The Seneca Sailing Academy (SSA) formed about a year ago to expand and enhance the Seneca Yacht Club (SYC) longstanding junior sailing program. One of its goals is to build a new junior sailing center on the Seneca Yacht Club’s property so that the program can grow and be enhanced. The program is a resource not only for the children of the Yacht Club members, but also for the whole community. For the past several years more than half of the junior sailors have not been members of the Seneca Yacht Club. The SSA is a 501C3 corporation and may accept tax-free donations toward this project.

With the guidance of our professors Jeffery Blankenship, Stan Mathews and Gabriella D’Angelo our class has researched and met with the advisory board in a series of steering committee meetings to develop a program for this new space.

Each member of the class has proposed a new building for boat storage and indoor activity space with site design strategies for linking the boathouse to the waters edge via paths, docks, etc. We offer our schematic designs to you to be used for fundraising and as a community awareness tool.
INDIVIDUAL DESIGNS

ANDREW KING
KELLY HALEY
EMILY VOLLO
SCOTT GREENBAUM
ELIZABETH HIGHS
JENNIFER GALIZO
JOELLEN MARCH
LINDOEN YOUNG
ANDREW THOMPSON
FUNCTIONALLY CRANKED.

KELLY HALEY.

VIEW FROM THE LAKE
TRANSPARENT SPACE.

EMILY VOLLO.

INTERIOR LIGHT STUDY
WINDOWS ON THE LAKE.

ELIZABETH HUGHES.
THE BOAT BARN.
JOELLEN MAUCH.

INTERIOR LIGHT STUDY
SENECA SAILING ACADEMY PAVILION.

LINCOLN YOUNG.
96A BOATHOUSE.

ANDREW THOMPSON.
Alternative Toilets: Incinerating Toilets

Self-contained waterless systems that do not require being hooked up to a sewer or septic system. Rely on electric power or natural gas to incinerate human waste to sterile clean ash. These systems are simple to use, safe, clean, and relatively easy to maintain.

Incinerating Toilets

Option 1: Natural Gas and Propane Incinerating Toilets
- Burn chamber reaches temperatures of 970-1400 degrees F and reduces waste into clean sterile ash.
- Relies on just an available source of natural gas or propane.
- Can be temporarily connected to a gas cylinder or be directly hooked up to a permanent source of gas.
- The systems have the ability to accommodate the needs of 8-10 workers in an average 8-hour period, similar to maintaining a outhouse.

Set up:
- Place unit in desired location.
- Connect a 3-inch diameter exhaust vent between rear of the unit and the building exterior.
- Plug unit into 120 volt outlet.

Option 2: Electric Powered Incinerating Toilets
- Burn chamber reaches temperatures of 970-1400 degrees F and reduces waste into clean sterile ash.
- Set up:
  - Place unit in desired location.
  - Connect a 3-inch diameter exhaust vent between rear of the unit and the building exterior.
  - Plug unit into 120 volt outlet.

Alternative Toilets: Composting Toilets

Enviroleat Composting Toilets by Sancor: are the most advanced environmental and economic sanitation solution. Toilets will accommodate up to eight persons a day and more for occasional use.

Size: 26" x 33" x 26" Height to seat: About 20" (No step-up)

http://www.envirolet.com/models.html
OPTION 1: POLY CRYSTALLINE AND MONO CRYSTALLINE

MOST POPULAR FOR RESIDENTIAL AND SMALL COMMERCIAL SYSTEMS FOR THE AMOUNT OF ENERGY THEY PRODUCE OVER A YEAR. COMPARED TO OTHER COST AND COST OF INSTALLATION, THESE PANELS ARE BETTER IN NORMAL SUNLIGHT BUT HAVE BEEN MAKING MODERATE GAINS IN HOW MUCH ENERGY THEY CAN PRODUCE IN LOW LIGHT CONDITIONS.

BRANDS: REC, KYOCERA, SCHOTT, SUNEV, YINGLI

OPTION 2: HYBRID SYSTEMS

THESE PANELS USE THIN FILM TECHNOLOGY AND POLY CRYSTALINE TECHNOLOGY TO PRODUCE MORE POWER PER SQ FT THAN ANY OTHER TECHNOLOGY. THESE PANELS ARE IDEAL FOR SPECIFIC APPLICATIONS WHERE SPACE IS AT A PREMIUM SUCH AS SMALL ROOFS.

BRANDS: SUNPOWER, SANYO

COST EFFICIENCY:

NYSDA PROVIDES CASH INCENTIVES FOR THE INSTALLATION BY ELIGIBLE INSTALLERS OF NEW GRID-CONNECTED SOLAR ELECTRIC OR PHOTOVOLTAIC (PV) SYSTEMS THAT ARE 200KW OR LESS FOR COMMERCIAL SITES. INCENTIVES ARE GRANTED ON A FIRST-COME, FIRST-SERVED BASIS AND APPLICATIONS WILL BE ACCEPTED THROUGH DECEMBER 31, 2015.

**DUE TO DRAMATIC REDUCTIONS IN THE COST OF SOLAR EQUIPMENT AND STRONG INCENTIVES IN NEW YORK, THE ENERGY PRODUCED BY SOLAR POWER WILL ONLY COST YOU 0.05 PER KWH GUARANTEED FOR THE NEXT 25 YEARS.


https://www.qwiksolar.com/

585 672-6557
122 NORTH GENESEE STREET
GENEVA, NY 14456

MOUNTING TECHNIQUES:

ROOF MOUNT FLASHINGS

THE CHEAP METHOD IS TO PUT ROOF CEMENT ON A LAG BOLT BEFORE GOING THROUGH THE ROOF WITH ANY FLASHING.

INSTALLERS USUALLY POINT ON USING A FLASHING SO THAT THE PIERCING IS LESS LIKELY TO LEAK OVER THE AGE

GROUND MOUNTING STRUCTURE

IF ROOF IS SLIGHTLY HILLSY, MOUNT SOLAR PANELS ON A SERIES OF POLES NEXT TO STRUCTURE.

THE HARDWARE USED IS 4” POLE THAT ARE PLACED IN CONCRETE AT LEAST 36” DEEP INTO THE GROUND.

A SERIES OF STEEL AND ALUMINUM RAILS ARE PLACED ON THE POLES.

THE PANELS ARE SECURED TO THE RAILS USING A SPECIALTY CLAMPS MADE FOR THE EXACT THICKNESS OF THE PANEL.

AVERAGE SIZE:

ABOUT 3’X6’ BY 5’ X 220-230 WATT SOLAR PANELS.
FINAL DESIGN

SENeca Jr. Pavilion.
Breaking Boundaries.
SENeca JR. PAVILION.
ELIZABETH HUGHES, SCOTT GREENBAUM, KELLY HALEY, & JENNIFER GALEZO.

INTERIOR DETAIL.
THE SENECA JR. PAVILION.

SITE PLAN
SCALE 1"=40'

EXISTING CLUBHOUSE

TRELLIS WITH GRAPEVINES
SCALE 1"=1/2"
BREAKING BOUNDARIES

ANDREW KING, ANDREW THOMPSON, LINCOLN YOUNG & JOELLEN MALICH

VIEW FROM THE EAST
BREAKING BOUNDARIES

CONTAINER RESTROOM & KITCHEN

BOAT HOUSE FLOOR PLAN

1/4" SCALE 1"=8"
A SPECIAL THANK YOU TO:

COMMODORE TOM TOPHER
THE SENECA SAILING ACADEMY ADVISORY BOARD &
THE SENECA YACHT CLUB BOARD