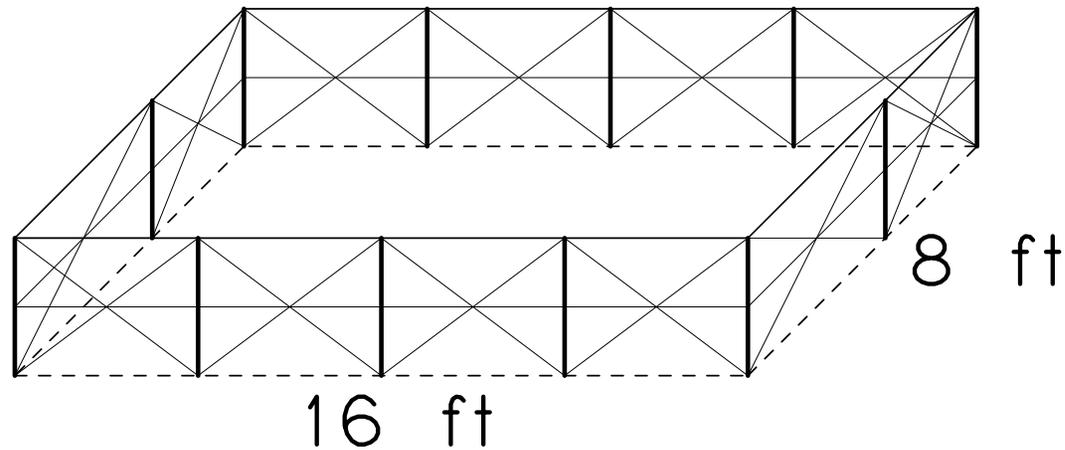
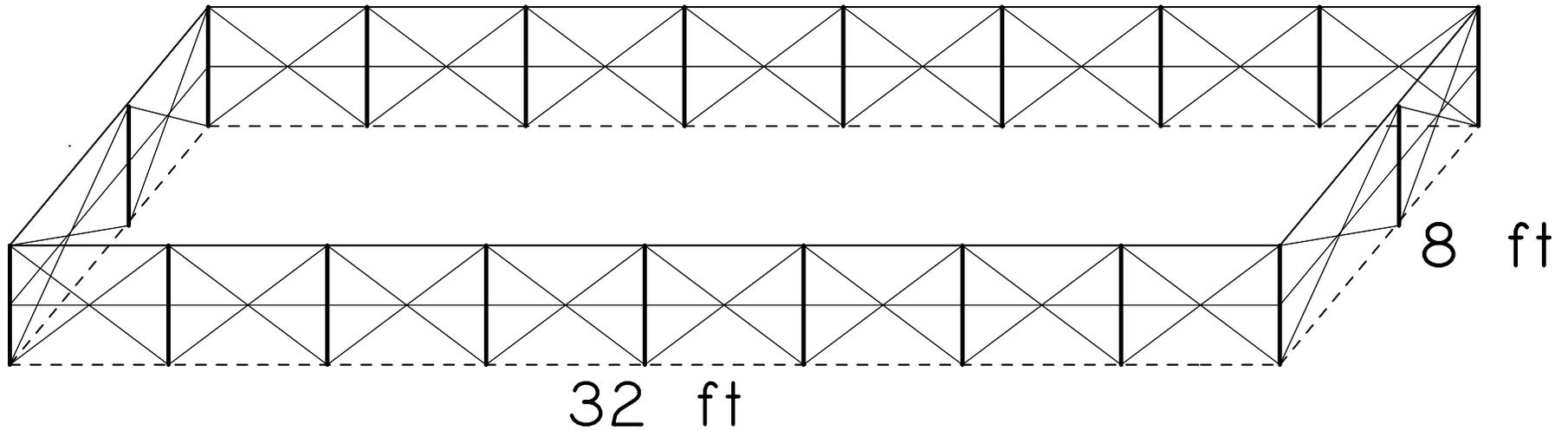


MDI Biological Laboratory

Fencing Plan for Eelgrass Restoration in Frenchman Bay 2014-2015



Fencing Plan as a Modification to Corps Permit # NAE-2007-1187-M2
MDI Biological Laboratory, Salisbury Cove, ME
November 1, 2013

[The following assumes: Planting a total of 256 grids at Berry Cove and Goose Cove, and 128 at Thomas Island and Jordan River. Half of the grids at each location would be uncaged, half in cages 8 ft wide and 32 ft long; each cage will therefore hold 32 grids at 50% density.]

At Berry Cove and Goose Cove, the biodegradable grids will be placed in arrays 8 ft wide and 32 ft long, with the long dimension parallel to the shore to maintain equal water depth throughout. The 2 x 2 ft grids with eelgrass transplants will be spaced 2 ft apart in each direction, to form an array of 4 grids wide and 16 grids long containing 64 grids. The four individual arrays will be separated by at least the length of one array (32 ft) but may be greater depending on bottom topography. Alternating along the shoreline, half of the grids will be enclosed in cages (see below) and half left uncaged as controls. At Thomas Island and Jordan River, the array length will be halved to 16 ft due to limited space and grid numbers, but the same alternation of control and caged arrays will be used.

The cages will be constructed by driving 4' wooden "contractors stakes" about 1 ft into the substrate to form the corners of the array, and driving additional stakes every 4 ft along each side. These stakes will be connected by $\frac{1}{4}$ inch yellow polypropylene rope attached to the stakes by "zip" ties through holes pre-drilled in the stakes. Black polypropylene "deer netting", which is supplied in 7 ft widths x 100 ft lengths and a mesh size of $\frac{3}{4}$ ", folded in half, will be attached without unfolding to the ropes with zip ties, and the excess (~6") pushed into the mud to seal the bottom. Each full size cage will thus require 72 ft of rope and netting, and 18 stakes. The half size cages will each require 48 ft of rope and netting and 10 stakes. The total project will thus require 4 full sized cages and 4 half sized cages, for a total of 480 feet of rope and netting and 112 stakes.

Each array location (caged or control) will be marked by at least one buoy. Additionally, the corners of each array will be marked by a single 5' plastic pipe. The buoys and corner pipes will remain in the water over the winter to mark the locations for analysis the following spring. All of the cage materials will be removed in the fall, after the green crabs have moved offshore for the winter.