

State of Rhode Island Coastal Resources Management Council Oliver H. Stedman Government Center 4808 Tower Hill Road, Suite 3 Wakefield, RI 02879-1900

(401) 783-3370 Fax (401) 783-2069

#### PUBLIC RE-NOTICE

File Number: 2020-04-037

Date: May 9, 2023

This office has under consideration the application of:

#### John Bowen & Patrick Bowen 79 Shaw Road Little Compton, RI 02831

for a State of Rhode Island Assent to construct and maintain: a 0.97-acre oyster farm using submerged bottom cages in Sapowet Cove. The first public notice for this application was on April 17, 2020. The applicants have modified the coordinates of the original site as described in the first public notice. This second public notice period is based upon the modified application submitted to CRMC on November 9, 2020. This modified version of the application has been reviewed by the Rhode Island Marine Fisheries Council and the Rhode Island Department of Environmental Protection consistent with the requirements of R.I. Gen Laws 20-10-5. The full CRMC Council will now consider this modified version of the application at a public hearing on a date to be determined after the close of this second public notice period. A copy of the modified application materials is attached. *Please note that all public comments previously submitted to CRMC on this application will remain in the file and will continue to be considered by the CRMC.* 

Project Location:	Sakonnet River
City/Town:	Tiverton
Waterway:	Sapowet Cove

Plans of the proposed work are attached and can be requested at <u>Cstaff1@crmc.ri.gov</u>.

In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter.

You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing (with your correct mailing address, e-mail address and valid contact number) and be received at this office on or before June 8, 2023.

Please email your comments/hearing requests to: <u>cstaff1@crmc.ri.gov</u>; or mail via USPS to: Coastal Resources Management Council; O. S. Government Center, 4808 Tower Hill Road, Rm 116; Wakefield, RI 02879.

### **CRMC AQUACULTURE APPLICATION FOR STATE ASSENT**

#### **Applicant Name and Mailing Address:**

Applicant Name(s): John Bowen, Patrick Bowen Street: 79 Shaw Road City/Town: Little Compton State: RI Zip Code: 02837 E-Mail: Seanbow@yahoo.com

CRMC File Number: 2020-04-037

**DEM License Number:** Application Pending

Type of Facility: Commercial lease site

#### Location of Proposed Aquaculture Site (Waterway): Sakonnet River, Southwest of Seapowet Creek



Size of Proposed Aquaculture Site: 0.95 acres

Latitude /Longitude of Proposed Aquaculture Site:

Northwest: 41.580613, -71.210130 Northeast: 41.580819, -71.209384 Southwest: 41.580130, -71.209870 Southeast: 41.580180, -71.209238

Signature of Requestor:\_\_\_

Date:



# This application for State Assent is submitted at the request of the CRMC Aquaculture Coordinator, to provide clarification and detail regarding a modification of coordinates, which the Council may consider as an alternate to those originally submitted for State Assent.

John Bowen and Patrick Bowen are seeking State Assent from Coastal Resources Management Council for a shellfish aquaculture farm in Tiverton, RI. The site is located in the Sakonnet River, Southwest of Seapowet Creek. The site was chosen for a variety of reasons, including proximity to the nutrient rich Seapowet Creek tidal flow, depth, and lack of wild shellfish resource within the site.

Farming practices will focus on environmental sustainability, and utilize a low-profile approach. The growout gear utilized will not be visible from shore, even at low tide. Culture methods will suit the site and accommodate multiple stages of growth, consisting of top loading cages, with mesh bags affixed to the cages.

John Bowen and his brother Patrick Bowen will be primarily responsible for daily management of the farm, with their sons Samuel and Malcolm actively assisting in farm operation. John and Patrick have both completed the course, "Fundamentals of Shellfish Farming: Practical Tools, Tips, and Techniques", presented by Roger Williams University and Cape Cod Cooperative Extension, and both have experience working on an oyster farm, dating back to the early 1980s. Additionally, John has a Bachelor's Degree in Environmental Science, with Emphasis in Aquaculture from Unity College in Maine. It is their intention to be model stewards of the area, and they understand the responsibility and privilege of a shellfish aquaculture lease.

<u>Changes to application as a result of recommendations from the Preliminary Determination Hearing,</u> <u>held February 17, 2020:</u>

1. Tiverton Harbor and Coastal Waters Management Commission, DEM, and an objector had concerns regarding the shallow depth of the proposed site.

In response to this, the location of the site was moved into deeper water (average MLW depth of two to four feet).

- 2. Tiverton Harbor and Coastal Waters Management Commission and DEM had concern regarding the location of the site in relation to the DEM Recreational Shellfish Area.
  In response to this, the site was moved to the west, and largely outside the bounds of the DEM Recreational Shellfish Area.
- 3. Concern was raised by DEM and CRMC regarding transporting oyster cages across and through the Sapowet Management Area public parking area.

In response to this, the applicants will not transport oyster cages across the Sapowet Management Area public parking area. Installation (placement) and removal of the cages will be conducted by boat and/or private access to the shore.

As stated in the CRMC Preliminary Determination Report of Findings,

"The Commission, DEM, and the objector all stated that they would not have an issue with this farm if it was moved to deeper water adjacent to this site."

John and Patrick Bowen (applicants) believe that the above changes to their initial application address the concerns resulting from the Preliminary Determination Hearing, and as expressed in the CRMC Preliminary Determination Report of Findings.

#### **OPERATIONAL PLAN:**

1. Name and Address:

John Bowen, Patrick Bowen 79 Shaw Road Little Compton, RI 02837

- 2. CRMC File Number: 2020-04-037
- 3. DEM Aquaculture License Number: To be determined
- 4. Type of Facility: Commercial Aquaculture Lease Site
- 5. Location of Facility: Tiverton, RI, Sakonnet River, Southwest of Seapowet Creek. The dimensions of the site are: West Side: 190', North Side: 215', East Side: 240', South Side: 175'. The site extends in a Southwest direction in a trapezoid shape. The proposed site is 41,402 square feet, or .95 acres.

#### Setbacks:

260' from Northeasterly corner to Mean Low Water (MLW) (nearest point of the site)

- 260' from the Southeast Corner to Mean Low Water (MLW)
- 400' from a point on the SW corner of the Seapowet Bridge to the NE corner of the site
- 560' from a point on the SW corner of the Seapowet Bridge to the NW corner of the site.

Longitude/Latitude of Proposed Aquaculture Site:

Northwest: 41.580613, -71.210130 Northeast: 41.580819, -71.209384 Southwest: 41.580130, -71.209870 Southeast: 41.580180, -71.209238



6. **Species Grown:** <u>Crassostrea virginica</u>. Eastern Oyster shellfish seed is to be purchased from a New England shellfish hatchery approved by DEM (Aquacultural Research Corporation, Dennis, MA; Fishers Island Hatchery, New York; Mook Sea Farms, Damariscotta, ME, or other approved shellfish hatchery), in accordance with regulation. It is the hope of the applicants that any oyster spawning which results from the farm will supplement the natural oyster recruitment in the area.

Applicants are very much aware of the importance of agricultural biosecurity as applied to shellfish aquaculture, and will be fully compliant with Biosecurity Board protocols.

7. Gear Description: Predominant culture method will be top loaded wire cages, dimensions of 24" wide, 48" long, and 14" tall, with 2" runners to keep them elevated from the bottom (total cage height is 16" tall). The cages will be placed directly on the bottom. Cages are accessed through the top, will contain stacked trays (plastic or wire), and will be covered with a rigid wire cover, affixed with shock cord. The cages will be deployed in a series of ten (each ten cages referred to as a "trawl"), oriented such that the 48" sides of the cages are approximately 6" apart, each trawl spanning approximately thirty feet. The trawls will be secured with 5/8"x36" helical anchors installed at each end, with a line (half inch diameter, three strand, twisted nylon rope, minimum breaking load (MBL) of 5,670 lbs) attached to the helical-anchors on each side, creating a lateral line around the trawl. Each cage will be secured to the lateral line on both ends. Additionally, standard 18"x36" ADPI bags (rigid mesh plastic bags) will be secured directly to the cages using heavy-duty clips.

The first year, at least 25,000 oyster seed will be purchased, and grown utilizing the culture methods described above. An annual increase in oyster cultivation will likely result in a maximum of 200 cages in use on the farm. We anticipate harvest time to be approximately 18-24 months.

#### 8. Identifying Markers

Each of the four corners of the farm will be marked with standard 11" pot buoys, each of which will be marked in 3" letters "CRMC", and the File Number provided at the time of Assent. This will be done within ten days of CRMC Assent.

#### 9. DEM Shellfish Harvesting Classification:

The location for this site is in waters approved for shellfish harvesting located in the Sakonnet River shellfish classification area GA4 harvest area 5B in the town of Tiverton. NSSP Growing Area Classification: Approved.

#### **10. Description of Practices and Procedures:**

As described above, <u>Crassostrea virginica, Eastern Oyster</u> shellfish seed is to be purchased from a regional shellfish hatchery approved by DEM (Aquacultural Research Corporation, Dennis, MA; Fishers Island Hatchery, New York, Mook Sea Farms, Damariscotta, ME, or other hatchery approved by DEM and CRMC), in accordance with regulation. The first year (and likely thereafter) larger seed size will be purchased, anticipating 5-7 mm size). The CRMC Aquaculture Coordinator will be notified of seed source and provided with a pathology report as required, at least five days prior to delivery of the seed.



#### **11.** Harvest, Storage, and Transportation:

It is anticipated that harvest time will be 18-24 months. Initially, oysters are expected to be sold to licensed Rhode Island Wholesale Dealers, rather than direct marketed, however the goal of the applicants is to attain proper licensure to sell shellfish locally. Harvesting and transporting oysters will be conducted with a focus on public health requirements, including icing, tagging, sanitation, and record keeping as required.

#### 12. Time Table of Work

Farm work will take place predominantly at low tide (an hour before to an hour after), accessing the site using waders (or shorts during the summer months), and will consist of replacing bio-fouled plastic and wire trays inside the cages with clean trays, to reduce fouling and allow for better water flow over the oysters; splitting volumes of oysters into additional gear to maintain low densities; and culling/sorting oysters by size and quality. As oysters reach harvest size, they will be pre sorted for quantity, and pre bagged to reduce harvest time and allow for more rapid cooling during the summer months.

#### 13. Record Keeping:

Records of all seed purchases (including origin, quantity, pathology reports, etc.), harvesting records, and operating records will be submitted to CRMC as required, and maintained by John Bowen, available for review as needed upon request. Annual reporting to CRMC with all required information will be conducted as required.

- **14.** Procedures for maintaining records regarding upwellers in prohibited waters: An upweller will not be used.
- **15. Procedure for maintaining records for operations using seed from prohibited waters:** Seed will not be obtained from prohibited waters.



#### Coastal Resources Management Program – Section 1.3.1(A) – Category B Requirements

#### 1. Demonstrate the need for the proposed activity or alteration:

John Bowen and Patrick Bowen are proposing an oyster farm in Tiverton, RI. The site is located in the Sakonnet River, Southwest of Seapowet Creek. This site was chosen based upon proximity to the nutrient rich Seapowet Creek tidal flow, water depth, and lack of wild shellfish resource within the site. Shellfish aquaculture, especially oyster culture, is increasing in Rhode Island, however, the East Bay is largely under-represented. This proposal utilizes a low profile approach to this nutrient extractive agricultural process in an environmentally sensitive area, and helps to maintain local, historical marine tradition.

- 2. Demonstrate that all applicable local zoning ordinances, building codes, flood hazard standards, and all safety codes, fire codes, and environmental requirements have or will be met: Permits required for the proposed lease will be obtained through RI CRMC pending approval of subsequent applications.
- 3. Describe the boundaries of the coastal waters and the land area that is anticipated to be affected: The proposed lease site is located in Tiverton, in the Sakonnet River, Southwest of Seapowet Creek.

Latitude/Longitude of Proposed Aquaculture Site:

Northwest: 41.580613, -71.210130 Northeast: 41.580819, -71.209384 Southwest: 41.580130, -71.209870 Southeast: 41.580180, -71.209238

The dimensions of the site are: West Side: 190', North Side: 215', East Side: 240', South Side: 175'. The site extends in a Southwest direction in a trapezoid shape. The proposed site is 41,402 square feet, or .95 acres.

#### Setbacks:

260' from Northeasterly corner to Mean Low Water (MLW) (nearest point of the site)
260' from the Southeast Corner to Mean Low Water (MLW)
400' from a point on the SW corner of the Seapowet Bridge to the NE corner of the site
560' from a point on the SW corner of the Seapowet Bridge to the NW corner of the site.

4. Demonstrate that the alteration or activity will not result in significant impacts on erosion and/or deposition processes along the shore and in tidal waters:

All gear on the site will be temporary (not permanent), and designed to allow water to flow through, having minimal impact on erosion or deposition.



5. Demonstrate that the alteration or activity will not result in significant impacts on the abundance and diversity of plant and animal life:

Culture methods proposed are intended to be low-impact. The site should have no negative impact on the abundance or diversity of plant and animal life. To the contrary, aquaculture gear provides habitat structure and supports a diverse assemblage of juvenile fish, crabs, lobsters. Oyster grow-out cages provide valuable habitat for finfish and have been compared with artificial reefs as part of habitat restoration programs.\*

\*Tallman, Forrester; Transactions of the American Fisheries Society, May, 2007

6. Demonstrate that the alteration will not unreasonably interfere with, impair, or significantly impact existing public access to, or use of, tidal waters and/or the shore:

As a result of the Preliminary Determination Hearing and subsequent CRMC Report of findings, the coordinates of the proposed site have been moved into deeper water, and largely outside of DEM's Recreational Shellfish Area.

The site is located in the Sakonnet River, on the southwest side of Seapowet Creek. The water depth and coarse sand/gravelly bottom are not conducive to boating\*, swimming\*\*, or fishing, and there is no significant wild shellfish resource on the site. The area SW of Seapowet Point is extremely shallow and cannot be safely navigated during low tides\*. The area west of Seapowet and Fogland Points presents dangerous swimming conditions.\*\* Fishermen, shellfishermen and bathers typically use the area to the north of the Seapowet Creek. The lease site would still be possible for people to walk or wade through, or kayak through.

\*TIVERTON HARBOR AND COASTAL WATERS MANAGEMENT PLAN: II(A)(3)(e) \*\* CODE OF ORDINANCES, TOWN OF TIVERTON, Chapter 14, Article II, Section 14-193

7. Demonstrate that the alterations will not result in significant impacts to water circulation, flushing, turbidity, and sedimentation:

The proposed gear is designed to be low-impact, not extending greater than 18" from the bottom. All gear is intended to allow water to flow freely, as it increases oyster growth. Oyster filtration has been found to reduce turbidity and increase water clarity. Turbidity or sedimentation caused by work on the farm should be minimal and temporary.

8. Demonstrate that there will be no significant deterioration in the quality of water in the immediate vicinity as defined by DEM:

The proposed oyster farm will have no negative effect on water quality as defined by DEM (based on fecal coliform levels). Additionally, as estuarine nutrient loading is increasingly an ongoing global issue of concern, oysters are able to integrate nitrogen from algae in the water column within shell and tissue, which through harvesting, is removed from the system\*, asserting an ecological benefit.

\* Pollack, Yoskowitz, Kim, Montagna; Plos One, Volume 8, Issue 6, June 2013

9. Demonstrate that the alteration or activity will not result in significant impacts to areas of historic and archaeological significance:

There are no known historic or archaeological resources in the proposed site.

10. Demonstrate that the alteration or activity will not result in significant conflicts with water dependent uses and activities such as recreational boating, swimming, navigation, and commerce:

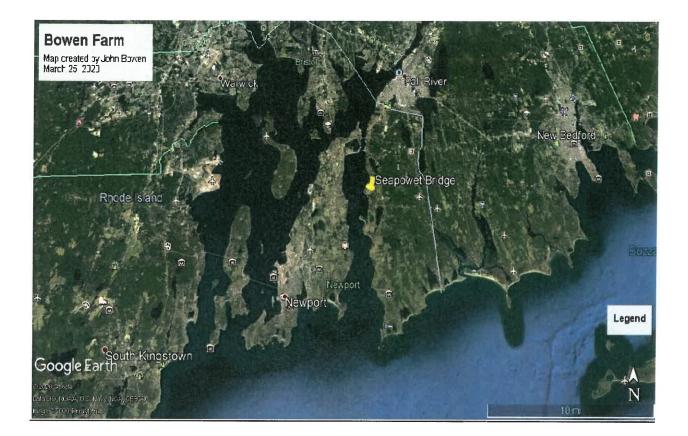
As a result of the Preliminary Determination Hearing and subsequent CRMC Report of findings, the coordinates of the proposed site have been moved into deeper water, and largely outside of DEM's Recreational Shellfish Area.

The site is located in the Sakonnet River, on the southwest side of Seapowet Creek. The water depth and coarse sand/gravelly bottom are not conducive to boating\*, swimming\*\* or fishing, and there is no significant hardshell clam resource on the site. The area SW of Seapowet Point is extremely shallow and cannot be safely navigated during low tides\*. The area west of Seapowet and Fogland Points presents dangerous swimming conditions.\*\* Fishermen, shellfishermen and bathers typically use the area to the north of the Seapowet Creek. The lease site would still be possible for people to walk or wade through, or kayak through.

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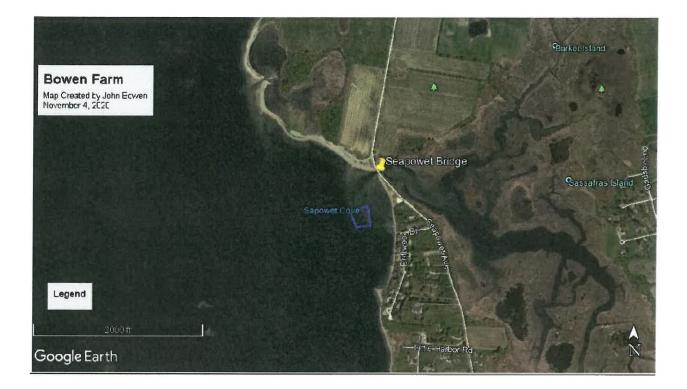
11. Demonstrate that measures have been taken to minimize any scenic impact:

The gear design is such that it will not be visible, even at low tide, with the exception of buoys at each of the corners, as required.















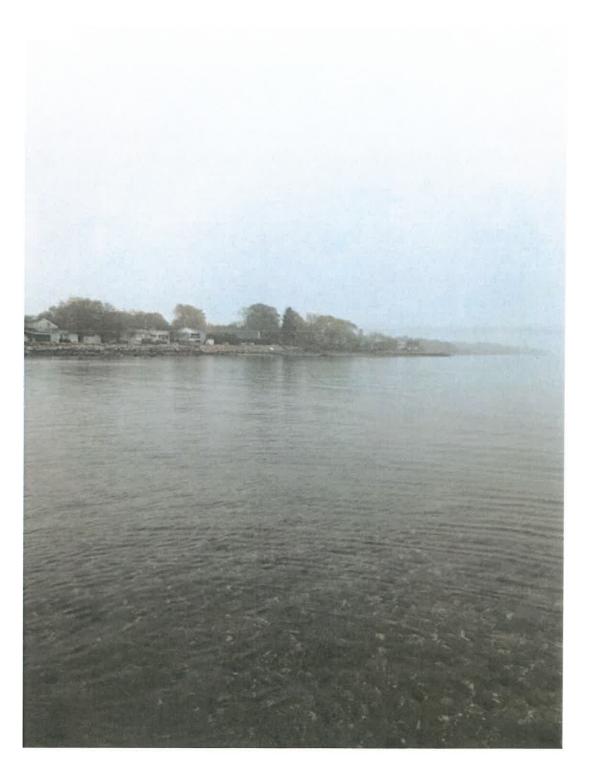


## North



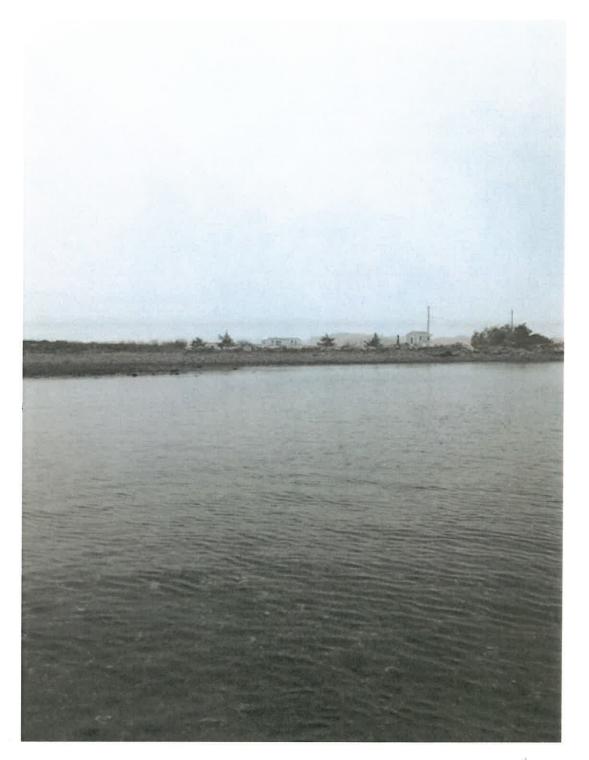


## South





## East

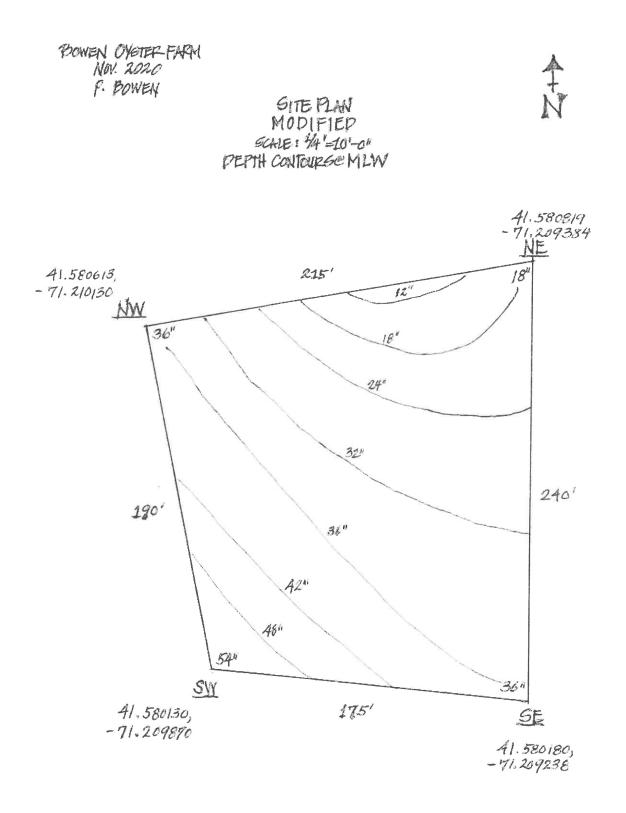


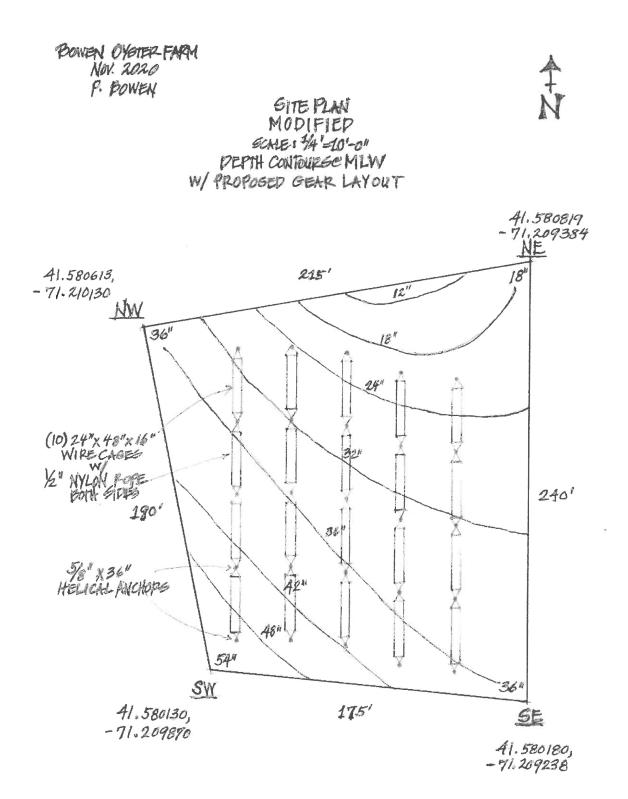


## West

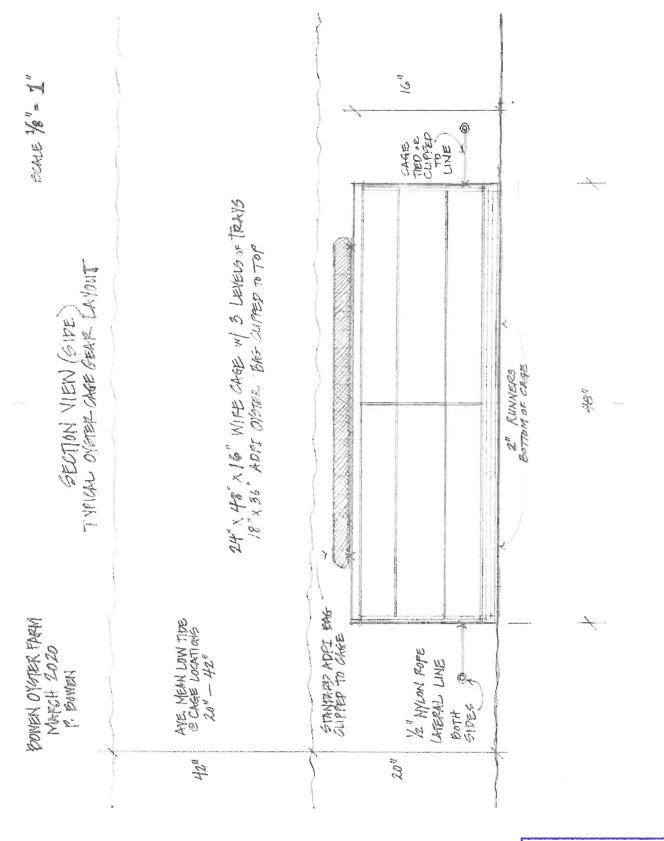












18" × 86" OYSTER ØNGS ULIPPED TO CASES 18"x 36" OYSTER PAG CUPPED TO CAGE ecke 1/-0" N N 78" × 36" HELICAL ANCHORS 7-40'-0" 0.0. 24" X 48" X 16" WIRE CAGES ON BOTTOM W/3 TRAYS EACH OLIPPED TO 1 NULON ROPE CHSE CULTER TO THE WORLD 1 24" X 49" X 16" WIRE CASE W/ 3 LEVELS OF TRAYS FFORMAL OYOFER CAGE GEAR LAYOUT SIDE VIEW Main and 18 Contraction of the 24" AVERAGE VERN LOWTIPE 1 -10. 1/2" NVUON POPE VATERAL LINE BOTH ENDS BOWEN OYSTER FRAM Constant of AVERAGE NEARLOW TICE P. BOWEN Ś ٦ The series and the series of t N

