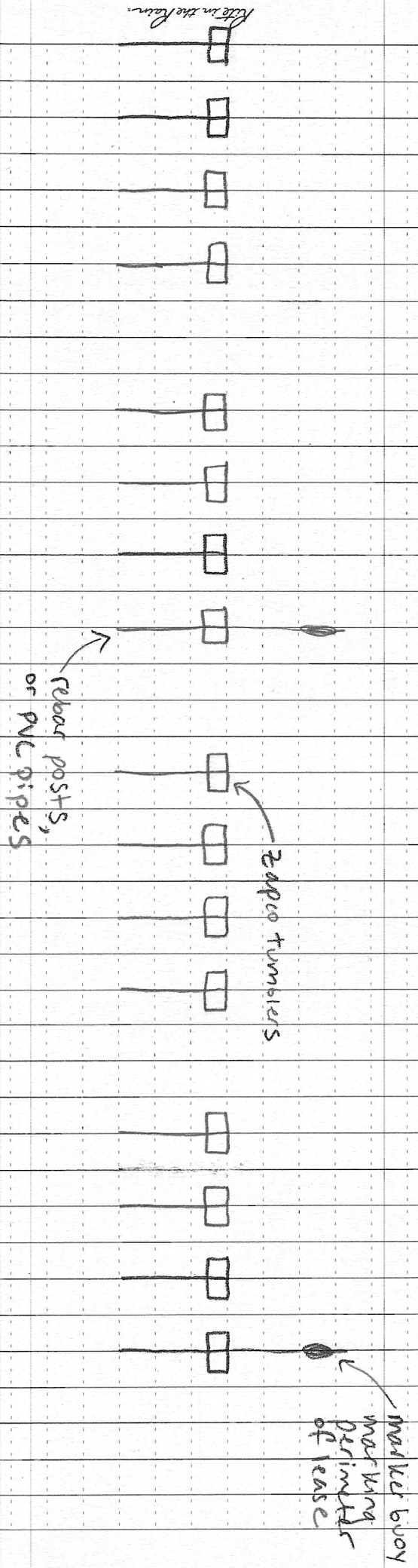
Schematic From Channel, Facing SE  
Vantage Point:  $44^{\circ}14'51''N$ ,  $69^{\circ}32'15''W$





# Appendix F2- Equipment Layout

Schematic From Channel, Facing NE  
Vantage Point:  $44^{\circ}1'30''N$ ,  $69^{\circ}22'15''W$



February 16, 2022

RE: Mook Sea Farms Inc.  
321 State Route 129  
Walpole, ME 04573

To Whom It May Concern:

Please accept this letter as it relates to Mook Sea Farms, Inc.'s Lease application:

Mook Sea Farms Inc., and its principal Bill Mook, have been a valued client of the Bank (Damariscotta Bank & Trust which has merged into Bangor Savings Bank) for over 35 years.

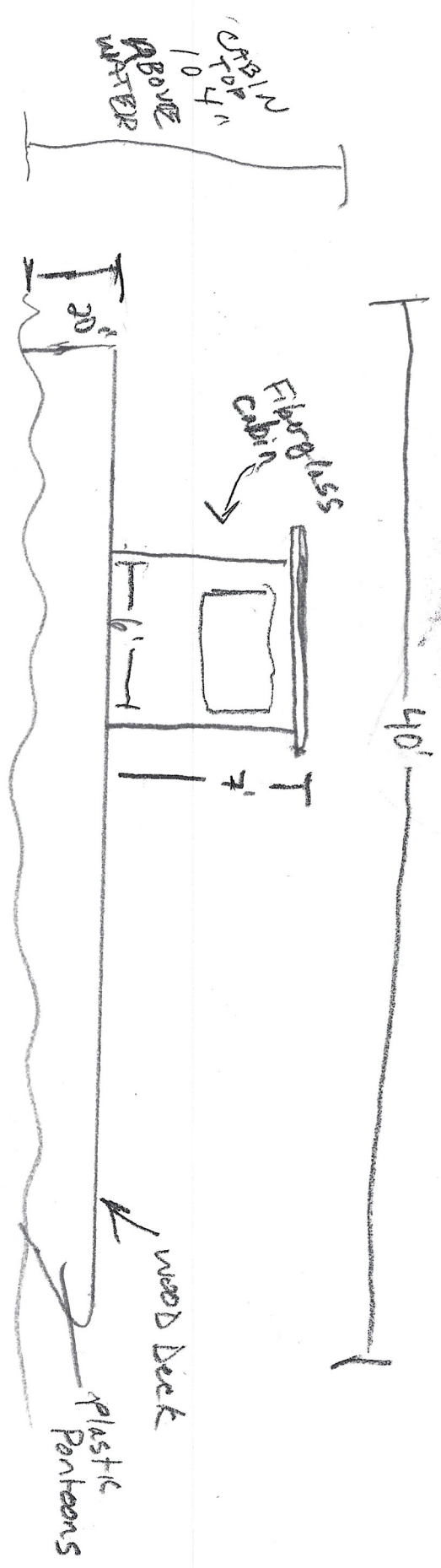
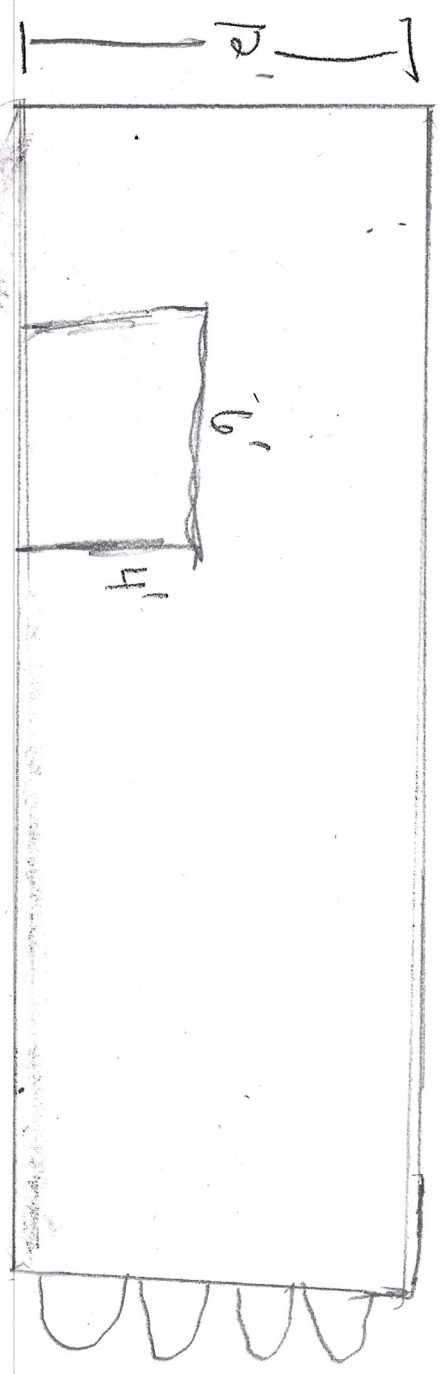
During this time, Mook Sea Farms Inc. has handled all deposit and loan accounts as agreed.

Please let us know if we can be of further assistance.

Sincerely,

A handwritten signature in black ink that reads "Bradley Galley". The signature is written in a cursive style with a large, stylized initial 'B'.

Bradley Galley  
Vice President



BARGE DETAIL



## **MAINE DEPARTMENT OF MARINE RESOURCES**

*Aquaculture Division, 21 State House Station, Augusta, ME 04333-0021 (207) 624-6567*

### **CORPORATE APPLICANT FORM For Standard and Experimental Aquaculture Lease Applications**

Corporations or partnerships that apply for aquaculture leases in the State of Maine must complete this form. Corporations must submit information as requested under A. Corporate Applicant. Partnerships must submit information as requested under B. Partnership Applicant.

#### **A. Corporate Applicant**

**Note:** You must attach a copy of the Articles of Incorporation (Inc.) or Certificate of Formation (LLC) to your application.

1. Name of Corporation:     Mook Sea Farms, Inc.    

2. Date of incorporation:     2/6/1985     State of incorporation:     Maine    

3. List the names, addresses, and titles of all officers:

<b>Name</b>	<b>Address</b>	<b>Title</b>
William H. Mook	270 South Dyer Neck Rd. Newcastle, Maine 04553	President, Treasurer
Steven R. Zimmerman	30 Chase Farm Rd. Newcastle, Maine 04553	Chief Operating Officer

**Please use additional sheets if necessary and attach to the application.**

4. List the names and addresses of all directors/members:

<b>Name</b>	<b>Address</b>

**Please use additional sheets if necessary and attach to the application.**

5. Has the corporation, or any stockholder, director, or officer applied for an aquaculture lease for Maine lands in the past?  Yes  No

If you selected “yes,” please indicate who applied for the lease and the status of the application or lease.

Mook Sea Farms has applied for and been granted the following leases on the Damariscotta River:

DAM EL3	Standard	Granted
DAM DCx	Experimental	Granted
DAM PP2	Standard	Granted
DAM PI2	Standard	Granted
DAM SW	Standard	Granted

6. List the names and addresses of all stockholders who own or control at least 5% of the outstanding stock and the percentage of outstanding stock currently owned or controlled by each stockholder.

Name	Address	Percentage of Owned Stock
William H. Mook	270 South Dyer Neck Rd. Newcastle, Maine 04553	60
Albert Surprenant	262 Bridge Street Osterville, MA 02655	40

**Please use additional sheets if necessary and attach to the application.**

7. List the names and addresses of stockholders, directors, or officers owning an interest, either directly or beneficially, in any other Maine aquaculture leases, as well as the quantity of acreage from existing aquaculture leases attributed to each such person based on the percentage of owned stock listed in question 6. If none, write, “None.”

Name	Address	Lease Acronym	Acreage
William H. Mook	270 South Dyer Neck Rd. Newcastle, Maine 04553	DAM EL3 DAM DCx DAM PP2 DAM PI2 DAM SW	31.45



Albert Surprenant	262 Bridge Street Osterville, MA 02655	Same as above	20.96

**Please use additional sheets if necessary and attach to the application.**

8. Has the corporation or any officer, director, member, or shareholder listed in item 5 above ever been arrested, indicted, convicted of, or adjudicated to be responsible for any violation of any marine resources or environmental protection law, whether state or federal?

Yes  No

If you selected "yes", please provide details.

**B. Partnership Applicant**

**Note:** You must attach a copy of either the Certificate of Limited Partnership or documentation of the formation of a General Partnership to your application.

1. Name of Partnership: \_\_\_\_\_

2. Date of formation: \_\_\_\_\_ State of partnership: \_\_\_\_\_

3. List the names, addresses, and ownership shares of all partners:

Name	Address	Ownership Shares

**Please use additional sheets if necessary and attach to the application.**

4. Has the partnership, or any partner applied for an aquaculture lease for Maine lands in the past?  Yes  No

If you selected "yes," please indicate who applied for the lease and the status of the application or lease.

5. List the names and addresses of any partner owning an interest, either directly or beneficially, in any other Maine aquaculture leases, as well as the quantity of acreage from existing aquaculture leases attributed to each such person, based on their ownership shares from question 3.

Name	Address	Lease Acronym	Acreage

**Please use additional sheets if necessary and attach to the application.**

6. Has the partnership or any partner been arrested, indicted or convicted of or adjudicated to be responsible for any violation of marine resources or environmental protection law, whether State or Federal?

Yes  No

If you selected “yes”, please provide details.