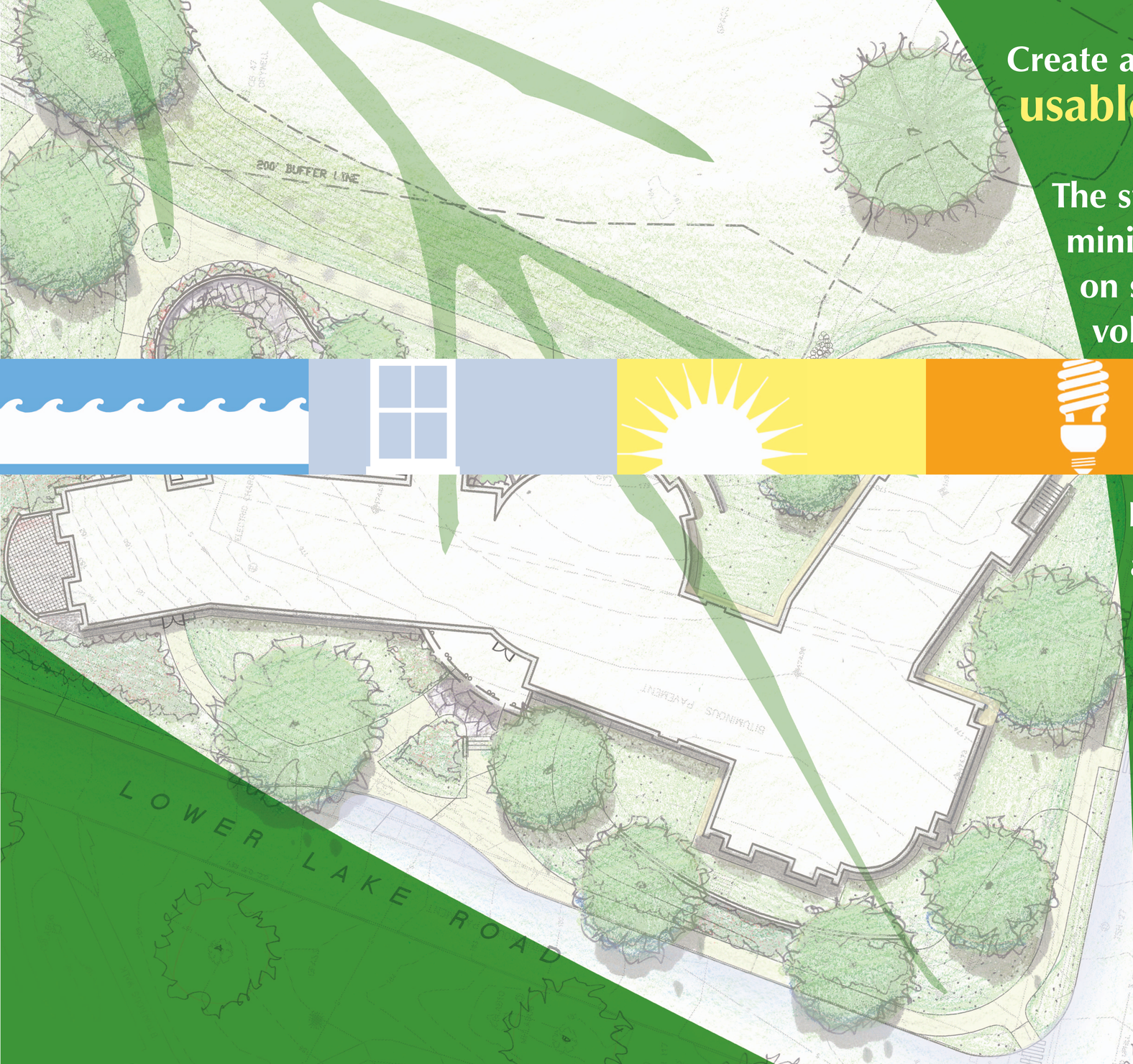

Create a **natural landscape** with **usable open space** and views to Stony Brook.

The storm water management design minimizes storm water runoff and utilizes on site retention system to limit flow volume to the brook.

Remove invasive plants along the brook and **plant native vegetation.**

The orientation of the building wings maximizes opportunities for **natural light, views and ventilation.**

Provide area within the building for securing bicycles for 15% of the residents.

Minimize light pollution.

Reduce site compaction due to construction activities that may inhibit new plant, grass and tree growth by loosening subgrade to a 12″ depth and provide 8″ of topsoil to establish a 20″ soil medium layer.

Sustainable Sites

The S/L/A/M Collaborative
VANZELM HEYWOOD & SHADFORD INC
MECHANICAL AND ELECTRICAL ENGINEERS

The S/L/A/M Collaborative
VanZelmHeywood&ShadfordInc
MECHANICAL AND ELECTRICAL ENGINEERS

Materials + Resources

Target goal to divert 95% of the construction waste to a local building recycling company for salvage and reuse.

20% of the building materials locally manufactured, within 500 miles of campus.

In an effort to minimize resource depletion, rapidly renewable materials and recycled content will be utilized wherever possible. Examples include cork and bamboo flooring, Roof shingles made from 40% Post-consumer materials, Aluminum window frames made from 50% Post-consumer materials, Insulated glass made from 25% recycled material and Steel that is minimum 65% Post-consumer.

The S/L/A/M Collaborative
VanZelmHeywood&ShadfordInc
MECHANICAL AND ELECTRICAL ENGINEERS

Innovation + Design

Realtime monitoring and display of electrical energy consumption of each residential cluster.

Solar Thermal Roof Panel Collectors
provide 22% of domestic hot water

Utilizing Renewable Energy total building electrical load.
Greenhouse gas reduction equals 404 tons/year equal to planting 110 acres of trees or taking 70 cars off the road.

Incorporate Heat Recovery Wheel to **Conserve and reduce energy loads** on the campus central heating and cooling system.

The S/L/A/M Collaborative
VanZelmHeywood&Shadford Inc
Mechanical and Electrical Engineers

Energy + Atmosphere

Building envelope and HVAC design optimizes energy performance
45% more efficient than traditional building standards resulting in building energy savings.
Reduced Green House Gas emissions by 196 tons/year. CO_2 equivalent to planting 53 acres of trees or removing 34 cars from the road.

Daylight dimming and occupancy sensors in the public spaces to conserve electricity and reduce heat loads.

New Facility is continuously monitored by Building Management Control Systems to maximize building systems efficiency.

The S/L/A/M Collaborative
VANZELM HEYWOOD & SHADFORD INC
MECHANICAL AND ELECTRICAL ENGINEERS

Building finishes utilize materials with **low emitting 'Volatile Organic Compounds'** in carpet, paint, sealants and adhesives, also composite wood products are low emitting and free of added ureaformaldehyde resins.

All regularly occupied spaces have direct access to daylight and views.

Conduct building flush-out after construction ends and prior to occupancy to **ensure indoor air quality meets EPA environmental requirements**

Indoor Environment

The S/L/A/M Collaborative
VanZelmHeywood&ShadfordInc
MECHANICAL AND ELECTRICAL ENGINEERS

Water Efficiency

Select plumbing fixtures to **maximize water efficiency**

using 30% less water than a traditional building.

Incorporate plants and grasses that are native to the Northeast and **minimize water use.**

Plant species examples:
Green Mountain Sugar Maple,
Autumn Brilliance Apple Serviceberry, Tulip Tree,
Sourwood, Hummingbird Summersweet, 'Little Henry' Virginia Sweetspire, Palibin Lilac, Korean Spice Viburnum